

SITE INFORMATION

Report Type: Closure Report NRM2029543600

General Site Information:

Site:	Lomas Rojas 26 State Com CTB 501H Separator					
Company:	EOG Resources					
Section, Township and Range	Unit P	Sec. 26	T 25S	R 33E		
Lease Number:						
County:	Lea County					
GPS:	32.09677			-103.537438		
Surface Owner:	State					
Mineral Owner:						
Directions:	From Battle Axe Road 32.065168°, -103.549264°, turn right onto lease road and follow for 2.76 miles to location.					

Release Data:

Date Released:	9/28/2020
Type Release:	Oil & Produced Water
Source of Contamination:	Separator
Fluid Released:	2 bbl oil & 3 bbl water
Fluids Recovered:	1 bbl oil & 2 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:	128.51' Below Surface
Karst Potential:	Low

Recommended Remedial Action Levels (RRALs)

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



TETRA TECH

May 6, 2021

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

**Re: Closure Report for the EOG Resources, Lomas Rojas 26 St Com CTB 501H Separator, Unit P, Section 26, Township 25 South, Range 33 East, Lea County, New Mexico.
NRM2029543600.**

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, Lomas Rojas 26 St Com CTB 501H Separator, Unit P, Section 26, Township 25 South, Range 33 East, Lea County, New Mexico (Site). The site coordinates are 32.096770°, -103.537438°. 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 September 28, 2020, and released approximately 2 barrels of oil and 3 barrels of produced water due to a leak in a line at the #501H Separator. Approximately 1 barrel of oil and 2 barrels of produced water were recovered. The release occurred on the facility pad around the separator, impacting an area measuring approximately 30'x28'. 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 United States Geological Survey (USGS) database, in Section 25 approximately 2.51 miles southeast of the site and has a reported depth to groundwater of 128.51 feet below surface. Site characterization documents are shown in Appendix B.

Tetra Tech

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

Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com



Regulatory

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

Soil Assessment and Analytical Results

Initial Assessment

On October 28, 2020, Tetra Tech personnel were onsite to evaluate and sample the release area. A total of 3 auger holes (AH-1, AH-2, and AH-3) were installed in the release footprint to total depths ranging from surface to 1.5' below surface. Additionally, three (3) horizontal samples were collected to delineate the spill area. 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, the areas of auger holes (AH-1 and AH-3) did not show any benzene, total BTEX, or TPH concentrations above the RRALs. However, the area of auger hole (AH-2) did show a shallow TPH impact of 1,310 mg/kg at 0-1', vertical delineation was not found due to hitting refusal. Additionally, the area of auger hole (AH-2) did not show benzene, total BTEX, or chloride concentrations above the RRALs. However, the areas of auger holes (AH-1 and AH-3) showed chloride concentrations above the RRALs with concentrations ranging from 6850 mg/kg to 11,100 mg/kg. The chloride impact was not vertically delineated due to a dense formation in the area. Additionally, the areas of horizontals (H-1 through H-3) did not show any benzene, total BTEX, or TPH concentrations above the RRALs.

Remediation and Reclamation Activities

Tetra Tech personnel were onsite March 1, 2021 through March 10, 2021, to supervise the remediation and reclamation activities as well as to collect confirmation samples. The impacted areas were excavated to depths ranging from 2.0'-3.0' below surface, as shown on Figure 4 and Table 2. Due to equipment and safety concerns, the entire impacted area was hand dug.

Confirmation bottom hole and sidewall samples were collected every 200 square feet, a total of 5 bottom hole samples (Bottom Hole 1 through Bottom Hole 5) and 8 sidewall samples (SW-1 through SW-8) were collected to ensure proper removal of the impacted soils. The samples were submitted to the laboratory to be analyzed for TPH method 8015 extended, BTEX method



8021B, and Chloride by EPA Method 300.0. The sampling results are summarized in Table 2. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The excavation depths and sample locations are shown in Figure 4.

Referring to Table 2, all final confirmation samples collected showed benzene, total BTEX, and TPH concentrations below the laboratory reporting limits. Additionally, all final samples, showed chloride concentrations below the 600 mg/kg threshold.

Approximately 55 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 and the 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 black ink, appearing to read 'Brittany Long'.

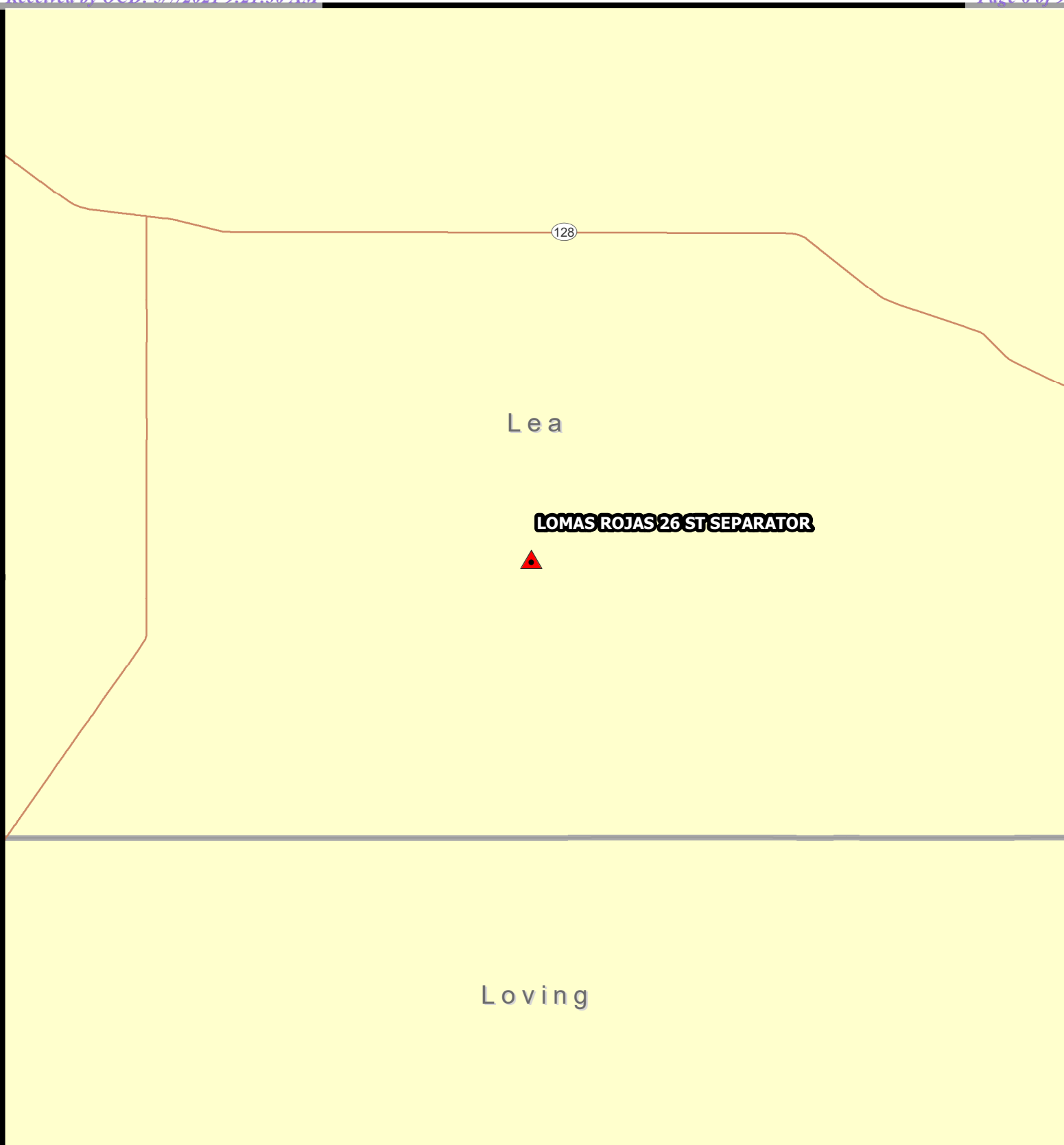
Brittany Long,
Project Manager

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

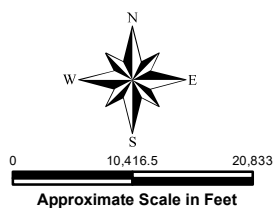
Clair Gonzales,
Senior Project Manager

cc: James Kennedy – EOG
Todd Wells - EOG

Figures



 SITE LOCATION

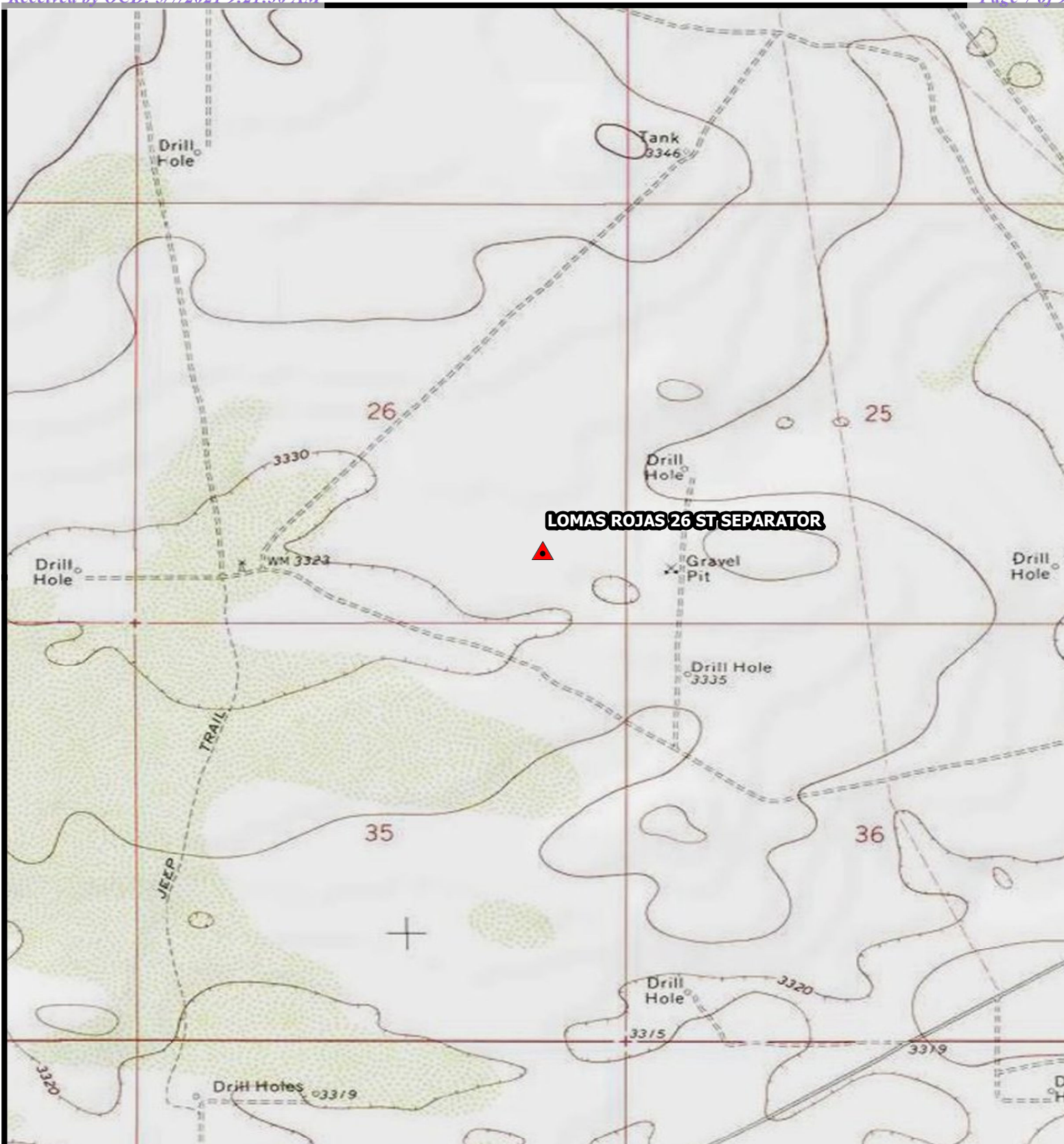


OVERVIEW MAP
LOMAS ROJAS 26 STATE COM CTB 501H SEPARATOR
 Property located at coordinates 32.096767°, -103.537466°
 LEA COUNTY, NEW MEXICO

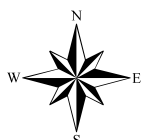


TETRA TECH
 901 W Wall St Ste. 100,
 Midland, TX 79701
 (432) 682-4559
 Project #: 212C-MD-02346
 Date: 02-19-2021
 Drawn By: Ezequiel Moreno

FIGURE
1



SITE LOCATION



0 550 1,100 2,200

Approximate Scale in Feet

Service Layer Credits: Copyright: © 2013 National Geographic Society, I-cubed

TOPOGRAPHIC MAP

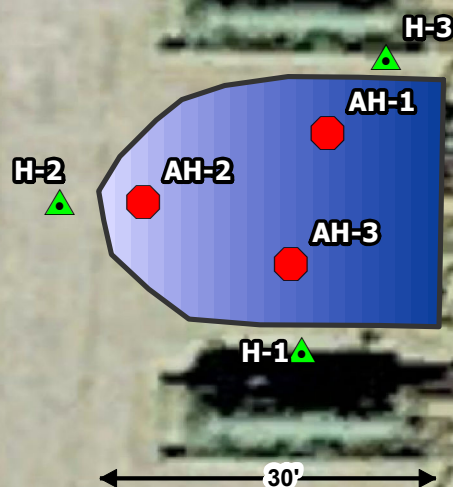
LOMAS ROJAS 26 STATE COM CTB 501H SEPARATOR
 Property located at coordinates 32.096767°, -103.537466°
 LEA COUNTY, NEW MEXICO



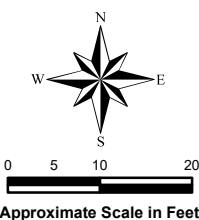
Project #: 212C-MD-02346
 Date: 02-19-2021
 Drawn By: Ezequiel Moreno

FIGURE
2

SAMPLE DESIGNATION	LATITUDE	LONGITUDE
H-1	32.096671573°	-103.537363287°
H-2	32.09671555°	-103.537435319°
H-3	32.09675876°	-103.537338129°
AH-1	32.096735909°	-103.537355748°
AH-2	32.096715367°	-103.537410532°
AH-3	32.096696849°	-103.537366464°



-  HORIZONTAL SAMPLE LOCATIONS
-  AUGER HOLE SAMPLE LOCATIONS
-  AFFECTED SPILL AREA

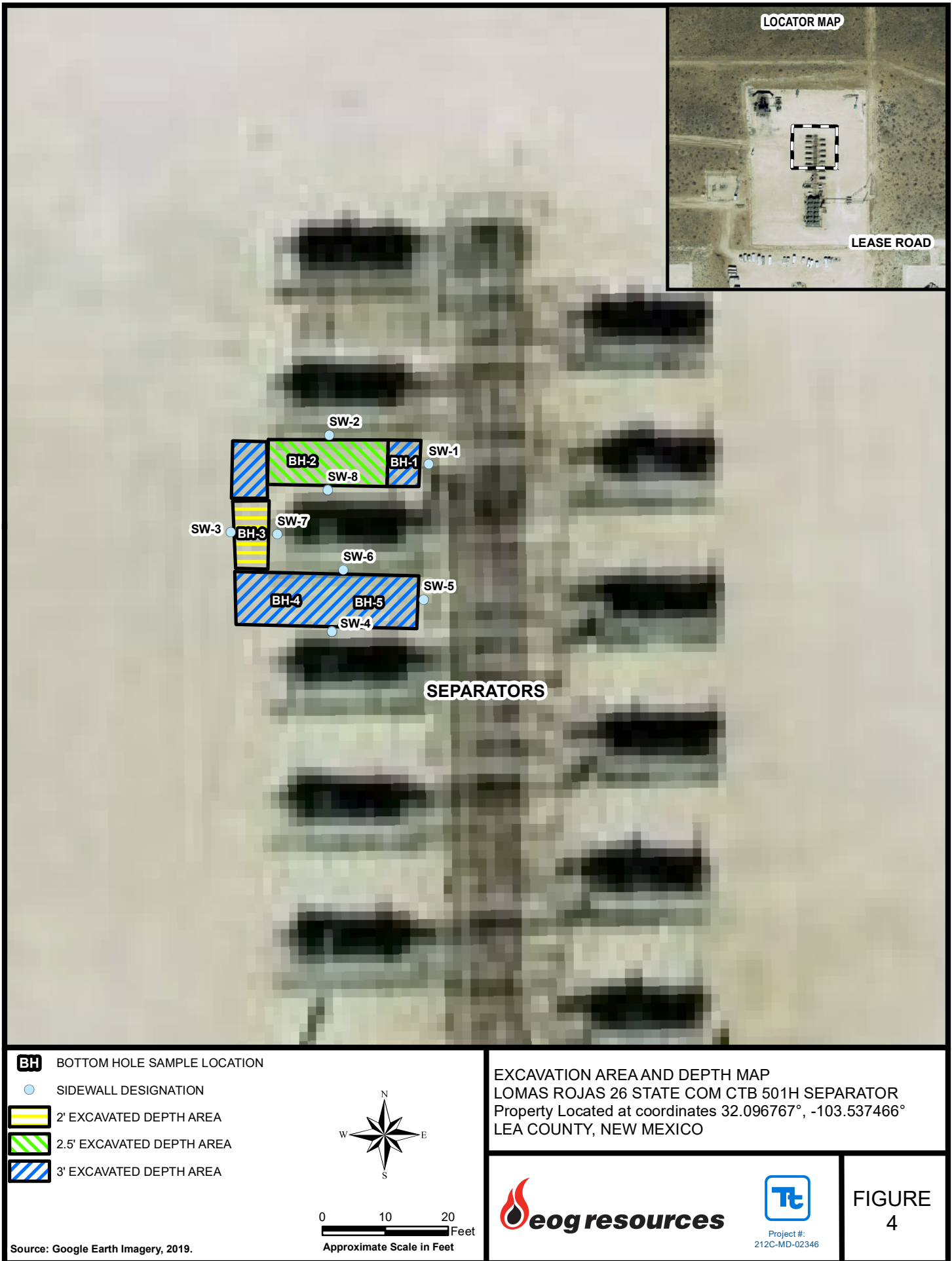


SPILL ASSESSMENT MAP
 LOMAS ROJAS 26 STATE COM CTB 501H SEPARATOR
 Property located at coordinates 32.096767°, -103.537466°
 LEA COUNTY, NEW MEXICO



TETRA TECH
 901 W Wall St Ste. 100,
 Midland, TX 79701
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 Project #: 212C-MD-02346
 Date: 02-19-2021
 Drawn By: Ezequiel Moreno

FIGURE
3



Tables

Table 1
EOG
Lomas Rojas 26 St Com CTB 501H Separator
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
AH-1	10/28/2020	0-1	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	6,850
	"	1-1.5	X		<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	6,860
AH-2	10/28/2020	0-1	X		97.0	1,060	157	1,310	<0.00200	0.00749	0.00612	0.494	0.508	273
AH-3	10/28/2020	0-1	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	11,100
	"	1-1.5	X		<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	10,100
H-1	10/28/2020	0-1	X		<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	165
H-2	10/28/2020	0-1	X		<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	17.4
H-3	10/28/2020	0-1	X		<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	56.1

(-)

Not Analyzed

Proposed Excavation Depths

Table 2
EOG
Lomas Rojas 26 St Com CTB 501H Separator
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
BH-1	3/8/2021	3'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	48.2
BH-2	3/8/2021	2.5'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	34.4
BH-3	3/8/2021	2'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	34.7
BH-4	3/8/2021	3'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	29.1
BH-5	3/8/2021	3'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	25.2
SW-1	3/8/2021	3'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	27.6
SW-2	3/8/2021	2'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<4.99
SW-3	3/8/2021	2'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	82.3
SW-4	3/8/2021	3'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	33.7
SW-5	3/8/2021	3'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	32.7
SW-6	3/8/2021	3'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	34.7
SW-7	3/8/2021	2'	X	-	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	35
SW-8	3/8/2021	2.5'	X	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	57.3

(-)

Not Analyzed

Photos

EOG Resources
Lomas Rojas 26 St Com CTB 501H Separator
Lea County, New Mexico



View of Remediation Activities – View East

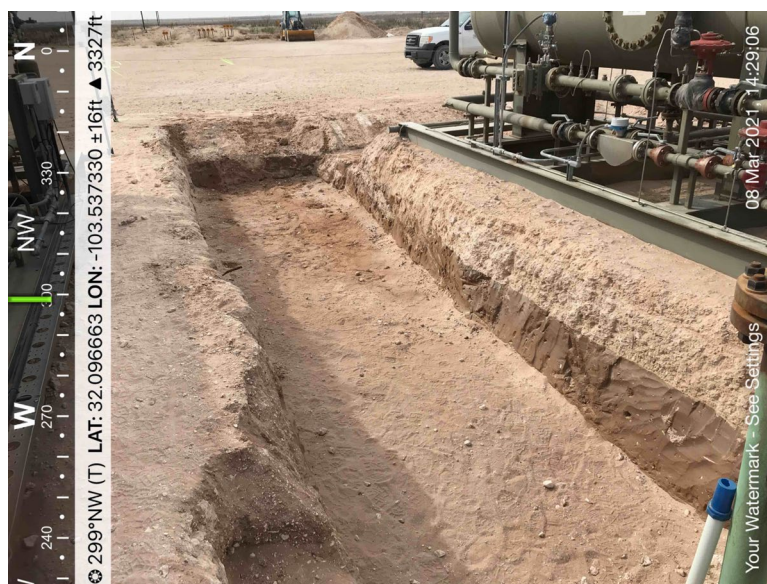


View of Remediation Activities – View East

EOG Resources
Lomas Rojas 26 St Com CTB 501H Separator
Lea County, New Mexico



View of Remediation Activities – View East



View of Remediation Activities– View Northwest

Appendix A

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	NRM2029543600
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 32.096770° Longitude -103.537438°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Lomas Rojas 26 State Com CTB - #501H Separator	Site Type CTB
Date Release Discovered 9/28/20	API# (if applicable)

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

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 2	Volume Recovered (bbls) 1
☒ Produced Water	Volume Released (bbls) 3	Volume Recovered (bbls) 2
	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 lease operator arrived at the CTB and discovered a leak in the water line at the #501H separator. Approximately 5 bbls of oil and produced water was released on the pad around the separator and 3 bbls recovered.

Incident ID	NRM2029543600
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>10-19-20</u>
email: <u>Todd_Wells@eogresources.com</u>	Telephone: <u>(432) 686-3613</u>
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>10/21/2020</u>

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
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Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: Todd Wells Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: _____ Title: _____

Signature: Todd Wells Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

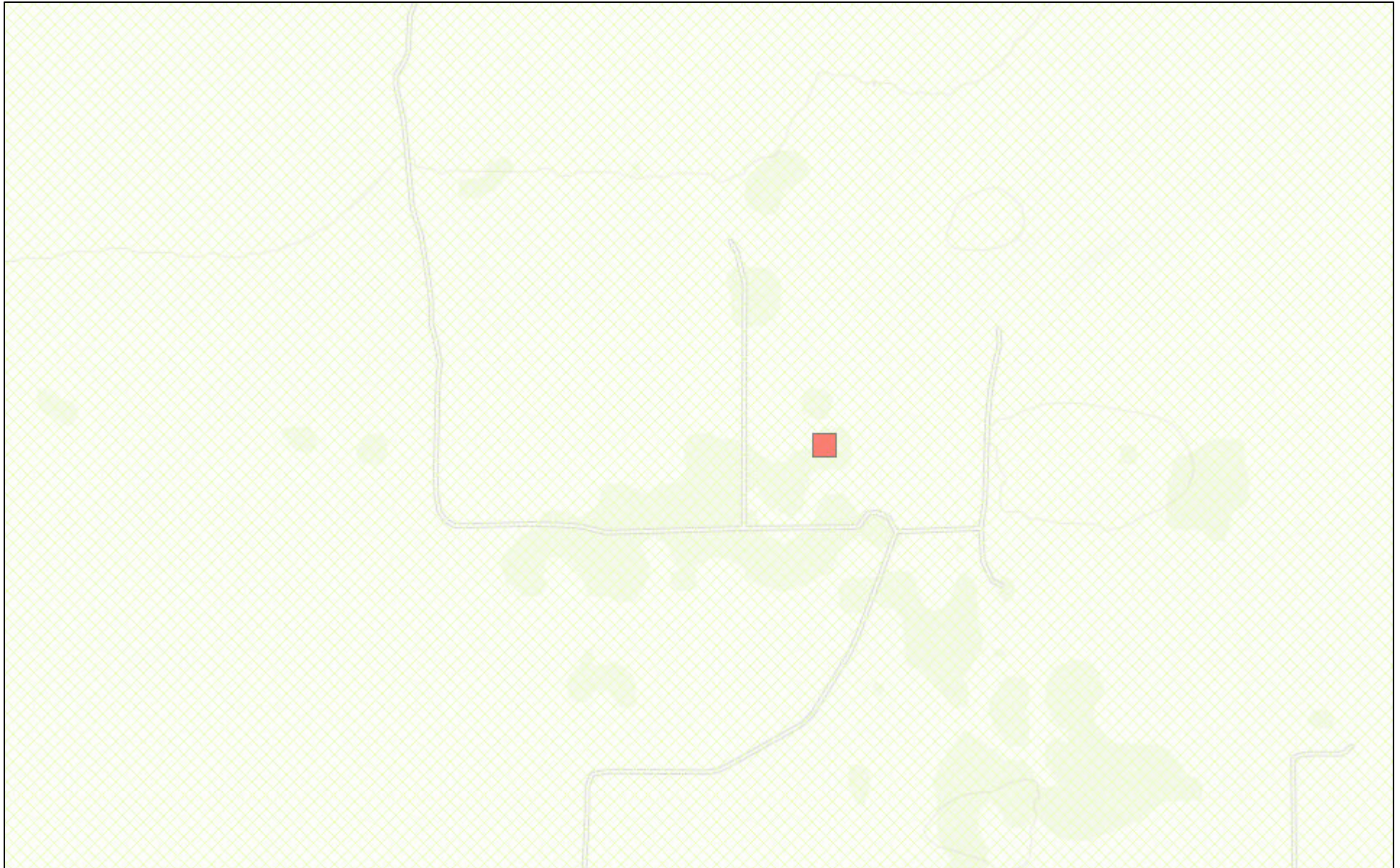
Appendix B



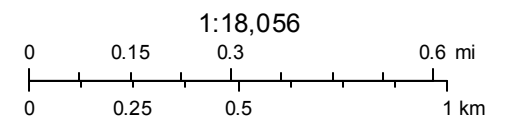
National Water Information System: Mapper



New Mexico NFHL Data



October 21, 2020



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



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:
Groundwater

Geographic Area:
New Mexico

GO

Click to hideNews Bulletins

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

Groundwater levels for New Mexico

Click to hide state-specific text

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 320523103294401

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

USGS 320523103294401 25S.34E.29.343322

Lea County, New Mexico
Latitude 32°05'23", Longitude 103°29'44" NAD27
Land-surface elevation 3,321 feet above NAVD88
The depth of the well is 165 feet below land surface.
This well is completed in the Ogallala Formation (121OGLL) 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
1970-12-08		D	127.15			2		U			A
1976-01-08		D	127.49			2		U			A
1981-03-25		D	132.10			2		U			A
1986-03-12		D	130.23			2		U			A
1991-06-06		D	128.51			2		U			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

- [Questions about sites/data?](#)
[Feedback on this web site](#)
[Automated retrievals](#)
[Help](#)
[Data Tips](#)
[Explanation of terms](#)
[Subscribe for system changes](#)
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New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 02312		CUB	LE	1	2	1	05	25S	33E	632292	3559772	150	90	60
C 02313		CUB	LE	2	3	3	26	25S	33E	636971	3552098*	150	110	40
C 02373 CLW317846	O	CUB	LE	2	1	1	13	25S	33E	638518	3556544*	625	185	440
C 02373 S		CUB	LE	1	2	1	13	25S	33E	638721	3556549*	625	185	440

Average Depth to Water: **142 feet**

Minimum Depth: **90 feet**

Maximum Depth: **185 feet**

Record Count: 4

PLSS Search:

Township: 25S

Range: 33E

*UTM location was derived from PLSS - see Help

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

10/21/20 7:39 PM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER

Water Well Data
Average Depth to Groundwater (ft)
EOG - Lomas Rojas 26 State Com
Lea County, New Mexico

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

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

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

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

88 New Mexico State Engineers Well Reports

105 USGS Well Reports

90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)
 Geology and Groundwater Resources of Eddy County, NM (Report 3)

34 NMOCD - Groundwater Data

123 Tetra Tech installed temporary wells and field water level

143 NMOCD Groundwater map well location

Legend

-  EOG Lomas Rojas 26 St Com CTB #501H Separator
-  High
-  Low
-  Medium

128

 EOG Lomas Rojas 26 St Com CTB #501H Separator

Appendix C

Certificate of Analysis Summary 676455

Tetra Tech- Midland, Midland, TX

Project Name: Lomas Rojas 26 St Co CTB 501H Separato

Project Id: 212C-MD-02346

Date Received in Lab: Fri 10.30.2020 10:43

Contact: Mike Carmona

Report Date: 11.05.2020 16:08

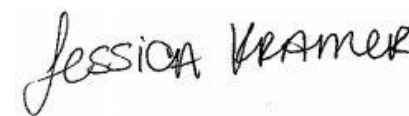
Project Location: Lea County, Texas

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	676455-001	676455-002	676455-003	676455-004	676455-005	
	<i>Field Id:</i>	AH-1 (0-1')	AH-1 (1'-1.5')	AH-2 (0-1')	AH-3 (0-1')	AH-3 (1'-1.5')	
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	10.28.2020 00:00	10.28.2020 00:00	10.28.2020 00:00	10.28.2020 00:00	10.28.2020 00:00	
BTEX by EPA 8021B	<i>Extracted:</i>	11.04.2020 16:45	11.04.2020 16:45	11.04.2020 16:45	11.04.2020 16:45	11.04.2020 16:45	
	<i>Analyzed:</i>	11.05.2020 05:53	11.05.2020 06:13	11.05.2020 06:33	11.05.2020 06:54	11.05.2020 07:14	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	
Toluene		<0.00200 0.00200	<0.00199 0.00199	0.00749 0.00200	<0.00201 0.00201	<0.00199 0.00199	
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	0.00612 0.00200	<0.00201 0.00201	<0.00199 0.00199	
m,p-Xylenes		<0.00399 0.00399	<0.00398 0.00398	0.309 0.00400	<0.00402 0.00402	<0.00398 0.00398	
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	0.185 0.00200	<0.00201 0.00201	<0.00199 0.00199	
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199	0.494 0.00200	<0.00201 0.00201	<0.00199 0.00199	
Total BTEX		<0.00200 0.00200	<0.00199 0.00199	0.508 0.00200	<0.00201 0.00201	<0.00199 0.00199	
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	11.02.2020 11:40	11.02.2020 11:40	11.02.2020 11:40	11.02.2020 11:40	11.02.2020 11:40	
	<i>Analyzed:</i>	11.02.2020 13:56	11.02.2020 14:03	11.02.2020 14:23	11.02.2020 14:29	11.02.2020 14:49	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		6850 50.5	6860 X 49.8	273 25.2	11100 100	10100 100	
TPH By SW8015 Mod	<i>Extracted:</i>	10.30.2020 12:00	10.30.2020 12:00	10.30.2020 12:00	10.30.2020 12:00	10.30.2020 12:00	
	<i>Analyzed:</i>	10.30.2020 13:56	10.30.2020 15:00	10.30.2020 15:21	10.30.2020 15:43	10.30.2020 16:04	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	97.0 50.0	<49.9 49.9	<49.8 49.8	
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	1060 50.0	<49.9 49.9	<49.8 49.8	
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	157 50.0	<49.9 49.9	<49.8 49.8	
Total TPH		<50.0 50.0	<50.0 50.0	1310 50.0	<49.9 49.9	<49.8 49.8	

BRL - Below Reporting Limit

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



Analytical Report 676455

for

Tetra Tech- Midland

Project Manager: Mike Carmona

Lomas Rojas 26 St Co CTB 501H Separato

212C-MD-02346

11.05.2020

Collected By: Client



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

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



11.05.2020

Project Manager: **Mike Carmona**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **676455**

Lomas Rojas 26 St Co CTB 501H Separato

Project Address: Lea County, Texas

Mike Carmona:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 676455. 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. 676455 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 676455****Tetra Tech- Midland, Midland, TX**

Lomas Rojas 26 St Co CTB 501H Separato

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
AH-1 (0-1')	S	10.28.2020 00:00		676455-001
AH-1 (1'-1.5')	S	10.28.2020 00:00		676455-002
AH-2 (0-1')	S	10.28.2020 00:00		676455-003
AH-3 (0-1')	S	10.28.2020 00:00		676455-004
AH-3 (1'-1.5')	S	10.28.2020 00:00		676455-005

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Lomas Rojas 26 St Co CTB 501H Separato**

Project ID: 212C-MD-02346
Work Order Number(s): 676455

Report Date: 11.05.2020
Date Received: 10.30.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3141212 Inorganic Anions by EPA 300/300.1

Lab Sample ID 676455-002 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 676455-001, -002, -003, -004, -005.

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

Batch: LBA-3141451 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected. Samples affected are: 676455-003.



Certificate of Analytical Results 676455

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26 St Co CTB 501H Separato

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

Matrix: Soil

Date Received: 10.30.2020 10:43

Lab Sample Id: 676455-001

Date Collected: 10.28.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.02.2020 11:40

% Moisture:

Seq Number: 3141212

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6850	50.5	mg/kg	11.02.2020 13:56		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.30.2020 12:00

% Moisture:

Seq Number: 3141082

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.30.2020 13:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.30.2020 13:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.30.2020 13:56	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.30.2020 13:56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	99	%	70-130	10.30.2020 13:56		
o-Terphenyl	84-15-1	103	%	70-130	10.30.2020 13:56		



Certificate of Analytical Results 676455

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26 St Co CTB 501H Separato

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

Matrix: Soil

Date Received: 10.30.2020 10:43

Lab Sample Id: 676455-001

Date Collected: 10.28.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.04.2020 16:45

% Moisture:

Seq Number: 3141451

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.05.2020 05:53	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.05.2020 05:53	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.05.2020 05:53	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.05.2020 05:53	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.05.2020 05:53	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.05.2020 05:53	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.05.2020 05:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	86	%	70-130	11.05.2020 05:53	
4-Bromofluorobenzene	460-00-4	115	%	70-130	11.05.2020 05:53	



Certificate of Analytical Results 676455

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26 St Co CTB 501H Separato

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

Matrix: Soil

Date Received: 10.30.2020 10:43

Lab Sample Id: 676455-002

Date Collected: 10.28.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.02.2020 11:40

% Moisture:

Seq Number: 3141212

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6860	49.8	mg/kg	11.02.2020 14:03	X	10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.30.2020 12:00

% Moisture:

Seq Number: 3141082

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.30.2020 15:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.30.2020 15:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.30.2020 15:00	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.30.2020 15:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	10.30.2020 15:00	
o-Terphenyl	84-15-1	101	%	70-130	10.30.2020 15:00	



Certificate of Analytical Results 676455

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26 St Co CTB 501H Separato

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

Matrix: Soil

Date Received: 10.30.2020 10:43

Lab Sample Id: 676455-002

Date Collected: 10.28.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.04.2020 16:45

% Moisture:

Basis: Wet Weight

Seq Number: 3141451

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.05.2020 06:13	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.05.2020 06:13	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.05.2020 06:13	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.05.2020 06:13	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.05.2020 06:13	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	11.05.2020 06:13	U	1
Total BTEX		<0.00199	0.00199	mg/kg	11.05.2020 06:13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	113	%	70-130	11.05.2020 06:13		
1,4-Difluorobenzene	540-36-3	98	%	70-130	11.05.2020 06:13		



Certificate of Analytical Results 676455

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26 St Co CTB 501H Separato

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

Matrix: Soil

Date Received: 10.30.2020 10:43

Lab Sample Id: 676455-003

Date Collected: 10.28.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.02.2020 11:40

% Moisture:

Basis: Wet Weight

Seq Number: 3141212

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	273	25.2	mg/kg	11.02.2020 14:23		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.30.2020 12:00

% Moisture:

Basis: Wet Weight

Seq Number: 3141082

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	97.0	50.0	mg/kg	10.30.2020 15:21		1
Diesel Range Organics (DRO)	C10C28DRO	1060	50.0	mg/kg	10.30.2020 15:21		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	157	50.0	mg/kg	10.30.2020 15:21		1
Total TPH	PHC635	1310	50.0	mg/kg	10.30.2020 15:21		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	112	%	70-130	10.30.2020 15:21		
o-Terphenyl	84-15-1	109	%	70-130	10.30.2020 15:21		



Certificate of Analytical Results 676455

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26 St Co CTB 501H Separato

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

Matrix: Soil

Date Received: 10.30.2020 10:43

Lab Sample Id: 676455-003

Date Collected: 10.28.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.04.2020 16:45

% Moisture:

Seq Number: 3141451

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.05.2020 06:33	U	1
Toluene	108-88-3	0.00749	0.00200	mg/kg	11.05.2020 06:33		1
Ethylbenzene	100-41-4	0.00612	0.00200	mg/kg	11.05.2020 06:33		1
m,p-Xylenes	179601-23-1	0.309	0.00400	mg/kg	11.05.2020 06:33		1
o-Xylene	95-47-6	0.185	0.00200	mg/kg	11.05.2020 06:33		1
Total Xylenes	1330-20-7	0.494	0.00200	mg/kg	11.05.2020 06:33		1
Total BTEX		0.508	0.00200	mg/kg	11.05.2020 06:33		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	88	%	70-130	11.05.2020 06:33		
4-Bromofluorobenzene	460-00-4	218	%	70-130	11.05.2020 06:33	**	



Certificate of Analytical Results 676455

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26 St Co CTB 501H Separato

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

Matrix: Soil

Date Received: 10.30.2020 10:43

Lab Sample Id: 676455-004

Date Collected: 10.28.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.02.2020 11:40

% Moisture:

Basis: Wet Weight

Seq Number: 3141212

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11100	100	mg/kg	11.02.2020 14:29		20

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.30.2020 12:00

% Moisture:

Basis: Wet Weight

Seq Number: 3141082

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.30.2020 15:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.30.2020 15:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.30.2020 15:43	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.30.2020 15:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	10.30.2020 15:43	
o-Terphenyl	84-15-1	101	%	70-130	10.30.2020 15:43	



Certificate of Analytical Results 676455

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26 St Co CTB 501H Separato

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

Matrix: Soil

Date Received: 10.30.2020 10:43

Lab Sample Id: 676455-004

Date Collected: 10.28.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.04.2020 16:45

% Moisture:

Basis: Wet Weight

Seq Number: 3141451

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.05.2020 06:54	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.05.2020 06:54	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.05.2020 06:54	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.05.2020 06:54	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.05.2020 06:54	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	11.05.2020 06:54	U	1
Total BTEX		<0.00201	0.00201	mg/kg	11.05.2020 06:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	102	%	70-130	11.05.2020 06:54		
4-Bromofluorobenzene	460-00-4	122	%	70-130	11.05.2020 06:54		



Certificate of Analytical Results 676455

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26 St Co CTB 501H Separato

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

Matrix: Soil

Date Received: 10.30.2020 10:43

Lab Sample Id: 676455-005

Date Collected: 10.28.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.02.2020 11:40

% Moisture:

Seq Number: 3141212

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10100	100	mg/kg	11.02.2020 14:49		20

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.30.2020 12:00

% Moisture:

Seq Number: 3141082

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	10.30.2020 16:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	10.30.2020 16:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	10.30.2020 16:04	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	10.30.2020 16:04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	101	%	70-130	10.30.2020 16:04		
o-Terphenyl	84-15-1	106	%	70-130	10.30.2020 16:04		



Certificate of Analytical Results 676455

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26 St Co CTB 501H Separato

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

Matrix: Soil

Date Received: 10.30.2020 10:43

Lab Sample Id: 676455-005

Date Collected: 10.28.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.04.2020 16:45

% Moisture:

Seq Number: 3141451

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.05.2020 07:14	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.05.2020 07:14	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.05.2020 07:14	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.05.2020 07:14	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.05.2020 07:14	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	11.05.2020 07:14	U	1
Total BTEX		<0.00199	0.00199	mg/kg	11.05.2020 07:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	11.05.2020 07:14	
4-Bromofluorobenzene	460-00-4	115	%	70-130	11.05.2020 07:14	

Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Tetra Tech- Midland
Lomas Rojas 26 St Co CTB 501H Separato

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3141212

Matrix: Solid

Prep Method: E300P

Date Prep: 11.02.2020

MB Sample Id: 7714335-1-BLK

LCS Sample Id: 7714335-1-BKS

LCSD Sample Id: 7714335-1-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	268	107	266	106	90-110	1	20	mg/kg	11.02.2020 12:17	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3141212

Matrix: Soil

Prep Method: E300P

Date Prep: 11.02.2020

Parent Sample Id: 676434-014

MS Sample Id: 676434-014 S

MSD Sample Id: 676434-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3500	1250	5020	122	4960	117	90-110	1	20	mg/kg	11.02.2020 12:36	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3141212

Matrix: Soil

Prep Method: E300P

Date Prep: 11.02.2020

Parent Sample Id: 676455-002

MS Sample Id: 676455-002 S

MSD Sample Id: 676455-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6860	2490	9680	113	9490	106	90-110	2	20	mg/kg	11.02.2020 14:10	X

Analytical Method: TPH By SW8015 Mod

Seq Number: 3141082

Matrix: Solid

Prep Method: SW8015P

Date Prep: 10.30.2020

MB Sample Id: 7714294-1-BLK

LCS Sample Id: 7714294-1-BKS

LCSD Sample Id: 7714294-1-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	1030	103	993	99	70-130	4	20	mg/kg	10.30.2020 13:13	
Diesel Range Organics (DRO)	<50.0	1000	1060	106	1070	107	70-130	1	20	mg/kg	10.30.2020 13:13	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	78		106		107		70-130	%	10.30.2020 13:13
o-Terphenyl	78		122		120		70-130	%	10.30.2020 13:13

Analytical Method: TPH By SW8015 Mod

Seq Number: 3141082

Matrix: Solid

Prep Method: SW8015P

Date Prep: 10.30.2020

MB Sample Id: 7714294-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.30.2020 12:52	

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

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

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

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



Tetra Tech- Midland
Lomas Rojas 26 St Co CTB 501H Separato

Analytical Method: TPH By SW8015 Mod

Seq Number: 3141082

Parent Sample Id: 676455-001

Matrix: Soil

MS Sample Id: 676455-001 S

Prep Method: SW8015P

Date Prep: 10.30.2020

MSD Sample Id: 676455-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	923	93	964	97	70-130	4	20	mg/kg	10.30.2020 14:17	
Diesel Range Organics (DRO)	<49.9	997	937	94	917	92	70-130	2	20	mg/kg	10.30.2020 14:17	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		94		70-130	%	10.30.2020 14:17
o-Terphenyl	93		92		70-130	%	10.30.2020 14:17

Analytical Method: BTEX by EPA 8021B

Seq Number: 3141451

MB Sample Id: 7714573-1-BLK

Matrix: Solid

LCS Sample Id: 7714573-1-BKS

Prep Method: SW5035A

Date Prep: 11.04.2020

LCSD Sample Id: 7714573-1-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	0.0989	99	0.0942	94	70-130	5	35	mg/kg	11.05.2020 03:32	
Toluene	<0.00200	0.100	0.0977	98	0.0936	94	70-130	4	35	mg/kg	11.05.2020 03:32	
Ethylbenzene	<0.00200	0.100	0.101	101	0.0957	96	70-130	5	35	mg/kg	11.05.2020 03:32	
m,p-Xylenes	<0.00400	0.200	0.199	100	0.190	95	70-130	5	35	mg/kg	11.05.2020 03:32	
o-Xylene	<0.00200	0.100	0.0981	98	0.0931	93	70-130	5	35	mg/kg	11.05.2020 03:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		100		100		70-130	%	11.05.2020 03:32
4-Bromofluorobenzene	115		102		97		70-130	%	11.05.2020 03:32

Analytical Method: BTEX by EPA 8021B

Seq Number: 3141451

Parent Sample Id: 676455-001

Matrix: Soil

MS Sample Id: 676455-001 S

Prep Method: SW5035A

Date Prep: 11.04.2020

MSD Sample Id: 676455-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0694	70	0.0695	70	70-130	0	35	mg/kg	11.05.2020 04:13	
Toluene	<0.00200	0.0998	0.0708	71	0.0741	74	70-130	5	35	mg/kg	11.05.2020 04:13	
Ethylbenzene	<0.00200	0.0998	0.0754	76	0.0799	80	70-130	6	35	mg/kg	11.05.2020 04:13	
m,p-Xylenes	<0.00399	0.200	0.153	77	0.165	83	70-130	8	35	mg/kg	11.05.2020 04:13	
o-Xylene	<0.00200	0.0998	0.0744	75	0.0800	80	70-130	7	35	mg/kg	11.05.2020 04:13	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		97		70-130	%	11.05.2020 04:13
4-Bromofluorobenzene	100		105		70-130	%	11.05.2020 04:13

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

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

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

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

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

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

16760455

Page 1 of 1

Client Name:						EOG						Site Manager:						Mike Carmona																																															
Project Name:																		Lomas Rojas 26 St Com CTB 501H Separato																																															
Project Location: (county, state)																		Lea County, Texas																		Project #:						212C-MD-02346																							
Invoice to:																		Todd Wells																																															
Receiving Laboratory:																		Xenco						Sampler Signature:												Devin Dominguez																													
Comments:																																																																	
Run deeper sample if Benzene exceeds 10 mg/kg or total BTEX exceeds 50 mg/kg. Run deeper sample if TPH exceeds 100 mg/kg.																																																																	
LAB # (LAB USE ONLY)																		SAMPLE IDENTIFICATION																		SAMPLING			MATRIX			PRESERVATIVE METHOD						# CONTAINERS			FILTERED (Y/N)														
																																				YEAR: 2020			DATE			TIME			WATER			SOIL			HCL												HNO ₃		
																		AH-1 (0'-1')																		10/28/2020									X			X			1			N											
																		AH-1 (1'-1.5')																		10/28/2020									X			X			1			N											
																		AH-2 (0'-1')																		10/28/2020									X			X			1			N											
																		AH-3 (0'-1')																		10/28/2020									X			X			1			N											
																		AH-3 (1'-1.5')																		10/28/2020									X			X			1			N											
Relinquished by:																		Date:						Time:						Received by:						Date:						Time:						LAB USE ONLY																	
Relinquished by:																		Date:						Time:						Received by:						Date:						Time:						LAB USE ONLY																	
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Relinquished by:																		Date:						Time:						Received by:						Date:						Time:						LAB USE ONLY																	

ORIGINAL COPY

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 10.30.2020 10.43.00 AM

Work Order #: 676455

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	-5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes BTEX was in bulk container
#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: 10.30.2020

Checklist reviewed by:



Jessica Kramer

Date: 10.30.2020

Certificate of Analysis Summary 676458

Tetra Tech- Midland, Midland, TX

Project Name: Lomas Rojas 26 St Co CTB 501H Separato

Project Id: 212C-MD-02346

Date Received in Lab: Fri 10.30.2020 10:43

Contact: Mike Carmona

Report Date: 11.10.2020 09:34

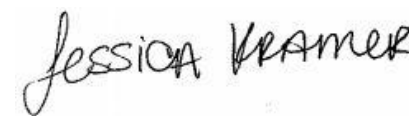
Project Location: Lea County, Texas

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	676458-001	676458-002	676458-003			
	Field Id:	H-1 (0-1')	H-2 (0-1')	H-3 (0-1')			
	Depth:						
	Matrix:	SOIL	SOIL	SOIL			
	Sampled:	10.28.2020 00:00	10.28.2020 00:00	10.28.2020 00:00			
BTEX by EPA 8021B	Extracted:	11.05.2020 13:50	11.05.2020 13:50	11.06.2020 17:30			
	Analyzed:	11.06.2020 00:36	11.06.2020 01:01	11.06.2020 23:14			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201			
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201			
Ethylbenzene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201			
m,p-Xylenes		<0.00402 0.00402	<0.00399 0.00399	<0.00402 0.00402			
o-Xylene		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201			
Total Xylenes		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201			
Total BTEX		<0.00201 0.00201	<0.00200 0.00200	<0.00201 0.00201			
Inorganic Anions by EPA 300/300.1	Extracted:	11.02.2020 11:40	11.02.2020 11:40	11.02.2020 11:40			
	Analyzed:	11.02.2020 14:56	11.02.2020 15:03	11.02.2020 15:09			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		165 5.00	17.4 4.95	56.1 4.99			
TPH By SW8015 Mod	Extracted:	10.30.2020 12:00	10.30.2020 12:00	10.30.2020 12:00			
	Analyzed:	10.30.2020 16:26	10.30.2020 16:47	10.30.2020 17:09			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9			
Diesel Range Organics (DRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9			
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<49.9 49.9			
Total TPH		<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



Analytical Report 676458

for

Tetra Tech- Midland

Project Manager: Mike Carmona

Lomas Rojas 26 St Co CTB 501H Separato

212C-MD-02346

11.10.2020

Collected By: Client



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

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



11.10.2020

Project Manager: **Mike Carmona**

Tetra Tech- Midland

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **676458**

Lomas Rojas 26 St Co CTB 501H Separato

Project Address: Lea County, Texas

Mike Carmona:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 676458. 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. 676458 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 676458

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26 St Co CTB 501H Separato

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
H-1 (0-1')	S	10.28.2020 00:00		676458-001
H-2 (0-1')	S	10.28.2020 00:00		676458-002
H-3 (0-1')	S	10.28.2020 00:00		676458-003



CASE NARRATIVE

Client Name: Tetra Tech- Midland

Project Name: Lomas Rojas 26 St Co CTB 501H Separato

Project ID: 212C-MD-02346
Work Order Number(s): 676458

Report Date: 11.10.2020
Date Received: 10.30.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 676458

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26 St Co CTB 501H Separato

Sample Id: **H-1 (0-1')**
Lab Sample Id: 676458-001

Matrix: Soil
Date Collected: 10.28.2020 00:00

Date Received: 10.30.2020 10:43

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.02.2020 11:40

% Moisture:
Basis: Wet Weight

Seq Number: 3141212

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	165	5.00	mg/kg	11.02.2020 14:56		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.30.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3141082

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.30.2020 16:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.30.2020 16:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.30.2020 16:26	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.30.2020 16:26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	99	%	70-130	10.30.2020 16:26		
o-Terphenyl	84-15-1	103	%	70-130	10.30.2020 16:26		



Certificate of Analytical Results 676458

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26 St Co CTB 501H Separato

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

Matrix: Soil

Date Received: 10.30.2020 10:43

Lab Sample Id: 676458-001

Date Collected: 10.28.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.05.2020 13:50

% Moisture:

Seq Number: 3141609

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.06.2020 00:36	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.06.2020 00:36	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.06.2020 00:36	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.06.2020 00:36	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.06.2020 00:36	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	11.06.2020 00:36	U	1
Total BTEX		<0.00201	0.00201	mg/kg	11.06.2020 00:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	117	%	70-130	11.06.2020 00:36		
1,4-Difluorobenzene	540-36-3	114	%	70-130	11.06.2020 00:36		



Certificate of Analytical Results 676458

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26 St Co CTB 501H Separato

Sample Id: **H-2 (0-1')**
Lab Sample Id: 676458-002

Matrix: Soil
Date Collected: 10.28.2020 00:00

Date Received: 10.30.2020 10:43

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.02.2020 11:40

% Moisture:
Basis: Wet Weight

Seq Number: 3141212

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17.4	4.95	mg/kg	11.02.2020 15:03		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.30.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3141082

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	10.30.2020 16:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	10.30.2020 16:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	10.30.2020 16:47	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	10.30.2020 16:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	10.30.2020 16:47	
o-Terphenyl	84-15-1	105	%	70-130	10.30.2020 16:47	



Certificate of Analytical Results 676458

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26 St Co CTB 501H Separato

Sample Id: **H-2 (0-1')**
Lab Sample Id: 676458-002

Matrix: Soil
Date Collected: 10.28.2020 00:00

Date Received: 10.30.2020 10:43

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.05.2020 13:50

% Moisture:
Basis: Wet Weight

Seq Number: 3141609

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.06.2020 01:01	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.06.2020 01:01	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.06.2020 01:01	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.06.2020 01:01	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.06.2020 01:01	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.06.2020 01:01	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.06.2020 01:01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	106	%	70-130	11.06.2020 01:01		
4-Bromofluorobenzene	460-00-4	123	%	70-130	11.06.2020 01:01		



Certificate of Analytical Results 676458

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26 St Co CTB 501H Separato

Sample Id: **H-3 (0-1')**
Lab Sample Id: 676458-003

Matrix: Soil
Date Collected: 10.28.2020 00:00

Date Received: 10.30.2020 10:43

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.02.2020 11:40

% Moisture:
Basis: Wet Weight

Seq Number: 3141212

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	56.1	4.99	mg/kg	11.02.2020 15:09		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 10.30.2020 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3141082

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	10.30.2020 17:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	10.30.2020 17:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	10.30.2020 17:09	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	10.30.2020 17:09	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	10.30.2020 17:09	
o-Terphenyl	84-15-1	98	%	70-130	10.30.2020 17:09	



Certificate of Analytical Results 676458

Tetra Tech- Midland, Midland, TX

Lomas Rojas 26 St Co CTB 501H Separato

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

Matrix: Soil

Date Received: 10.30.2020 10:43

Lab Sample Id: 676458-003

Date Collected: 10.28.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.06.2020 17:30

% Moisture:

Seq Number: 3141633

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.06.2020 23:14	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.06.2020 23:14	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.06.2020 23:14	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.06.2020 23:14	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.06.2020 23:14	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	11.06.2020 23:14	U	1
Total BTEX		<0.00201	0.00201	mg/kg	11.06.2020 23:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	114	%	70-130	11.06.2020 23:14		
1,4-Difluorobenzene	540-36-3	99	%	70-130	11.06.2020 23:14		

Flagging Criteria

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

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



Tetra Tech- Midland
Lomas Rojas 26 St Co CTB 501H Separato

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3141212

Matrix: Solid

Prep Method: E300P

Date Prep: 11.02.2020

MB Sample Id: 7714335-1-BLK

LCS Sample Id: 7714335-1-BKS

LCSD Sample Id: 7714335-1-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	268	107	266	106	90-110	1	20	mg/kg	11.02.2020 12:17	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3141212

Matrix: Soil

Prep Method: E300P

Date Prep: 11.02.2020

Parent Sample Id: 676434-014

MS Sample Id: 676434-014 S

MSD Sample Id: 676434-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3500	1250	5020	122	4960	117	90-110	1	20	mg/kg	11.02.2020 12:36	X

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3141212

Matrix: Soil

Prep Method: E300P

Date Prep: 11.02.2020

Parent Sample Id: 676455-002

MS Sample Id: 676455-002 S

MSD Sample Id: 676455-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6860	2490	9680	113	9490	106	90-110	2	20	mg/kg	11.02.2020 14:10	X

Analytical Method: TPH By SW8015 Mod

Seq Number: 3141082

Matrix: Solid

Prep Method: SW8015P

Date Prep: 10.30.2020

MB Sample Id: 7714294-1-BLK

LCS Sample Id: 7714294-1-BKS

LCSD Sample Id: 7714294-1-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	1030	103	993	99	70-130	4	20	mg/kg	10.30.2020 13:13	
Diesel Range Organics (DRO)	<50.0	1000	1060	106	1070	107	70-130	1	20	mg/kg	10.30.2020 13:13	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	78		106		107		70-130	%	10.30.2020 13:13
o-Terphenyl	78		122		120		70-130	%	10.30.2020 13:13

Analytical Method: TPH By SW8015 Mod

Seq Number: 3141082

Matrix: Solid

Prep Method: SW8015P

Date Prep: 10.30.2020

MB Sample Id: 7714294-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	10.30.2020 12:52	

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

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

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

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



Tetra Tech- Midland
Lomas Rojas 26 St Co CTB 501H Separato

Analytical Method: TPH By SW8015 Mod

Seq Number: 3141082

Parent Sample Id: 676455-001

Matrix: Soil

MS Sample Id: 676455-001 S

Prep Method: SW8015P

Date Prep: 10.30.2020

MSD Sample Id: 676455-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	997	923	93	964	97	70-130	4	20	mg/kg	10.30.2020 14:17	
Diesel Range Organics (DRO)	<49.9	997	937	94	917	92	70-130	2	20	mg/kg	10.30.2020 14:17	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		94		70-130	%	10.30.2020 14:17
o-Terphenyl	93		92		70-130	%	10.30.2020 14:17

Analytical Method: BTEX by EPA 8021B

Seq Number: 3141609

MB Sample Id: 7714679-1-BLK

Matrix: Solid

LCS Sample Id: 7714679-1-BKS

Prep Method: SW5035A

Date Prep: 11.05.2020

LCSD Sample Id: 7714679-1-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	0.0776	78	0.0779	78	70-130	0	35	mg/kg	11.05.2020 19:05	
Toluene	<0.00200	0.100	0.0935	94	0.109	109	70-130	15	35	mg/kg	11.05.2020 19:05	
Ethylbenzene	<0.00200	0.100	0.0990	99	0.103	103	70-130	4	35	mg/kg	11.05.2020 19:05	
m,p-Xylenes	<0.00400	0.200	0.202	101	0.213	107	70-130	5	35	mg/kg	11.05.2020 19:05	
o-Xylene	<0.00200	0.100	0.100	100	0.106	106	70-130	6	35	mg/kg	11.05.2020 19:05	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	82		109		113		70-130	%	11.05.2020 19:05
4-Bromofluorobenzene	84		100		103		70-130	%	11.05.2020 19:05

Analytical Method: BTEX by EPA 8021B

Seq Number: 3141633

MB Sample Id: 7714711-1-BLK

Matrix: Solid

LCS Sample Id: 7714711-1-BKS

Prep Method: SW5035A

Date Prep: 11.06.2020

LCSD Sample Id: 7714711-1-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	0.0861	86	0.0845	85	70-130	2	35	mg/kg	11.06.2020 20:52	
Toluene	<0.00200	0.100	0.0860	86	0.0846	85	70-130	2	35	mg/kg	11.06.2020 20:52	
Ethylbenzene	<0.00200	0.100	0.0906	91	0.0893	89	70-130	1	35	mg/kg	11.06.2020 20:52	
m,p-Xylenes	<0.00400	0.200	0.177	89	0.175	88	70-130	1	35	mg/kg	11.06.2020 20:52	
o-Xylene	<0.00200	0.100	0.0876	88	0.0865	87	70-130	1	35	mg/kg	11.06.2020 20:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		101		102		70-130	%	11.06.2020 20:52
4-Bromofluorobenzene	105		100		101		70-130	%	11.06.2020 20:52

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

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

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

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



Tetra Tech- Midland
Lomas Rojas 26 St Co CTB 501H Separato

Analytical Method: BTEX by EPA 8021B

Seq Number: 3141609

Parent Sample Id: 676698-001

Matrix: Soil

MS Sample Id: 676698-001 S

Prep Method: SW5035A

Date Prep: 11.05.2020

MSD Sample Id: 676698-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0667	67	0.0638	64	70-130	4	35	mg/kg	11.05.2020 19:56	X
Toluene	<0.00200	0.100	0.0893	89	0.0710	71	70-130	23	35	mg/kg	11.05.2020 19:56	
Ethylbenzene	<0.00200	0.100	0.0820	82	0.0673	67	70-130	20	35	mg/kg	11.05.2020 19:56	X
m,p-Xylenes	<0.00400	0.200	0.168	84	0.139	70	70-130	19	35	mg/kg	11.05.2020 19:56	
o-Xylene	<0.00200	0.100	0.0839	84	0.0708	71	70-130	17	35	mg/kg	11.05.2020 19:56	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	116		110		70-130	%	11.05.2020 19:56
4-Bromofluorobenzene	109		102		70-130	%	11.05.2020 19:56

Analytical Method: BTEX by EPA 8021B

Seq Number: 3141633

Parent Sample Id: 676458-003

Matrix: Soil

MS Sample Id: 676458-003 S

Prep Method: SW5035A

Date Prep: 11.06.2020

MSD Sample Id: 676458-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0730	73	0.0789	79	70-130	8	35	mg/kg	11.06.2020 21:33	
Toluene	<0.00200	0.100	0.0713	71	0.0789	79	70-130	10	35	mg/kg	11.06.2020 21:33	
Ethylbenzene	<0.00200	0.100	0.0776	78	0.0850	86	70-130	9	35	mg/kg	11.06.2020 21:33	
m,p-Xylenes	<0.00400	0.200	0.148	74	0.166	83	70-130	11	35	mg/kg	11.06.2020 21:33	
o-Xylene	<0.00200	0.100	0.0759	76	0.0838	84	70-130	10	35	mg/kg	11.06.2020 21:33	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		99		70-130	%	11.06.2020 21:33
4-Bromofluorobenzene	105		106		70-130	%	11.06.2020 21:33

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

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

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

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

Tetra Tech, Inc.

900 West Wall Street, Ste 1000
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

674458

Page 1 of 1

ANALYSIS REQUEST

(Circle or Specify Method No.)

(Circle) HAND DELIVERED FEDEX UPS Tracking #

ORIGINAL COPY

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 10.30.2020 10.43.00 AM

Work Order #: 676458

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	-5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes BTEX was in bulk container
#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: 10.30.2020

Checklist reviewed by:



Jessica Kramer

Date: 10.30.2020



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-318-1

Laboratory Sample Delivery Group: 212C-MD-02346
Client Project/Site: Lomas Rojas 26 St Com CTB 501 H
Separtor

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:
3/15/2021 4:51:44 PM

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

LINKS

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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: Lomas Rojas 26 St Com CTB 501 H Separator

Laboratory Job ID: 890-318-1
SDG: 212C-MD-02346

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Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separator

Job ID: 890-318-1
SDG: 212C-MD-02346

Glossary

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

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separat

Job ID: 890-318-1
SDG: 212C-MD-02346

Job ID: 890-318-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-318-1

Receipt

The samples were received on 3/10/2021 4:58 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 6.0°C

Receipt Exceptions

The following samples analyzed for method <FRACTION_METHOD> were received and analyzed from an unpreserved bulk soil jar: BH-1 (3') (890-318-1), BH-2 (2.5') (890-318-2), BH-3 (2') (890-318-3), BH-4 (3') (890-318-4), BH-5 (3') (890-318-5), SW-1 (3') (890-318-6), SW-2 (2') (890-318-7), SW-3 (2') (890-318-8), SW-4 (3') (890-318-9), SW-5 (3') (890-318-10), SW-6 (3') (890-318-11), SW-7 (2') (890-318-12) and SW-8 (2.5') (890-318-13).
BTEX 8021

Subcontract Lab non-Sister Lab

See attached subcontract report.

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separator

Job ID: 890-318-1
SDG: 212C-MD-02346

Client Sample ID: BH-1 (3')

Lab Sample ID: 890-318-1

Date Collected: 03/08/21 00:00

Matrix: Solid

Date Received: 03/10/21 16:58

Method: 300.0 - Chloride - EPA 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48.2		5.00		mg/kg		03/11/21 13:50	03/11/21 16:18	1

Method: 8015 NM - TPH - SW846 8015B TPH ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/11/21 21:59	1
Gasoline Range Hydrocarbons (GRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/11/21 21:59	1
Motor Oil Range Hydrocarbons (MRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/11/21 21:59	1
Total TPH	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/11/21 21:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 135	03/11/21 17:00	03/11/21 21:59	1
o-Terphenyl	87		70 - 135	03/11/21 17:00	03/11/21 21:59	1

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 01:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 01:06	1
m,p-Xylenes	<0.00399	U	0.00399		mg/kg		03/13/21 10:15	03/14/21 01:06	1
o-Xylene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 01:06	1
Toluene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 01:06	1
Total BTEX	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 01:06	1
Total Xylenes	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 01:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	105		70 - 130	03/13/21 10:15	03/14/21 01:06	1
4-Bromofluorobenzene	110		70 - 130	03/13/21 10:15	03/14/21 01:06	1

Client Sample ID: BH-2 (2.5')

Lab Sample ID: 890-318-2

Date Collected: 03/08/21 00:00

Matrix: Solid

Date Received: 03/10/21 16:58

Method: 300.0 - Chloride - EPA 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.4		5.00		mg/kg		03/11/21 13:50	03/11/21 16:23	1

Method: 8015 NM - TPH - SW846 8015B TPH ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/11/21 23:02	1
Gasoline Range Hydrocarbons (GRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/11/21 23:02	1
Motor Oil Range Hydrocarbons (MRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/11/21 23:02	1
Total TPH	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/11/21 23:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 135	03/11/21 17:00	03/11/21 23:02	1
o-Terphenyl	91		70 - 135	03/11/21 17:00	03/11/21 23:02	1

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 01:27	1
Ethylbenzene	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 01:27	1
m,p-Xylenes	<0.00396	U	0.00396		mg/kg		03/13/21 10:15	03/14/21 01:27	1
o-Xylene	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 01:27	1

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separator

Job ID: 890-318-1
SDG: 212C-MD-02346

Client Sample ID: BH-2 (2.5')

Date Collected: 03/08/21 00:00

Date Received: 03/10/21 16:58

Lab Sample ID: 890-318-2

Matrix: Solid

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 01:27	1
Total BTEX	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 01:27	1
Total Xylenes	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 01:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	103		70 - 130				03/13/21 10:15	03/14/21 01:27	1
4-Bromofluorobenzene	110		70 - 130				03/13/21 10:15	03/14/21 01:27	1

Client Sample ID: BH-3 (2')

Date Collected: 03/08/21 00:00

Date Received: 03/10/21 16:58

Lab Sample ID: 890-318-3

Matrix: Solid

Method: 300.0 - Chloride - EPA 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.7		5.02		mg/kg		03/11/21 13:50	03/11/21 16:28	1

Method: 8015 NM - TPH - SW846 8015B TPH ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/11/21 23:22	1
Gasoline Range Hydrocarbons (GRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/11/21 23:22	1
Motor Oil Range Hydrocarbons (MRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/11/21 23:22	1
Total TPH	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/11/21 23:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 135				03/11/21 17:00	03/11/21 23:22	1
o-Terphenyl	99		70 - 135				03/11/21 17:00	03/11/21 23:22	1

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 04:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 04:16	1
m,p-Xylenes	<0.00400	U	0.00400		mg/kg		03/13/21 10:15	03/14/21 04:16	1
o-Xylene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 04:16	1
Toluene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 04:16	1
Total BTEX	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 04:16	1
Total Xylenes	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 04:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	103		70 - 130				03/13/21 10:15	03/14/21 04:16	1
4-Bromofluorobenzene	104		70 - 130				03/13/21 10:15	03/14/21 04:16	1

Client Sample ID: BH-4 (3')

Date Collected: 03/08/21 00:00

Date Received: 03/10/21 16:58

Lab Sample ID: 890-318-4

Matrix: Solid

Method: 300.0 - Chloride - EPA 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29.1		5.05		mg/kg		03/11/21 19:00	03/11/21 21:26	1

Method: 8015 NM - TPH - SW846 8015B TPH ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/11/21 23:43	1

Eurofins Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separat

Job ID: 890-318-1
SDG: 212C-MD-02346

Client Sample ID: BH-4 (3')

Lab Sample ID: 890-318-4

Date Collected: 03/08/21 00:00

Matrix: Solid

Date Received: 03/10/21 16:58

Method: 8015 NM - TPH - SW846 8015B TPH ORO (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons (GRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/11/21 23:43	1
Motor Oil Range Hydrocarbons (MRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/11/21 23:43	1
Total TPH	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/11/21 23:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 135				03/11/21 17:00	03/11/21 23:43	1
o-Terphenyl	89		70 - 135				03/11/21 17:00	03/11/21 23:43	1

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 04:36	1
Ethylbenzene	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 04:36	1
m,p-Xylenes	<0.00404	U	0.00404		mg/kg		03/13/21 10:15	03/14/21 04:36	1
o-Xylene	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 04:36	1
Toluene	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 04:36	1
Total BTEX	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 04:36	1
Total Xylenes	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 04:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	104		70 - 130				03/13/21 10:15	03/14/21 04:36	1
4-Bromofluorobenzene	109		70 - 130				03/13/21 10:15	03/14/21 04:36	1

Client Sample ID: BH-5 (3')

Lab Sample ID: 890-318-5

Date Collected: 03/08/21 00:00

Matrix: Solid

Date Received: 03/10/21 16:58

Method: 300.0 - Chloride - EPA 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.2		5.05		mg/kg		03/11/21 19:00	03/11/21 21:32	1

Method: 8015 NM - TPH - SW846 8015B TPH ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/12/21 00:04	1
Gasoline Range Hydrocarbons (GRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/12/21 00:04	1
Motor Oil Range Hydrocarbons (MRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/12/21 00:04	1
Total TPH	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/12/21 00:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 135				03/11/21 17:00	03/12/21 00:04	1
o-Terphenyl	93		70 - 135				03/11/21 17:00	03/12/21 00:04	1

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 04:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 04:57	1
m,p-Xylenes	<0.00399	U	0.00399		mg/kg		03/13/21 10:15	03/14/21 04:57	1
o-Xylene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 04:57	1
Toluene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 04:57	1
Total BTEX	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 04:57	1
Total Xylenes	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 04:57	1

Eurofins Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separat

Job ID: 890-318-1
SDG: 212C-MD-02346

Client Sample ID: BH-5 (3')

Date Collected: 03/08/21 00:00

Date Received: 03/10/21 16:58

Lab Sample ID: 890-318-5

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	102		70 - 130	03/13/21 10:15	03/14/21 04:57	1
4-Bromofluorobenzene	109		70 - 130	03/13/21 10:15	03/14/21 04:57	1

Client Sample ID: SW-1 (3')

Date Collected: 03/08/21 00:00

Date Received: 03/10/21 16:58

Lab Sample ID: 890-318-6

Matrix: Solid

Method: 300.0 - Chloride - EPA 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27.6		4.97		mg/kg		03/11/21 19:00	03/11/21 21:37	1

Method: 8015 NM - TPH - SW846 8015B TPH ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 00:25	1
Gasoline Range Hydrocarbons (GRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 00:25	1
Motor Oil Range Hydrocarbons (MRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 00:25	1
Total TPH	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 00:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 135	03/11/21 17:00	03/12/21 00:25	1
o-Terphenyl	90		70 - 135	03/11/21 17:00	03/12/21 00:25	1

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 05:17	1
Ethylbenzene	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 05:17	1
m,p-Xylenes	<0.00397	U	0.00397		mg/kg		03/13/21 10:15	03/14/21 05:17	1
o-Xylene	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 05:17	1
Toluene	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 05:17	1
Total BTEX	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 05:17	1
Total Xylenes	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 05:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	103		70 - 130	03/13/21 10:15	03/14/21 05:17	1
4-Bromofluorobenzene	109		70 - 130	03/13/21 10:15	03/14/21 05:17	1

Client Sample ID: SW-2 (2')

Date Collected: 03/08/21 00:00

Date Received: 03/10/21 16:58

Lab Sample ID: 890-318-7

Matrix: Solid

Method: 300.0 - Chloride - EPA 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99		mg/kg		03/11/21 19:00	03/11/21 21:43	1

Method: 8015 NM - TPH - SW846 8015B TPH ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/12/21 00:45	1
Gasoline Range Hydrocarbons (GRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/12/21 00:45	1
Motor Oil Range Hydrocarbons (MRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/12/21 00:45	1
Total TPH	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/12/21 00:45	1

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separator

Job ID: 890-318-1
SDG: 212C-MD-02346

Client Sample ID: SW-2 (2')

Lab Sample ID: 890-318-7

Date Collected: 03/08/21 00:00

Matrix: Solid

Date Received: 03/10/21 16:58

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 135	03/11/21 17:00	03/12/21 00:45	1
o-Terphenyl	87		70 - 135	03/11/21 17:00	03/12/21 00:45	1

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/kg		03/13/21 10:15	03/14/21 05:38	1
Ethylbenzene	<0.00199	U	0.00199		mg/kg		03/13/21 10:15	03/14/21 05:38	1
m,p-Xylenes	<0.00398	U	0.00398		mg/kg		03/13/21 10:15	03/14/21 05:38	1
o-Xylene	<0.00199	U	0.00199		mg/kg		03/13/21 10:15	03/14/21 05:38	1
Toluene	<0.00199	U	0.00199		mg/kg		03/13/21 10:15	03/14/21 05:38	1
Total BTEX	<0.00199	U	0.00199		mg/kg		03/13/21 10:15	03/14/21 05:38	1
Total Xylenes	<0.00199	U	0.00199		mg/kg		03/13/21 10:15	03/14/21 05:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	104		70 - 130	03/13/21 10:15	03/14/21 05:38	1
4-Bromofluorobenzene	110		70 - 130	03/13/21 10:15	03/14/21 05:38	1

Client Sample ID: SW-3 (2')

Lab Sample ID: 890-318-8

Date Collected: 03/08/21 00:00

Matrix: Solid

Date Received: 03/10/21 16:58

Method: 300.0 - Chloride - EPA 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	82.3		5.00		mg/kg		03/11/21 19:00	03/11/21 21:48	1

Method: 8015 NM - TPH - SW846 8015B TPH ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 01:06	1
Gasoline Range Hydrocarbons (GRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 01:06	1
Motor Oil Range Hydrocarbons (MRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 01:06	1
Total TPH	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 01:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 135	03/11/21 17:00	03/12/21 01:06	1
o-Terphenyl	85		70 - 135	03/11/21 17:00	03/12/21 01:06	1

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 05:58	1
Ethylbenzene	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 05:58	1
m,p-Xylenes	<0.00404	U	0.00404		mg/kg		03/13/21 10:15	03/14/21 05:58	1
o-Xylene	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 05:58	1
Toluene	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 05:58	1
Total BTEX	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 05:58	1
Total Xylenes	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 05:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	102		70 - 130	03/13/21 10:15	03/14/21 05:58	1
4-Bromofluorobenzene	110		70 - 130	03/13/21 10:15	03/14/21 05:58	1

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separator

Job ID: 890-318-1
SDG: 212C-MD-02346

Client Sample ID: SW-4 (3')

Lab Sample ID: 890-318-9

Date Collected: 03/08/21 00:00

Matrix: Solid

Date Received: 03/10/21 16:58

Method: 300.0 - Chloride - EPA 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33.7		5.02		mg/kg		03/11/21 19:00	03/11/21 22:05	1

Method: 8015 NM - TPH - SW846 8015B TPH ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/12/21 01:27	1
Gasoline Range Hydrocarbons (GRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/12/21 01:27	1
Motor Oil Range Hydrocarbons (MRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/12/21 01:27	1
Total TPH	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/12/21 01:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 135	03/11/21 17:00	03/12/21 01:27	1
o-Terphenyl	91		70 - 135	03/11/21 17:00	03/12/21 01:27	1

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 06:18	1
Ethylbenzene	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 06:18	1
m,p-Xylenes	<0.00403	U	0.00403		mg/kg		03/13/21 10:15	03/14/21 06:18	1
o-Xylene	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 06:18	1
Toluene	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 06:18	1
Total BTEX	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 06:18	1
Total Xylenes	<0.00202	U	0.00202		mg/kg		03/13/21 10:15	03/14/21 06:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	104		70 - 130	03/13/21 10:15	03/14/21 06:18	1
4-Bromofluorobenzene	109		70 - 130	03/13/21 10:15	03/14/21 06:18	1

Client Sample ID: SW-5 (3')

Lab Sample ID: 890-318-10

Date Collected: 03/08/21 00:00

Matrix: Solid

Date Received: 03/10/21 16:58

Method: 300.0 - Chloride - EPA 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	32.7		4.96		mg/kg		03/11/21 19:00	03/11/21 22:10	1

Method: 8015 NM - TPH - SW846 8015B TPH ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 01:48	1
Gasoline Range Hydrocarbons (GRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 01:48	1
Motor Oil Range Hydrocarbons (MRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 01:48	1
Total TPH	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 01:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 135	03/11/21 17:00	03/12/21 01:48	1
o-Terphenyl	91		70 - 135	03/11/21 17:00	03/12/21 01:48	1

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 06:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 06:39	1
m,p-Xylenes	<0.00401	U	0.00401		mg/kg		03/13/21 10:15	03/14/21 06:39	1
o-Xylene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 06:39	1

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separator

Job ID: 890-318-1
SDG: 212C-MD-02346

Client Sample ID: SW-5 (3')

Lab Sample ID: 890-318-10

Date Collected: 03/08/21 00:00

Matrix: Solid

Date Received: 03/10/21 16:58

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 06:39	1
Total BTEX	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 06:39	1
Total Xylenes	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 06:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	104		70 - 130				03/13/21 10:15	03/14/21 06:39	1
4-Bromofluorobenzene	110		70 - 130				03/13/21 10:15	03/14/21 06:39	1

Client Sample ID: SW-6 (3')

Lab Sample ID: 890-318-11

Date Collected: 03/08/21 00:00

Matrix: Solid

Date Received: 03/10/21 16:58

Method: 300.0 - Chloride - EPA 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.7		5.03		mg/kg		03/11/21 19:00	03/11/21 22:27	1

Method: 8015 NM - TPH - SW846 8015B TPH ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 02:30	1
Gasoline Range Hydrocarbons (GRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 02:30	1
Motor Oil Range Hydrocarbons (MRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 02:30	1
Total TPH	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 02:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 135				03/11/21 17:00	03/12/21 02:30	1
o-Terphenyl	83		70 - 135				03/11/21 17:00	03/12/21 02:30	1

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 06:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 06:59	1
m,p-Xylenes	<0.00399	U	0.00399		mg/kg		03/13/21 10:15	03/14/21 06:59	1
o-Xylene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 06:59	1
Toluene	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 06:59	1
Total BTEX	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 06:59	1
Total Xylenes	<0.00200	U	0.00200		mg/kg		03/13/21 10:15	03/14/21 06:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	105		70 - 130				03/13/21 10:15	03/14/21 06:59	1
4-Bromofluorobenzene	109		70 - 130				03/13/21 10:15	03/14/21 06:59	1

Client Sample ID: SW-7 (2')

Lab Sample ID: 890-318-12

Date Collected: 03/08/21 00:00

Matrix: Solid

Date Received: 03/10/21 16:58

Method: 300.0 - Chloride - EPA 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35.0		4.98		mg/kg		03/11/21 19:00	03/11/21 22:33	1

Method: 8015 NM - TPH - SW846 8015B TPH ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/12/21 02:52	1

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separat

Job ID: 890-318-1
SDG: 212C-MD-02346

Client Sample ID: SW-7 (2')

Lab Sample ID: 890-318-12

Date Collected: 03/08/21 00:00

Matrix: Solid

Date Received: 03/10/21 16:58

Method: 8015 NM - TPH - SW846 8015B TPH ORO (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons (GRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/12/21 02:52	1
Motor Oil Range Hydrocarbons (MRO)	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/12/21 02:52	1
Total TPH	<49.9	U	49.9		mg/kg		03/11/21 17:00	03/12/21 02:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 135				03/11/21 17:00	03/12/21 02:52	1
o-Terphenyl	79		70 - 135				03/11/21 17:00	03/12/21 02:52	1

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 07:20	1
Ethylbenzene	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 07:20	1
m,p-Xylenes	<0.00397	U	0.00397		mg/kg		03/13/21 10:15	03/14/21 07:20	1
o-Xylene	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 07:20	1
Toluene	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 07:20	1
Total BTEX	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 07:20	1
Total Xylenes	<0.00198	U	0.00198		mg/kg		03/13/21 10:15	03/14/21 07:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	104		70 - 130				03/13/21 10:15	03/14/21 07:20	1
4-Bromofluorobenzene	109		70 - 130				03/13/21 10:15	03/14/21 07:20	1

Client Sample ID: SW-8 (2.5')

Lab Sample ID: 890-318-13

Date Collected: 03/08/21 00:00

Matrix: Solid

Date Received: 03/10/21 16:58

Method: 300.0 - Chloride - EPA 300.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57.3		4.95		mg/kg		03/11/21 19:00	03/11/21 22:38	1

Method: 8015 NM - TPH - SW846 8015B TPH ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 03:19	1
Gasoline Range Hydrocarbons (GRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 03:19	1
Motor Oil Range Hydrocarbons (MRO)	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 03:19	1
Total TPH	<50.0	U	50.0		mg/kg		03/11/21 17:00	03/12/21 03:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 135				03/11/21 17:00	03/12/21 03:19	1
o-Terphenyl	78		70 - 135				03/11/21 17:00	03/12/21 03:19	1

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/kg		03/14/21 09:00	03/14/21 14:48	1
Ethylbenzene	<0.00202	U	0.00202		mg/kg		03/14/21 09:00	03/14/21 14:48	1
m,p-Xylenes	<0.00403	U	0.00403		mg/kg		03/14/21 09:00	03/14/21 14:48	1
o-Xylene	<0.00202	U	0.00202		mg/kg		03/14/21 09:00	03/14/21 14:48	1
Toluene	<0.00202	U	0.00202		mg/kg		03/14/21 09:00	03/14/21 14:48	1
Total BTEX	<0.00202	U	0.00202		mg/kg		03/14/21 09:00	03/14/21 14:48	1
Total Xylenes	<0.00202	U	0.00202		mg/kg		03/14/21 09:00	03/14/21 14:48	1

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separor

Job ID: 890-318-1
SDG: 212C-MD-02346

Client Sample ID: SW-8 (2.5')
Date Collected: 03/08/21 00:00
Date Received: 03/10/21 16:58

Lab Sample ID: 890-318-13
Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	103		70 - 130	03/14/21 09:00	03/14/21 14:48	1
4-Bromofluorobenzene	109		70 - 130	03/14/21 09:00	03/14/21 14:48	1

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separor

Job ID: 890-318-1
SDG: 212C-MD-02346

Method: 8015 NM - TPH - SW846 8015B TPH ORO

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO	OTPH
		(70-135)	(70-135)
890-318-1	BH-1 (3')	84	87
890-318-2	BH-2 (2.5')	90	91
890-318-3	BH-3 (2')	97	99
890-318-4	BH-4 (3')	89	89
890-318-5	BH-5 (3')	90	93
890-318-6	SW-1 (3')	87	90
890-318-7	SW-2 (2')	87	87
890-318-8	SW-3 (2')	85	85
890-318-9	SW-4 (3')	88	91
890-318-10	SW-5 (3')	89	91
890-318-11	SW-6 (3')	82	83
890-318-12	SW-7 (2')	80	79
890-318-13	SW-8 (2.5')	79	78
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds

Matrix: SOIL

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB	
		(70-130)	
691368-013 S	Matrix Spike	103	
691368-013 SD	Matrix Spike Duplicate	105	
7723269-1-BKS	Lab Control Sample	102	
7723269-1-BLK	Method Blank	103	
7723269-1-BSD	Lab Control Sample Dup	98	
7723288-1-BKS	Lab Control Sample	98	
7723288-1-BLK	Method Blank	100	
7723288-1-BSD	Lab Control Sample Dup	98	
Surrogate Legend			
BFB = 4-Bromofluorobenzene			

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB	DFBZ
		(70-130)	(70-130)
890-318-1	BH-1 (3')	110	105
890-318-2	BH-2 (2.5')	110	103
890-318-3	BH-3 (2')	104	103
890-318-4	BH-4 (3')	109	104
890-318-5	BH-5 (3')	109	102
890-318-6	SW-1 (3')	109	103
890-318-7	SW-2 (2')	110	104
890-318-8	SW-3 (2')	110	102
890-318-9	SW-4 (3')	109	104

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Surrogate Summary

Client: Tetra Tech, Inc.

Job ID: 890-318-1

Project/Site: Lomas Rojas 26 St Com CTB 501 H Separator

SDG: 212C-MD-02346

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds (Continued)**Matrix: Solid****Prep Type: Total/NA****Percent Surrogate Recovery (Acceptance Limits)**

Lab Sample ID	Client Sample ID	BFB (70-130)	DFBZ (70-130)
890-318-10	SW-5 (3')	110	104
890-318-11	SW-6 (3')	109	105
890-318-12	SW-7 (2')	109	104
890-318-13	SW-8 (2.5')	109	103

Surrogate Legend

BFB = 4-Bromofluorobenzene

DFBZ = 1,4-Difluorobenzene

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separat

Job ID: 890-318-1
SDG: 212C-MD-02346

Method: 300.0 - Chloride - EPA 300.0

Lab Sample ID: 7723102-1-BLK
Matrix: SOIL
Analysis Batch: 3153430

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3153430_P

Analyte	BLANK Result	BLANK Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5	U	5		mg/kg		03/11/21 13:50	03/11/21 14:07	1

Lab Sample ID: 7723102-1-BKS
Matrix: SOIL
Analysis Batch: 3153430

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3153430_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	243		mg/kg		97	80 - 120

Lab Sample ID: 7723102-1-BSD
Matrix: SOIL
Analysis Batch: 3153430

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3153430_P

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	250	243		mg/kg		97	80 - 120	0	20

Lab Sample ID: 7723178-1-BLK
Matrix: SOIL
Analysis Batch: 3153436

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3153436_P

Analyte	BLANK Result	BLANK Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5	U	5		mg/kg		03/11/21 19:00	03/11/21 20:14	1

Lab Sample ID: 7723178-1-BKS
Matrix: SOIL
Analysis Batch: 3153436

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3153436_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	249		mg/kg		100	80 - 120

Lab Sample ID: 7723178-1-BSD
Matrix: SOIL
Analysis Batch: 3153436

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3153436_P

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	250	251		mg/kg		100	80 - 120	1	20

Lab Sample ID: 691368-008 S
Matrix: SOIL
Analysis Batch: 3153436

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 3153436_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	82.3		250	345		mg/kg		105	80 - 120

Lab Sample ID: 691368-008 SD
Matrix: SOIL
Analysis Batch: 3153436

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 3153436_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	82.3		250	336		mg/kg		101	80 - 120	3	20

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QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separat

Job ID: 890-318-1
SDG: 212C-MD-02346

Method: 8015 NM - TPH - SW846 8015B TPH ORO

Lab Sample ID: 7723156-1-BLK

Matrix: SOIL

Analysis Batch: 3153460

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3153460_P

Analyte	BLANK Result	BLANK Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<50	U	50		mg/kg		03/11/21 17:00	03/11/21 20:56	1
Gasoline Range Hydrocarbons (GRO)	<50	U	50		mg/kg		03/11/21 17:00	03/11/21 20:56	1
Motor Oil Range Hydrocarbons (MRO)	<50	U	50		mg/kg		03/11/21 17:00	03/11/21 20:56	1

Lab Sample ID: 7723156-1-BKS

Matrix: SOIL

Analysis Batch: 3153460

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3153460_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (DRO)	1000	974		mg/kg		97	70 - 135
Gasoline Range Hydrocarbons (GRO)	1000	1030		mg/kg		103	70 - 135

Lab Sample ID: 7723156-1-BSD

Matrix: SOIL

Analysis Batch: 3153460

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3153460_P

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Diesel Range Organics (DRO)	1000	984		mg/kg		98	70 - 135	1	20
Gasoline Range Hydrocarbons (GRO)	1000	1030		mg/kg		103	70 - 135	0	20

Lab Sample ID: 691368-001 S

Matrix: SOIL

Analysis Batch: 3153460

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 3153460_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (DRO)	<50		997	985		mg/kg		99	70 - 135
Gasoline Range Hydrocarbons (GRO)	<50		997	1020		mg/kg		102	70 - 135

Lab Sample ID: 691368-001 SD

Matrix: SOIL

Analysis Batch: 3153460

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 3153460_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Diesel Range Organics (DRO)	<50		999	968		mg/kg		97	70 - 135	2	20
Gasoline Range Hydrocarbons (GRO)	<50		999	997		mg/kg		100	70 - 135	2	20

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds

Lab Sample ID: 7723269-1-BLK

Matrix: SOIL

Analysis Batch: 3153561

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3153561_P

Analyte	BLANK Result	BLANK Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<.002	U	.002		mg/kg		03/13/21 10:15	03/13/21 21:54	1
Ethylbenzene	<.002	U	.002		mg/kg		03/13/21 10:15	03/13/21 21:54	1
m,p-Xylenes	<.004	U	.004		mg/kg		03/13/21 10:15	03/13/21 21:54	1
o-Xylene	<.002	U	.002		mg/kg		03/13/21 10:15	03/13/21 21:54	1

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QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separat

Job ID: 890-318-1
SDG: 212C-MD-02346

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds (Continued)

Lab Sample ID: 7723269-1-BLK

Matrix: SOIL

Analysis Batch: 3153561

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3153561_P

Analyte	BLANK Result	BLANK Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<.002	U	.002		mg/kg		03/13/21 10:15	03/13/21 21:54	1
Surrogate	%Recovery	BLANK Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	103		70 - 130				03/13/21 10:15	03/13/21 21:54	1

Lab Sample ID: 7723269-1-BKS

Matrix: SOIL

Analysis Batch: 3153561

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3153561_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	.1	0.111		mg/kg		111	70 - 130
Ethylbenzene	.1	0.115		mg/kg		115	71 - 129
m,p-Xylenes	.2	0.234		mg/kg		117	70 - 135
o-Xylene	.1	0.124		mg/kg		124	71 - 133
Toluene	.1	0.128		mg/kg		128	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene	102		70 - 130				

Lab Sample ID: 7723269-1-BSD

Matrix: SOIL

Analysis Batch: 3153561

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3153561_P

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	.1	0.100		mg/kg		100	70 - 130	10	35
Ethylbenzene	.1	0.108		mg/kg		108	71 - 129	6	35
m,p-Xylenes	.2	0.221		mg/kg		111	70 - 135	6	35
o-Xylene	.1	0.112		mg/kg		112	71 - 133	10	35
Toluene	.1	0.113		mg/kg		113	70 - 130	12	35
Surrogate	%Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene	98		70 - 130						

Lab Sample ID: 7723288-1-BLK

Matrix: SOIL

Analysis Batch: 3153588

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3153588_P

Analyte	BLANK Result	BLANK Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<.002	U	.002		mg/kg		03/14/21 09:00	03/14/21 14:19	1
Ethylbenzene	<.002	U	.002		mg/kg		03/14/21 09:00	03/14/21 14:19	1
m,p-Xylenes	<.004	U	.004		mg/kg		03/14/21 09:00	03/14/21 14:19	1
o-Xylene	<.002	U	.002		mg/kg		03/14/21 09:00	03/14/21 14:19	1
Toluene	<.002	U	.002		mg/kg		03/14/21 09:00	03/14/21 14:19	1
Surrogate	%Recovery	BLANK Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		70 - 130				03/14/21 09:00	03/14/21 14:19	1

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QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separat

Job ID: 890-318-1
SDG: 212C-MD-02346

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds (Continued)

Lab Sample ID: 7723288-1-BKS

Matrix: SOIL

Analysis Batch: 3153588

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3153588_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	.1	0.105		mg/kg		105	70 - 130
Ethylbenzene	.1	0.112		mg/kg		112	71 - 129
m,p-Xylenes	.2	0.229		mg/kg		115	70 - 135
o-Xylene	.1	0.114		mg/kg		114	71 - 133
Toluene	.1	0.114		mg/kg		114	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	98		70 - 130

Lab Sample ID: 7723288-1-BSD

Matrix: SOIL

Analysis Batch: 3153588

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3153588_P

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	.1	0.109		mg/kg		109	70 - 130	4	35
Ethylbenzene	.1	0.110		mg/kg		110	71 - 129	2	35
m,p-Xylenes	.2	0.222		mg/kg		111	70 - 135	3	35
o-Xylene	.1	0.110		mg/kg		110	71 - 133	4	35
Toluene	.1	0.112		mg/kg		112	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	98		70 - 130

Lab Sample ID: 691368-013 S

Matrix: SOIL

Analysis Batch: 3153588

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 3153588_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<.002		.0998	0.101		mg/kg		101	70 - 130
Ethylbenzene	<.002		.0998	0.105		mg/kg		105	71 - 129
m,p-Xylenes	<.004		.2	0.213		mg/kg		107	70 - 135
o-Xylene	<.002		.0998	0.107		mg/kg		107	71 - 133
Toluene	<.002		.0998	0.107		mg/kg		107	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	103		70 - 130

Lab Sample ID: 691368-013 SD

Matrix: SOIL

Analysis Batch: 3153588

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 3153588_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<.002		.1	0.0963		mg/kg		96	70 - 130	5	35
Ethylbenzene	<.002		.1	0.0990		mg/kg		99	71 - 129	6	35
m,p-Xylenes	<.004		.2	0.198		mg/kg		99	70 - 135	7	35
o-Xylene	<.002		.1	0.101		mg/kg		101	71 - 133	6	35
Toluene	<.002		.1	0.101		mg/kg		101	70 - 130	6	35

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QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separator

Job ID: 890-318-1
SDG: 212C-MD-02346

Method: 8021B - BTEX - SW846 8021 Volatile Organic Compounds (Continued)

Lab Sample ID: 691368-013 SD

Matrix: SOIL

Analysis Batch: 3153588

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 3153588_P

	<i>MSD</i>	<i>MSD</i>	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
4-Bromofluorobenzene	105		70 - 130

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separat

Job ID: 890-318-1
SDG: 212C-MD-02346

Subcontract

Analysis Batch: 3153430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-318-1	BH-1 (3')	Total/NA	Solid	300.0 - Chloride	3153430_P
890-318-2	BH-2 (2.5')	Total/NA	Solid	300.0 - Chloride	3153430_P
890-318-3	BH-3 (2')	Total/NA	Solid	300.0 - Chloride	3153430_P
7723102-1-BLK	Method Blank	Total/NA	SOIL	300.0 - Chloride	3153430_P
7723102-1-BKS	Lab Control Sample	Total/NA	SOIL	300.0 - Chloride	3153430_P
7723102-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	300.0 - Chloride	3153430_P

Analysis Batch: 3153436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-318-4	BH-4 (3')	Total/NA	Solid	300.0 - Chloride	3153436_P
890-318-5	BH-5 (3')	Total/NA	Solid	300.0 - Chloride	3153436_P
890-318-6	SW-1 (3')	Total/NA	Solid	300.0 - Chloride	3153436_P
890-318-7	SW-2 (2')	Total/NA	Solid	300.0 - Chloride	3153436_P
890-318-8	SW-3 (2')	Total/NA	Solid	300.0 - Chloride	3153436_P
890-318-9	SW-4 (3')	Total/NA	Solid	300.0 - Chloride	3153436_P
890-318-10	SW-5 (3')	Total/NA	Solid	300.0 - Chloride	3153436_P
890-318-11	SW-6 (3')	Total/NA	Solid	300.0 - Chloride	3153436_P
890-318-12	SW-7 (2')	Total/NA	Solid	300.0 - Chloride	3153436_P
890-318-13	SW-8 (2.5')	Total/NA	Solid	300.0 - Chloride	3153436_P
7723178-1-BLK	Method Blank	Total/NA	SOIL	300.0 - Chloride	3153436_P
7723178-1-BKS	Lab Control Sample	Total/NA	SOIL	300.0 - Chloride	3153436_P
7723178-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	300.0 - Chloride	3153436_P
691368-008 S	Matrix Spike	Total/NA	SOIL	300.0 - Chloride	3153436_P
691368-008 SD	Matrix Spike Duplicate	Total/NA	SOIL	300.0 - Chloride	3153436_P

Analysis Batch: 3153460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-318-1	BH-1 (3')	Total/NA	Solid	8015 NM - TPH	3153460_P
890-318-2	BH-2 (2.5')	Total/NA	Solid	8015 NM - TPH	3153460_P
890-318-3	BH-3 (2')	Total/NA	Solid	8015 NM - TPH	3153460_P
890-318-4	BH-4 (3')	Total/NA	Solid	8015 NM - TPH	3153460_P
890-318-5	BH-5 (3')	Total/NA	Solid	8015 NM - TPH	3153460_P
890-318-6	SW-1 (3')	Total/NA	Solid	8015 NM - TPH	3153460_P
890-318-7	SW-2 (2')	Total/NA	Solid	8015 NM - TPH	3153460_P
890-318-8	SW-3 (2')	Total/NA	Solid	8015 NM - TPH	3153460_P
890-318-9	SW-4 (3')	Total/NA	Solid	8015 NM - TPH	3153460_P
890-318-10	SW-5 (3')	Total/NA	Solid	8015 NM - TPH	3153460_P
890-318-11	SW-6 (3')	Total/NA	Solid	8015 NM - TPH	3153460_P
890-318-12	SW-7 (2')	Total/NA	Solid	8015 NM - TPH	3153460_P
890-318-13	SW-8 (2.5')	Total/NA	Solid	8015 NM - TPH	3153460_P
7723156-1-BLK	Method Blank	Total/NA	SOIL	8015 NM - TPH	3153460_P
7723156-1-BKS	Lab Control Sample	Total/NA	SOIL	8015 NM - TPH	3153460_P
7723156-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	8015 NM - TPH	3153460_P
691368-001 S	Matrix Spike	Total/NA	SOIL	8015 NM - TPH	3153460_P
691368-001 SD	Matrix Spike Duplicate	Total/NA	SOIL	8015 NM - TPH	3153460_P

Analysis Batch: 3153561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-318-1	BH-1 (3')	Total/NA	Solid	8021B - BTEX	3153561_P
890-318-2	BH-2 (2.5')	Total/NA	Solid	8021B - BTEX	3153561_P
890-318-3	BH-3 (2')	Total/NA	Solid	8021B - BTEX	3153561_P

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QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separat

Job ID: 890-318-1
SDG: 212C-MD-02346

Subcontract (Continued)

Analysis Batch: 3153561 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-318-4	BH-4 (3')	Total/NA	Solid	8021B - BTEX	3153561_P
890-318-5	BH-5 (3')	Total/NA	Solid	8021B - BTEX	3153561_P
890-318-6	SW-1 (3')	Total/NA	Solid	8021B - BTEX	3153561_P
890-318-7	SW-2 (2')	Total/NA	Solid	8021B - BTEX	3153561_P
890-318-8	SW-3 (2')	Total/NA	Solid	8021B - BTEX	3153561_P
890-318-9	SW-4 (3')	Total/NA	Solid	8021B - BTEX	3153561_P
890-318-10	SW-5 (3')	Total/NA	Solid	8021B - BTEX	3153561_P
890-318-11	SW-6 (3')	Total/NA	Solid	8021B - BTEX	3153561_P
890-318-12	SW-7 (2')	Total/NA	Solid	8021B - BTEX	3153561_P
7723269-1-BLK	Method Blank	Total/NA	SOIL	8021B - BTEX	3153561_P
7723269-1-BKS	Lab Control Sample	Total/NA	SOIL	8021B - BTEX	3153561_P
7723269-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	8021B - BTEX	3153561_P

Analysis Batch: 3153588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-318-13	SW-8 (2.5')	Total/NA	Solid	8021B - BTEX	3153588_P
7723288-1-BLK	Method Blank	Total/NA	SOIL	8021B - BTEX	3153588_P
7723288-1-BKS	Lab Control Sample	Total/NA	SOIL	8021B - BTEX	3153588_P
7723288-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	8021B - BTEX	3153588_P
691368-013 S	Matrix Spike	Total/NA	SOIL	8021B - BTEX	3153588_P
691368-013 SD	Matrix Spike Duplicate	Total/NA	SOIL	8021B - BTEX	3153588_P

Prep Batch: 3153430_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-318-1	BH-1 (3')	Total/NA	Solid	E300P	
890-318-2	BH-2 (2.5')	Total/NA	Solid	E300P	
890-318-3	BH-3 (2')	Total/NA	Solid	E300P	
7723102-1-BLK	Method Blank	Total/NA	SOIL	***DEFAULT PREP***	
7723102-1-BKS	Lab Control Sample	Total/NA	SOIL	***DEFAULT PREP***	
7723102-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	***DEFAULT PREP***	

Prep Batch: 3153436_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-318-4	BH-4 (3')	Total/NA	Solid	E300P	
890-318-5	BH-5 (3')	Total/NA	Solid	E300P	
890-318-6	SW-1 (3')	Total/NA	Solid	E300P	
890-318-7	SW-2 (2')	Total/NA	Solid	E300P	
890-318-8	SW-3 (2')	Total/NA	Solid	E300P	
890-318-9	SW-4 (3')	Total/NA	Solid	E300P	
890-318-10	SW-5 (3')	Total/NA	Solid	E300P	
890-318-11	SW-6 (3')	Total/NA	Solid	E300P	
890-318-12	SW-7 (2')	Total/NA	Solid	E300P	
890-318-13	SW-8 (2.5')	Total/NA	Solid	E300P	
7723178-1-BLK	Method Blank	Total/NA	SOIL	***DEFAULT PREP***	
7723178-1-BKS	Lab Control Sample	Total/NA	SOIL	***DEFAULT PREP***	
7723178-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	***DEFAULT PREP***	

Eurofins Carlsbad

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separator

Job ID: 890-318-1
SDG: 212C-MD-02346

Subcontract (Continued)

Prep Batch: 3153436_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
691368-008 S	Matrix Spike	Total/NA	SOIL	***DEFAULT PREP***	
691368-008 SD	Matrix Spike Duplicate	Total/NA	SOIL	***DEFAULT PREP***	

Prep Batch: 3153460_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-318-1	BH-1 (3')	Total/NA	Solid	SW8015P	
890-318-2	BH-2 (2.5')	Total/NA	Solid	SW8015P	
890-318-3	BH-3 (2')	Total/NA	Solid	SW8015P	
890-318-4	BH-4 (3')	Total/NA	Solid	SW8015P	
890-318-5	BH-5 (3')	Total/NA	Solid	SW8015P	
890-318-6	SW-1 (3')	Total/NA	Solid	SW8015P	
890-318-7	SW-2 (2')	Total/NA	Solid	SW8015P	
890-318-8	SW-3 (2')	Total/NA	Solid	SW8015P	
890-318-9	SW-4 (3')	Total/NA	Solid	SW8015P	
890-318-10	SW-5 (3')	Total/NA	Solid	SW8015P	
890-318-11	SW-6 (3')	Total/NA	Solid	SW8015P	
890-318-12	SW-7 (2')	Total/NA	Solid	SW8015P	
890-318-13	SW-8 (2.5')	Total/NA	Solid	SW8015P	
7723156-1-BLK	Method Blank	Total/NA	SOIL	***DEFAULT PREP***	
7723156-1-BKS	Lab Control Sample	Total/NA	SOIL	***DEFAULT PREP***	
7723156-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	***DEFAULT PREP***	
691368-001 S	Matrix Spike	Total/NA	SOIL	***DEFAULT PREP***	
691368-001 SD	Matrix Spike Duplicate	Total/NA	SOIL	***DEFAULT PREP***	

Prep Batch: 3153561_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-318-1	BH-1 (3')	Total/NA	Solid	SW5035A	
890-318-2	BH-2 (2.5')	Total/NA	Solid	SW5035A	
890-318-3	BH-3 (2')	Total/NA	Solid	SW5035A	
890-318-4	BH-4 (3')	Total/NA	Solid	SW5035A	
890-318-5	BH-5 (3')	Total/NA	Solid	SW5035A	
890-318-6	SW-1 (3')	Total/NA	Solid	SW5035A	
890-318-7	SW-2 (2')	Total/NA	Solid	SW5035A	
890-318-8	SW-3 (2')	Total/NA	Solid	SW5035A	
890-318-9	SW-4 (3')	Total/NA	Solid	SW5035A	
890-318-10	SW-5 (3')	Total/NA	Solid	SW5035A	
890-318-11	SW-6 (3')	Total/NA	Solid	SW5035A	
890-318-12	SW-7 (2')	Total/NA	Solid	SW5035A	
7723269-1-BLK	Method Blank	Total/NA	SOIL	SW5035A	
7723269-1-BKS	Lab Control Sample	Total/NA	SOIL	SW5035A	
7723269-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	SW5035A	

Prep Batch: 3153588_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-318-13	SW-8 (2.5')	Total/NA	Solid	SW5035A	
7723288-1-BLK	Method Blank	Total/NA	SOIL	SW5035A	

Eurofins Carlsbad

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separator

Job ID: 890-318-1
SDG: 212C-MD-02346

Subcontract (Continued)

Prep Batch: 3153588_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
7723288-1-BKS	Lab Control Sample	Total/NA	SOIL	SW5035A	
7723288-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	SW5035A	
691368-013 S	Matrix Spike	Total/NA	SOIL	SW5035A	
691368-013 SD	Matrix Spike Duplicate	Total/NA	SOIL	SW5035A	

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Lomas Rojas 26 St Com CTB 501 H Separor

Job ID: 890-318-1
SDG: 212C-MD-02346

Laboratory: Eurofins Midland

The accreditations/certifications listed below are applicable to this report.

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

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

Method Summary

Client: Tetra Tech, Inc.

Job ID: 890-318-1

Project/Site: Lomas Rojas 26 St Com CTB 501 H Separator

SDG: 212C-MD-02346

Method	Method Description	Protocol	Laboratory
300.0	EPA 300.0	EPA	XM
8015B	SW846 8015B TPH ORO	SW846	XM
8021	SW846 8021 Volatile Organic Compounds	SW846	XM

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Eurofins Carlsbad

Sample Summary

Client: Tetra Tech, Inc.

Job ID: 890-318-1

Project/Site: Lomas Rojas 26 St Com CTB 501 H Separator

SDG: 212C-MD-02346

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-318-1	BH-1 (3')	Solid	03/08/21 00:00	03/10/21 16:58	
890-318-2	BH-2 (2.5')	Solid	03/08/21 00:00	03/10/21 16:58	
890-318-3	BH-3 (2')	Solid	03/08/21 00:00	03/10/21 16:58	
890-318-4	BH-4 (3')	Solid	03/08/21 00:00	03/10/21 16:58	
890-318-5	BH-5 (3')	Solid	03/08/21 00:00	03/10/21 16:58	
890-318-6	SW-1 (3')	Solid	03/08/21 00:00	03/10/21 16:58	
890-318-7	SW-2 (2')	Solid	03/08/21 00:00	03/10/21 16:58	
890-318-8	SW-3 (2')	Solid	03/08/21 00:00	03/10/21 16:58	
890-318-9	SW-4 (3')	Solid	03/08/21 00:00	03/10/21 16:58	
890-318-10	SW-5 (3')	Solid	03/08/21 00:00	03/10/21 16:58	
890-318-11	SW-6 (3')	Solid	03/08/21 00:00	03/10/21 16:58	
890-318-12	SW-7 (2')	Solid	03/08/21 00:00	03/10/21 16:58	
890-318-13	SW-8 (2.5')	Solid	03/08/21 00:00	03/10/21 16:58	

Eurofins Carlsbad

Analysis Request of Chain of Custody Record

890-318 Chain of Custody



Page 1 of 2

Tetra Tech, Inc.901 W. Vahl Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559 Fax (432) 682-3946

Client Name:

EOG

Site Manager:

Brittany Long

Project Name:

Lomas Rops 26 St Com CTB 501 Hseparator

Project Location:
(county, state)

Lea County, NM

Project #:

212C-MD-02346

Invoice to:

EOG Todd Wells

Receiving Laboratory:

Xenco

Sampler Signature:

Ezequiel Moreno

Comments:

SAMPLE IDENTIFICATION

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

Ezequiel Moreno

Date: Time:

Received by:

3.10.21 1655

Relinquished by:

Ezequiel Moreno

Date: Time:

Received by:

3.10.21 1655

Relinquished by:

Ezequiel Moreno

Date: Time:

Received by:

3.10.21 1655

ANALYSIS REQUEST

(Circle or Specify Method No.)

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

LAB USE ONLY

STANDARD

Sample Temperature

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

Analysis Request of Chain of Custody Record

Page 2 of 2



Tetra Tech, Inc.

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

Client Name:

EOG

Site Manager:

Brittany Long

Project Name:

Lomas Rogas - 26 St Com CTB 501 H Separator

Project Location:

Lea County, NM

Project #:

212C-MD-02346

Invoice to:

EOG Todd Wells

Receiving Laboratory:

Xenco

Sampler Signature:

Ezequiel Moreno

Comments:

SAMPLE IDENTIFICATION

LAB #
(LAB USE ONLY)

SAMPLING

YEAR: 2020

DATE

TIME

MATRIX

WATER

SOIL

HCL

HNO₃

ICE

None

CONTAINERS

FILTERED (Y/N)

DATE

TIME

WATER

SOIL

HCL

HNO₃

ICE

None

CONTAINERS

FILTERED (Y/N)

BTX 8021B

BTX 8260B

TPH TX1005 (Ext to C35)

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

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Hold

Relinquished by:

Date: Time:

Received by:

Date: Time:

Relinquished by:

Date: Time:

Received by:

Date: Time:

Relinquished by:

Date: Time:

Received by:

Date: Time:

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB USE ONLY

REMARKS:

STANDARD

RUSH:

Same Day 24 hr 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-318-1

SDG Number: 212C-MD-02346

Login Number: 318**List Number: 1****Creator: Clifton, Cloe****List Source: Eurofins Carlsbad**

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

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: 6/24/2021

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

Closure Approved by: Robert Hamlet Date: 6/24/2021

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

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 27274

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 27274
	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 #NRM2029543600 LOMAS ROJAS 26 STATE COM CTB - #501H SEPARATOR, thank you. This closure is approved.	6/24/2021