TETRA TECH

August 15, 2022

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

Re: REVISED Release Characterization and Closure Report
ConocoPhillips
War Hammer CTB Release
Unit Letter G, Section 25, Township 26 South, Range 32 East
Lea County, New Mexico
Incident ID# nVV2003557031

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips to assess a release that occurred from an equipment failure at the War Hammer Central Tank Battery (CTB). The release footprint is located in Public Land Survey System (PLSS) Unit Letter G, Section 25, Township 26 South, Range 32 East, in Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.015282°, -103.624803°, 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 January 8, 2020 (mistakenly reported as January 8, 2019). The release occurred as the result of equipment failure, specifically a pin hole leak on a ball valve. COP internal documentation indicates that the source for the release was a 2-inch ball valve on water tank 2030 (T-2030).

Approximately 8 barrels (bbls) of produced water were reported released, of which 8 bbls were recovered. The produced water was released into a lined secondary containment. The volume determination submitted to the NMOCD along with the C-141 documented that all fluids were removed from the secondary containment and back calculated that 8 bbls of produced water were released based upon the volume recovered by the vacuum truck. Charles R. Beauvais II submitted the initial Form C-141 on January 9, 2020. The NMOCD approved the initial C-141 on February 4, 2020, and subsequently assigned the release the Incident ID NVV2003557031.

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 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 is one (1) water well within 5,200 meters of the site with a depth to groundwater of 120 feet below ground surface (bgs). The site characterization data is included in Appendix B.

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

SITE VISIT SUMMARY

On May 12, 2022, Tetra Tech personnel were at the Site to assess current site conditions and take photographs of the impacted area, if any. Tetra Tech personnel met with COP representatives who were familiar with the release. During the site visit, no evidence of a release was observed in the southeastern portion of the tank battery secondary containment. The secondary containment is made up of steel walls approximately 2 feet tall with an intact polyethylene liner with no visible rips or tears. The liner was exposed and intact at the time of the site visit. The release was reported as having been contained within the lined secondary containment and, as documented in the C-141, initial response efforts were successful in recovering all released fluids.

The size of the release extent, approximately 215 square feet, was approximated using the volume determination included with the Form C-141. Additionally, T-2030 was observed near the southeastern corner of the secondary containment which confirms the release source found in internal COP documentation. Photographic documentation of site conditions at the time of the site visit is included in Appendix C.

LINER INTEGRITY

In accordance with 19.15.29.11(A)(5)(a) NMAC, notification of a liner inspection at the War Hammer CTB was sent via email to the NMOCD on June 27, 2022. The liner inspection notification email correspondence is included in Appendix D.

On June 30, 2022, Tetra Tech personnel performed an inspection of the liner within the secondary containment of the War Hammer CTB. 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. At the time of the liner inspection, stormwater had accumulated in the lined area due to recent rain events. The standing water lends further evidence to the integrity of the liner as a competent fluid barrier. At the time of the inspection, the liner was intact and had the ability to contain the leak in question. Photographic documentation of the liner inspection is included in Appendix C.

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 June 30, 2022 to conduct soil sampling to delineate the release horizontally using Table I of 19.15.29.12 NMAC constituents. A total of four (4) hand auger borings were installed around the perimeter of the release extent. 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 (DRO and ORO) by EPA Method 8015, TPH Low Fraction (GRO) by EPA Method 8015D, BTEX by EPA Method 8021B, and chlorides by Standard Method SM4500Cl-B.

INITIAL CLOSURE REQUEST SUBMITTAL

Based on the site assessment results, a Release Characterization and Closure Report was prepared by Tetra Tech and submitted, on behalf of COP, to the NMOCD on July 19, 2022 with fee application payment PO Number T6VG0-220719-C-1410. The report described the initial assessment activities, liner inspection and results. The request for closure was denied by Robert Hamlet of the NMOCD via email on July 22, 2022. The following reason for denial was included in the email:

"The Closure Report is denied. Chain of Custody and Analysis Request form on 6/30/22 show samples not received at proper temperature of 6 deg. Celsius or below. Samples were delivered at temperature of 29.4 deg. Celsius.

Based on the above NMOCD response, the June 2022 assessment results were considered unacceptable. The NMOCD email correspondence associated with the closure denial is included in Appendix D.

ADDITIONAL SITE ASSESSMENT SUMMARY AND SAMPLE RESULTS

To address the reasoning for the closure request denial, Tetra Tech personnel were on site on July 27, 2022 to conduct soil sampling to again sample the lease pad surrounding the battery and 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.

Thus, 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 (DRO and ORO) by EPA Method 8015, TPH Low Fraction (GRO) by EPA Method 8015D, BTEX by EPA Method 8021B, and chlorides by Standard Method SM4500Cl-B. Additionally, the samples were received by Cardinal at an acceptable temperature of 6° Celsius or below. 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.

CONCLUSION

Based on the results of the liner inspection and additional site assessment, 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

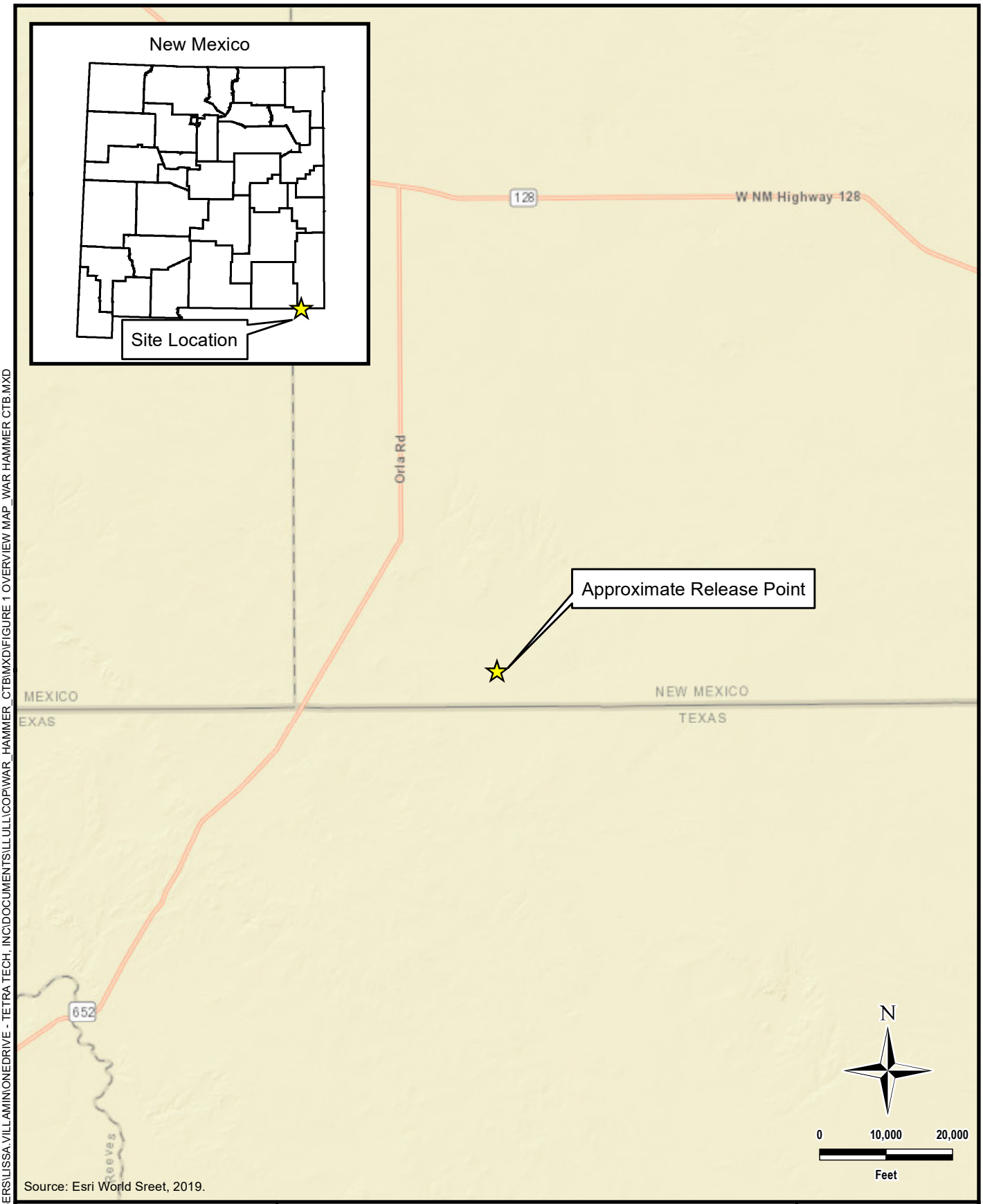
Tables:

Table 1 – Summary of Analytical Results – Soil Assessment

Appendices:

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

FIGURES



Source: Esri World Sreet, 2019.

DOCUMENT PATH: C:\USERS\LISSA.VILLAMIN\ONEDRIVE - TETRA TECH, INC\DOCUMENTS\LLULL\COP\WAR_HAMMER_CTB\MXD\FIGURE 1 OVERVIEW MAP_WAR HAMMER CTB.MXD

TETRA TECH
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Midland, Texas 79701
Phone: (432) 682-4559
Fax: (432) 682-3946

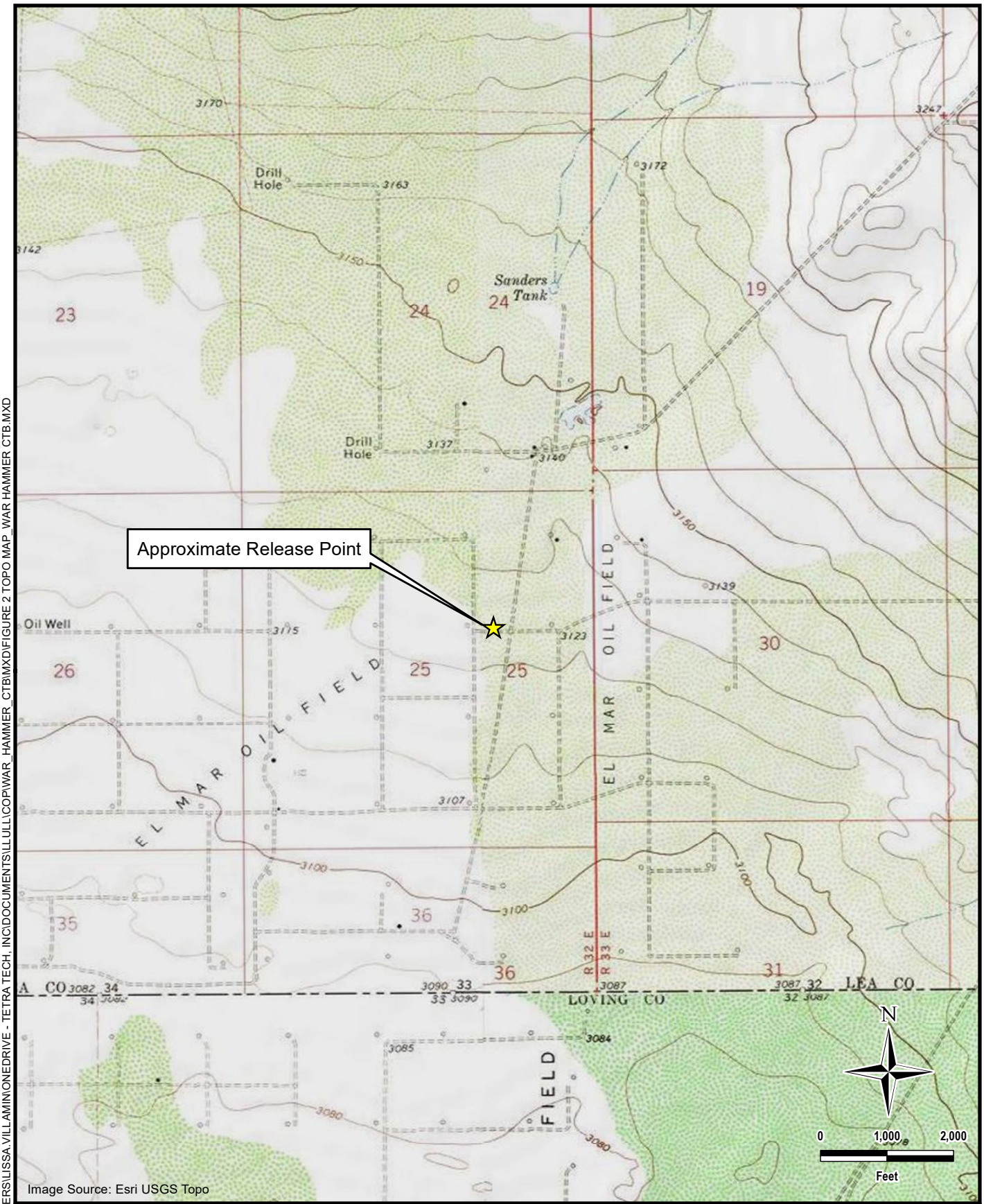
CONOCOPHILLIPS

NVV2003557031
(32.015282°, -103.624803°)
LEA COUNTY, NEW MEXICO

WAR HAMMER CTB RELEASE
OVERVIEW MAP

PROJECT NO.:	212C-MD-02758
DATE:	JUNE 02, 2022
DESIGNED BY:	LMV

Figure No.
1



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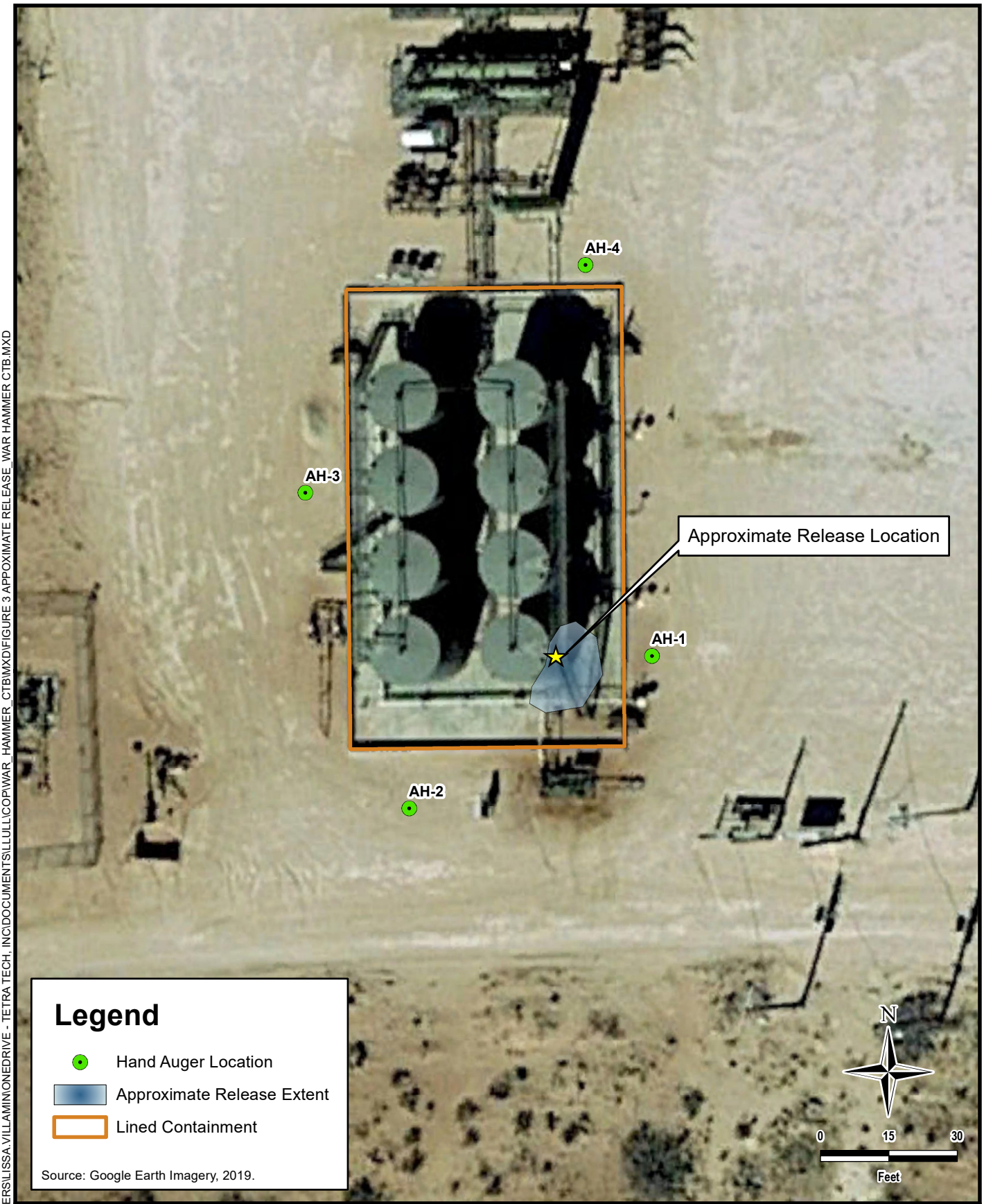
CONOCOPHILLIPS

NVV2003557031
(32.015282°, -103.624803°)
LEA COUNTY, NEW MEXICO

WAR HAMMER CTB RELEASE
TOPOGRAPHIC MAP

PROJECT NO.:	212C-MD-02758
DATE:	JUNE 02, 2022
DESIGNED BY:	LMV

Figure No.
2



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CONOCOPHILLIPS

NVV2003557031
(32.015282°, -103.624803°)
LEA COUNTY, NEW MEXICO

WAR HAMMER CTB RELEASE
APPROXIMATE RELEASE EXTENT AND SITE ASSESSMENT

PROJECT NO.:	212C-MD-02758
DATE:	AUGUST 02, 2022
DESIGNED BY:	LMV

Figure No.
3

TABLE

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
SOIL ASSESSMENT- NVV2003557031
CONOCOPHILLIPS
WAR HAMMER CTB RELEASE
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride[1]		BTEX[2]										TPH[3]							
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH
															C_6 - C_{10}		> C_{10} - C_{28}		> C_{28} - C_{36}		(GRO+DRO+EXT DRO)
		ft. bgs	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	7/27/2022	0-1	192		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-3	48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
AH-2	7/27/2022	0-1	192		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-3	80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
AH-3	7/27/2022	0-1	208		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-3	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
AH-4	7/27/2022	0-1	240		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-3	16.0		< 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 SM4500Cl-B

2 Method 8021B

3 Method 8015M

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	**NVV2003557031**
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party ConocoPhillips Company	OGRID 217817 VV
Contact Name Charles Robert Beauvais II	Contact Telephone 575-988-2043
Contact email charles.r.beauvais@conocophillips.com	Incident # *(assigned by OCD)* **NVV2003557031**
Contact mailing address 15 W London Rd, Loving, NM 88256	

Location of Release Source

Latitude 32.015418 Longitude -103.624516
(NAD 83 in decimal degrees to 5 decimal places)

Site Name - War Hammer	Site Type – Central Tank Battery
Date Release Discovered 1/8/2019	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
A (SW/NE)	25	26S	32E	Lea

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)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 8 Total	Volume Recovered (bbls) 8
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release - Ball valve had a pin hole leak. Ball valve has been replaced. Remediation completed via vac truck from secondary containment. None of the release made it to ground soil. Release has been fully cleaned up.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	**NVV2003557031**
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? 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 11 A.M. on 1/09/2020 via email to Bradford.billings@state.nm. Also, an online submittal with payment for submittals was made to NMOCD.

Initial Response

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

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not 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: Charles Robert Beauvais II Title: Environmental Coordinator

Signature: Date: 1/9/2020

email: charles.r.beauvais@conocophillips.com Telephone: 575-988-2043

OCD Only

Received by: **Victoria Venegas** Date: **02/04/2020**

Volume Determination

Vac truck company determined their truck was 10% full for a truck that can carry 80 barrels. Therefore, they charged COP for 8 barrels of water hauling.

All fluids were removed from secondary containment.

State of New Mexico
Oil Conservation Division

Incident ID	NVV2003557031
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?	120 (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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NVV2003557031
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: Sam Widmer Title: RM&R Program Manager

Signature: Sam Widmer Date: 08/15/22

email: sam.widmer@cop.com Telephone: 281-206-5298

OCD Only

Received by: Jocelyn Harimon Date: 11/23/2022

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NVV2003557031
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: RM&R Program Manager

Signature: Sam Widmer Date: 08/15/22

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

OCD Only

Received by: Jocelyn Harimon Date: 11/23/2022

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: 11/23/2022

Printed Name: Jocelyn Harimon Title: Environmental Specialist

APPENDIX B
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): 629878.6 **Northing (Y):** 3542960.44 **Radius:** 800

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-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 04547 POD1	CUB	LE	2	4	4	07	26S	33E	631686	3547262	4665	112		
C 02273	CUB	LE		1	2	21	26S	33E	634549	3545134*	5151	160	120	40

Average Depth to Water: **120 feet**

Minimum Depth: **120 feet**

Maximum Depth: **120 feet**

Record Count: 2

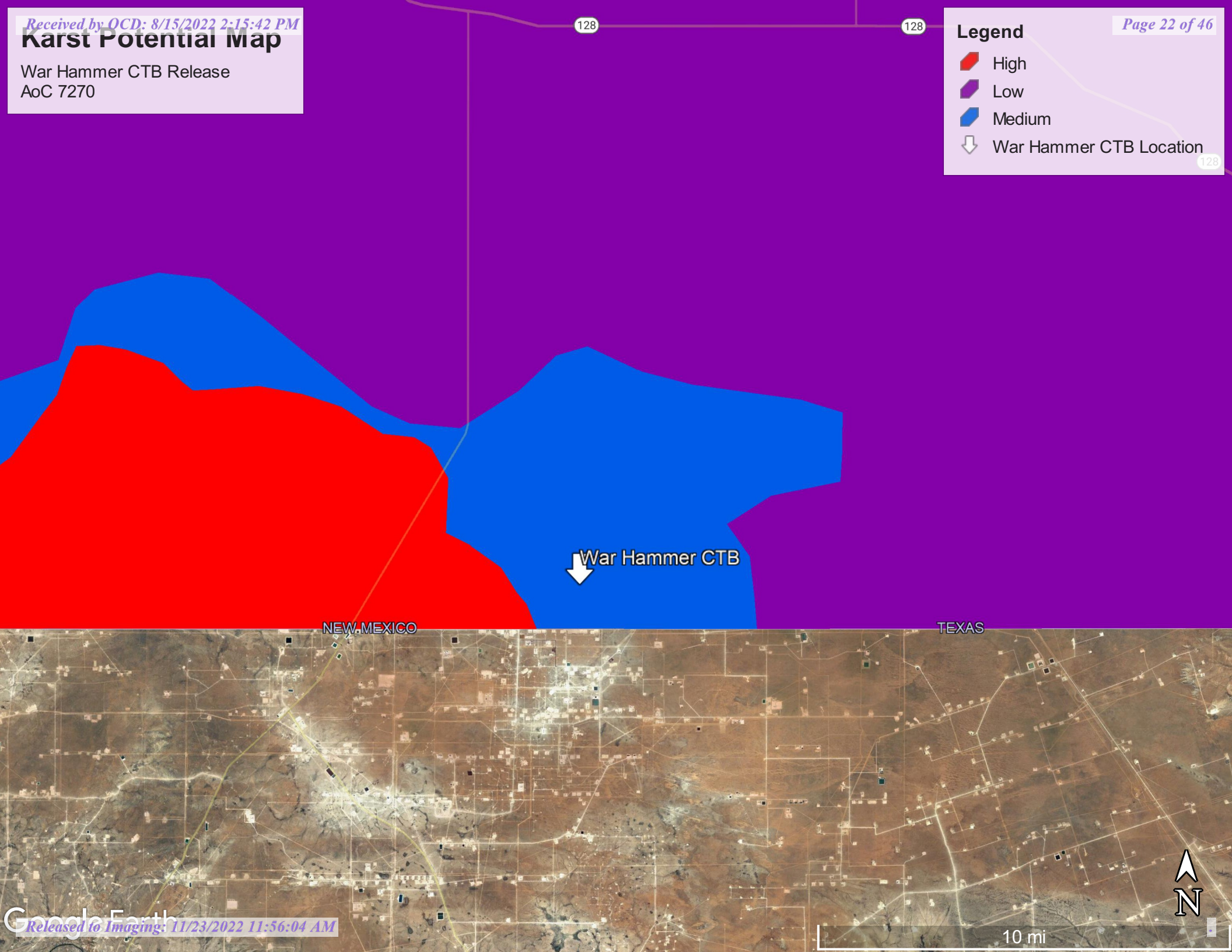
UTMNAD83 Radius Search (in meters):

Easting (X): 629878.6 **Northing (Y):** 3542960.44 **Radius:** 5200

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

Karst Potential Map

War Hammer CTB Release
AoC 7270



OCD Waterbodies

6/2/2022, 12:33:02 PM

OSE Streams

1:18,056

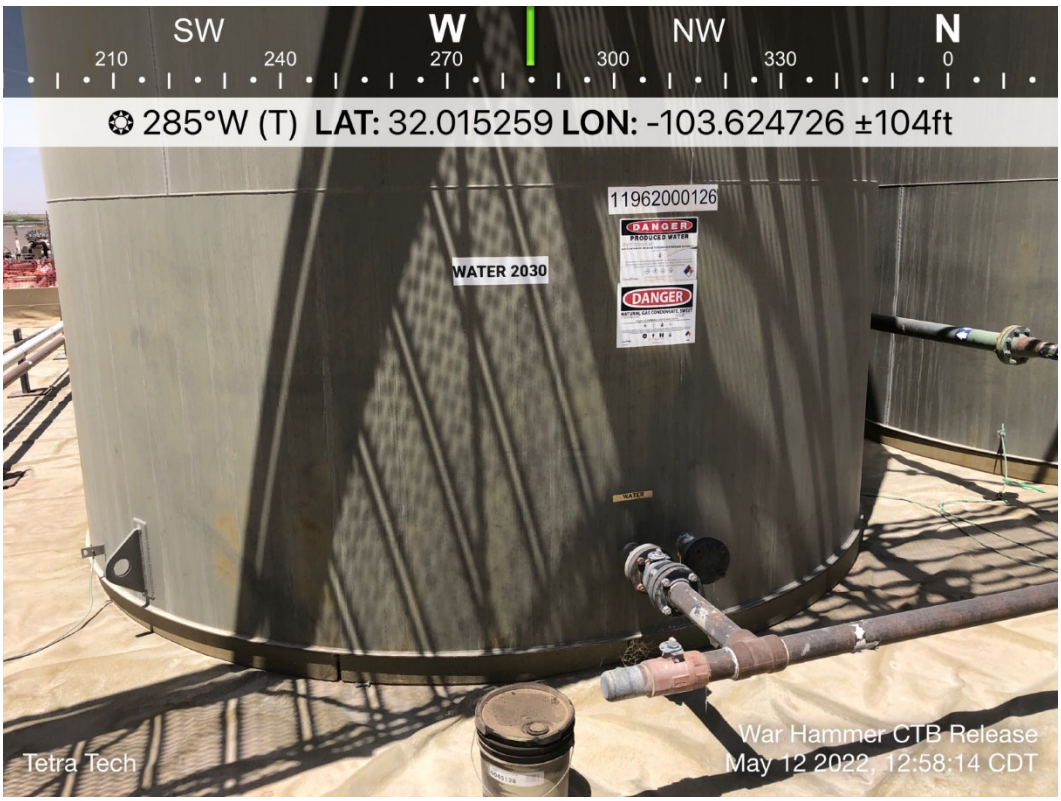
0 0.17 0.35 0.7 mi

0 0.3 0.6 1.2 km

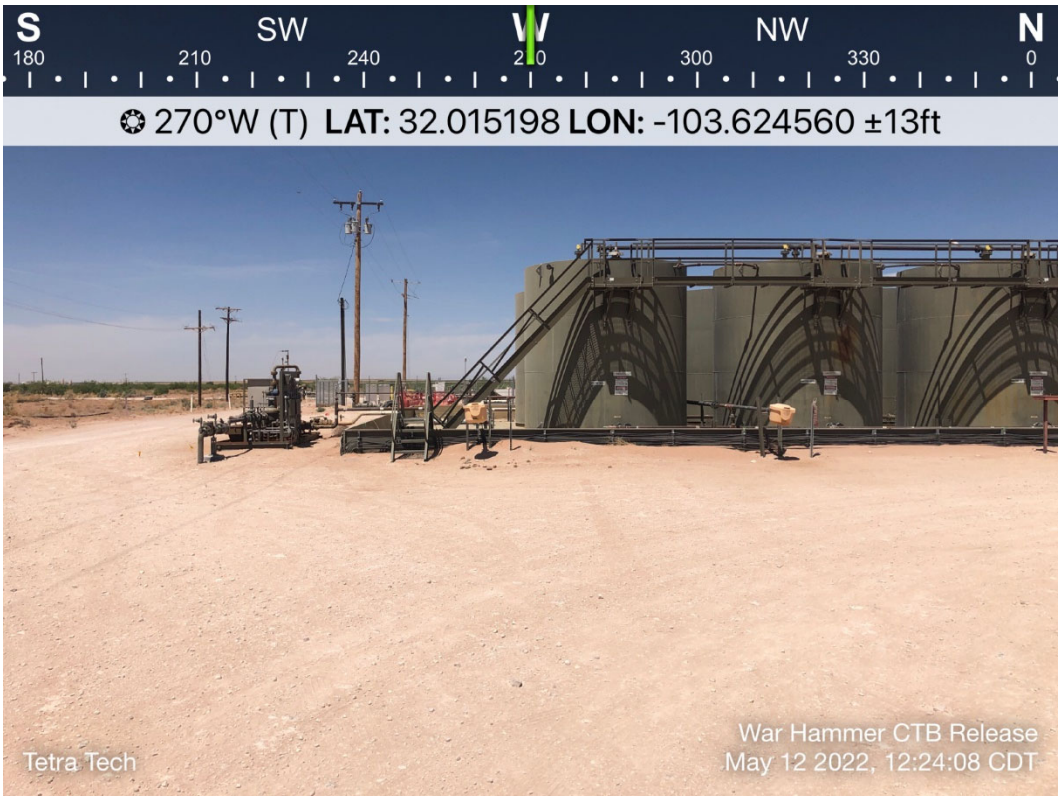
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, NM OSE

APPENDIX C
Photographic Documentation

TETRA TECH, INC. PROJECT NO. 212C-MD-02758	DESCRIPTION	View west. Site Signage and location information	1
	SITE NAME	ConocoPhillips War Hammer CTB Release	5/12/2022

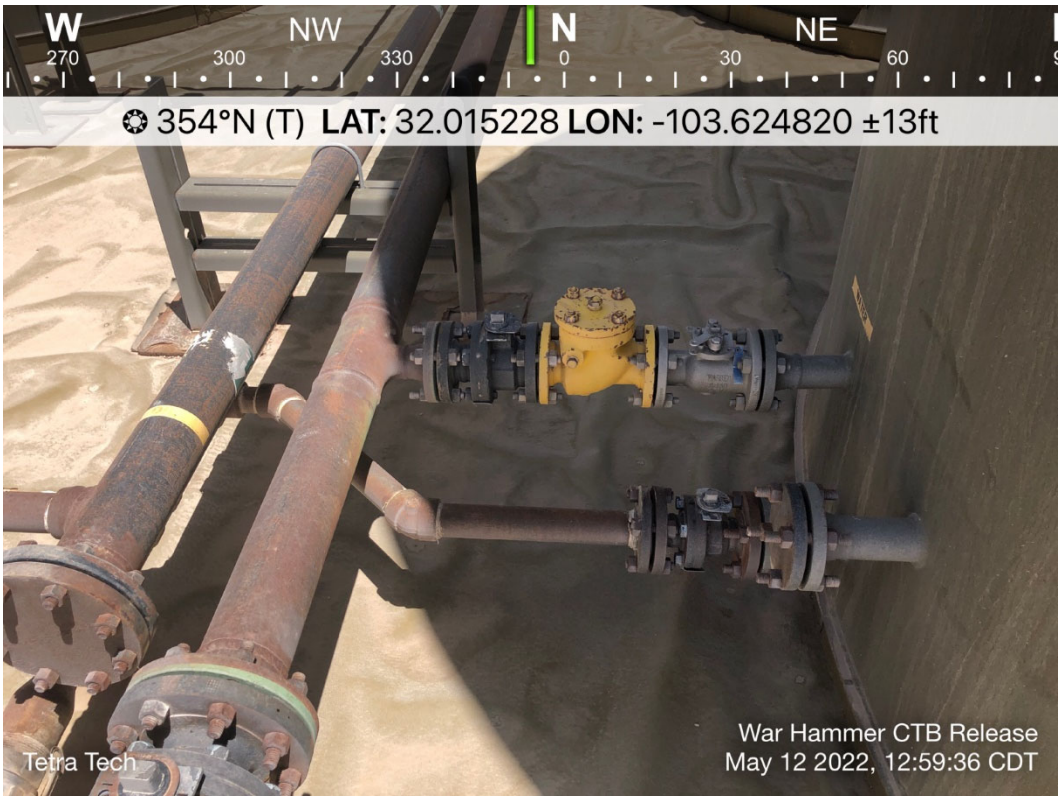


TETRA TECH, INC. PROJECT NO. 212C-MD-02758	DESCRIPTION	View west. Tank T-2030, release source.	2
	SITE NAME	ConocoPhillips War Hammer CTB Release	5/12/2022

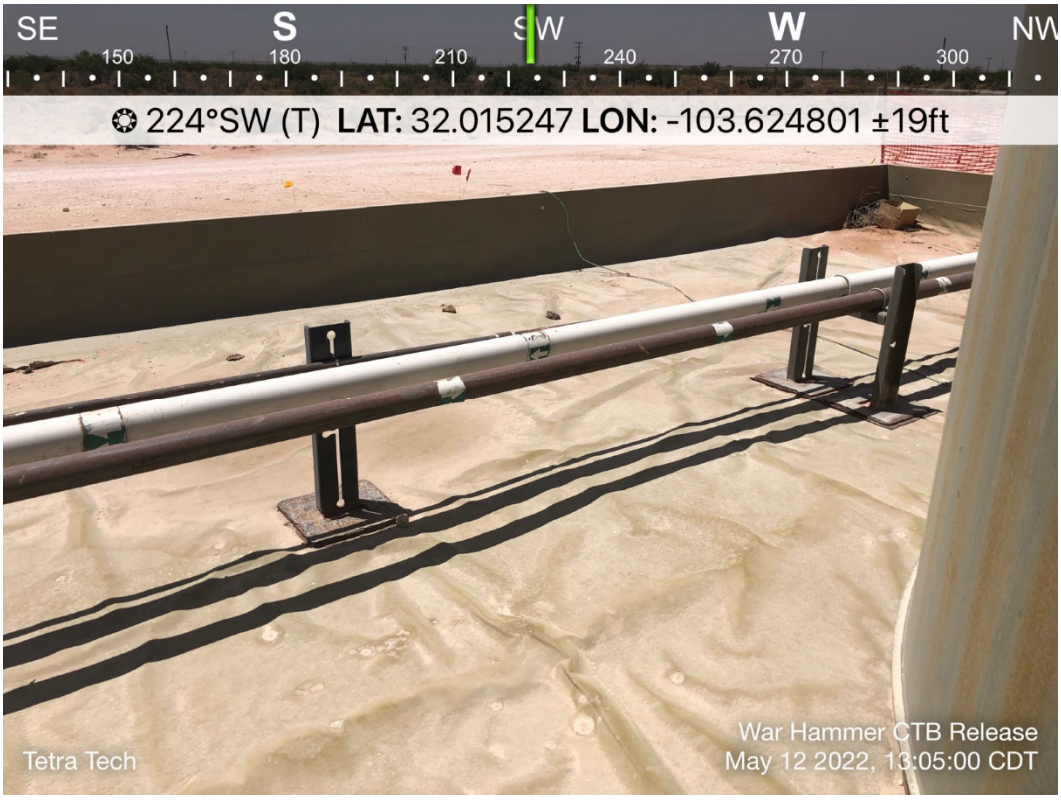


TETRA TECH, INC. PROJECT NO. 212C-MD-02758	DESCRIPTION	View west. Area east of the release and source location. Outside the lined secondary containment.	3
	SITE NAME	ConocoPhillips War Hammer CTB Release	5/12/2022

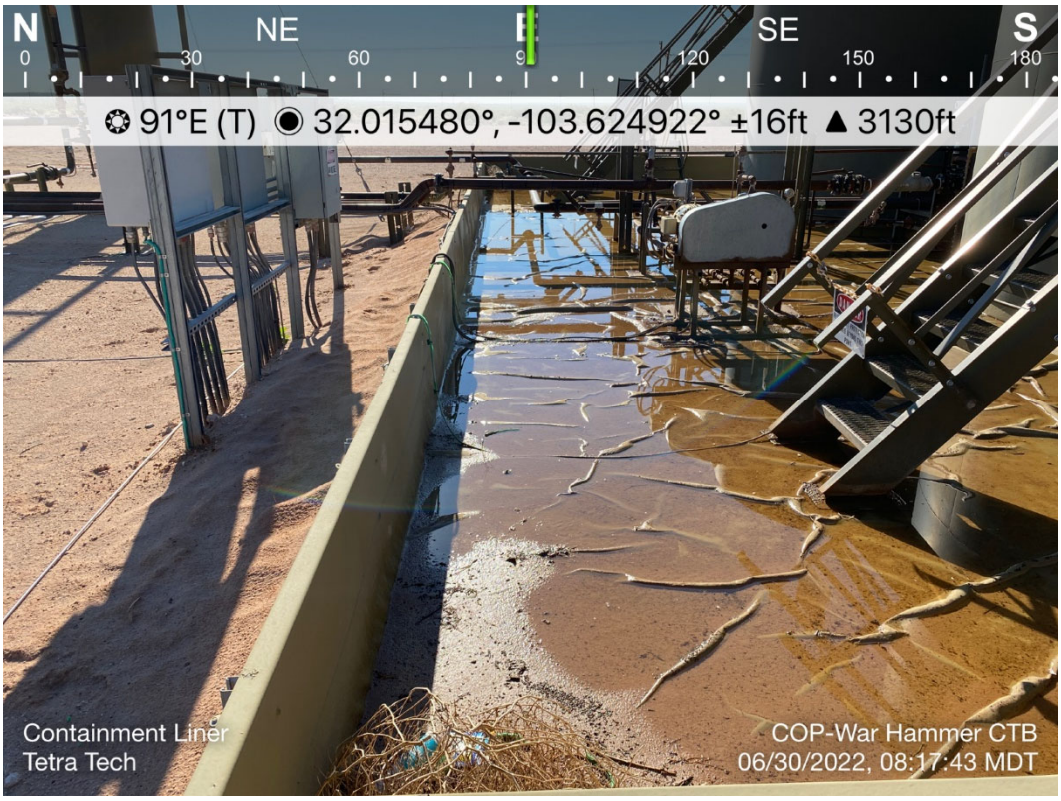
TETRA TECH, INC. PROJECT NO. 212C-MD-02758	DESCRIPTION	View northwest. Area south of the release and source location. Outside the line secondary containment.	4
	SITE NAME	ConocoPhillips War Hammer CTB Release	5/12/2022



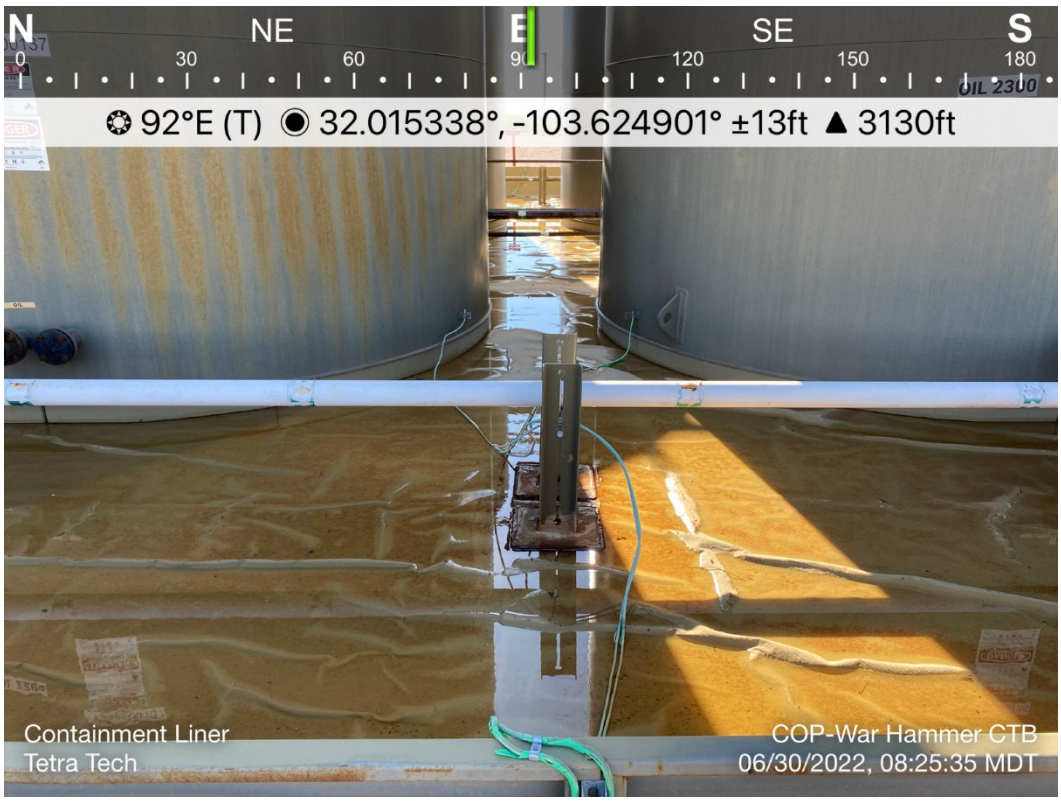
TETRA TECH, INC. PROJECT NO. 212C-MD-02758	DESCRIPTION	Release source; replaced ball valve.	5
	SITE NAME	ConocoPhillips War Hammer CTB Release	5/12/2022



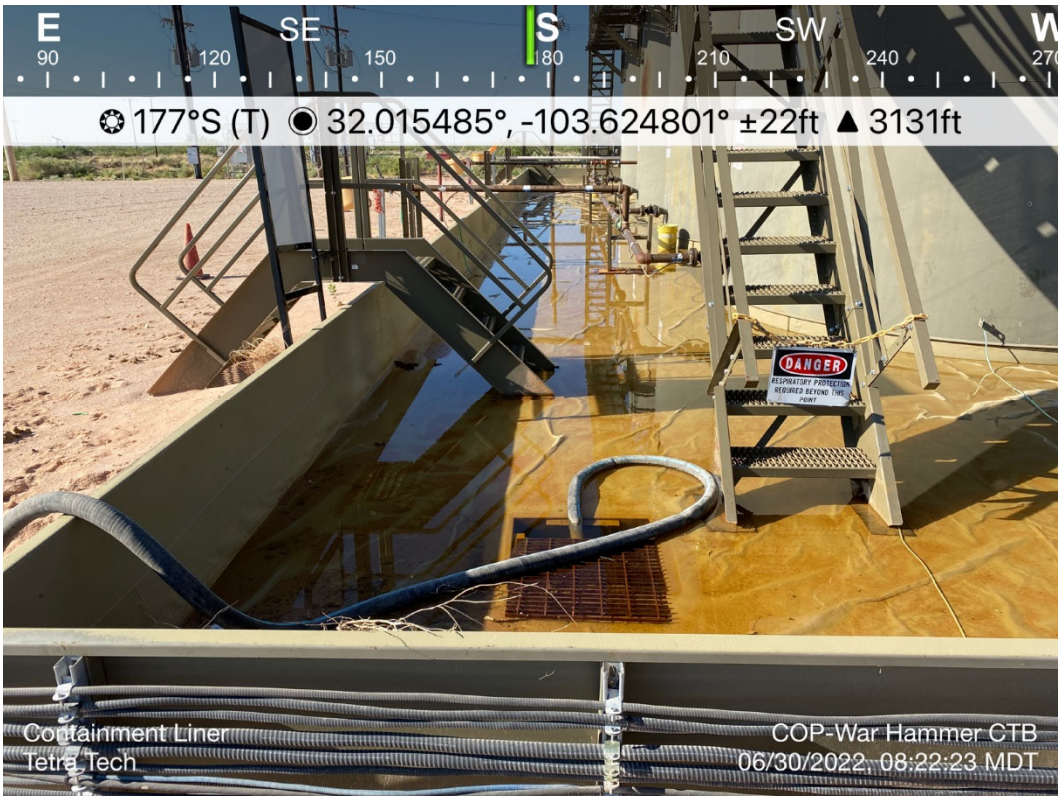
TETRA TECH, INC. PROJECT NO. 212C-MD-02758	DESCRIPTION	View southwest. Inside the secondary containment. No visual evidence of a release within the lined area.	6
	SITE NAME	ConocoPhillips War Hammer CTB Release	5/12/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02758	DESCRIPTION	View east. Stormwater present in the northern portion of the lined secondary containment during liner inspection.	7
	SITE NAME	ConocoPhillips War Hammer CTB Release	6/30/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02758	DESCRIPTION	View east. Stormwater present in the central portion of lined secondary containment during liner inspection.	8
	SITE NAME	ConocoPhillips War Hammer CTB Release	6/30/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02758	DESCRIPTION	View south. Stormwater present in the eastern portion of lined secondary containment during liner inspection.	9
	SITE NAME	ConocoPhillips War Hammer CTB Release	6/30r/2022

TETRA TECH, INC. PROJECT NO. 212C-MD-02758	DESCRIPTION	View northwest. Southern portion of lined secondary containment during liner inspection.	10
	SITE NAME	ConocoPhillips War Hammer CTB Release	6/30/2022

TETRA TECH, INC. PROJECT NO. 212C-MD-02758	DESCRIPTION	View north-northeast. Stormwater present in the western portion of lined secondary containment during liner inspection.	11
	SITE NAME	ConocoPhillips War Hammer CTB Release	6/30/2022

APPENDIX D
Regulatory Correspondence

Dickerson, Ryan

From: Dickerson, Ryan
Sent: Monday, June 27, 2022 1:01 PM
To: ocd.enviro@state.nm.us
Cc: Llull, Christian; Poole, Nicholas
Subject: Incident ID: NVV2003557031 - Liner Inspection

Incident ID (n#) **NVV2003557031** (War Hammer 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 June 30, 2022.

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

Ryan Dickerson | Project Geologist
Cell **+1 (512) 217-7254** | ryan.dickerson@tetratech.com

Tetra Tech | *Leading with Science®* | OGA
8911 N. Capital of TX Hwy. | Bldg. 2, Ste 2310 | Austin, TX 78759 | tetratech.com

Dickerson, Ryan

From: OCDOnline@state.nm.us
Sent: Friday, July 22, 2022 11:04 AM
To: Llull, Christian
Subject: The Oil Conservation Division (OCD) has rejected the application, Application ID: 127069

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

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nVV2003557031,
for the following reasons:

- **The Closure Report is denied. Chain of Custody and Analysis Request form on 6/30/22 show samples not received at proper temperature of 6 deg. Celsius or below. Samples were delivered at temperature of 29.4 deg. Celsius.**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 127069.
Please review and make the required correction(s) prior to resubmitting.
If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,
Robert Hamlet
575-748-1283
Robert.Hamlet@state.nm.us

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

APPENDIX E
Laboratory Analytical Data

CARDINAL Laboratories

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

August 01, 2022

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: WAR HAMMER CTB

Enclosed are the results of analyses for samples received by the laboratory on 07/27/22 16:20.

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 accreditated 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,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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:	07/27/2022	Sampling Date:	07/27/2022
Reported:	08/01/2022	Sampling Type:	Soil
Project Name:	WAR HAMMER CTB	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02758	Sample Received By:	Jodi Henson
Project Location:	CONOCO PHILLIPS - LEA CO NM		

Sample ID: AH - 1 (0-1') (H223318-01)

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	07/29/2022	ND	1.79	89.5	2.00	9.02	
Toluene*	<0.050	0.050	07/29/2022	ND	1.85	92.6	2.00	8.92	
Ethylbenzene*	<0.050	0.050	07/29/2022	ND	1.90	95.2	2.00	8.90	
Total Xylenes*	<0.150	0.150	07/29/2022	ND	5.81	96.8	6.00	8.70	
Total BTEX	<0.300	0.300	07/29/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.1 %* *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	**192**	16.0	07/29/2022	ND	432	108	400	0.00	

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	07/28/2022	ND	243	122	200	2.43	
DRO >C10-C28*	<10.0	10.0	07/28/2022	ND	204	102	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	07/28/2022	ND					

Surrogate: 1-Chlorooctane *72.8 %* *43-149*

Surrogate: 1-Chlorooctadecane *61.3 %* *42.5-161*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	07/27/2022	Sampling Date:	07/27/2022
Reported:	08/01/2022	Sampling Type:	Soil
Project Name:	WAR HAMMER CTB	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02758	Sample Received By:	Jodi Henson
Project Location:	CONOCO PHILLIPS - LEA CO NM		

Sample ID: AH - 1 (2-3') (H223318-02)

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	07/29/2022	ND	1.79	89.5	2.00	9.02	
Toluene*	<0.050	0.050	07/29/2022	ND	1.85	92.6	2.00	8.92	
Ethylbenzene*	<0.050	0.050	07/29/2022	ND	1.90	95.2	2.00	8.90	
Total Xylenes*	<0.150	0.150	07/29/2022	ND	5.81	96.8	6.00	8.70	
Total BTEX	<0.300	0.300	07/29/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.4 %* *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	**48.0**	16.0	07/29/2022	ND	432	108	400	0.00	

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	07/28/2022	ND	243	122	200	2.43	
DRO >C10-C28*	<10.0	10.0	07/28/2022	ND	204	102	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	07/28/2022	ND					

Surrogate: 1-Chlorooctane *84.3 %* *43-149*

Surrogate: 1-Chlorooctadecane *69.2 %* *42.5-161*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	07/27/2022	Sampling Date:	07/27/2022
Reported:	08/01/2022	Sampling Type:	Soil
Project Name:	WAR HAMMER CTB	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02758	Sample Received By:	Jodi Henson
Project Location:	CONOCO PHILLIPS - LEA CO NM		

Sample ID: AH - 2 (0-1') (H223318-03)

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	07/29/2022	ND	1.79	89.5	2.00	9.02	
Toluene*	<0.050	0.050	07/29/2022	ND	1.85	92.6	2.00	8.92	
Ethylbenzene*	<0.050	0.050	07/29/2022	ND	1.90	95.2	2.00	8.90	
Total Xylenes*	<0.150	0.150	07/29/2022	ND	5.81	96.8	6.00	8.70	
Total BTEX	<0.300	0.300	07/29/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.6 %* *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	**192**	16.0	07/29/2022	ND	432	108	400	0.00	

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	07/28/2022	ND	243	122	200	2.43	
DRO >C10-C28*	<10.0	10.0	07/28/2022	ND	204	102	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	07/28/2022	ND					

Surrogate: 1-Chlorooctane *91.4 %* *43-149*

Surrogate: 1-Chlorooctadecane *75.9 %* *42.5-161*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	07/27/2022	Sampling Date:	07/27/2022
Reported:	08/01/2022	Sampling Type:	Soil
Project Name:	WAR HAMMER CTB	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02758	Sample Received By:	Jodi Henson
Project Location:	CONOCO PHILLIPS - LEA CO NM		

Sample ID: AH - 2 (2-3') (H223318-04)

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	07/29/2022	ND	1.79	89.5	2.00	9.02	
Toluene*	<0.050	0.050	07/29/2022	ND	1.85	92.6	2.00	8.92	
Ethylbenzene*	<0.050	0.050	07/29/2022	ND	1.90	95.2	2.00	8.90	
Total Xylenes*	<0.150	0.150	07/29/2022	ND	5.81	96.8	6.00	8.70	
Total BTEX	<0.300	0.300	07/29/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.7 %* *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	**80.0**	16.0	07/29/2022	ND	432	108	400	0.00	

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	07/28/2022	ND	243	122	200	2.43	
DRO >C10-C28*	<10.0	10.0	07/28/2022	ND	204	102	200	4.33	
EXT DRO >C28-C36	<10.0	10.0	07/28/2022	ND					

Surrogate: 1-Chlorooctane *80.7 %* *43-149*

Surrogate: 1-Chlorooctadecane *65.9 %* *42.5-161*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	07/27/2022	Sampling Date:	07/27/2022
Reported:	08/01/2022	Sampling Type:	Soil
Project Name:	WAR HAMMER CTB	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02758	Sample Received By:	Jodi Henson
Project Location:	CONOCO PHILLIPS - LEA CO NM		

Sample ID: AH - 3 (0-1') (H223318-05)

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	07/29/2022	ND	1.74	86.8	2.00	7.97	
Toluene*	<0.050	0.050	07/29/2022	ND	1.94	97.2	2.00	7.78	
Ethylbenzene*	<0.050	0.050	07/29/2022	ND	1.84	92.2	2.00	8.94	
Total Xylenes*	<0.150	0.150	07/29/2022	ND	5.67	94.6	6.00	11.0	
Total BTEX	<0.300	0.300	07/29/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *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	**208**	16.0	07/29/2022	ND	432	108	400	0.00	

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	07/29/2022	ND	216	108	200	0.819	
DRO >C10-C28*	<10.0	10.0	07/29/2022	ND	200	100	200	1.20	
EXT DRO >C28-C36	<10.0	10.0	07/29/2022	ND					

Surrogate: 1-Chlorooctane *91.9 %* *43-149*

Surrogate: 1-Chlorooctadecane *95.5 %* *42.5-161*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	07/27/2022	Sampling Date:	07/27/2022
Reported:	08/01/2022	Sampling Type:	Soil
Project Name:	WAR HAMMER CTB	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02758	Sample Received By:	Jodi Henson
Project Location:	CONOCO PHILLIPS - LEA CO NM		

Sample ID: AH - 3 (2-3') (H223318-06)

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	07/29/2022	ND	1.74	86.8	2.00	7.97	
Toluene*	<0.050	0.050	07/29/2022	ND	1.94	97.2	2.00	7.78	
Ethylbenzene*	<0.050	0.050	07/29/2022	ND	1.84	92.2	2.00	8.94	
Total Xylenes*	<0.150	0.150	07/29/2022	ND	5.67	94.6	6.00	11.0	
Total BTEX	<0.300	0.300	07/29/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *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	**32.0**	16.0	07/29/2022	ND	432	108	400	0.00	

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	07/29/2022	ND	216	108	200	0.819	
DRO >C10-C28*	<10.0	10.0	07/29/2022	ND	200	100	200	1.20	
EXT DRO >C28-C36	<10.0	10.0	07/29/2022	ND					

Surrogate: 1-Chlorooctane *99.4 %* *43-149*

Surrogate: 1-Chlorooctadecane *104 %* *42.5-161*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	07/27/2022	Sampling Date:	07/27/2022
Reported:	08/01/2022	Sampling Type:	Soil
Project Name:	WAR HAMMER CTB	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02758	Sample Received By:	Jodi Henson
Project Location:	CONOCO PHILLIPS - LEA CO NM		

Sample ID: AH - 4 (0-1') (H223318-07)

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	07/29/2022	ND	1.74	86.8	2.00	7.97	
Toluene*	<0.050	0.050	07/29/2022	ND	1.94	97.2	2.00	7.78	
Ethylbenzene*	<0.050	0.050	07/29/2022	ND	1.84	92.2	2.00	8.94	
Total Xylenes*	<0.150	0.150	07/29/2022	ND	5.67	94.6	6.00	11.0	
Total BTEX	<0.300	0.300	07/29/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *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	**240**	16.0	07/29/2022	ND	416	104	400	0.00	

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	07/29/2022	ND	216	108	200	0.819	
DRO >C10-C28*	<10.0	10.0	07/29/2022	ND	200	100	200	1.20	
EXT DRO >C28-C36	<10.0	10.0	07/29/2022	ND					

Surrogate: 1-Chlorooctane *108 %* *43-149*

Surrogate: 1-Chlorooctadecane *111 %* *42.5-161*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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:	07/27/2022	Sampling Date:	07/27/2022
Reported:	08/01/2022	Sampling Type:	Soil
Project Name:	WAR HAMMER CTB	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02758	Sample Received By:	Jodi Henson
Project Location:	CONOCO PHILLIPS - LEA CO NM		

Sample ID: AH - 4 (2-3') (H223318-08)

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	07/29/2022	ND	1.74	86.8	2.00	7.97	
Toluene*	<0.050	0.050	07/29/2022	ND	1.94	97.2	2.00	7.78	
Ethylbenzene*	<0.050	0.050	07/29/2022	ND	1.84	92.2	2.00	8.94	
Total Xylenes*	<0.150	0.150	07/29/2022	ND	5.67	94.6	6.00	11.0	
Total BTEX	<0.300	0.300	07/29/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *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	**16.0**	16.0	07/29/2022	ND	416	104	400	0.00	

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	07/29/2022	ND	216	108	200	0.819	
DRO >C10-C28*	<10.0	10.0	07/29/2022	ND	200	100	200	1.20	
EXT DRO >C28-C36	<10.0	10.0	07/29/2022	ND					

Surrogate: 1-Chlorooctane *108 %* *43-149*

Surrogate: 1-Chlorooctadecane *111 %* *42.5-161*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

Client Name: COP

Site Manager: Gabriel Huerta

Project Name: War Hammer CTB

Contact Info: Christian.Llull@tetratech.com
Nicholas.Poole@tetratech.com

Project Location: (county, state) Lea County, NM

Project #: 212C-MD-02758

Invoice to: Christian Llull

Receiving Laboratory: Cardinal Lab

Sampler Signature: Gabriel Huerta

Comments:

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	Asbestos		Hold
H223318																														
1	AH-1 (0-1')	7-27-22	11:00		✓			✓	1		✓		✓											✓							
2	AH-1 (2-3')	7-27-22	11:10		✓			✓	1		✓		✓											✓							
3	AH-2 (0-1')	7-27-22	11:30		✓			✓	1		✓		✓											✓							
4	AH-2 (2-3')	7-27-22	11:45		✓			✓	1		✓		✓											✓							
5	AH-3 (0-1')	7-27-22	12:00		✓			✓	1		✓		✓											✓							
6	AH-3 (2-3')	7-27-22	12:15		✓			✓	1		✓		✓											✓							
7	AH-4 (0-1')	7-27-22	12:30		✓			✓	1		✓		✓											✓							
8	AH-4 (2-3')	7-27-22	12:45		✓			✓	1		✓		✓											✓							

Relinquished by: Gabe Huerta Date: Time:

Received by: Jodi Henson 7/27/22 16:20 Date: Time:

Relinquished by: Date: Time:

Received by: Date: Time:

Relinquished by: Date: Time:

Received by: Date: Time:

LAB USE ONLY

Sample Temperature
3.2°C
-1.6
2.6°C #113

REMARKS:

Standard GH

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

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 134083

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 134083
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	11/23/2022