SITE INFORMATION

Report Type: Closure Report (1RP-908)

General Site Information:						
Site:	**Micro Brew BEU Federal #1**					
Company:	**EOG Resources**					
Section, Township and Range	**Unit O**	**Sec. 13**	**T 22S**	**R 32E**		
County:	**Lea County, NM**					
GPS:	**32.38720**			**-103.62678**		
Surface Owner:	**State of New Mexico**					

Release Data:		
Date Released:	5/26/2006	
Type Release:	Oil and Produced Water	
Source of Contamination:	Failure on packing well	
Fluid Released:	2 bbls. of Oil	3 bbls. of Produced Water
Fluids Recovered:	0 bbls. of Oil	0 bbls. of Produced Water

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

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

Recommended Remedial Action Levels (RRALs)			
Benzene	***Total BTEX***	***TPH (GRO+DRO+MRO)***	***Chlorides***
10 mg/kg	*50 mg/kg*	*100 mg/kg*	*600 mg/kg*

TETRA TECH

April 8, 2021

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

Re: Closure Report
EOG Resources
Micro Brew BEU Federal #1
Unit O, Section 13, Township 22 South, Range 32 East
Lea County, New Mexico
1RP-908

Mr. Billings:

Tetra Tech, Inc. (Tetra Tech) was contacted by EOG Resources (EOG) to assess a release at the EOG Micro Brew BEU Federal #1 (API No. 30-025-36883). The release footprint is located in the Public Land Survey System (PLSS) Unit O, Section 13, Township 22 South, Range 32 East, Lea County, New Mexico (Site). The Site coordinates are 32.38720º, -103.62678º. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the release occurred on May 26, 2006 due to a packing well worn out causing fluids to leak around polished rod and onto ground. The release consisted of 2 barrels (bbls.) of oil and 3 bbls. of produced water affecting an area of approximate 3 feet (ft.) by 30 ft. on the pad. During immediate response actions, the well was shut down. No free fluids were recovered. The initial C-141 report was submitted on June 02, 2006. The release was subsequently assigned the Remediation Permit (RP) number 1RP-908. The C-141 forms are included in Appendix A.

Site Characterization

A site characterization was performed for the site, and no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances, and the site is in a low karst potential area. The nearest well is listed in the USGS National Water Information Database website in Section 14, approximately 1 mile west of the site, and has a reported depth to groundwater of 370.4 feet below ground surface last sample on 1972. In addition, according to the New Mexico Office of the State Engineer, there are no water wells within 800 meters (½ miles) radius. However, there are two (2) water wells are located within 3,200 meters (approximately 2 miles) of the Site. The average depth to groundwater is 350 ft. bgs. Site characterization data is included in Appendix B.

Tetra Tech
901 West Wall Street, Suite 100, Midland, TX 79701
Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com

TETRA TECH

Regulatory

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

Soil Assessment and Analytical Results

On March 2, 2021, Tetra Tech personnel were on site to evaluate and sample the release area. The formerly impacted area was identified from the description in the C-141 and the aerial imagery. Soils were field screened for salinity using an Extech EC400 ExStik to determine sampling intervals. A total of two (2) auger holes (AH-1 and AH-2) were advanced to a total depth from surface to 1ft. bgs. A total of four (4) samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The results of the sampling are summarized in Table 1. The auger hole locations are shown on Figure 3. Photographic documentation is included.

Referring to Table 1, all the samples analyzed exceeded the Site RRAL for chloride (600 mg/kg) and TPH (100 mg/kg). In addition, none of the samples exceeded the Site RRAL for BTEX (50 m/kg) and benzene (10 mg/kg).

Remediation Activities

On March 2, 2021, Tetra Tech personnel were on site to supervise the excavation and remediation activities in order to remove the impacted soil from the release area. The excavated areas are shown on Figure 4. Two (2) areas (north and south) were excavated to a total depth of 1 ft. bgs. on either side of the wellhead. Once the excavations were completed, confirmation samples were collected for every 200 sq. ft. One (1) bottom hole sample was collected at the north excavation area and two (2) bottom hole samples (north and south) were collected at the south excavation area. In addition, (6) sidewall samples were collected at the two excavated areas. A total of nine (9) samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The results of the sampling are summarized in Table 2.

Referring to Table 2, all the samples analyzed were below the Site RRAL for chloride (600 mg/kg) and TPH (100 mg/kg).

The excavations were all backfilled with clean soil material. Approximately 23 cubic yards of material was transported offsite for proper disposal.

TETRA TECH

Conclusion

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

Respectfully submitted,
TETRA TECH

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

Figures

SITE LOCATION

N
W
E
S

0 2.5 5 Miles

Approximate Scale in Miles

Source: ESRI Basemap - Streets, 2021.

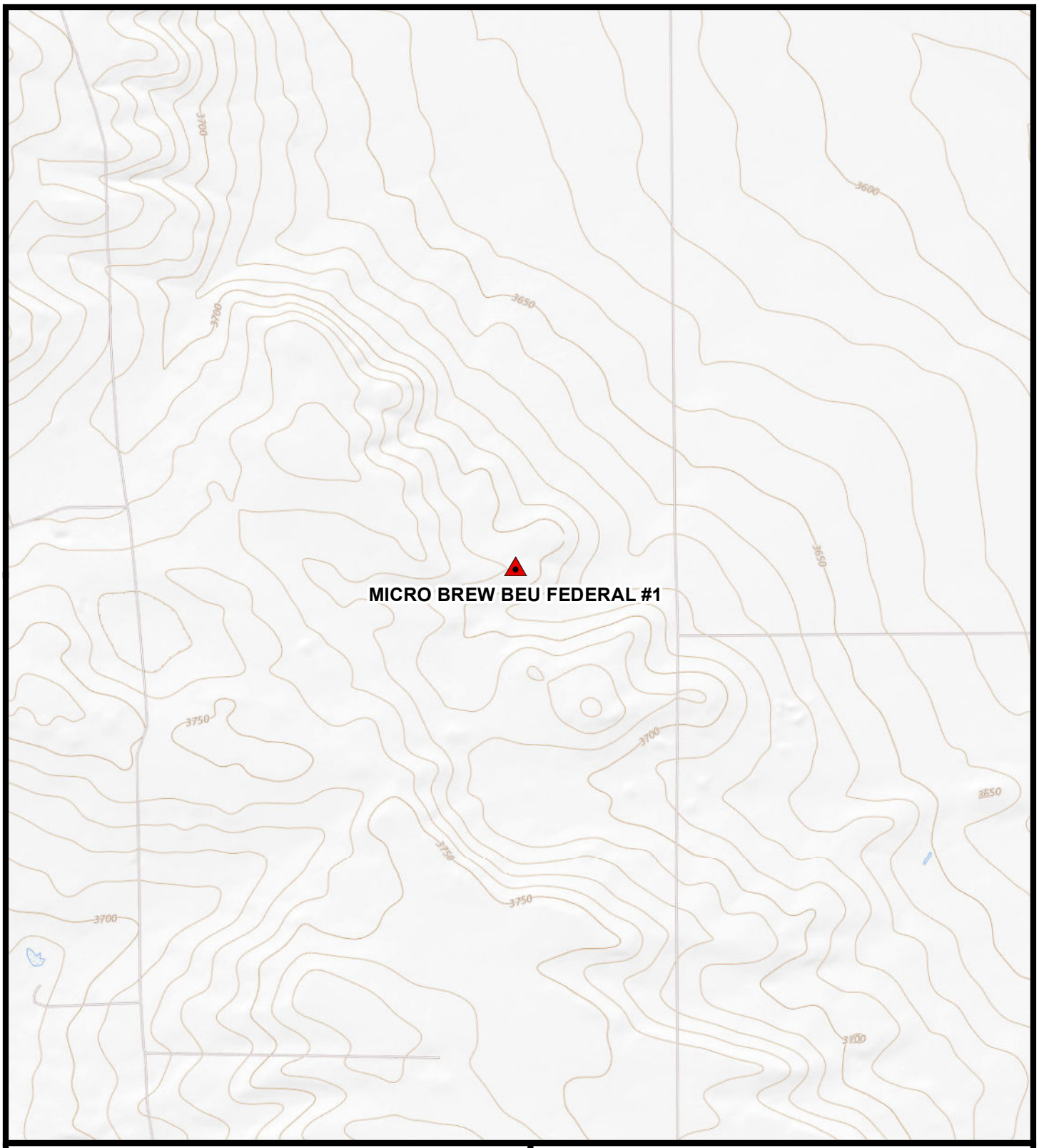
OVERVIEW MAP
MICRO BREW BEU FEDERAL #1
Property Located at coordinates 32.38720°, -103.62678°
LEA COUNTY, NEW MEXICO

eog resources

Project #:
212C-MD-02419

FIGURE
1

C:\GIS\EOG Resources\212C-MD-02419_MicroBrewBEU\212C-MD-02419_MicroBrewBEU_FIG1.mxd 4/7/2021 joel.peters



SITE LOCATION

N
W
E
S

0 1,000 2,000 Feet

Approximate Scale in Feet

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

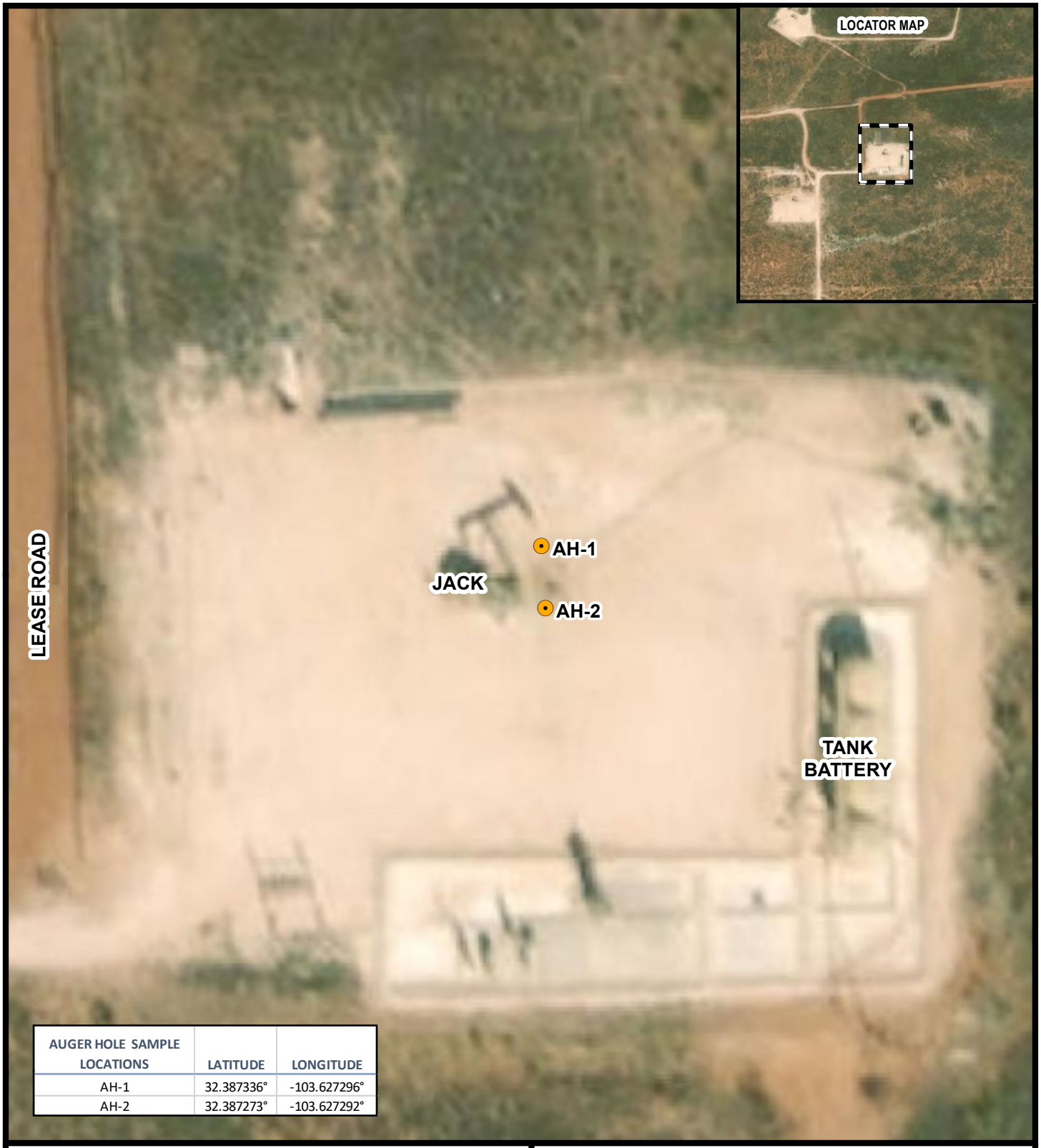
TOPOGRAPHIC MAP
MICRO BREW BEU FEDERAL #1
Property Located at coordinates 32.38720°, -103.62678°
LEA COUNTY, NEW MEXICO

eog resources

Project #:
212C-MD-02419

FIGURE
2

C:\GIS\EOG Resources\212C-MD-02419_MicroBrewBEU\212C-MD-02419_MicroBrewBEU_FIG2.mxd 4/7/2021 joel.peters



AUGER HOLE SAMPLE LOCATIONS	LATITUDE	LONGITUDE
AH-1	32.387336°	-103.627296°
AH-2	32.387273°	-103.627292°

AUGER HOLE SAMPLE LOCATION

N
W E
S

0 25 50 Feet

Approximate Scale in Feet

Source: ESRI Basemap - Imagery, 2019.

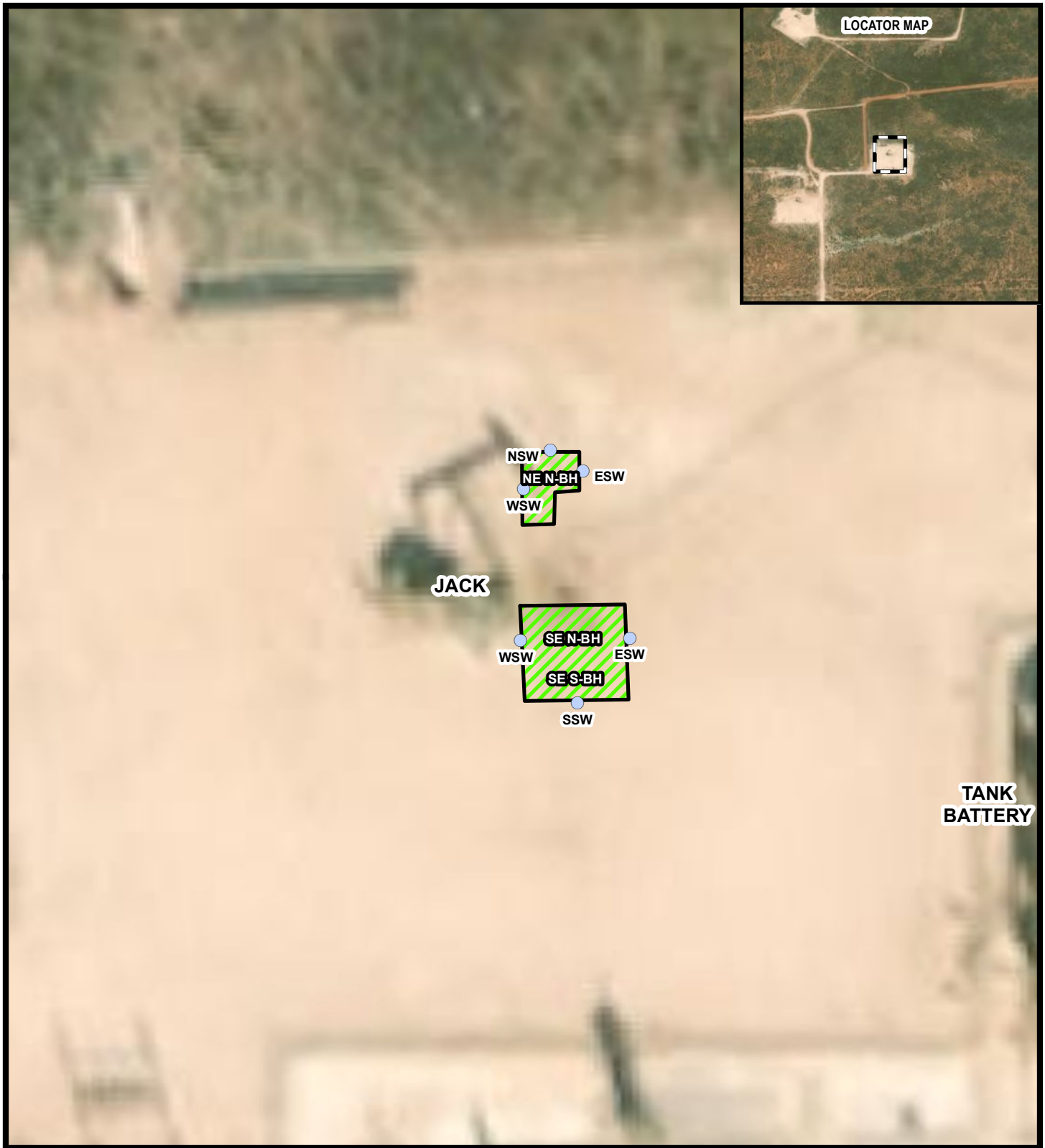
RELEASE ASSESSMENT AND BORING LOCATION MAP
MICRO BREW BEU FEDERAL #1
Property Located at coordinates 32.38720°, -103.62678°
LEA COUNTY, NEW MEXICO

eog resources

Project #:
212C-MD-02419

FIGURE
3

C:\GIS\EOG Resources\212C-MD-02419_MicroBrewBEU\212C-MD-02419_MicroBrewBEU_FIG3.mxd 4/7/2021 joel.peters



BH BOTTOM HOLE SAMPLE LOCATION

SIDEWALL DESIGNATION

1' EXCAVATED DEPTH AREA

N
W E
S

0 15 30 Feet

Approximate Scale in Feet

Source: ESRI Basemap - Imagery, 2019.

EXCAVATION AREA AND DEPTH MAP
MICRO BREW BEU FEDERAL #1
Property Located at coordinates 32.38720°, -103.62678°
LEA COUNTY, NEW MEXICO

eog resources

Project #:
212C-MD-02419

FIGURE
4

C:\GIS\EOG Resources\212C-MD-02419_MicroBrewBEU\212C-MD-02419_MicroBrewBEU_FIG4.mxd 4/7/2021 joel.peters

Tables

Table 1
EOG
Micro Brew Federal #1
Lea County, NM

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
AH-1	3/2/2021	0-0.5	X	-	<50.0	**522**	74.5	**597**	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	**1,580**
	"	0.5-1	X	-	<49.9	**203**	<49.9	**203**	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	**1,440**
AH-2	3/2/2021	0-0.5	X	-	<49.8	**2,570**	**847**	**3,420**	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	**14,100**
	"	0.5-1	X	-	<50.0	**773**	**277**	**1,050**	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	**4,290**

(-) Not Analyzed

Exceeded RRALs

Table 2
EOG
Micro Brew Federal #1
Lea County, NM

Sample ID	Sample Date	Sample Depth	BEB Sample	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	ORO	Total						
North Exc. BH	3/24/2021	-	1.0	X	-	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00202	155
North Exc. NSW	3/24/2021	-	-	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	117
North Exc. WSW	3/24/2021	-	-	X	-	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	123
North Exc. ESW	3/24/2021	-	-	X	-	<49.7	<49.7	<49.7	<49.7	<0.00202	<0.00202	<0.00202	<0.00403	<0.00202	211
South Exc. N-BH	3/24/2021	-	1.0	X	-	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00397	<0.00198	434
South Exc. S-BH	4/1/2021	-	1.0	X	-	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	0.00312	0.0455	0.0486	46.5
South Exc. WSW	3/25/2021	-	-	X	-	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	73
South Exc. ESW	3/25/2021	-	-	X	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	147
South Exc. SSW	3/25/2021	-	-	X	-	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00202	357

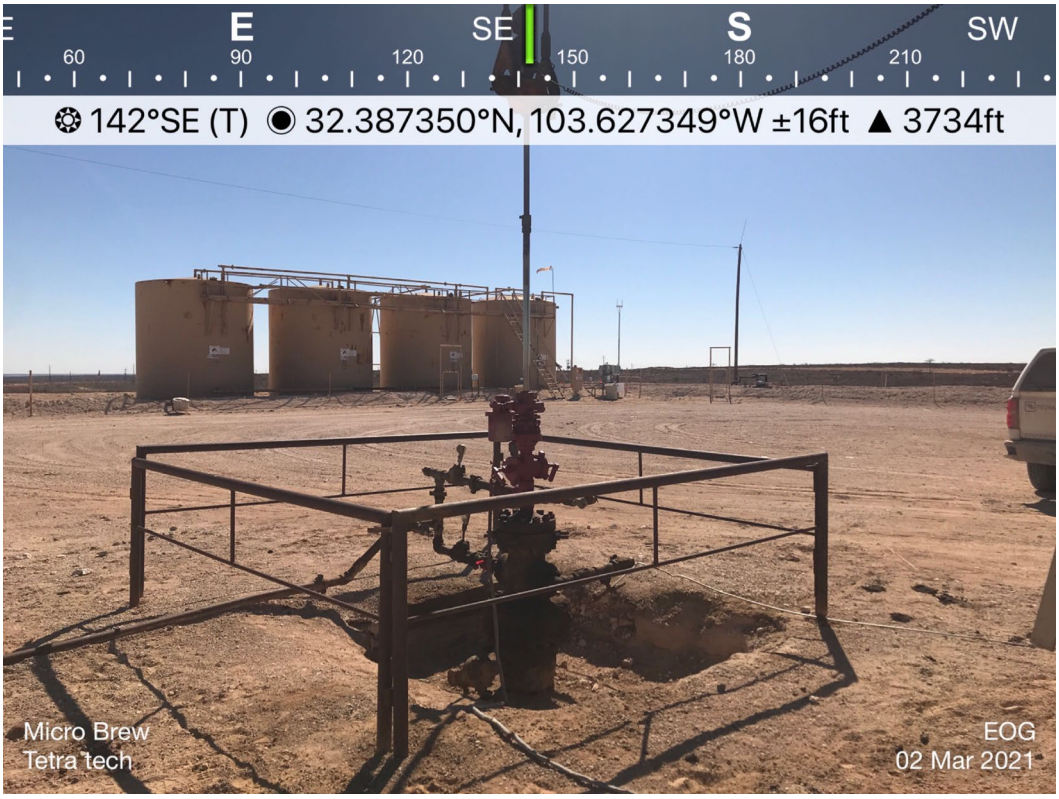
(-) Not Analyzed
Excavated

Photos

EOG Resources
Micro Brew BEU
Lea County, New Mexico

TETRA TECH

View of Release Area – View West



View of Release Area – View Southeast

EOG Resources
Micro Brew BEU
Lea County, New Mexico

TETRA TECH

View of Remediation Activities – View South

View of Remediation Activities– View Northeast

Appendix A

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	OGRID Number	Contact
Yates Petroleum Corporation	25575	Robert Asher
Address		Telephone No.
104 S. 4TH Street		505-748-1471
Facility Name	API Number	Facility Type
Micro Brew BEU Federal #1	30-025-36883	Well

Surface Owner	Mineral Owner	Lease No.
Federal	Federal	NM-96237

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	13	22S	32E	990	South	2310	East	Lea

Latitude 32.38720 **Longitude** 103.62678

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Crude Oil & Produced Water	2 B/O & 3 B/PW	0 B/O & 0 B/PW
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Stuffing Box	5/26/2006 - AM	5/26/2006 - AM
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Packing on well worn out causing fluids to leak around polished rod and onto ground. Well shut down, repacked well.

Describe Area Affected and Cleanup Action Taken.*
An approximate area of 3' X 30', on the pad. Contaminated soils to be excavated and area to be evaluated. **SITE RANKING IS 0.**

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

Signature:

Printed Name: Robert Asher

Title: Environmental Regulatory Agent

E-mail Address: boba@ypcnm.com

Date: Friday, June 02, 2006 Phone: 505-748-1471

OIL CONSERVATION DIVISION

Approved by District Supervisor:

Approval Date: Expiration Date:

Conditions of Approval: Attached ☐

* Attach Additional Sheets If Necessary

incident - nPAC0615634081
application - pPAC0615634256

State of New Mexico
Oil Conservation Division

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

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: James F. Kennedy Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nPAC0615634081
District RP	
Facility ID	
Application ID	

Closure

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

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

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☐ Description of remediation activities

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

Printed Name: _____ Title: _____

Signature: James F. Kennedy Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

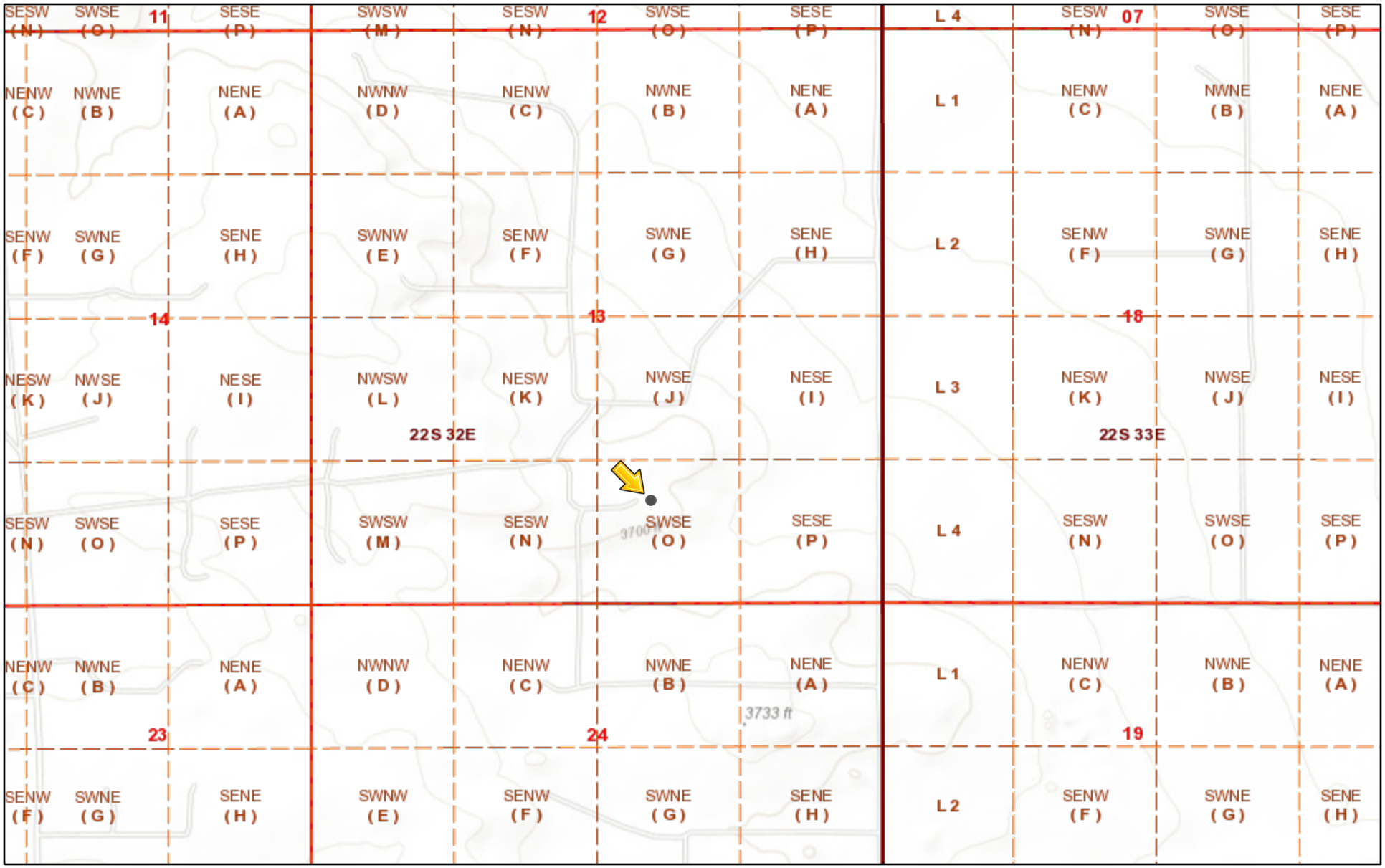
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance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

Closure Approved by: Bradford Billings Date: 11/02/2021

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

Appendix B

1RP-908



2/9/2021, 9:11:23 PM

1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

Override 1

OCD District Offices

PLSS First Division

PLSS Second Division

PLSS Townships

OSE Streams

OSE Water-bodies

PLJV Probable Playas

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

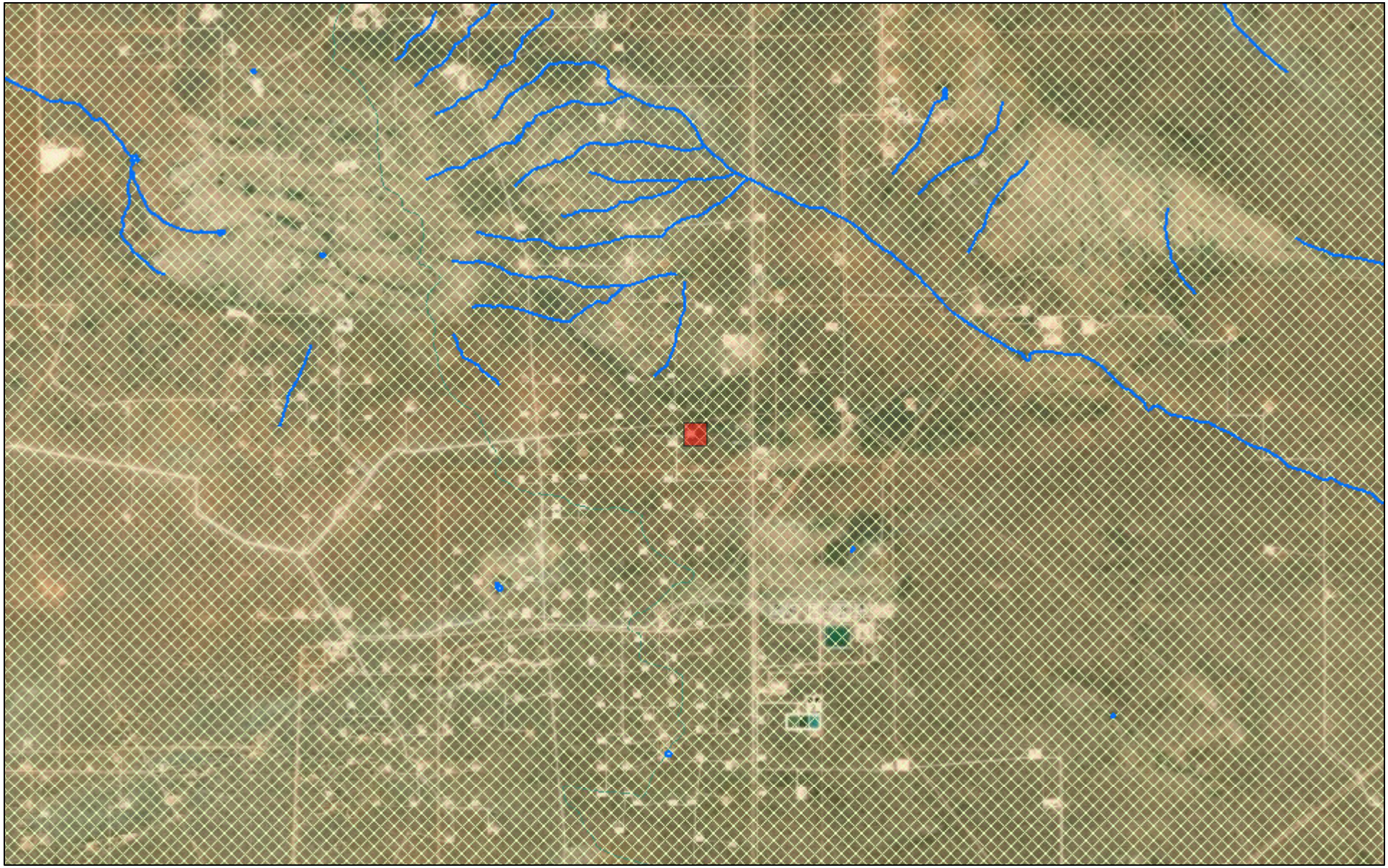
New Mexico Oil Conservation Division

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

Karst Potential

1RP-908

New Mexico NFHL Data



February 17, 2021

1:72,224

0 0.5 1 2 mi

0 1 2 4 km

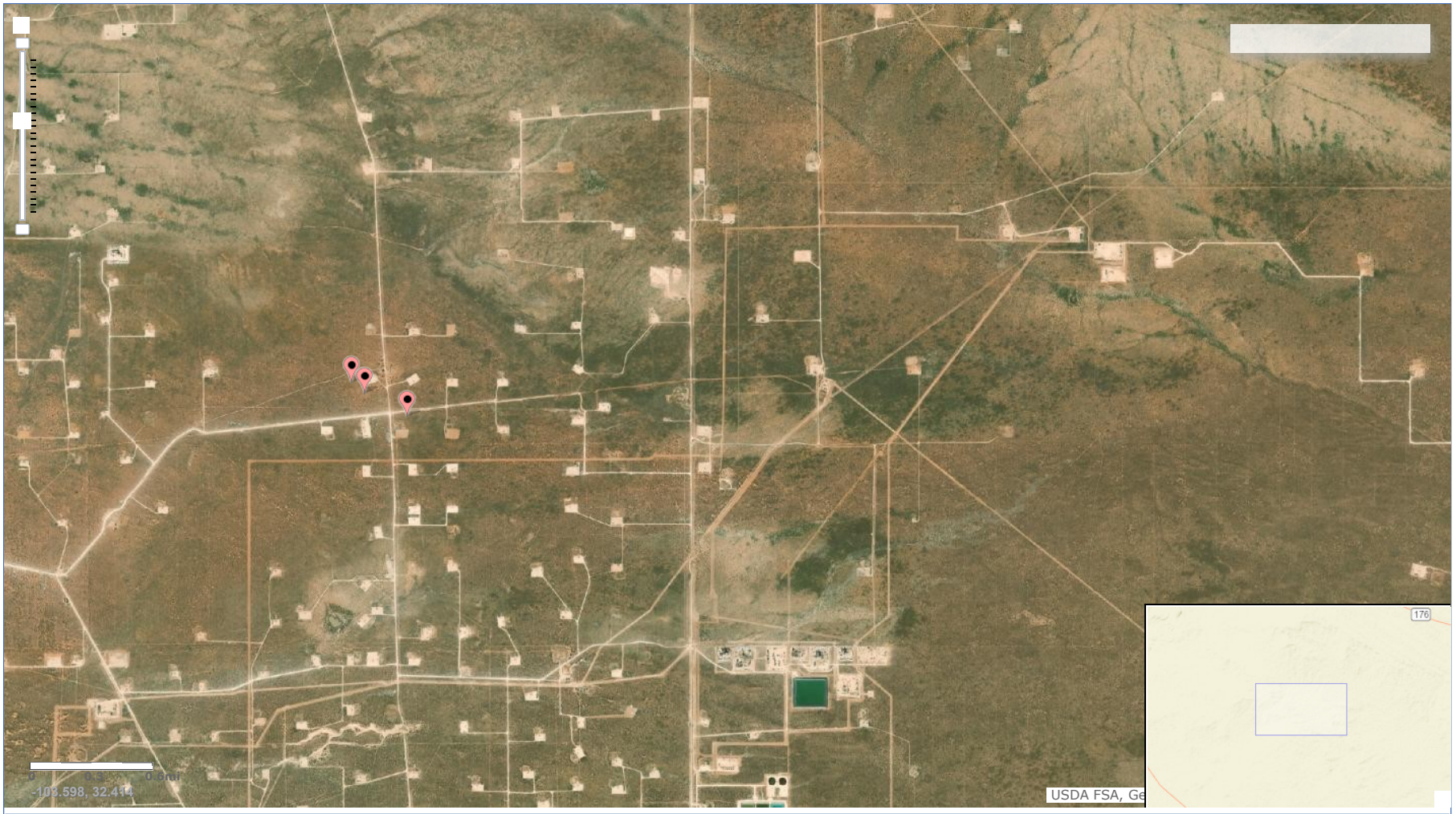
Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

USGS
science for a changing world

USGS Home
Contact USGS
Search USGS

National Water Information System: Mapper

Help Info



Site Information

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	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02821		C	LE	2	2	3	14	22S	32E	627303	3584563*	1901	540	340	200
C 02096		CUB	ED		2	3	14	22S	32E	627204	3584464*	1982	435	360	75

Average Depth to Water: **350 feet**
Minimum Depth: **340 feet**
Maximum Depth: **360 feet**

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 629166.1 **Northing (Y):** 3584183.81 **Radius:** 3200

***UTM location was derived from PLSS - see Help**

2/9/21 8:15 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

USGS science for a changing world

National Water Information System: Web Interface

USGS Water Resources

Click to hideNews Bulletins

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

Groundwater levels for New Mexico

Click to hide state-specific text

* IMPORTANT: Next Generation Station Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 322314103383601

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 322314103383601 22S.32E.14.32422

Lea County, New Mexico
Latitude 32°23'14", Longitude 103°38'36" NAD27
Land-surface elevation 3,740 feet above NAVD88
The depth of the well is 380 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1972-09-13		D	62610		3367.92	NGVD29	1	Z			A
1972-09-13		D	62611		3369.60	NAVD88	1	Z			A
1972-09-13		D	72019	370.40			1	Z			A

Explanation

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

Appendix C

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 690620

Tetra Tech- Midland, Midland, TX

Project Name: Microbrew BEU

Project Id: 212C-MD-02419 TASK:1300
Contact: Clair Gonzales
Project Location: Eddy County, NM

Date Received in Lab: Fri 03.05.2021 12:41
Report Date: 03.15.2021 16:32
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	690620-001		690620-002		690620-003		690620-004					
	Field Id:	AH-1 (0-6')		AH-1 (6'-1')		AH-2 (0-6')		AH-2 (6'-1')					
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	03.02.2021 00:00		03.02.2021 00:00		03.02.2021 00:00		03.02.2021 00:00					
BTEX by EPA 8021B	***Extracted:***	03.12.2021 12:00		03.12.2021 12:00		03.12.2021 12:00		03.12.2021 13:00					
	Analyzed:	03.12.2021 22:21		03.12.2021 22:41		03.12.2021 23:02		03.13.2021 02:24					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200				
Toluene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200				
Ethylbenzene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200				
m,p-Xylenes		<0.00399	0.00399	<0.00403	0.00403	<0.00401	0.00401	<0.00401	0.00401				
o-Xylene		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200				
Total Xylenes		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200				
Total BTEX		<0.00200	0.00200	<0.00202	0.00202	<0.00200	0.00200	<0.00200	0.00200				
Inorganic Anions by EPA 300/300.1	***Extracted:***	03.06.2021 15:00		03.06.2021 15:00		03.06.2021 15:00		03.06.2021 15:30					
	Analyzed:	03.06.2021 19:32		03.06.2021 19:37		03.06.2021 19:42		03.06.2021 18:24					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		1580	25.3	1440	25.1	14100	99.4	4290	49.9				
TPH By SW8015 Mod	***Extracted:***	03.05.2021 13:00		03.05.2021 13:00		03.05.2021 13:00		03.05.2021 13:00					
	Analyzed:	03.05.2021 23:30		03.05.2021 23:52		03.06.2021 00:13		03.05.2021 22:27					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0				
Diesel Range Organics (DRO)		522	50.0	203	49.9	2570	49.8	773	50.0				
Motor Oil Range Hydrocarbons (MRO)		74.5	50.0	<49.9	49.9	847	49.8	277	50.0				
Total TPH		597	50.0	203	49.9	3420	49.8	1050	50.0				

BRL - Below Reporting Limit

Jessica Kramer

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

eurofins | Environment Testing Xenco

Analytical Report 690620

for

Tetra Tech- Midland

Project Manager: Clair Gonzales

Microbrew BEU

212C-MD-02419 TASK:1300

03.15.2021

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

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

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

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

eurofins | Environment Testing Xenco

03.15.2021

Project Manager: **Clair Gonzales**
Tetra Tech- Midland
901 West Wall ST
Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **690620**
Microbrew BEU
Project Address: Eddy County, NM

Clair Gonzales:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 690620. 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. 690620 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,

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

eurofins | Environment Testing Xenco

Sample Cross Reference 690620

Tetra Tech- Midland, Midland, TX

Microbrew BEU

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
AH-1 (0-6')	S	03.02.2021 00:00		690620-001
AH-1 (6'-1')	S	03.02.2021 00:00		690620-002
AH-2 (0-6')	S	03.02.2021 00:00		690620-003
AH-2 (6'-1')	S	03.02.2021 00:00		690620-004

eurofins | Environment Testing Xenco

CASE NARRATIVE

Client Name: Tetra Tech- Midland

Project Name: Microbrew BEU

Project ID: *212C-MD-02419 TASK:*
Work Order Number(s): *690620*

Report Date: *03.15.2021*
Date Received: *03.05.2021*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

eurofins | Environment Testing Xenco

Certificate of Analytical Results 690620

Tetra Tech- Midland, Midland, TX

Microbrew BEU

Sample Id: **AH-1 (0-6')** Matrix: Soil Date Received:03.05.2021 12:41

Lab Sample Id: 690620-001 Date Collected: 03.02.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Tech: SPC

Analyst: SPC Date Prep: 03.06.2021 15:00 % Moisture:

Seq Number: 3152766 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1580**	25.3	mg/kg	03.06.2021 19:32		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 03.05.2021 13:00 % Moisture:

Seq Number: 3152843 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.05.2021 23:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	**522**	50.0	mg/kg	03.05.2021 23:30		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**74.5**	50.0	mg/kg	03.05.2021 23:30		1
Total TPH	PHC635	**597**	50.0	mg/kg	03.05.2021 23:30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	03.05.2021 23:30	
o-Terphenyl	84-15-1	102	%	70-130	03.05.2021 23:30	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 690620

Tetra Tech- Midland, Midland, TX

Microbrew BEU

Sample Id:	**AH-1 (0-6')**	Matrix:	Soil	Date Received:	03.05.2021 12:41
Lab Sample Id:	690620-001	Date Collected:	03.02.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	03.12.2021 12:00	% Moisture:	
Seq Number:	3153519			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.12.2021 22:21	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.12.2021 22:21	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.12.2021 22:21	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.12.2021 22:21	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.12.2021 22:21	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.12.2021 22:21	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.12.2021 22:21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	03.12.2021 22:21	
1,4-Difluorobenzene	540-36-3	99	%	70-130	03.12.2021 22:21	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 690620

Tetra Tech- Midland, Midland, TX

Microbrew BEU

Sample Id: **AH-1 (6'-1')** Matrix: Soil Date Received:03.05.2021 12:41

Lab Sample Id: 690620-002 Date Collected: 03.02.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Tech: SPC

Analyst: SPC Date Prep: 03.06.2021 15:00 % Moisture:

Seq Number: 3152766 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1440**	25.1	mg/kg	03.06.2021 19:37		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 03.05.2021 13:00 % Moisture:

Seq Number: 3152843 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.05.2021 23:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	**203**	49.9	mg/kg	03.05.2021 23:52		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.05.2021 23:52	U	1
Total TPH	PHC635	**203**	49.9	mg/kg	03.05.2021 23:52		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	03.05.2021 23:52	
o-Terphenyl	84-15-1	97	%	70-130	03.05.2021 23:52	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 690620

Tetra Tech- Midland, Midland, TX

Microbrew BEU

Sample Id:	**AH-1 (6'-1')**	Matrix:	Soil	Date Received:	03.05.2021 12:41
Lab Sample Id:	690620-002	Date Collected:	03.02.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	03.12.2021 12:00	% Moisture:	
Seq Number:	3153519			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.12.2021 22:41	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.12.2021 22:41	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.12.2021 22:41	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.12.2021 22:41	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.12.2021 22:41	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.12.2021 22:41	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.12.2021 22:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	03.12.2021 22:41	
4-Bromofluorobenzene	460-00-4	102	%	70-130	03.12.2021 22:41	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 690620

Tetra Tech- Midland, Midland, TX

Microbrew BEU

Sample Id: **AH-2 (0-6')** Matrix: Soil Date Received:03.05.2021 12:41

Lab Sample Id: 690620-003 Date Collected: 03.02.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Tech: SPC

Analyst: SPC Date Prep: 03.06.2021 15:00 % Moisture:

Seq Number: 3152766 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14100**	99.4	mg/kg	03.06.2021 19:42		20

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 03.05.2021 13:00 % Moisture:

Seq Number: 3152843 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	03.06.2021 00:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	**2570**	49.8	mg/kg	03.06.2021 00:13		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**847**	49.8	mg/kg	03.06.2021 00:13		1
Total TPH	PHC635	**3420**	49.8	mg/kg	03.06.2021 00:13		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-130	03.06.2021 00:13	
o-Terphenyl	84-15-1	99	%	70-130	03.06.2021 00:13	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 690620

Tetra Tech- Midland, Midland, TX

Microbrew BEU

Sample Id:	**AH-2 (0-6')**	Matrix:	Soil	Date Received:	03.05.2021 12:41
Lab Sample Id:	690620-003	Date Collected:	03.02.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	03.12.2021 12:00	% Moisture:	
Seq Number:	3153519			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.12.2021 23:02	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.12.2021 23:02	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.12.2021 23:02	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.12.2021 23:02	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.12.2021 23:02	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.12.2021 23:02	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.12.2021 23:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	108	%	70-130	03.12.2021 23:02	
1,4-Difluorobenzene	540-36-3	97	%	70-130	03.12.2021 23:02	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 690620

Tetra Tech- Midland, Midland, TX

Microbrew BEU

Sample Id: **AH-2 (6'-1')** Matrix: Soil Date Received:03.05.2021 12:41

Lab Sample Id: 690620-004 Date Collected: 03.02.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P

Tech: SPC

Analyst: SPC Date Prep: 03.06.2021 15:30 % Moisture:

Seq Number: 3152767 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4290**	49.9	mg/kg	03.06.2021 18:24		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM

Analyst: ARM Date Prep: 03.05.2021 13:00 % Moisture:

Seq Number: 3152843 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.05.2021 22:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	**773**	50.0	mg/kg	03.05.2021 22:27		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**277**	50.0	mg/kg	03.05.2021 22:27		1
Total TPH	PHC635	**1050**	50.0	mg/kg	03.05.2021 22:27		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	03.05.2021 22:27	
o-Terphenyl	84-15-1	100	%	70-130	03.05.2021 22:27	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 690620

Tetra Tech- Midland, Midland, TX

Microbrew BEU

Sample Id:	**AH-2 (6'-1')**	Matrix:	Soil	Date Received:	03.05.2021 12:41
Lab Sample Id:	690620-004	Date Collected:	03.02.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL				
Analyst:	KTL	Date Prep:	03.12.2021 13:00	% Moisture:	
Seq Number:	3153540			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.13.2021 02:24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.13.2021 02:24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.13.2021 02:24	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	03.13.2021 02:24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.13.2021 02:24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.13.2021 02:24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.13.2021 02:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	70-130	03.13.2021 02:24	
4-Bromofluorobenzene	460-00-4	101	%	70-130	03.13.2021 02:24	

eurofins | Environment Testing Xenco

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

QC Summary 690620

eurofins | Environment Testing Xenco

Tetra Tech- Midland

Microbrew BEU

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 3152766 — Matrix: Solid — Date Prep: 03.06.2021
MB Sample Id: 7722686-1-BLK — LCS Sample Id: 7722686-1-BKS — LCSD Sample Id: 7722686-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	254	102	254	102	90-110	0	20	mg/kg	03.06.2021 17:17	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 3152767 — Matrix: Solid — Date Prep: 03.06.2021
MB Sample Id: 7722687-1-BLK — LCS Sample Id: 7722687-1-BKS — LCSD Sample Id: 7722687-1-BSD

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

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 3152766 — Matrix: Soil — Date Prep: 03.06.2021
Parent Sample Id: 690617-008 — MS Sample Id: 690617-008 S — MSD Sample Id: 690617-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	13.9	251	264	100	263	99	90-110	0	20	mg/kg	03.06.2021 17:32	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 3152766 — Matrix: Soil — Date Prep: 03.06.2021
Parent Sample Id: 690619-002 — MS Sample Id: 690619-002 S — MSD Sample Id: 690619-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7.73	250	256	99	256	99	90-110	0	20	mg/kg	03.06.2021 18:42	

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 3152767 — Matrix: Soil — Date Prep: 03.06.2021
Parent Sample Id: 690620-004 — MS Sample Id: 690620-004 S — MSD Sample Id: 690620-004 SD

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

Analytical Method: Inorganic Anions by EPA 300/300.1 — Prep Method: E300P
Seq Number: 3152767 — Matrix: Soil — Date Prep: 03.06.2021
Parent Sample Id: 690621-010 — MS Sample Id: 690621-010 S — MSD Sample Id: 690621-010 SD

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

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 690620

eurofins | Environment Testing Xenco

Tetra Tech- Midland

Microbrew BEU

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3152843 — Matrix: Solid — Date Prep: 03.05.2021
MB Sample Id: 7722741-1-BLK — LCS Sample Id: 7722741-1-BKS — LCSD Sample Id: 7722741-1-BSD

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

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

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3152843 — Matrix: Solid — Date Prep: 03.05.2021
MB Sample Id: 7722741-1-BLK

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

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3152843 — Matrix: Soil — Date Prep: 03.05.2021
Parent Sample Id: 690620-004 — MS Sample Id: 690620-004 S — MSD Sample Id: 690620-004 SD

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

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

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3153519 — Matrix: Solid — Date Prep: 03.12.2021
MB Sample Id: 7723198-1-BLK — LCS Sample Id: 7723198-1-BKS — LCSD Sample Id: 7723198-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0924	92	0.0920	92	70-130	0	35	mg/kg	03.12.2021 12:49	
Toluene	<0.00200	0.100	0.0883	88	0.0886	89	70-130	0	35	mg/kg	03.12.2021 12:49	
Ethylbenzene	<0.00200	0.100	0.0882	88	0.0884	88	70-130	0	35	mg/kg	03.12.2021 12:49	
m,p-Xylenes	<0.00400	0.200	0.179	90	0.179	90	70-130	0	35	mg/kg	03.12.2021 12:49	
o-Xylene	<0.00200	0.100	0.0995	100	0.0960	96	70-130	4	35	mg/kg	03.12.2021 12:49	

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

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference 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

QC Summary 690620

eurofins | Environment Testing Xenco

Tetra Tech- Midland

Microbrew BEU

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3153540 — Matrix: Solid — Date Prep: 03.12.2021
MB Sample Id: 7723200-1-BLK — LCS Sample Id: 7723200-1-BKS — LCSD Sample Id: 7723200-1-BSD

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

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

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3153519 — Matrix: Soil — Date Prep: 03.12.2021
Parent Sample Id: 690614-001 — MS Sample Id: 690614-001 S — MSD Sample Id: 690614-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0774	78	0.0827	83	70-130	7	35	mg/kg	03.12.2021 13:30	
Toluene	<0.00199	0.0996	0.0742	74	0.0789	79	70-130	6	35	mg/kg	03.12.2021 13:30	
Ethylbenzene	<0.00199	0.0996	0.0739	74	0.0792	80	70-130	7	35	mg/kg	03.12.2021 13:30	
m,p-Xylenes	<0.00398	0.199	0.149	75	0.160	80	70-130	7	35	mg/kg	03.12.2021 13:30	
o-Xylene	<0.00199	0.0996	0.0790	79	0.0845	85	70-130	7	35	mg/kg	03.12.2021 13:30	

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

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5035A
Seq Number: 3153540 — Matrix: Soil — Date Prep: 03.12.2021
Parent Sample Id: 690620-004 — MS Sample Id: 690620-004 S — MSD Sample Id: 690620-004 SD

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

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

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

Analysis Request of Chain of Custody Record

690620

Tetra Tech, Inc.

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

Client Name:	EOG	**Site Manager:**	Clair Gonzales
Project Name:	Microbrew BEU	**Contact Info:**	
Project Location: (county, state)	Eddy County, NM	**Project #:**	212C-MD-02419 Task:1300
Invoice to:	EOG: James Kennedy		
Receiving Laboratory:	Xenco	**Sampler Signature:**	Devin Dominguez
Comments:			

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD
	AH-1 (0-6")		3/2/2021		X				X		1	N	X		X												X					
	AH-1 (6"-1')		3/2/2021		X				X		1	N	X		X												X					
	AH-2 (0-6")		3/2/2021		X				X		1	N	X		X												X					
	AH-2 (6"-1')		3/2/2021		X				X		1	N	X		X												X					

Relinquished by: Matthew Gant	Date: 3/5/21	Time:	Received by: KRAMER 3/5/21	Date:	Time: 1711
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

ORIGINAL COPY

LAB USE ONLY

Sample Temperature 1.5/2.0

REMARKS:

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 03.05.2021 12.41.00 PM

Work Order #: 690620

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

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

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

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 03.05.2021
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 03.08.2021
Jessica Kramer

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-428-1
Laboratory Sample Delivery Group: Lea Co NM
Client Project/Site: Microbrew BEU Fed 001

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

Attn: Clair Gonzales

JKramer

Authorized for release by:
3/29/2021 11:26:06 AM

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

Table of Contents

Definitions/Glossary

Client: Tetra Tech, Inc. Job ID: 890-428-1
Project/Site: Microbrew BEU Fed 001 SDG: Lea Co NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU Fed 001

Job ID: 890-428-1
SDG: Lea Co NM

Job ID: 890-428-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-428-1

Receipt
The samples were received on 3/25/2021 12:38 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 22.8°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: N EXC. Bottom hole @1' (890-428-1), N.EXC. NSW (890-428-2), N.EXC. ESW (890-428-3), N.EXC. WSW (890-428-4), S. EXC. N Bottomhole @1' (890-428-5), S. EXC. S Bottomhole @1' (890-428-6), S. EXC. ESW (890-428-7), S. EXC. SSW (890-428-8) and S. EXC. WSW (890-428-9).

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU Fed 001

Job ID: 890-428-1
SDG: Lea Co NM

Client Sample ID: N EXC. Bottom hole @1'

Lab Sample ID: 890-428-1
Matrix: Solid
Date Collected: 03/24/21 13:50
Date Received: 03/25/21 12:38

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1	0.00200		mg/Kg		03/26/21 15:03	03/27/21 08:49	1
Ethylbenzene	<0.00200	U F1	0.00200		mg/Kg		03/26/21 15:03	03/27/21 08:49	1
Toluene	<0.00200	U F1	0.00200		mg/Kg		03/26/21 15:03	03/27/21 08:49	1
Total BTEX	<0.00200	U F1	0.00200		mg/Kg		03/26/21 15:03	03/27/21 08:49	1
Xylenes, Total	<0.00400	U F1	0.00400		mg/Kg		03/26/21 15:03	03/27/21 08:49	1
m-Xylene & p-Xylene	<0.00400	U F1	0.00400		mg/Kg		03/26/21 15:03	03/27/21 08:49	1
o-Xylene	<0.00200	U F1	0.00200		mg/Kg		03/26/21 15:03	03/27/21 08:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/26/21 15:03*	*03/27/21 08:49*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*03/26/21 15:03*	*03/27/21 08:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/26/21 15:15	03/28/21 00:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/26/21 15:15	03/28/21 00:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/26/21 15:15	03/28/21 00:19	1
Total TPH	<49.9	U	49.9		mg/Kg		03/26/21 15:15	03/28/21 00:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*03/26/21 15:15*	*03/28/21 00:19*	*1*
o-Terphenyl	*98*		*70 - 130*	*03/26/21 15:15*	*03/28/21 00:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**155**		5.04		mg/Kg			03/26/21 18:46	1

Client Sample ID: N.EXC. NSW

Lab Sample ID: 890-428-2
Matrix: Solid
Date Collected: 03/24/21 14:00
Date Received: 03/25/21 12:38

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 09:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 09:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 09:10	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 09:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/26/21 15:03	03/27/21 09:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/26/21 15:03	03/27/21 09:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 09:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/26/21 15:03*	*03/27/21 09:10*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*03/26/21 15:03*	*03/27/21 09:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/26/21 15:15	03/28/21 01:22	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU Fed 001

Job ID: 890-428-1
SDG: Lea Co NM

Client Sample ID: N.EXC. NSW

Lab Sample ID: 890-428-2
Matrix: Solid
Date Collected: 03/24/21 14:00
Date Received: 03/25/21 12:38

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/26/21 15:15	03/28/21 01:22	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/26/21 15:15	03/28/21 01:22	1
Total TPH	<49.9	U	49.9		mg/Kg		03/26/21 15:15	03/28/21 01:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*03/26/21 15:15*	*03/28/21 01:22*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/26/21 15:15*	*03/28/21 01:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**117**		5.05		mg/Kg			03/26/21 18:52	1

Client Sample ID: N.EXC. ESW

Lab Sample ID: 890-428-3
Matrix: Solid
Date Collected: 03/24/21 14:30
Date Received: 03/25/21 12:38

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/26/21 15:03	03/27/21 09:30	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/26/21 15:03	03/27/21 09:30	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/26/21 15:03	03/27/21 09:30	1
Total BTEX	<0.00202	U	0.00202		mg/Kg		03/26/21 15:03	03/27/21 09:30	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/26/21 15:03	03/27/21 09:30	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/26/21 15:03	03/27/21 09:30	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/26/21 15:03	03/27/21 09:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*03/26/21 15:03*	*03/27/21 09:30*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*03/26/21 15:03*	*03/27/21 09:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/26/21 15:15	03/28/21 01:44	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/26/21 15:15	03/28/21 01:44	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/26/21 15:15	03/28/21 01:44	1
Total TPH	<49.7	U	49.7		mg/Kg		03/26/21 15:15	03/28/21 01:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*03/26/21 15:15*	*03/28/21 01:44*	*1*
o-Terphenyl	*97*		*70 - 130*	*03/26/21 15:15*	*03/28/21 01:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**211**		4.99		mg/Kg			03/26/21 19:08	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU Fed 001

Job ID: 890-428-1
SDG: Lea Co NM

Client Sample ID: N.EXC. WSW

Lab Sample ID: 890-428-4
Matrix: Solid
Date Collected: 03/24/21 14:50
Date Received: 03/25/21 12:38

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/26/21 15:03	03/27/21 09:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/26/21 15:03	03/27/21 09:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/26/21 15:03	03/27/21 09:51	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/26/21 15:03	03/27/21 09:51	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/26/21 15:03	03/27/21 09:51	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/26/21 15:03	03/27/21 09:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/26/21 15:03	03/27/21 09:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/26/21 15:03*	*03/27/21 09:51*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*03/26/21 15:03*	*03/27/21 09:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/28/21 02:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/28/21 02:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/28/21 02:05	1
Total TPH	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/28/21 02:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*03/26/21 15:15*	*03/28/21 02:05*	*1*
o-Terphenyl	*98*		*70 - 130*	*03/26/21 15:15*	*03/28/21 02:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**123**		4.97		mg/Kg			03/26/21 19:14	1

Client Sample ID: S. EXC. N Bottomhole @1'

Lab Sample ID: 890-428-5
Matrix: Solid
Date Collected: 03/24/21 15:00
Date Received: 03/25/21 12:38

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/26/21 15:03	03/27/21 10:12	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/26/21 15:03	03/27/21 10:12	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/26/21 15:03	03/27/21 10:12	1
Total BTEX	<0.00198	U	0.00198		mg/Kg		03/26/21 15:03	03/27/21 10:12	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/26/21 15:03	03/27/21 10:12	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		03/26/21 15:03	03/27/21 10:12	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/26/21 15:03	03/27/21 10:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*03/26/21 15:03*	*03/27/21 10:12*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/26/21 15:03*	*03/27/21 10:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/26/21 15:15	03/28/21 02:26	1

Client Sample Results

Client: Tetra Tech, Inc. Job ID: 890-428-1
Project/Site: Microbrew BEU Fed 001 SDG: Lea Co NM

Client Sample ID: S. EXC. N Bottomhole @1'

Lab Sample ID: 890-428-5
Date Collected: 03/24/21 15:00
Matrix: Solid
Date Received: 03/25/21 12:38

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/26/21 15:15	03/28/21 02:26	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/26/21 15:15	03/28/21 02:26	1
Total TPH	<49.8	U	49.8		mg/Kg		03/26/21 15:15	03/28/21 02:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*03/26/21 15:15*	*03/28/21 02:26*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/26/21 15:15*	*03/28/21 02:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**434**		4.95		mg/Kg			03/26/21 19:19	1

Client Sample ID: S. EXC. S Bottomhole @1'

Lab Sample ID: 890-428-6
Date Collected: 03/24/21 15:20
Matrix: Solid
Date Received: 03/25/21 12:38

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 10:33	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 10:33	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 10:33	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 10:33	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/26/21 15:03	03/27/21 10:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/26/21 15:03	03/27/21 10:33	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 10:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/26/21 15:03*	*03/27/21 10:33*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*03/26/21 15:03*	*03/27/21 10:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/28/21 02:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/28/21 02:47	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/28/21 02:47	1
Total TPH	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/28/21 02:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*03/26/21 15:15*	*03/28/21 02:47*	*1*
o-Terphenyl	*125*		*70 - 130*	*03/26/21 15:15*	*03/28/21 02:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**759**		4.95		mg/Kg			03/26/21 19:25	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU Fed 001

Job ID: 890-428-1
SDG: Lea Co NM

Client Sample ID: S. EXC. ESW

Lab Sample ID: 890-428-7
Matrix: Solid
Date Collected: 03/25/21 10:00
Date Received: 03/25/21 12:38

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 10:54	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 10:54	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 10:54	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 10:54	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/26/21 15:03	03/27/21 10:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/26/21 15:03	03/27/21 10:54	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 10:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*03/26/21 15:03*	*03/27/21 10:54*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/26/21 15:03*	*03/27/21 10:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/28/21 03:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/28/21 03:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/28/21 03:08	1
Total TPH	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/28/21 03:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*03/26/21 15:15*	*03/28/21 03:08*	*1*
o-Terphenyl	*97*		*70 - 130*	*03/26/21 15:15*	*03/28/21 03:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**147**		4.97		mg/Kg			03/26/21 19:30	1

Client Sample ID: S. EXC. SSW

Lab Sample ID: 890-428-8
Matrix: Solid
Date Collected: 03/25/21 10:35
Date Received: 03/25/21 12:38

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/26/21 15:03	03/27/21 11:14	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/26/21 15:03	03/27/21 11:14	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/26/21 15:03	03/27/21 11:14	1
Total BTEX	<0.00202	U	0.00202		mg/Kg		03/26/21 15:03	03/27/21 11:14	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/26/21 15:03	03/27/21 11:14	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/26/21 15:03	03/27/21 11:14	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/26/21 15:03	03/27/21 11:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*03/26/21 15:03*	*03/27/21 11:14*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*03/26/21 15:03*	*03/27/21 11:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/28/21 03:30	1

Client Sample Results

Client: Tetra Tech, Inc. Job ID: 890-428-1
Project/Site: Microbrew BEU Fed 001 SDG: Lea Co NM

Client Sample ID: S. EXC. SSW — Lab Sample ID: 890-428-8

Date Collected: 03/25/21 10:35 **Matrix: Solid**
Date Received: 03/25/21 12:38

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/28/21 03:30	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/28/21 03:30	1
Total TPH	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/28/21 03:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*03/26/21 15:15*	*03/28/21 03:30*	*1*
o-Terphenyl	*102*		*70 - 130*	*03/26/21 15:15*	*03/28/21 03:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**357**		5.00		mg/Kg			03/26/21 19:36	1

Client Sample ID: S. EXC. WSW — Lab Sample ID: 890-428-9

Date Collected: 03/25/21 12:00 **Matrix: Solid**
Date Received: 03/25/21 12:38

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 11:35	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 11:35	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 11:35	1
Total BTEX	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 11:35	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/26/21 15:03	03/27/21 11:35	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/26/21 15:03	03/27/21 11:35	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/26/21 15:03	03/27/21 11:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*03/26/21 15:03*	*03/27/21 11:35*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*03/26/21 15:03*	*03/27/21 11:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/26/21 15:15	03/28/21 03:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/26/21 15:15	03/28/21 03:51	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/26/21 15:15	03/28/21 03:51	1
Total TPH	<49.9	U	49.9		mg/Kg		03/26/21 15:15	03/28/21 03:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*03/26/21 15:15*	*03/28/21 03:51*	*1*
o-Terphenyl	*102*		*70 - 130*	*03/26/21 15:15*	*03/28/21 03:51*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**72.6**		4.99		mg/Kg			03/26/21 19:41	1

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU Fed 001

Job ID: 890-428-1
SDG: Lea Co NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-428-1	N EXC. Bottom hole @1'	97	111
890-428-1 MS	N EXC. Bottom hole @1'	93	107
890-428-2	N.EXC. NSW	97	106
890-428-3	N.EXC. ESW	95	106
890-428-4	N.EXC. WSW	97	113
890-428-5	S. EXC. N Bottomhole @1'	99	104
890-428-6	S. EXC. S Bottomhole @1'	101	110
890-428-7	S. EXC. ESW	102	103
890-428-8	S. EXC. SSW	97	112
890-428-9	S. EXC. WSW	96	102
LCS 880-936/35	Lab Control Sample	95	101
LCSD 880-936/36	Lab Control Sample Dup	93	100
MB 880-936/41	Method Blank	110	93
MB 880-936/9	Method Blank	108	95

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID		
890-428-1 MSD	N EXC. Bottom hole @1'		

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-428-1	N EXC. Bottom hole @1'	86	98
890-428-1 MS	N EXC. Bottom hole @1'	102	95
890-428-1 MS	N EXC. Bottom hole @1'	109	101
890-428-1 MSD	N EXC. Bottom hole @1'	112	117
890-428-1 MSD	N EXC. Bottom hole @1'	116	106
890-428-2	N.EXC. NSW	93	107
890-428-3	N.EXC. ESW	87	97
890-428-4	N.EXC. WSW	88	98
890-428-5	S. EXC. N Bottomhole @1'	92	107
890-428-6	S. EXC. S Bottomhole @1'	113	125
890-428-7	S. EXC. ESW	89	97
890-428-8	S. EXC. SSW	93	102
890-428-9	S. EXC. WSW	91	102
LCS 880-921/2-A	Lab Control Sample	100	100

Surrogate Summary

Client: Tetra Tech, Inc. Job ID: 890-428-1
Project/Site: Microbrew BEU Fed 001 SDG: Lea Co NM

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
LCS 880-957/2-A	Lab Control Sample	120	113								
LCSD 880-921/3-A	Lab Control Sample Dup	102	106								
LCSD 880-957/3-A	Lab Control Sample Dup	105	98								
MB 880-921/1-A	Method Blank	93	105								
MB 880-957/1-A	Method Blank	99	104								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU Fed 001

Job ID: 890-428-1
SDG: Lea Co NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: 890-428-1 MS
Matrix: Solid
Analysis Batch: 936

Client Sample ID: N EXC. Bottom hole @1'
Prep Type: Total/NA
Prep Batch: 915

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U F1	0.199	0.08576	F1	mg/Kg		43	70 - 130
Ethylbenzene	<0.00200	U F1	0.199	0.08317	F1	mg/Kg		42	70 - 130
Toluene	<0.00200	U F1	0.199	0.08883	F1	mg/Kg		45	70 - 130
m-Xylene & p-Xylene	<0.00400	U F1	0.398	0.1679	F1	mg/Kg		42	70 - 130
o-Xylene	<0.00200	U F1	0.199	0.08265	F1	mg/Kg		42	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: 890-428-1 MSD
Matrix: Solid
Analysis Batch: 936

Client Sample ID: N EXC. Bottom hole @1'
Prep Type: Total/NA
Prep Batch: 915

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.198	0.07405		mg/Kg					
Ethylbenzene	<0.00200	U F1	0.198	0.07433		mg/Kg					
Toluene	<0.00200	U F1	0.198	0.07792		mg/Kg					
m-Xylene & p-Xylene	<0.00400	U F1	0.396	0.1477		mg/Kg					
o-Xylene	<0.00200	U F1	0.198	0.07433		mg/Kg					

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

Lab Sample ID: MB 880-936/41
Matrix: Solid
Analysis Batch: 936

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			03/27/21 08:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			03/27/21 08:27	1
Toluene	<0.00200	U	0.00200		mg/Kg			03/27/21 08:27	1
Total BTEX	<0.00200	U	0.00200		mg/Kg			03/27/21 08:27	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			03/27/21 08:27	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg			03/27/21 08:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			03/27/21 08:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*		*03/27/21 08:27*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*		*03/27/21 08:27*	*1*

Lab Sample ID: MB 880-936/9
Matrix: Solid
Analysis Batch: 936

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			03/26/21 21:22	1

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU Fed 001

Job ID: 890-428-1
SDG: Lea Co NM

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

Lab Sample ID: MB 880-936/9
Matrix: Solid
Analysis Batch: 936

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			03/26/21 21:22	1
Toluene	<0.00200	U	0.00200		mg/Kg			03/26/21 21:22	1
Total BTEX	<0.00200	U	0.00200		mg/Kg			03/26/21 21:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			03/26/21 21:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg			03/26/21 21:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			03/26/21 21:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*03/26/21 21:22*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*		*03/26/21 21:22*	*1*

Lab Sample ID: LCS 880-936/35
Matrix: Solid
Analysis Batch: 936

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09109		mg/Kg		91	70 - 130		
Ethylbenzene			0.100	0.09483		mg/Kg		95	70 - 130		
Toluene			0.100	0.09786		mg/Kg		98	70 - 130		
m-Xylene & p-Xylene			0.200	0.1911		mg/Kg		96	70 - 130		
o-Xylene			0.100	0.09577		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 880-936/36
Matrix: Solid
Analysis Batch: 936

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09377		mg/Kg		94	70 - 130	3	35
Ethylbenzene			0.100	0.09300		mg/Kg		93	70 - 130	2	35
Toluene			0.100	0.09904		mg/Kg		99	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.1882		mg/Kg		94	70 - 130	2	35
o-Xylene			0.100	0.09501		mg/Kg		95	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU Fed 001

Job ID: 890-428-1
SDG: Lea Co NM

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

Lab Sample ID: MB 880-921/1-A
Matrix: Solid
Analysis Batch: 944

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 921

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/27/21 23:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/27/21 23:15	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/27/21 23:15	1
Total TPH	<50.0	U	50.0		mg/Kg		03/26/21 15:15	03/27/21 23:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*03/26/21 15:15*	*03/27/21 23:15*	*1*
o-Terphenyl	*105*		*70 - 130*	*03/26/21 15:15*	*03/27/21 23:15*	*1*

Lab Sample ID: LCS 880-921/2-A
Matrix: Solid
Analysis Batch: 944

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 921

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	970.0		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	886.3		mg/Kg		89	70 - 130		

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

Lab Sample ID: LCSD 880-921/3-A
Matrix: Solid
Analysis Batch: 944

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 921

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1041		mg/Kg		104	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	1061		mg/Kg		106	70 - 130	18	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*106*		*70 - 130*

Lab Sample ID: 890-428-1 MS
Matrix: Solid
Analysis Batch: 944

Client Sample ID: N EXC. Bottom hole @1'
Prep Type: Total/NA
Prep Batch: 921

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	986.7		mg/Kg		99	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	859.7		mg/Kg		86	70 - 130		

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU Fed 001

Job ID: 890-428-1
SDG: Lea Co NM

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

Lab Sample ID: 890-428-1 MS
Matrix: Solid
Analysis Batch: 944

Client Sample ID: N EXC. Bottom hole @1'
Prep Type: Total/NA
Prep Batch: 921

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: 890-428-1 MSD
Matrix: Solid
Analysis Batch: 944

Client Sample ID: N EXC. Bottom hole @1'
Prep Type: Total/NA
Prep Batch: 921

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1041		mg/Kg		104	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1050		mg/Kg		105	70 - 130	20	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	117		70 - 130

Lab Sample ID: MB 880-957/1-A
Matrix: Solid
Analysis Batch: 967

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 957

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/27/21 14:37	03/28/21 11:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/27/21 14:37	03/28/21 11:53	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/27/21 14:37	03/28/21 11:53	1
Total TPH	<50.0	U	50.0		mg/Kg		03/27/21 14:37	03/28/21 11:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	03/27/21 14:37	03/28/21 11:53	1
o-Terphenyl	104		70 - 130	03/27/21 14:37	03/28/21 11:53	1

Lab Sample ID: LCS 880-957/2-A
Matrix: Solid
Analysis Batch: 967

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1244		mg/Kg		124	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1165		mg/Kg		116	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	113		70 - 130

QC Sample Results

Client: Tetra Tech, Inc. Job ID: 890-428-1
Project/Site: Microbrew BEU Fed 001 SDG: Lea Co NM

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

Lab Sample ID: LCSD 880-957/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 967 **Prep Batch: 957**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1230		mg/Kg		123	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	992.9		mg/Kg		99	70 - 130	16	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*105*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Lab Sample ID: 890-428-1 MS **Client Sample ID: N EXC. Bottom hole @1'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 967 **Prep Batch: 957**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	1000	1133		mg/Kg		113	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	1031		mg/Kg		103	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*101*		*70 - 130*

Lab Sample ID: 890-428-1 MSD **Client Sample ID: N EXC. Bottom hole @1'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 967 **Prep Batch: 957**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	998	1308	F1	mg/Kg		131	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1079		mg/Kg		108	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*116*		*70 - 130*
o-Terphenyl	*106*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-896/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 916

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/26/21 16:55	1

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU Fed 001

Job ID: 890-428-1
SDG: Lea Co NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-896/2-A
Matrix: Solid
Analysis Batch: 916

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	270.4		mg/Kg		108	90 - 110

Lab Sample ID: LCSD 880-896/3-A
Matrix: Solid
Analysis Batch: 916

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	270.2		mg/Kg		108	90 - 110	0	20

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU Fed 001

Job ID: 890-428-1
SDG: Lea Co NM

GC VOA

Prep Batch: 915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-428-1	N EXC. Bottom hole @1'	Total/NA	Solid	5035	
890-428-2	N.EXC. NSW	Total/NA	Solid	5035	
890-428-3	N.EXC. ESW	Total/NA	Solid	5035	
890-428-4	N.EXC. WSW	Total/NA	Solid	5035	
890-428-5	S. EXC. N Bottomhole @1'	Total/NA	Solid	5035	
890-428-6	S. EXC. S Bottomhole @1'	Total/NA	Solid	5035	
890-428-7	S. EXC. ESW	Total/NA	Solid	5035	
890-428-8	S. EXC. SSW	Total/NA	Solid	5035	
890-428-9	S. EXC. WSW	Total/NA	Solid	5035	
890-428-1 MS	N EXC. Bottom hole @1'	Total/NA	Solid	5035	
890-428-1 MSD	N EXC. Bottom hole @1'	Total/NA	Solid	5035	

Analysis Batch: 936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-428-1	N EXC. Bottom hole @1'	Total/NA	Solid	8021B	915
890-428-2	N.EXC. NSW	Total/NA	Solid	8021B	915
890-428-3	N.EXC. ESW	Total/NA	Solid	8021B	915
890-428-4	N.EXC. WSW	Total/NA	Solid	8021B	915
890-428-5	S. EXC. N Bottomhole @1'	Total/NA	Solid	8021B	915
890-428-6	S. EXC. S Bottomhole @1'	Total/NA	Solid	8021B	915
890-428-7	S. EXC. ESW	Total/NA	Solid	8021B	915
890-428-8	S. EXC. SSW	Total/NA	Solid	8021B	915
890-428-9	S. EXC. WSW	Total/NA	Solid	8021B	915
MB 880-936/41	Method Blank	Total/NA	Solid	8021B	
MB 880-936/9	Method Blank	Total/NA	Solid	8021B	
LCS 880-936/35	Lab Control Sample	Total/NA	Solid	8021B	
LCSD 880-936/36	Lab Control Sample Dup	Total/NA	Solid	8021B	
890-428-1 MS	N EXC. Bottom hole @1'	Total/NA	Solid	8021B	915
890-428-1 MSD	N EXC. Bottom hole @1'	Total/NA	Solid	8021B	915

GC Semi VOA

Prep Batch: 921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-428-1	N EXC. Bottom hole @1'	Total/NA	Solid	8015NM Prep	
890-428-2	N.EXC. NSW	Total/NA	Solid	8015NM Prep	
890-428-3	N.EXC. ESW	Total/NA	Solid	8015NM Prep	
890-428-4	N.EXC. WSW	Total/NA	Solid	8015NM Prep	
890-428-5	S. EXC. N Bottomhole @1'	Total/NA	Solid	8015NM Prep	
890-428-6	S. EXC. S Bottomhole @1'	Total/NA	Solid	8015NM Prep	
890-428-7	S. EXC. ESW	Total/NA	Solid	8015NM Prep	
890-428-8	S. EXC. SSW	Total/NA	Solid	8015NM Prep	
890-428-9	S. EXC. WSW	Total/NA	Solid	8015NM Prep	
MB 880-921/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-921/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-921/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-428-1 MS	N EXC. Bottom hole @1'	Total/NA	Solid	8015NM Prep	
890-428-1 MSD	N EXC. Bottom hole @1'	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU Fed 001

Job ID: 890-428-1
SDG: Lea Co NM

GC Semi VOA

Analysis Batch: 944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-428-1	N EXC. Bottom hole @1'	Total/NA	Solid	8015B NM	921
890-428-2	N.EXC. NSW	Total/NA	Solid	8015B NM	921
890-428-3	N.EXC. ESW	Total/NA	Solid	8015B NM	921
890-428-4	N.EXC. WSW	Total/NA	Solid	8015B NM	921
890-428-5	S. EXC. N Bottomhole @1'	Total/NA	Solid	8015B NM	921
890-428-6	S. EXC. S Bottomhole @1'	Total/NA	Solid	8015B NM	921
890-428-7	S. EXC. ESW	Total/NA	Solid	8015B NM	921
890-428-8	S. EXC. SSW	Total/NA	Solid	8015B NM	921
890-428-9	S. EXC. WSW	Total/NA	Solid	8015B NM	921
MB 880-921/1-A	Method Blank	Total/NA	Solid	8015B NM	921
LCS 880-921/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	921
LCSD 880-921/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	921
890-428-1 MS	N EXC. Bottom hole @1'	Total/NA	Solid	8015B NM	921
890-428-1 MSD	N EXC. Bottom hole @1'	Total/NA	Solid	8015B NM	921

Prep Batch: 957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-957/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-957/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-957/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-428-1 MS	N EXC. Bottom hole @1'	Total/NA	Solid	8015NM Prep	
890-428-1 MSD	N EXC. Bottom hole @1'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-957/1-A	Method Blank	Total/NA	Solid	8015B NM	957
LCS 880-957/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	957
LCSD 880-957/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	957
890-428-1 MS	N EXC. Bottom hole @1'	Total/NA	Solid	8015B NM	957
890-428-1 MSD	N EXC. Bottom hole @1'	Total/NA	Solid	8015B NM	957

HPLC/IC

Leach Batch: 896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-428-1	N EXC. Bottom hole @1'	Soluble	Solid	DI Leach	
890-428-2	N.EXC. NSW	Soluble	Solid	DI Leach	
890-428-3	N.EXC. ESW	Soluble	Solid	DI Leach	
890-428-4	N.EXC. WSW	Soluble	Solid	DI Leach	
890-428-5	S. EXC. N Bottomhole @1'	Soluble	Solid	DI Leach	
890-428-6	S. EXC. S Bottomhole @1'	Soluble	Solid	DI Leach	
890-428-7	S. EXC. ESW	Soluble	Solid	DI Leach	
890-428-8	S. EXC. SSW	Soluble	Solid	DI Leach	
890-428-9	S. EXC. WSW	Soluble	Solid	DI Leach	
MB 880-896/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-896/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-896/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-428-1	N EXC. Bottom hole @1'	Soluble	Solid	300.0	896

QC Association Summary

Client: Tetra Tech, Inc. Job ID: 890-428-1
Project/Site: Microbrew BEU Fed 001 SDG: Lea Co NM

HPLC/IC (Continued)

Analysis Batch: 916 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-428-2	N.EXC. NSW	Soluble	Solid	300.0	896
890-428-3	N.EXC. ESW	Soluble	Solid	300.0	896
890-428-4	N.EXC. WSW	Soluble	Solid	300.0	896
890-428-5	S. EXC. N Bottomhole @1'	Soluble	Solid	300.0	896
890-428-6	S. EXC. S Bottomhole @1'	Soluble	Solid	300.0	896
890-428-7	S. EXC. ESW	Soluble	Solid	300.0	896
890-428-8	S. EXC. SSW	Soluble	Solid	300.0	896
890-428-9	S. EXC. WSW	Soluble	Solid	300.0	896
MB 880-896/1-A	Method Blank	Soluble	Solid	300.0	896
LCS 880-896/2-A	Lab Control Sample	Soluble	Solid	300.0	896
LCSD 880-896/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	896

Lab Chronicle

Client: Tetra Tech, Inc. Job ID: 890-428-1
Project/Site: Microbrew BEU Fed 001 SDG: Lea Co NM

Client Sample ID: N EXC. Bottom hole @1' Lab Sample ID: 890-428-1

Date Collected: 03/24/21 13:50 **Matrix: Solid**
Date Received: 03/25/21 12:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			915	03/26/21 15:03	KL	XM
Total/NA	Analysis	8021B		1	936	03/27/21 08:49	AJ	XM
Total/NA	Prep	8015NM Prep			921	03/26/21 15:15	DM	XM
Total/NA	Analysis	8015B NM		1	944	03/28/21 00:19	AJ	XM
Soluble	Leach	DI Leach			896	03/26/21 10:07	CH	XM
Soluble	Analysis	300.0		1	916	03/26/21 18:46	CH	XM

Client Sample ID: N.EXC. NSW Lab Sample ID: 890-428-2

Date Collected: 03/24/21 14:00 **Matrix: Solid**
Date Received: 03/25/21 12:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			915	03/26/21 15:03	KL	XM
Total/NA	Analysis	8021B		1	936	03/27/21 09:10	AJ	XM
Total/NA	Prep	8015NM Prep			921	03/26/21 15:15	DM	XM
Total/NA	Analysis	8015B NM		1	944	03/28/21 01:22	AJ	XM
Soluble	Leach	DI Leach			896	03/26/21 10:07	CH	XM
Soluble	Analysis	300.0		1	916	03/26/21 18:52	CH	XM

Client Sample ID: N.EXC. ESW Lab Sample ID: 890-428-3

Date Collected: 03/24/21 14:30 **Matrix: Solid**
Date Received: 03/25/21 12:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			915	03/26/21 15:03	KL	XM
Total/NA	Analysis	8021B		1	936	03/27/21 09:30	AJ	XM
Total/NA	Prep	8015NM Prep			921	03/26/21 15:15	DM	XM
Total/NA	Analysis	8015B NM		1	944	03/28/21 01:44	AJ	XM
Soluble	Leach	DI Leach			896	03/26/21 10:07	CH	XM
Soluble	Analysis	300.0		1	916	03/26/21 19:08	CH	XM

Client Sample ID: N.EXC. WSW Lab Sample ID: 890-428-4

Date Collected: 03/24/21 14:50 **Matrix: Solid**
Date Received: 03/25/21 12:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			915	03/26/21 15:03	KL	XM
Total/NA	Analysis	8021B		1	936	03/27/21 09:51	AJ	XM
Total/NA	Prep	8015NM Prep			921	03/26/21 15:15	DM	XM
Total/NA	Analysis	8015B NM		1	944	03/28/21 02:05	AJ	XM
Soluble	Leach	DI Leach			896	03/26/21 10:07	CH	XM
Soluble	Analysis	300.0		1	916	03/26/21 19:14	CH	XM

Lab Chronicle

Client: Tetra Tech, Inc. Job ID: 890-428-1
Project/Site: Microbrew BEU Fed 001 SDG: Lea Co NM

Client Sample ID: S. EXC. N Bottomhole @1' Lab Sample ID: 890-428-5

Date Collected: 03/24/21 15:00 **Matrix: Solid**
Date Received: 03/25/21 12:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			915	03/26/21 15:03	KL	XM
Total/NA	Analysis	8021B		1	936	03/27/21 10:12	AJ	XM
Total/NA	Prep	8015NM Prep			921	03/26/21 15:15	DM	XM
Total/NA	Analysis	8015B NM		1	944	03/28/21 02:26	AJ	XM
Soluble	Leach	DI Leach			896	03/26/21 10:07	CH	XM
Soluble	Analysis	300.0		1	916	03/26/21 19:19	CH	XM

Client Sample ID: S. EXC. S Bottomhole @1' Lab Sample ID: 890-428-6

Date Collected: 03/24/21 15:20 **Matrix: Solid**
Date Received: 03/25/21 12:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			915	03/26/21 15:03	KL	XM
Total/NA	Analysis	8021B		1	936	03/27/21 10:33	AJ	XM
Total/NA	Prep	8015NM Prep			921	03/26/21 15:15	DM	XM
Total/NA	Analysis	8015B NM		1	944	03/28/21 02:47	AJ	XM
Soluble	Leach	DI Leach			896	03/26/21 10:07	CH	XM
Soluble	Analysis	300.0		1	916	03/26/21 19:25	CH	XM

Client Sample ID: S. EXC. ESW Lab Sample ID: 890-428-7

Date Collected: 03/25/21 10:00 **Matrix: Solid**
Date Received: 03/25/21 12:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			915	03/26/21 15:03	KL	XM
Total/NA	Analysis	8021B		1	936	03/27/21 10:54	AJ	XM
Total/NA	Prep	8015NM Prep			921	03/26/21 15:15	DM	XM
Total/NA	Analysis	8015B NM		1	944	03/28/21 03:08	AJ	XM
Soluble	Leach	DI Leach			896	03/26/21 10:07	CH	XM
Soluble	Analysis	300.0		1	916	03/26/21 19:30	CH	XM

Client Sample ID: S. EXC. SSW Lab Sample ID: 890-428-8

Date Collected: 03/25/21 10:35 **Matrix: Solid**
Date Received: 03/25/21 12:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			915	03/26/21 15:03	KL	XM
Total/NA	Analysis	8021B		1	936	03/27/21 11:14	AJ	XM
Total/NA	Prep	8015NM Prep			921	03/26/21 15:15	DM	XM
Total/NA	Analysis	8015B NM		1	944	03/28/21 03:30	AJ	XM
Soluble	Leach	DI Leach			896	03/26/21 10:07	CH	XM
Soluble	Analysis	300.0		1	916	03/26/21 19:36	CH	XM

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU Fed 001

Job ID: 890-428-1
SDG: Lea Co NM

Client Sample ID: S. EXC. WSW

Date Collected: 03/25/21 12:00
Date Received: 03/25/21 12:38

Lab Sample ID: 890-428-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			915	03/26/21 15:03	KL	XM
Total/NA	Analysis	8021B		1	936	03/27/21 11:35	AJ	XM
Total/NA	Prep	8015NM Prep			921	03/26/21 15:15	DM	XM
Total/NA	Analysis	8015B NM		1	944	03/28/21 03:51	AJ	XM
Soluble	Leach	DI Leach			896	03/26/21 10:07	CH	XM
Soluble	Analysis	300.0		1	916	03/26/21 19:41	CH	XM

Laboratory References:

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

Accreditation/Certification Summary

Client: Tetra Tech, Inc. Job ID: 890-428-1
Project/Site: Microbrew BEU Fed 001 SDG: Lea Co NM

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: Tetra Tech, Inc. Job ID: 890-428-1
Project/Site: Microbrew BEU Fed 001 SDG: Lea Co NM

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU Fed 001

Job ID: 890-428-1
SDG: Lea Co NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-428-1	N EXC. Bottom hole @1'	Solid	03/24/21 13:50	03/25/21 12:38	
890-428-2	N.EXC. NSW	Solid	03/24/21 14:00	03/25/21 12:38	
890-428-3	N.EXC. ESW	Solid	03/24/21 14:30	03/25/21 12:38	
890-428-4	N.EXC. WSW	Solid	03/24/21 14:50	03/25/21 12:38	
890-428-5	S. EXC. N Bottomhole @1'	Solid	03/24/21 15:00	03/25/21 12:38	
890-428-6	S. EXC. S Bottomhole @1'	Solid	03/24/21 15:20	03/25/21 12:38	
890-428-7	S. EXC. ESW	Solid	03/25/21 10:00	03/25/21 12:38	
890-428-8	S. EXC. SSW	Solid	03/25/21 10:35	03/25/21 12:38	
890-428-9	S. EXC. WSW	Solid	03/25/21 12:00	03/25/21 12:38	

eurofins | Environment Testing Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Paula Tocora Alonso	Bill to: (if different)	James Kennedy
Company Name:	Tetra Tech	Company Name:	EOG Resources
Address:	901 W. Wall Ste 100	Address:	5409 Champions Dr.
City, State ZIP:	Midland, TX 79720	City, State ZIP:	Midland, TX. 7
Phone:	432-978-3271 Email:		james.kennedy@eogresources.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	MicroBrew BEU Fed 001	Turn Around	☐ Routine ☒ Rush 24h
Project Number:	212C-MD-02419	Due Date:	3/26/21
Project Location:	Lea Co. NM	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Adrian Garcia		
PO #:	212C-MD-02419 1300		

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	Yes (No)
Samples Received Intact:	(Yes) No	Thermometer ID:	IR#1-07
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Temperature Reading:	23.0
Total Containers:		Corrected Temperature:	22.8

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

890-428 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	BTEX	Chloride 8021B	TPH 8015	Sample Comments
N Exc. Bottomhole @1'	S	3/24	1350	1	G	1	X	X	X	
N Exc. NSW	S	3/24	1400	-	G	1	X	X	X	
N Exc. ESW	S	3/24	1430	-	G	1	X	X	X	
N Exc. WSW	S	3/24	1450	-	G	1	X	X	X	
S Exc. N Bottomhole@1'	S	3/24	1500	1	G	1	X	X	X	
S Exc. S Bottomhole@1'	S	3/24	1520	1	G	1	X	X	X	
S Exc. ESW	S	3/25	1000	-	G	1	X	X	X	
S Exc. SSW	S	3/25	1035	-	G	1	X	X	X	
S Exc. WSW	S	3/25	1200	-	G	1	X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Adrian Garcia	Ana Cuff	3.25.21 1235	4		
3			6		
5					

Revised Date: 08/25/2020 Rev. 2020.2

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 890-131 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-428-1
Address: 1211 W Florida Ave	Due Date Requested: 3/26/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Microbrew BEU Fed 001	Project #: 88000013			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C - Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H - Ascorbic Acid, I Ice, J - DI Water, K EDTA, L - EDA, M - Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R - Na2S2O3, S H2SO4, T TSP Dodecahydrate, U - Acetone, V MCAA, W - pH 4-5, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/DI_LEACH Chloride	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH GRO-DRO-MRO	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X					
N EXC Bottom hole @1' (890-428-1)	3/24/21	13 50 Mountain		Solid			X	X	X	1	
N EXC NSW (890-428-2)	3/24/21	14 00 Mountain		Solid			X	X	X	1	
N EXC ESW (890-428-3)	3/24/21	14 30 Mountain		Solid			X	X	X	1	
N EXC WSW (890-428-4)	3/24/21	14 50 Mountain		Solid			X	X	X	1	
S EXC N Bottomhole @1' (890-428-5)	3/24/21	15 00 Mountain		Solid			X	X	X	1	
S EXC S Bottomhole @1' (890-428-6)	3/24/21	15 20 Mountain		Solid			X	X	X	1	
S EXC ESW (890-428-7)	3/25/21	10 00 Mountain		Solid			X	X	X	1	
S EXC SSW (890-428-8)	3/25/21	10 35 Mountain		Solid			X	X	X	1	
S EXC WSW (890-428-9)	3/25/21	12 00 Mountain		Solid			X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I II III, IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by: Clue Cuipo 3-25-21	Date/Time:	Company	Received by:	Date/Time: 3/25/21 1705	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-428-1
SDG Number: Lea Co NM

Login Number: 428
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-428-1
SDG Number: Lea Co NM

Login Number: 428
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 03/25/21 05:03 PM

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

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-478-1
Laboratory Sample Delivery Group: Lea County NM
Client Project/Site: Microbrew BEU 212C-MD-02419

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

Attn: Clair Gonzales

Jkramer

Authorized for release by:
4/5/2021 2:00:48 PM

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

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: Microbrew BEU 212C-MD-02419

Laboratory Job ID: 890-478-1
SDG: Lea County NM

Table of Contents

Definitions/Glossary

Client: Tetra Tech, Inc. Job ID: 890-478-1
Project/Site: Microbrew BEU 212C-MD-02419 SDG: Lea County NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
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: Microbrew BEU 212C-MD-02419

Job ID: 890-478-1
SDG: Lea County NM

Job ID: 890-478-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-478-1

Receipt
The sample was received on 4/2/2021 8:00 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.4°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: S-BH (1') (890-478-1).

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU 212C-MD-02419

Job ID: 890-478-1
SDG: Lea County NM

Client Sample ID: S-BH (1')

Date Collected: 04/01/21 00:00
Date Received: 04/02/21 08:00

Lab Sample ID: 890-478-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/02/21 13:15	04/02/21 22:10	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/02/21 13:15	04/02/21 22:10	1
Ethylbenzene	**0.00312**		0.00198		mg/Kg		04/02/21 13:15	04/02/21 22:10	1
m-Xylene & p-Xylene	**0.0119**		0.00396		mg/Kg		04/02/21 13:15	04/02/21 22:10	1
o-Xylene	**0.0336**		0.00198		mg/Kg		04/02/21 13:15	04/02/21 22:10	1
Xylenes, Total	**0.0455**		0.00396		mg/Kg		04/02/21 13:15	04/02/21 22:10	1
Total BTEX	**0.0486**		0.00198		mg/Kg		04/02/21 13:15	04/02/21 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*04/02/21 13:15*	*04/02/21 22:10*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*04/02/21 13:15*	*04/02/21 22:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/03/21 11:21	04/04/21 05:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/03/21 11:21	04/04/21 05:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/03/21 11:21	04/04/21 05:24	1
Total TPH	<50.0	U	50.0		mg/Kg		04/03/21 11:21	04/04/21 05:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*04/03/21 11:21*	*04/04/21 05:24*	*1*
o-Terphenyl	*89*		*70 - 130*	*04/03/21 11:21*	*04/04/21 05:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**46.5**		4.96		mg/Kg			04/04/21 01:40	1

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU 212C-MD-02419

Job ID: 890-478-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-478-1	S-BH (1')	116	101										
LCS 880-1247/1-A	Lab Control Sample	110	100										
LCSD 880-1247/2-A	Lab Control Sample Dup	105	100										
MB 880-1102/5-A	Method Blank	106	96										
MB 880-1247/5-A	Method Blank	105	101										

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-478-1	S-BH (1')	93	89										
LCS 880-1277/2-A	Lab Control Sample	103	92										
LCSD 880-1277/3-A	Lab Control Sample Dup	101	89										
MB 880-1277/1-A	Method Blank	119	114										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU 212C-MD-02419

Job ID: 890-478-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-1102/5-A
Matrix: Solid
Analysis Batch: 1205

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1102

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/31/21 11:41	04/02/21 07:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/31/21 11:41	04/02/21 07:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/31/21 11:41	04/02/21 07:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/31/21 11:41	04/02/21 07:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/31/21 11:41	04/02/21 07:26	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/31/21 11:41	04/02/21 07:26	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		03/31/21 11:41	04/02/21 07:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/31/21 11:41*	*04/02/21 07:26*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/31/21 11:41*	*04/02/21 07:26*	*1*

Lab Sample ID: MB 880-1247/5-A
Matrix: Solid
Analysis Batch: 1205

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1247

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/02/21 13:15	04/02/21 20:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/02/21 13:15	04/02/21 20:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/02/21 13:15	04/02/21 20:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/02/21 13:15	04/02/21 20:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/02/21 13:15	04/02/21 20:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/02/21 13:15	04/02/21 20:28	1
Total BTEX	<0.00200	U	0.00200		mg/Kg		04/02/21 13:15	04/02/21 20:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*04/02/21 13:15*	*04/02/21 20:28*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*04/02/21 13:15*	*04/02/21 20:28*	*1*

Lab Sample ID: LCS 880-1247/1-A
Matrix: Solid
Analysis Batch: 1205

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1247

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09975		mg/Kg		100	70 - 130
Toluene	0.100	0.1045		mg/Kg		104	70 - 130
Ethylbenzene	0.100	0.1120		mg/Kg		112	70 - 130
m-Xylene & p-Xylene	0.200	0.2267		mg/Kg		113	70 - 130
o-Xylene	0.100	0.1126		mg/Kg		113	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU 212C-MD-02419

Job ID: 890-478-1
SDG: Lea County NM

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

Lab Sample ID: LCSD 880-1247/2-A
Matrix: Solid
Analysis Batch: 1205

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1247

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1001		mg/Kg		100	70 - 130	0	35
Toluene			0.100	0.1027		mg/Kg		103	70 - 130	2	35
Ethylbenzene			0.100	0.1092		mg/Kg		109	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.2209		mg/Kg		110	70 - 130	3	35
o-Xylene			0.100	0.1074		mg/Kg		107	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 880-1277/1-A
Matrix: Solid
Analysis Batch: 1269

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 1277

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/03/21 11:21	04/03/21 21:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/03/21 11:21	04/03/21 21:22	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/03/21 11:21	04/03/21 21:22	1
Total TPH	<50.0	U	50.0		mg/Kg		04/03/21 11:21	04/03/21 21:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*119*		*70 - 130*	*04/03/21 11:21*	*04/03/21 21:22*	*1*
o-Terphenyl	*114*		*70 - 130*	*04/03/21 11:21*	*04/03/21 21:22*	*1*

Lab Sample ID: LCS 880-1277/2-A
Matrix: Solid
Analysis Batch: 1269

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 1277

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	998.9		mg/Kg		100	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	887.5		mg/Kg		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*92*		*70 - 130*

Lab Sample ID: LCSD 880-1277/3-A
Matrix: Solid
Analysis Batch: 1269

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 1277

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	975.7		mg/Kg		98	70 - 130	2	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: Tetra Tech, Inc. Job ID: 890-478-1
Project/Site: Microbrew BEU 212C-MD-02419 SDG: Lea County NM

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

Lab Sample ID: LCSD 880-1277/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 1269 **Prep Batch: 1277**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)			1000	860.3		mg/Kg		86	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*101*		*70 - 130*
o-Terphenyl	*89*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-1259/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 1279

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/04/21 00:33	1

Lab Sample ID: LCS 880-1259/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 1279

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	266.9		mg/Kg		107	90 - 110		

Lab Sample ID: LCSD 880-1259/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 1279

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	266.8		mg/Kg		107	90 - 110	0	20

QC Association Summary

Client: Tetra Tech, Inc. Job ID: 890-478-1
Project/Site: Microbrew BEU 212C-MD-02419 SDG: Lea County NM

GC VOA

Prep Batch: 1102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-1102/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 1205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-478-1	S-BH (1')	Total/NA	Solid	8021B	1247
MB 880-1102/5-A	Method Blank	Total/NA	Solid	8021B	1102
MB 880-1247/5-A	Method Blank	Total/NA	Solid	8021B	1247
LCS 880-1247/1-A	Lab Control Sample	Total/NA	Solid	8021B	1247
LCSD 880-1247/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	1247

Prep Batch: 1247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-478-1	S-BH (1')	Total/NA	Solid	5035	
MB 880-1247/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-1247/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-1247/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 1269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-478-1	S-BH (1')	Total/NA	Solid	8015B NM	1277
MB 880-1277/1-A	Method Blank	Total/NA	Solid	8015B NM	1277
LCS 880-1277/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	1277
LCSD 880-1277/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	1277

Prep Batch: 1277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-478-1	S-BH (1')	Total/NA	Solid	8015NM Prep	
MB 880-1277/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-1277/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-1277/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 1259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-478-1	S-BH (1')	Soluble	Solid	DI Leach	
MB 880-1259/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-1259/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-1259/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 1279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-478-1	S-BH (1')	Soluble	Solid	300.0	1259
MB 880-1259/1-A	Method Blank	Soluble	Solid	300.0	1259
LCS 880-1259/2-A	Lab Control Sample	Soluble	Solid	300.0	1259
LCSD 880-1259/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	1259

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU 212C-MD-02419

Job ID: 890-478-1
SDG: Lea County NM

Client Sample ID: S-BH (1')

Date Collected: 04/01/21 00:00
Date Received: 04/02/21 08:00

Lab Sample ID: 890-478-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			1247	04/02/21 13:15	KL	XM
Total/NA	Analysis	8021B		1	1205	04/02/21 22:10	MR	XM
Total/NA	Prep	8015NM Prep			1277	04/03/21 11:21	DM	XM
Total/NA	Analysis	8015B NM		1	1269	04/04/21 05:24	AJ	XM
Soluble	Leach	DI Leach			1259	04/02/21 15:06	SC	XM
Soluble	Analysis	300.0		1	1279	04/04/21 01:40	CH	XM

Laboratory References:

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

Accreditation/Certification Summary

Client: Tetra Tech, Inc. Job ID: 890-478-1
Project/Site: Microbrew BEU 212C-MD-02419 SDG: Lea County NM

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: Tetra Tech, Inc. Job ID: 890-478-1
Project/Site: Microbrew BEU 212C-MD-02419 SDG: Lea County NM

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Microbrew BEU 212C-MD-02419

Job ID: 890-478-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-478-1	S-BH (1')	Solid	04/01/21 00:00	04/02/21 08:00	

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

890-478 Chain of Custody

4/5/2021

Client Name:	EOG	Site Manager:	Paula Tocora
Project Name:	Microbrew BEU		
Project Location: (county, state)	Lea County, NM	Project #:	212C-MD-02419 Task: 1300
Invoice to:	James Kennedy		
Receiving Laboratory:	Xenco	Sampler Signature:	
Comments:			

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE (YEAR: 2020)	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: None	PRESERVATIVE METHOD:	# CONTAINERS	FILTERED (Y/N)
	S-BH (1')	4/1/2021			X				X				

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
X		X												X							

Relinquished by:	Date:	Time:	Received by: Date: Time:
Relinquished by:	Date:	Time:	Received by: Date: Time:
Relinquished by:	Date:	Time:	Received by: Date: Time:

Received by: Cue Cuate 4.2.21 0758

LAB USE ONLY

Sample Temperature 3.6/3.4

REMARKS:

- ☐ STANDARD
- ☒ 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

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Phone 575-988-3199 Fax. 575-988-3199

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-147 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana NELAP - Texas		Job #: 890-478-1
Address: 1211 W Florida Ave	Due Date Requested: 4/5/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Microbrew BEU	Project #: 88000013			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/DI_LEACH Chloride	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH GRO-DRO-MRO	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
S-BH (1') (890-478-1)	4/1/21	Mountain		Solid			X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: Clue Carter 4.2.21				4-2-21 2:00 pm	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-478-1
SDG Number: Lea County NM

Login Number: 478
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 890-478-1
SDG Number: Lea County NM

Login Number: 478
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Midland
List Creation: 04/02/21 02:23 PM

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

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

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 54740
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bbillings	None	11/2/2021