



August 17, 2022

District Supervisor
Oil Conservation Division, District 1
1625 North French Drive
Hobbs, New Mexico 88240

**Re: Release Characterization and Closure Report
ConocoPhillips
Battle Axe Central Tank Battery Release
Unit Letter A, Section 27, Township 26 South, Range 32 East
Lea County, New Mexico
Incident ID# NCE2002452675**

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips to assess a release that occurred from an equipment failure at the Battle Axe Central Tank Battery (CTB). The release footprint is located in Public Land Survey System (PLSS) Unit Letter A, Section 27, Township 26 South, Range 32 East, in Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.018301°, -103.656126°, as shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico Form C-141 Initial Report (Appendix A), the release was discovered on November 25, 2019. The release occurred as the result of a pin hole leak on a ball valve. Approximately 45.9 barrels (bbls) of produced water and 2.4 bbls of oil were reported released into lined secondary containment, of which all released fluids were recovered by vacuum trucks. The failed ball valve was replaced on November 25, 2019. Charles R. Beauvais II submitted the initial Form C-141 on January 9, 2020. The NMOCD rejected the initial C-141 on January 24, 2020. The release was assigned the Incident ID NCE2002452675.

The C-141 Initial Report was revised and submitted to the NMOCD on July 26, 2022, with fee application payment PO Number KAX12-220726-C-1410. The revised C-141 was approved by Jocelyn Harimon via email on July 26, 2022. The email correspondence is included in Appendix B.

SITE CHARACTERIZATION

A site characterization was performed and no sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, stream bodies, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.29 New Mexico Administrative Code (NMAC). The Site is in an area of medium to high karst potential.

According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there are no water wells within ½ mile (800 meters) of the Site. There four (4) water well within 2,700 meters of the site with an average depth to groundwater of 240 feet below ground surface (bgs). The site characterization data is included in Appendix C.

Tetra Tech

901 West Wall St., Suite 100, Midland, TX 79701

Tel 432.682.4559 Fax 432.682.3946 www.tetrattech.com

REGULATORY FRAMEWORK

Based upon the release footprint and in accordance with Subsection E of 19.15.29.12 NMAC, per 19.15.29.11 NMAC, the site characterization data was used to determine recommended remedial action levels (RRALs) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX), total petroleum hydrocarbons (TPH), and chlorides in soil.

Based on the relative absence of water wells within ½ mile of the Site, the strictest Table I closure criteria will be applied to this release area in lieu of drilling a boring for groundwater depth verification. Thus, based on the site characterization and in accordance with Table I of 19.15.29.12 NMAC, the RRALs for the Site are as follows:

:

Constituent	Site RRAL
Chloride	600 mg/kg
TPH (GRO+DRO+ORO)	100 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

LINER INTEGRITY

In accordance with 19.15.29.11(A)(5)(a) NMAC, notification of a liner inspection at the Battle Axe CTB was sent via email to the NMOCD on July 1, 2022. The liner inspection notification email correspondence is included in Appendix B.

On July 5, 2022, Tetra Tech personnel performed an inspection of the liner within the secondary containment of the Battle Axe CTB. The liner was visually inspected by an experienced Tetra Tech scientist familiar with facility operations and battery inspections. The liner was observed to underlie the entirety of the tank battery secondary containment area. The liner was intact with no visible rips or tears and encompassed by a 2-foot-tall steel wall. The liner extended up the steel "muscle" wall. Based on photographs of the release area at the time that the release was discovered, the released fluids appear to have been contained within the muscle wall. Photographic documentation of the release area at the time of discovery and liner inspection is included in Appendix D.

SITE ASSESSMENT SUMMARY AND SAMPLE RESULTS

Given the age of the release, in addition to the liner inspection, Tetra Tech personnel were on site on July 5, 2022 to conduct soil sampling to delineate the release horizontally using Table I of 19.15.29.12 NMAC constituents. This sampling was conducted to further demonstrate that the liner remained intact during the incident and had the ability to contain the leak in question. A total of four (4) hand auger borings (AH-1 through AH-4) were installed around the perimeter of the release extent as shown in Figure 3. The hand auger borings were installed to a depth of 3 feet bgs, and soil samples were collected at depth intervals 0-1' and 2-3' within each boring.

A total of eight (8) samples were collected from the four (4) borings and submitted to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico to be analyzed for TPH (GRO, DRO and EXT DRO) by EPA Method 8015M, BTEX by EPA Method 8021B, and chlorides by Standard Method SM4500Cl-B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix E.

Results from the July 2022 soil sampling event are summarized in Table 1. All analytical results associated with samples collected during the assessment activities were below Site RRALs. Horizontal delineation was achieved during the assessment.

Release Characterization and Closure Report
August 17, 2022

ConocoPhillips

CONCLUSION

Based on the results of the site assessment and liner inspection, ConocoPhillips respectfully requests closure of the subject incident. The release occurred within a lined containment area. The liner integrity demonstration is complete. The affected area of the liner has been visually inspected where the release occurred, and the liner remains intact and had the ability to contain the leak in question. Two business days' notice was provided to the appropriate division district office before conducting the liner inspection.

All analytical results associated with the horizontal delineation were below applicable Site RRALs. The release area occurring within the lined secondary containment at the site meets the standards of Table I of 19.15.29.11 NMAC as a result of the initial response remedial activities (vacuum trucks).

The final C-141 forms are enclosed in Appendix A. If you have any questions concerning the soil assessment activities or liner inspection for the Site, please call me at (512) 217-7254 or Christian at (512) 288-6281.

Sincerely,
Tetra Tech, Inc.



Ryan C. Dickerson
Project Manager



Christian M, Llull, P.G.
Program Manager

cc:
Mr. Sam Widmer, RMR – ConocoPhillips
Mr. Charles Beauvais, GPBU - ConocoPhillips

LIST OF ATTACHMENTS

Figures:

- Figure 1 – Overview Map
- Figure 2 – Topographic Map
- Figure 3 – Approximate Release Extent and Site Assessment Map

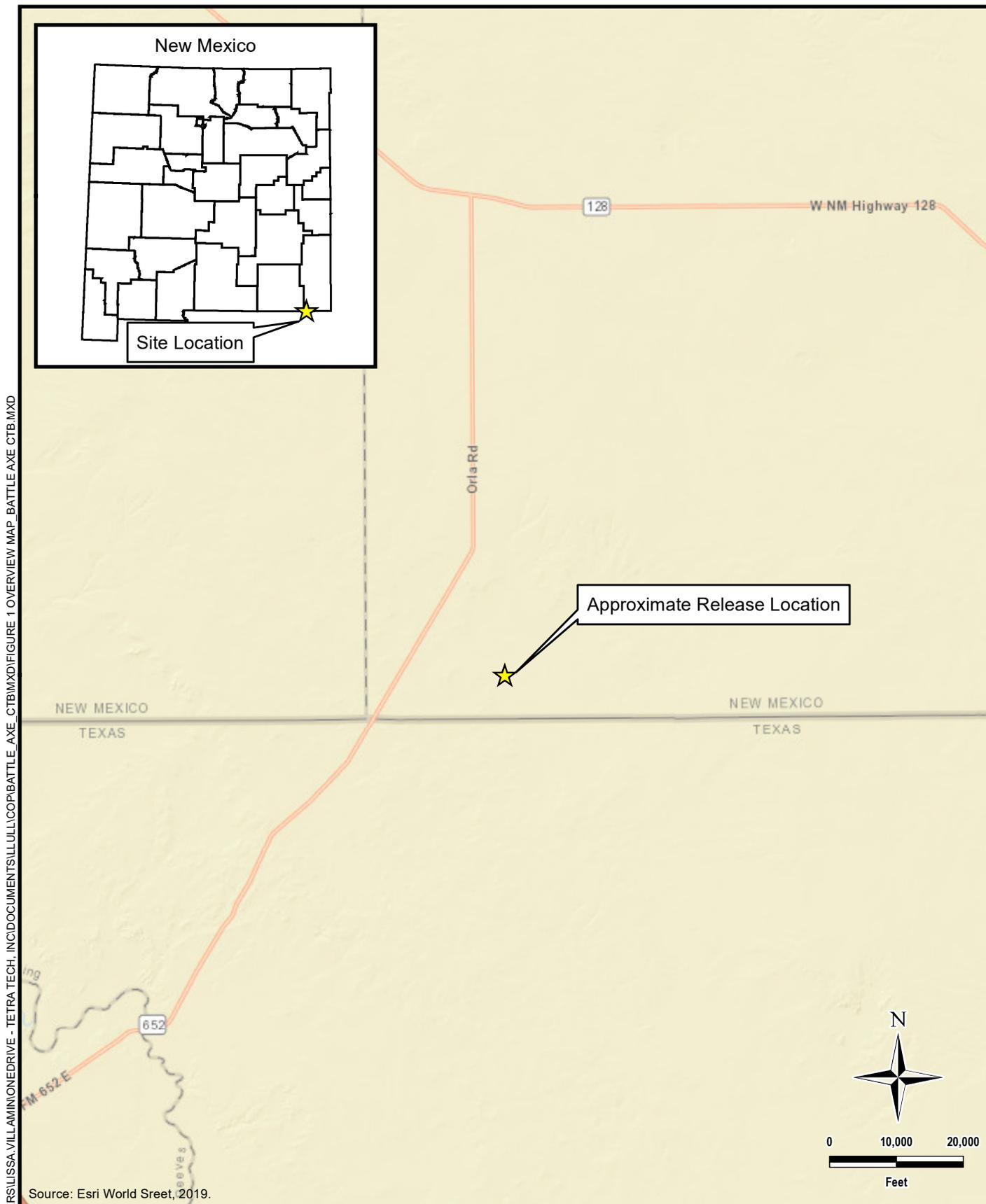
Tables:

- Table 1 – Summary of Analytical Results – Soil Assessment

Appendices:

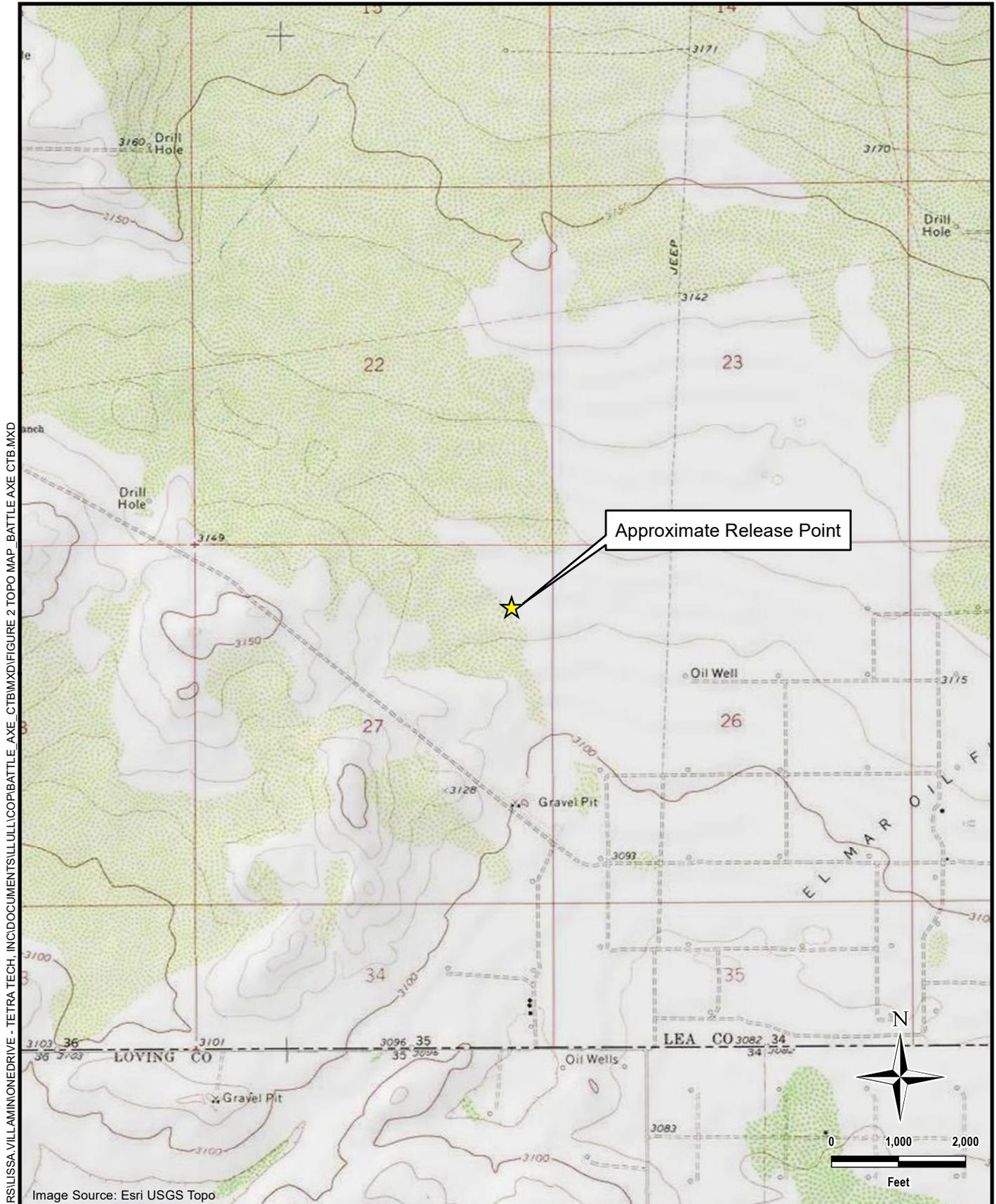
- Appendix A – C-141 Forms
- Appendix B – Regulatory Correspondence
- Appendix C – Site Characterization Data
- Appendix D – Photographic Documentation
- Appendix E – Laboratory Analytical Data

FIGURES



DOCUMENT PATH: C:\USERS\LISSA.VILLAMINONEDRIVE - TETRA TECH, INC\DOCUMENTS\ILLULLICOPBATTLE_AXE CTB\MXD\FIGURE 1 OVERVIEW MAP_BATTLE_AXE CTB.MXD

 TETRA TECH www.tetratech.com 901 West Wall Street, Suite 100 Midland, Texas 79701 Phone: (432) 682-4559 Fax: (432) 682-3946	CONOCOPHILLIPS NCE2002452675 (32.018301°, -103.656126°) LEA COUNTY, NEW MEXICO	PROJECT NO.: 212C-MD-02796 DATE: JULY 07, 2022 DESIGNED BY: LMV
	BATTLE AXE CTB RELEASE OVERVIEW MAP	Figure No. 1



DOCUMENT PATH: C:\USERS\LISSA.VILLAMINONEDRIVE - TETRA TECH\INC\DOCUMENTS\ILLU\CORP\BATTLE_AXE_CTB\MXD\FIGURE 2 TOPO MAP_BATTLE_AXE_CTB.MXD



TETRA TECH

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CONOCOPHILLIPS

NCE2002452675
(32.018301°, -103.656126°)
LEA COUNTY, NEW MEXICO

**BATTLE AXE CTB RELEASE
TOPOGRAPHIC MAP**

PROJECT NO.: 212C-MD-02796

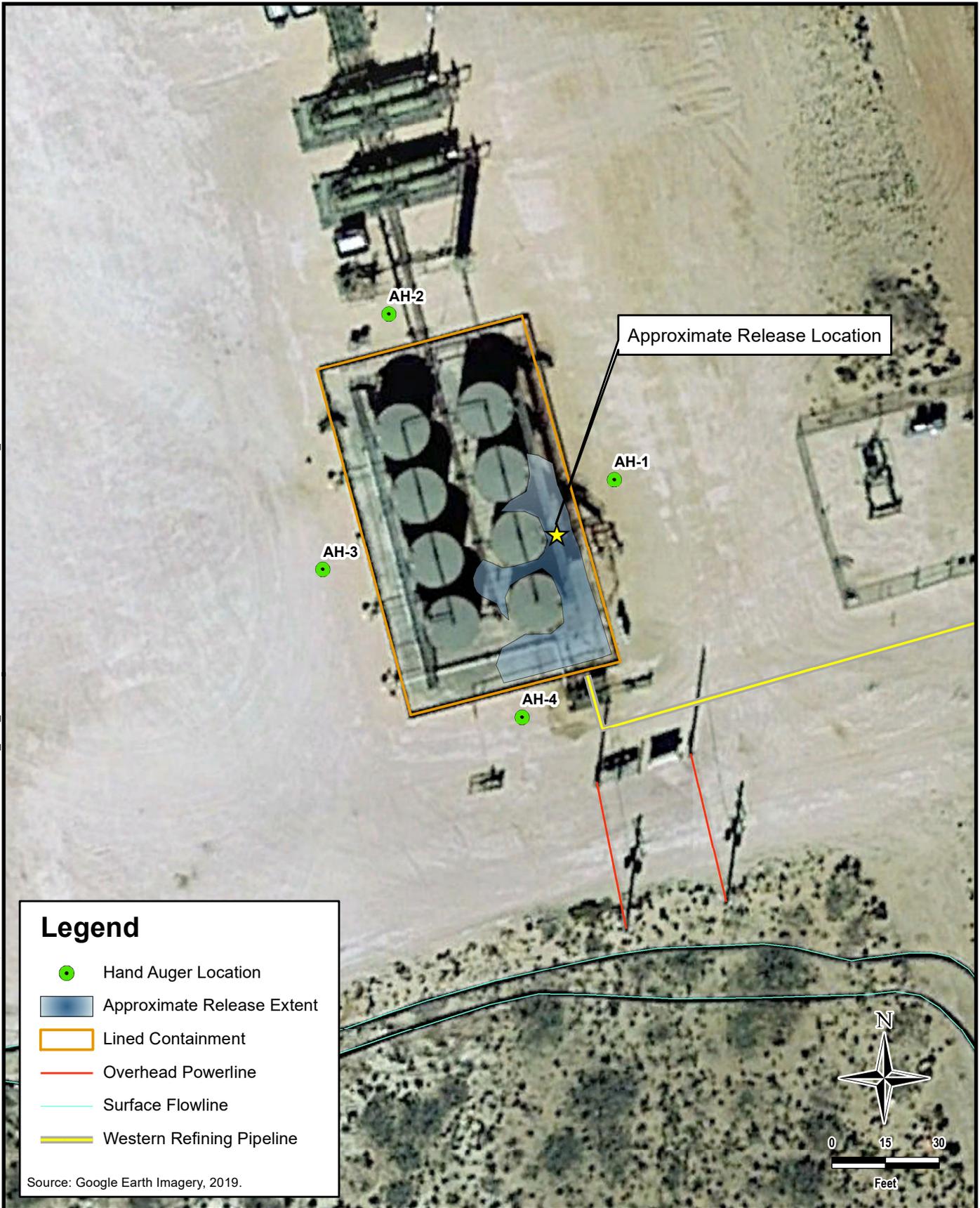
DATE: JULY 07, 2022

DESIGNED BY: LMV

Figure No.

2

DOCUMENT PATH: C:\USERS\LISSA.VILLAMINONEDRIVE\TETRA TECH\INC\DOCUMENTS\ILLULLICOPIBATTLE_AXE_CTB\MXD\FIGURE 3 RELEASE AND ASSESSMENT_BATTLE_AXE_CTB.MXD



Legend

- Hand Auger Location
- Approximate Release Extent
- Lined Containment
- Overhead Powerline
- Surface Flowline
- Western Refining Pipeline

Source: Google Earth Imagery, 2019.

 <p>TETRA TECH</p> <p>www.tetrattech.com</p> <p>901 West Wall Street, Suite 100 Midland, Texas 79701 Phone: (432) 682-4559 Fax: (432) 682-3946</p>	<p>CONOCOPHILLIPS</p> <p>NCE2002452675 (32.018301°, -103.656126°) LEA COUNTY, NEW MEXICO</p>	<p>PROJECT NO.: 212C-MD-02796</p>
	<p>BATTLE AXE CTB RELEASE APPROXIMATE RELEASE EXTENT AND SITE ASSESSMENT</p>	<p>DATE: JULY 07, 2022</p> <p>DESIGNED BY: LMV</p>
		<p>Figure No.</p> <p>3</p>

TABLE

TABLE 1
 SUMMARY OF ANALYTICAL RESULTS
 SOIL ASSESSMENT- NCE2002452675
 CONOCOPHILLIPS
 BATTLE AXE TANK BATTERY RELEASE
 LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Field Screening Results		Chloride ¹		BTEX ²										TPH ³						
			Chloride	PID			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH
			ft. bgs	ppm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
AH-1	7/5/2022	0-1	500	-	160		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-3	165	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0	QM-07, QR-03	< 10.0	QM-07, QR-03	< 10.0	< 10.0	-
AH-2	7/5/2022	0-1	218	-	208		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-3	125	-	96.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
AH-3	7/5/2022	0-1	491	-	96.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-3	95.0	-	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
AH-4	7/5/2022	0-1	316	-	48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-3	155	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-

NOTES:

- ft. Feet
- bgs Below ground surface
- mg/kg Milligrams per kilogram
- TPH Total Petroleum Hydrocarbons
- GRO Gasoline range organics
- DRO Diesel range organics
- 1 Method SM4500CI-B
- 2 Method 8021B
- 3 Method 8015M

QUALIFIERS:

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch was accepted based on LCS and/or LCSD recovery and/or RPD values.

APPENDIX A C-141 Forms

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	NCE2002452675
District RP	
Facility ID	
Application ID	

A3V68-191125-C-1410

Release Notification

Responsible Party

Responsible Party	ConocoPhillips	OGRID	217817
Contact Name	<i>Charles R. Beauvais II</i>	Contact Telephone	<i>575-988-2043</i>
Contact email	<i>charles.r.beauvais@conocophillips.com</i>	Incident # (assigned by OCD)	
Contact mailing address	<i>15 W London Rd, Loving, NM 88256</i>		

Location of Release Source

Latitude ~~*32° 0' 49" N*~~ ~~*32.01361*~~ **32.018301** Longitude ~~*103° 40' 18" W*~~ ~~*103.6717*~~ **-103.656126**
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Battle Axe CTB	Site Type	<i>Water Transfer Line - On Pad - Over Secondary Containment</i>
Date Release Discovered	<i>11/25/2019</i>	API# (if applicable)	

Unit Letter	Section	Township	Range	County
A	<i>2827</i>	<i>26S</i>	<i>32E</i>	<i>Lea County</i>

Surface Owner: State Federal Tribal Private (Name: *BLM*)

Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls)	<i>2.4 bbls</i>	Volume Recovered (bbls)	<i>2.4 bbls</i>
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls)	<i>45.9 bbls</i>	Volume Recovered (bbls)	<i>45.9 bbls</i>
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
<input type="checkbox"/> Condensate	Volume Released (bbls)	<i>0, NA</i>	Volume Recovered (bbls)	<i>0, N/A</i>
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	<i>0, NA</i>	Volume Recovered (Mcf)	<i>0, N/A</i>
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	<i>0, N/A</i>	Volume/Weight Recovered (provide units)	<i>0, N/A</i>

Cause of Release

Ball valve developed a pin hole leak. Ball valve is being replaced and Lone Star was called out the vac out 100% of the release from secondary containment and place back in appropriate tank.

*Repair made on 11/25/19, replaced ball valve
Remediation completed on 11/25/19, Secondary containment cleaned out w/ vac truck.*

Incident ID	NCE2002452675
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? 19.15.29.7(A)(1) An unauthorized release of a volume, excluding gases, of 25 barrels or more.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Notice was made by Charles Beauvais, Environmental Coordinator, at PM. on 11/25/19 via email to bradford.billings@state.nm. Also, an online submittal with payment for submittal was made to NMOCOD	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why: _____ _____ _____
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name: <u>Charles R. Beauvais II</u> Title: <u>Environmental Coordinator</u> Signature: <u>[Signature]</u> Date: <u>11/25/2019</u> email: <u>charles.r.beauvais@conocophillips.com</u> Telephone: <u>1-575-988-2043</u>
C-141 resubmitted with corrections via the payment portal on 7/26/2022. cml.
OCD Only Received by: <u>Rejected</u> Date: <u>01/24/2020</u>

L48 Spill Volume Estimate Form

Facility Name & Number:	Battle Axe Central Tank Battery
Asset Area:	Delaware Basin
Release Discovery Date & Time:	10/29/2019
Release Type:	Oil Mixture
Provide any known details about the event:	Ball valve leak inside lined secondary containment

Spill Calculation - On Pad Surface Pool Spill

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Deepest point in each of the areas (in.)	No. of boundaries of "shore" in each area	Estimated <i>Pool</i> Area (sq. ft.)	Estimated Average Depth (ft.)	Estimated volume of each pool area (bbl.)	Penetration allowance (ft.)	Total Estimated Volume of Spill (bbl.)	Percentage of Oil if Spilled Fluid is a Mixture	Total Estimated Volume of Spilled Oil (bbl.)	Total Estimated Volume of Spilled Liquid other than Oil (bbl.)
Rectangle A	56.0	10.0	3.00	1	560.000	0.250	24.920	0.013	25.232	4.96%	1.251	23.980
Rectangle B	22.0	11.0	3.00	1	242.000	0.250	10.769	0.013	10.904	4.96%	0.541	10.363
Rectangle C	22.0	10.0	3.00	1	220.000	0.250	9.790	0.013	9.912	4.96%	0.492	9.421
Rectangle D	7.0	7.0	3.00	1	49.000	0.250	2.181	0.013	2.208	4.96%	0.110	2.098
Rectangle E					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle F					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle G					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle H					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle I					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle J					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Total Volume Release:									48.255		2.393	45.862

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

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

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

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

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

CONDITIONS

Action 128677

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 128677
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	7/26/2022

Incident ID	NCE2002452675
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?	125 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

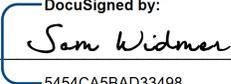
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods,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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	NCE2002452675
District RP	
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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: Sam Widmer Title: Principal Program Manager
 Signature:  Date: Aug-15-2022
 email: Sam.widmer@conocophillips.com Telephone: 281-206-5298

OCD Only

Received by: Jocelyn Harimon Date: 08/17/2022

Incident ID	NCE2002452675
District RP	
Facility ID	
Application ID	

Closure

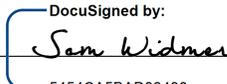
The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled 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: Sam widmer Title: Principal Program Manager

Signature:  Date: Aug-15-2022

email: Sam.widmer@conocophillips.com Telephone: 281-206-5298

OCD Only

Received by: Jocelyn Harimon Date: 08/17/2022

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

Closure Approved by:  Date: 08/18/2022

Printed Name: Jennifer Nobui Title: Environmental Specialist A

APPENDIX B

Regulatory Correspondence

From: OCDOnline@state.nm.us
To: [Lull, Christian](#)
Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 128677
Date: Tuesday, July 26, 2022 10:53:49 AM

CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.

To whom it may concern (c/o Christian Lull for CONOCOPHILLIPS COMPANY),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nCE2002452675, with the following conditions:

- **None**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,
Jocelyn Harimon
Environmental Specialist
575-748-1283
Jocelyn.Harimon@state.nm.us

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Dickerson, Ryan

From: Llull, Christian
Sent: Friday, July 1, 2022 1:41 PM
To: ocd.enviro@state.nm.us
Cc: Dickerson, Ryan
Subject: Incident ID: NCE2002452675 - Liner Inspection

Incident ID (n#) **NCE2002452675** (Battle Axe CTB Release)

To whom it may concern,

In accordance with Subsection A of 19.15.29.11 NMAC, the responsible party must verbally notify the appropriate division district office prior to conducting the liner inspection.

Thus, on behalf of ConocoPhillips for the above referenced incident, Tetra Tech is duly providing this communication which serves as notification that a liner inspection will be conducted at this site on July 5, 2022.

NOTE: If you have any questions regarding this schedule, please contact me.

Christian Llull, P.G. | Program Manager
Direct +1 (512) 338-2861 | Business +1 (512) 338-1667 | Fax +1 (512) 338-1331 | christian.llull@tetrattech.com

Tetra Tech | *Leading with Science*® | OGA
8911 N. Capital of Texas Highway | Bldg. 2, Suite 2310 | Austin, TX 78759 | tetrattech.com

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Please consider the environment before printing. [Read more](#)



APPENDIX C

Site Characterization Data



New Mexico Office of the State Engineer Water Column/Average Depth to Water

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 626915.96

Northing (Y): 3543253.44

Radius: 800

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



New Mexico Office of the State Engineer Water Column/Average Depth to Water

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

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

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

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02271	R	CUB	LE	2	3	21	26S	32E		624449	35441111*	2611	150	125	25
C 03595 POD1		CUB	LE	4	2	3	21	26S	32E	624423	3544045	2616	280	180	100
C 02271 POD2		CUB	LE	3	2	3	21	26S	32E	624348	3544010*	2677	270	250	20
C 02323	C	LE	LE	3	2	3	21	26S	32E	624348	3544010*	2677	405	405	0

Average Depth to Water: **240 feet**

Minimum Depth: **125 feet**

Maximum Depth: **405 feet**

Record Count: 4

UTMNAD83 Radius Search (in meters):

Easting (X): 626915.96

Northing (Y): 3543253.44

Radius: 2700

*UTM location was derived from PLSS - see Help

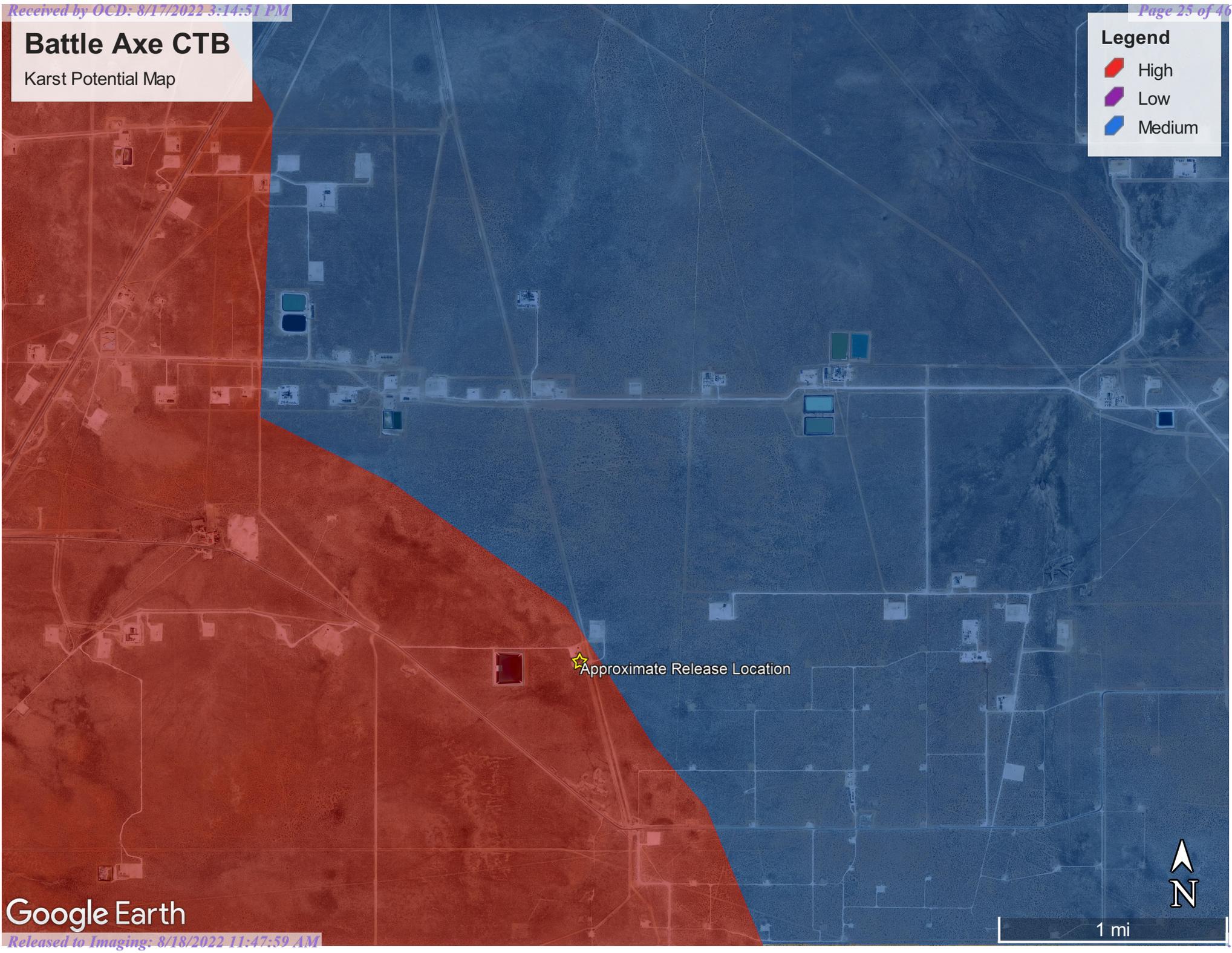
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

Battle Axe CTB

Karst Potential Map

Legend

-  High
-  Low
-  Medium



Google Earth

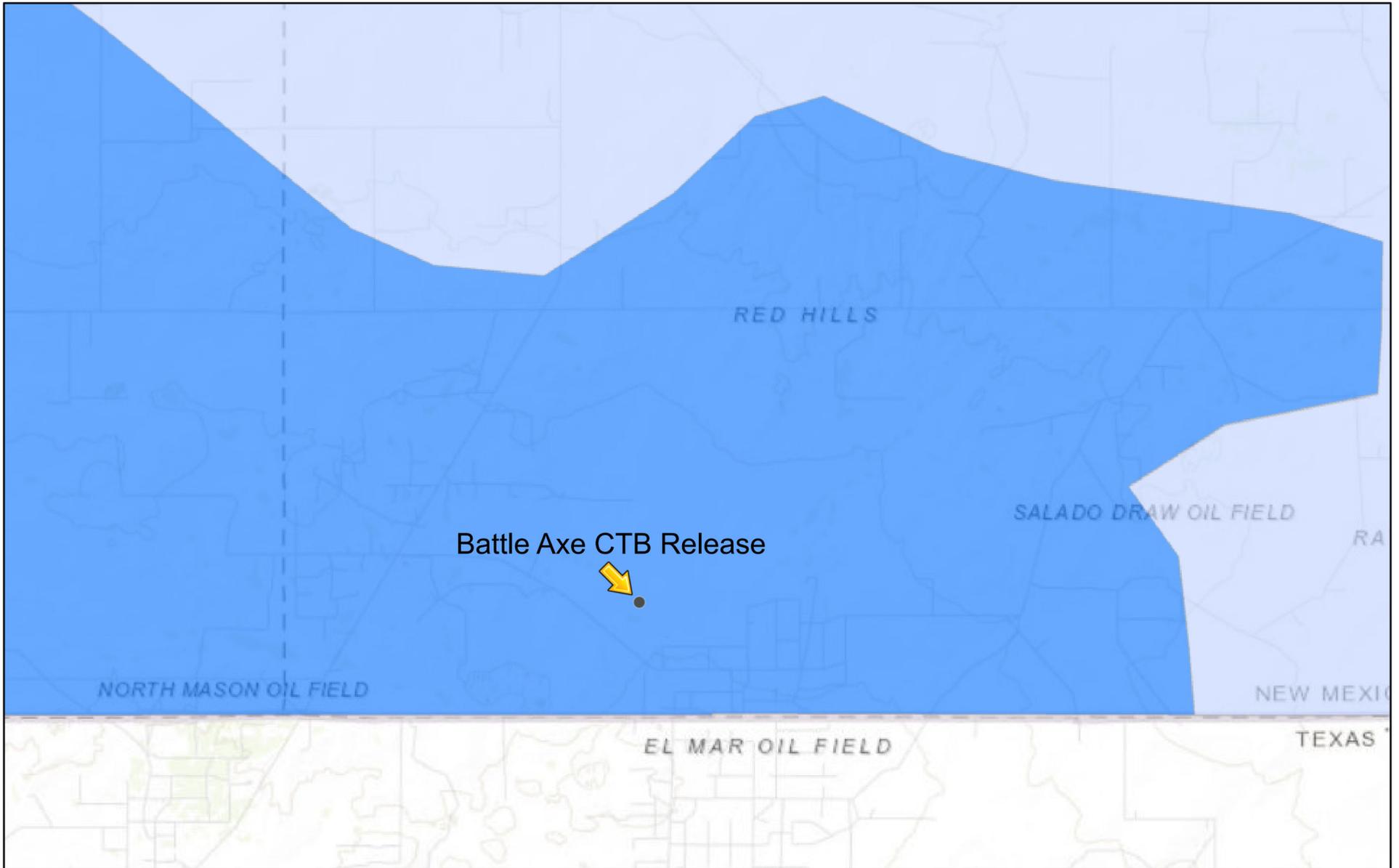


1 mi

Battle Axe CTB Release - NMOCD Karst Potential

Released to Imaging: 8/18/2022 11:47:59 AM

Received by OCD: 8/17/2022 3:14:51 PM



7/8/2022, 1:19:06 PM



Override 1



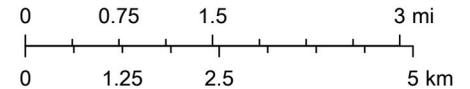
Low

Karst Occurrence Potential



Medium

1:114,279



Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS, BLM, OCD, New Mexico Tech

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

Page 26 of 46

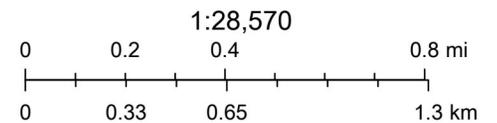
Battle Axe CTB Release - NMOCD Waterbodies



7/8/2022, 1:03:48 PM

 Override 1

 OSE Streams



Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, METI/NASA, EPA, USDA, NM OSE

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

APPENDIX D

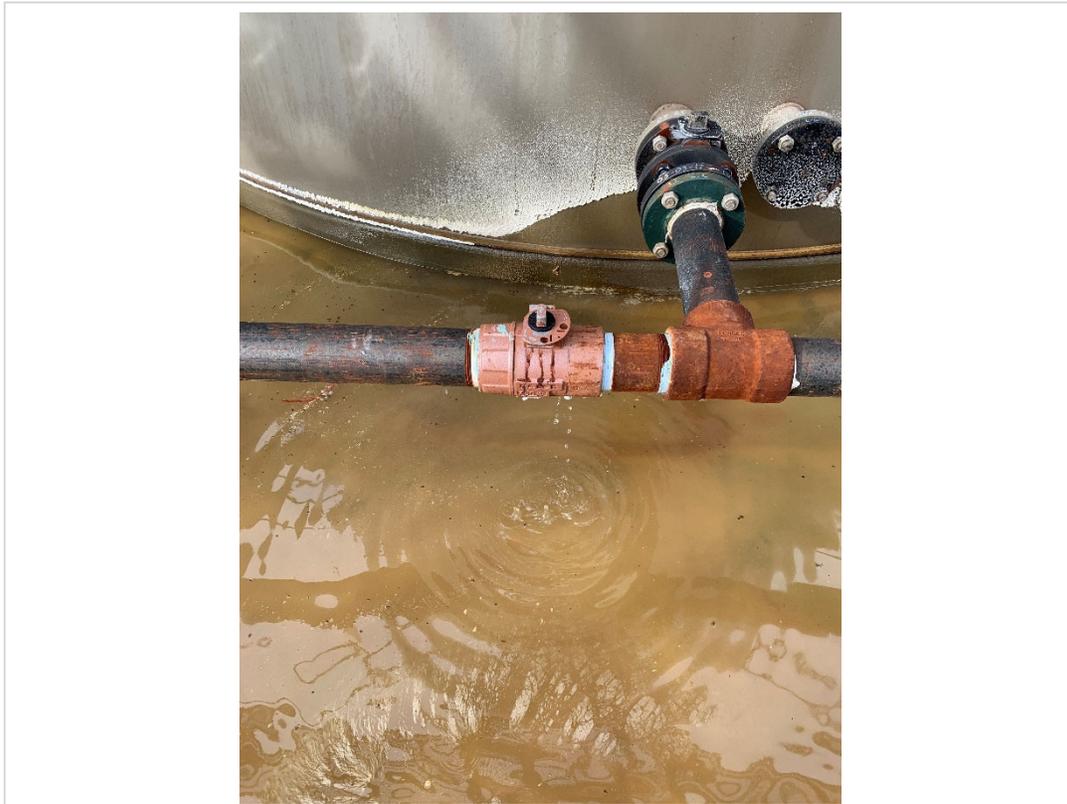
Photographic Documentation



TETRA TECH, INC. PROJECT NO. 212C-MD-02796	DESCRIPTION	Fluid being released on underside of ball valve fitting.	1
	SITE NAME	COP – Battle Axe CTB Release	11/29/2019



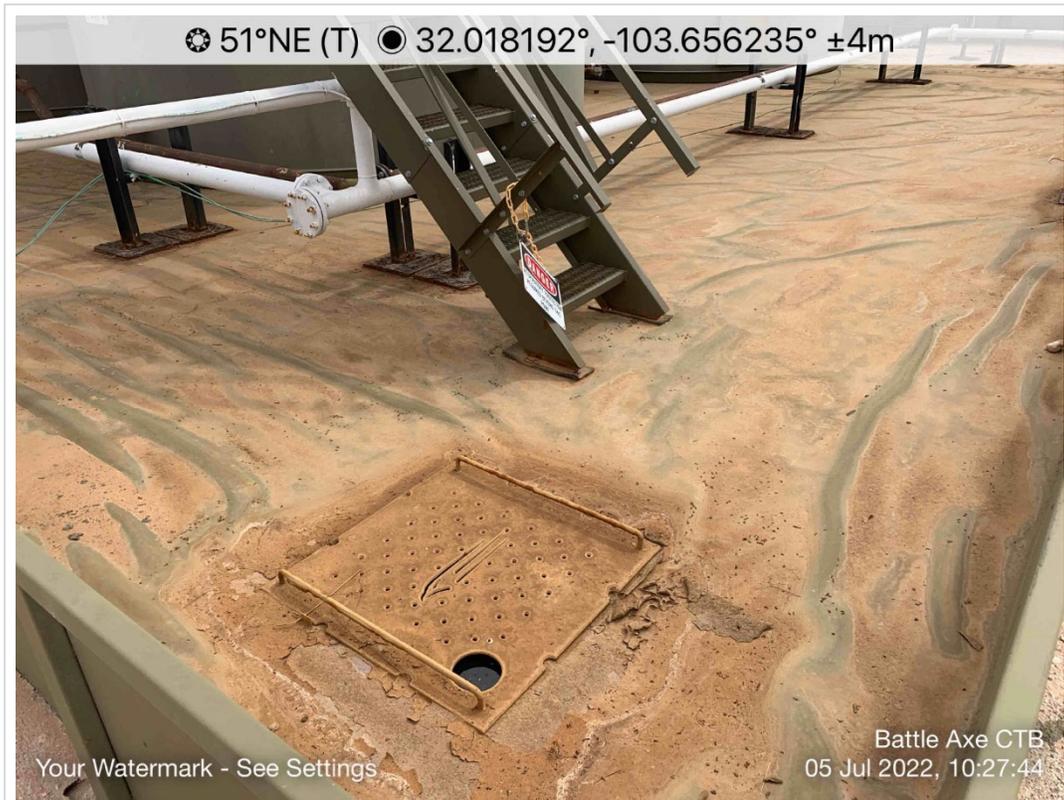
TETRA TECH, INC. PROJECT NO. 212C-MD-02796	DESCRIPTION	View south. Eastern portion of lined secondary containment immediately following discovery of release.	2
	SITE NAME	COP – Battle Axe CTB Release	11/29/2019



TETRA TECH, INC. PROJECT NO. 212C-MD-02796	DESCRIPTION	Failed ball valve at the time of release discovery.	3
	SITE NAME	COP – Battle Axe CTB Release	11/29/2019



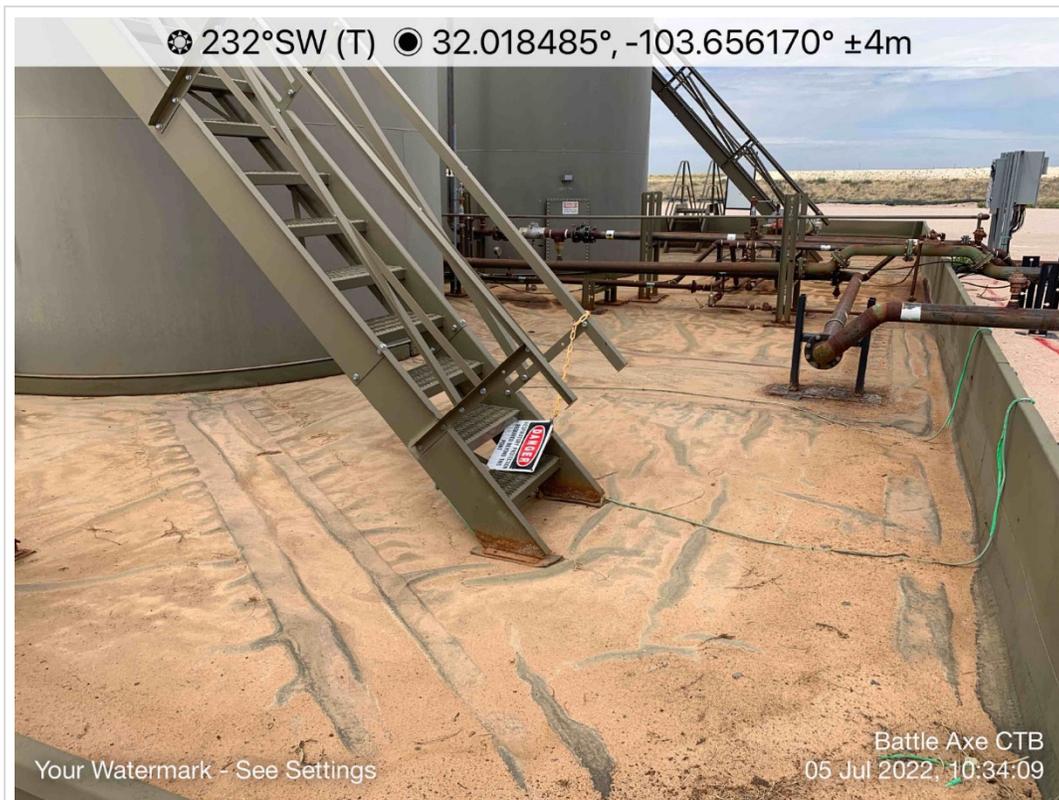
TETRA TECH, INC. PROJECT NO. 212C-MD-02796	DESCRIPTION	View north. Western portion of the lined secondary containment during liner inspection.	4
	SITE NAME	COP – Battle Axe CTB Release	7/5/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02796	DESCRIPTION	View northeast. Sump in the southwestern corner of the secondary containment during liner inspection.	5
	SITE NAME	COP – Battle Axe CTB Release	7/5/2022



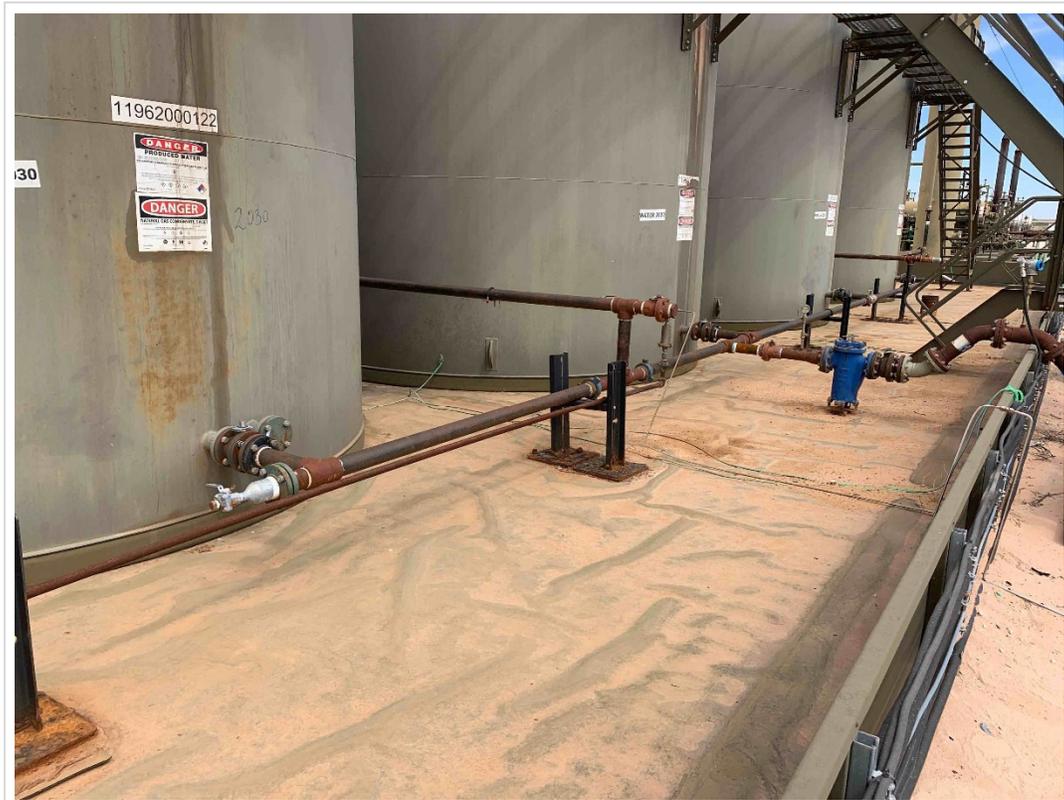
TETRA TECH, INC. PROJECT NO. 212C-MD-02796	DESCRIPTION	View west. Replaced ball valve fitting.	6
	SITE NAME	COP – Battle Axe CTB Release	7/5/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02796	DESCRIPTION	View west-southwest. Northern portion of lined secondary containment during liner inspection.	7
	SITE NAME	COP – Battle Axe CTB Release	7/5/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02796	DESCRIPTION	View southwest. Southern portion of lined secondary containment during liner inspection.	8
	SITE NAME	COP – Battle Axe CTB Release	7/5/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02796	DESCRIPTION	View northwest. Eastern portion of lined secondary containment during liner inspection.	9
	SITE NAME	COP – Battle Axe CTB Release	7/5/2022

APPENDIX E

Laboratory Analytical Data



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

July 08, 2022

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: BATTLE AXE

Enclosed are the results of analyses for samples received by the laboratory on 07/05/22 16:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	07/05/2022	Sampling Date:	07/05/2022
Reported:	07/08/2022	Sampling Type:	Soil
Project Name:	BATTLE AXE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02796	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

Sample ID: AH - 1 0-1' (H222864-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/08/2022	ND	1.96	98.0	2.00	4.74	
Toluene*	<0.050	0.050	07/08/2022	ND	2.05	102	2.00	6.36	
Ethylbenzene*	<0.050	0.050	07/08/2022	ND	1.97	98.3	2.00	5.91	
Total Xylenes*	<0.150	0.150	07/08/2022	ND	6.64	111	6.00	6.12	
Total BTEX	<0.300	0.300	07/08/2022	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/07/2022	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/07/2022	ND	186	92.9	200	1.52	
DRO >C10-C28*	<10.0	10.0	07/07/2022	ND	192	95.8	200	0.447	
EXT DRO >C28-C36	<10.0	10.0	07/07/2022	ND					

Surrogate: 1-Chlorooctane 79.2 % 43-149

Surrogate: 1-Chlorooctadecane 88.8 % 42.5-161

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	07/05/2022	Sampling Date:	07/05/2022
Reported:	07/08/2022	Sampling Type:	Soil
Project Name:	BATTLE AXE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02796	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

Sample ID: AH - 1 2-3' (H222864-02)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/08/2022	ND	1.96	98.0	2.00	4.74		
Toluene*	<0.050	0.050	07/08/2022	ND	2.05	102	2.00	6.36		
Ethylbenzene*	<0.050	0.050	07/08/2022	ND	1.97	98.3	2.00	5.91		
Total Xylenes*	<0.150	0.150	07/08/2022	ND	6.64	111	6.00	6.12		
Total BTEX	<0.300	0.300	07/08/2022	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	07/07/2022	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/07/2022	ND	200	100	200	0.920	QM-07, QR-03	
DRO >C10-C28*	<10.0	10.0	07/07/2022	ND	206	103	200	0.708	QM-07, QR-03	
EXT DRO >C28-C36	<10.0	10.0	07/07/2022	ND						

Surrogate: 1-Chlorooctane 90.4 % 43-149

Surrogate: 1-Chlorooctadecane 105 % 42.5-161

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	07/05/2022	Sampling Date:	07/05/2022
Reported:	07/08/2022	Sampling Type:	Soil
Project Name:	BATTLE AXE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02796	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

Sample ID: AH - 2 0-1' (H222864-03)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/08/2022	ND	1.96	98.0	2.00	4.74	
Toluene*	<0.050	0.050	07/08/2022	ND	2.05	102	2.00	6.36	
Ethylbenzene*	<0.050	0.050	07/08/2022	ND	1.97	98.3	2.00	5.91	
Total Xylenes*	<0.150	0.150	07/08/2022	ND	6.64	111	6.00	6.12	
Total BTEX	<0.300	0.300	07/08/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	07/07/2022	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/07/2022	ND	200	100	200	0.920	
DRO >C10-C28*	<10.0	10.0	07/07/2022	ND	206	103	200	0.708	
EXT DRO >C28-C36	<10.0	10.0	07/07/2022	ND					

Surrogate: 1-Chlorooctane 88.7 % 43-149

Surrogate: 1-Chlorooctadecane 103 % 42.5-161

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	07/05/2022	Sampling Date:	07/05/2022
Reported:	07/08/2022	Sampling Type:	Soil
Project Name:	BATTLE AXE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02796	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

Sample ID: AH - 2 2-3' (H222864-04)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/08/2022	ND	1.96	98.0	2.00	4.74	
Toluene*	<0.050	0.050	07/08/2022	ND	2.05	102	2.00	6.36	
Ethylbenzene*	<0.050	0.050	07/08/2022	ND	1.97	98.3	2.00	5.91	
Total Xylenes*	<0.150	0.150	07/08/2022	ND	6.64	111	6.00	6.12	
Total BTEX	<0.300	0.300	07/08/2022	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/07/2022	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/07/2022	ND	200	100	200	0.920	
DRO >C10-C28*	<10.0	10.0	07/07/2022	ND	206	103	200	0.708	
EXT DRO >C28-C36	<10.0	10.0	07/07/2022	ND					

Surrogate: 1-Chlorooctane 90.7 % 43-149

Surrogate: 1-Chlorooctadecane 106 % 42.5-161

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	07/05/2022	Sampling Date:	07/05/2022
Reported:	07/08/2022	Sampling Type:	Soil
Project Name:	BATTLE AXE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02796	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

Sample ID: AH - 3 0-1' (H222864-05)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/08/2022	ND	1.96	98.0	2.00	4.74	
Toluene*	<0.050	0.050	07/08/2022	ND	2.05	102	2.00	6.36	
Ethylbenzene*	<0.050	0.050	07/08/2022	ND	1.97	98.3	2.00	5.91	
Total Xylenes*	<0.150	0.150	07/08/2022	ND	6.64	111	6.00	6.12	
Total BTEX	<0.300	0.300	07/08/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/07/2022	ND	432	108	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/07/2022	ND	200	100	200	0.920	
DRO >C10-C28*	<10.0	10.0	07/07/2022	ND	206	103	200	0.708	
EXT DRO >C28-C36	<10.0	10.0	07/07/2022	ND					

Surrogate: 1-Chlorooctane 85.0 % 43-149

Surrogate: 1-Chlorooctadecane 99.3 % 42.5-161

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	07/05/2022	Sampling Date:	07/05/2022
Reported:	07/08/2022	Sampling Type:	Soil
Project Name:	BATTLE AXE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02796	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

Sample ID: AH - 3 2-3' (H222864-06)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/08/2022	ND	1.96	98.0	2.00	4.74		
Toluene*	<0.050	0.050	07/08/2022	ND	2.05	102	2.00	6.36		
Ethylbenzene*	<0.050	0.050	07/08/2022	ND	1.97	98.3	2.00	5.91		
Total Xylenes*	<0.150	0.150	07/08/2022	ND	6.64	111	6.00	6.12		
Total BTEX	<0.300	0.300	07/08/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/07/2022	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/07/2022	ND	200	100	200	0.920		
DRO >C10-C28*	<10.0	10.0	07/07/2022	ND	206	103	200	0.708		
EXT DRO >C28-C36	<10.0	10.0	07/07/2022	ND						

Surrogate: 1-Chlorooctane 91.8 % 43-149

Surrogate: 1-Chlorooctadecane 108 % 42.5-161

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	07/05/2022	Sampling Date:	07/05/2022
Reported:	07/08/2022	Sampling Type:	Soil
Project Name:	BATTLE AXE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02796	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

Sample ID: AH - 4 0-1' (H222864-07)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/06/2022	ND	2.27	113	2.00	7.01		
Toluene*	<0.050	0.050	07/06/2022	ND	2.25	112	2.00	7.73		
Ethylbenzene*	<0.050	0.050	07/06/2022	ND	2.24	112	2.00	7.36		
Total Xylenes*	<0.150	0.150	07/06/2022	ND	6.78	113	6.00	6.30		
Total BTEX	<0.300	0.300	07/06/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	07/07/2022	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/07/2022	ND	200	100	200	0.920		
DRO >C10-C28*	<10.0	10.0	07/07/2022	ND	206	103	200	0.708		
EXT DRO >C28-C36	<10.0	10.0	07/07/2022	ND						

Surrogate: 1-Chlorooctane 83.8 % 43-149

Surrogate: 1-Chlorooctadecane 97.6 % 42.5-161

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	07/05/2022	Sampling Date:	07/05/2022
Reported:	07/08/2022	Sampling Type:	Soil
Project Name:	BATTLE AXE	Sampling Condition:	** (See Notes)
Project Number:	212C-MD-02796	Sample Received By:	Shalyn Rodriguez
Project Location:	COP - LEA CO NM		

Sample ID: AH - 4 2-3' (H222864-08)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/06/2022	ND	2.27	113	2.00	7.01		
Toluene*	<0.050	0.050	07/06/2022	ND	2.25	112	2.00	7.73		
Ethylbenzene*	<0.050	0.050	07/06/2022	ND	2.24	112	2.00	7.36		
Total Xylenes*	<0.150	0.150	07/06/2022	ND	6.78	113	6.00	6.30		
Total BTEX	<0.300	0.300	07/06/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	07/07/2022	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/07/2022	ND	200	100	200	0.920		
DRO >C10-C28*	<10.0	10.0	07/07/2022	ND	206	103	200	0.708		
EXT DRO >C28-C36	<10.0	10.0	07/07/2022	ND						

Surrogate: 1-Chlorooctane 86.1 % 43-149

Surrogate: 1-Chlorooctadecane 101 % 42.5-161

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Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
** Samples not received at proper temperature of 6°C or below.
*** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Tetra Tech
 Project Manager: Christian Llu11
 Address: 901 W Wall St
 City: Midland State: Tx Zip: 79701
 Phone #: 432-334-9756 Fax #: _____
 Project #: 212C-MD-02796 Project Owner: COP
 Project Name: Battle AXE
 Project Location: Lea County, NM
 Sampler Name: Gabe Huerta
 P.O. #: _____
 Company: TetraTech
 Attn: Christian Llu11
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV		DATE	TIME	ANALYSIS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL			
<u>A022804</u>	AH-1	0-1'	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7-5-22	10:00	<input checked="" type="checkbox"/>				
	AH-1	2-3'	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7-5-22	10:15	<input checked="" type="checkbox"/>				
	AH-2	0-1'	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7-5-22	10:30	<input checked="" type="checkbox"/>				
	AH-2	2-3'	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7-5-22	10:45	<input checked="" type="checkbox"/>				
	AH-3	0-1'	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7-5-22	11:00	<input checked="" type="checkbox"/>				
	AH-3	2-3'	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7-5-22	11:15	<input checked="" type="checkbox"/>				
	AH-4	0-1'	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7-5-22	11:30	<input checked="" type="checkbox"/>				
	AH-4	2-3'	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7-5-22	11:45	<input checked="" type="checkbox"/>				

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Relinquished By: Reinforced
 Date: 7-5-22
 Time: 10:30
 Received By: Sebastian
 Date: _____
 Time: _____

Delivered By: (Circle One) UPS Bus Other:
 Observed Temp. °C: 78°C
 Corrected Temp. °C: 7.3°C
 Sample Condition: Intact Cool Yes No
 CHECKED BY: SA
 Turaround Time: _____
 Thermometer ID #113
 Correction Factor -0.5°C
 Standard Rush
 Bacteria (only) Cool Intact Yes No
 Sample Condition Observed Temp. °C Corrected Temp. °C

REMARKS: Christian.Llu11 @ tetra.tech.com
 Verbal Result: Yes No Add'l Phone #: _____
 All Results are emailed. Please provide Email address: _____
 Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720
District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720
District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 135176

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 135176
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved. This report was submitted 33 months after the release date. Closure reporting needs to be submitted 90 days after release date or file extensions.	8/18/2022