

February 28, 2022

Bradford Billings Hydrologist/E.Spec.A District 2 Artesia 1220 South St. Francis Drive Oil Conservation Division Santa Fe, NM 87505

Re: Release Characterization and Remediation Work Plan ConocoPhillips Heritage Concho Nervous Horz Com #3H Tank Release Unit Letter B, Section 36, Township 18 South, Range 31 East Eddy County, New Mexico Incident ID# nAB1534956719 2RP-3450

Mr. Billings,

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips to assess a Heritage Concho release that occurred from a tank battery at the Nervous Horz Com #3H (API No. 30-015-37145). The release footprint is located in Public Land Survey System (PLSS) Unit Letter B, Section 36, Township 18 South, Range 31 East, in Eddy County, New Mexico (Site). The approximate release point occurred at coordinates 32.710434°, -103.820831°, as shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico Oil Conservation Division (NMOCD) C-141 Initial Report, the release was discovered on November 24, 2015. The C-141 reports that the cause of the release was a valve being left open on a battery piping. Approximately 30 barrels (bbls) of crude oil were released and approximately 25 bbls of oil were recovered. The release remained on the oil and gas operations pad within the lined containment. The NMOCD approved the initial C-141 on December 8, 2015 and subsequently assigned the release the Incident ID nAB1534956719 and the remediation permit (RP) number 2RP-3450. The initial C-141 form is included in Appendix A.

SITE CHARACTERIZATION

A site characterization was performed and no sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, playa lakes, 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 not in an area of high karst potential.

There are no water wells listed in the New Mexico Office of the State Engineer (NMOSE) database located within approximately 0.5 miles (800 meters) of the Site. According to data from one (1) water well listed in the NMOSE database within approximately 3.73 miles (6,000 meters) of the site, the minimum depth to groundwater is 430 feet below ground surface (bgs). The site characterization data are presented in Appendix B.

Release Characterization and Remediation Work Plan February 28, 2022

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 site characterization, established depth to groundwater, and in accordance with Table I of 19.15.29.12 NMAC, the RRALs for the Site are as follows:

Constituent	Site RRALs
Chloride	20,000 mg/kg
TPH	2,500 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

INITIAL RESPONSE ACTIVITIES AND INITIAL ASSESSMENT

Following the release, Concho dispatched vacuum trucks to recover standing fluid within the lined containment. The facility was then cleaned and put back into service. The approximate release extent and location are presented in Figure 3.

On January 19, 2016, Concho was onsite to install one (1) soil boring (S1) to a total depth of 4 feet bgs. Although the exact location of the soil boring installed by Concho is unknown, Concho indicated that it may have been placed in front of the tanks to preserve the integrity of the liner. A total of five (5) soil samples were collected from one (1) boring and sent to Cardinal Laboratories in Hobbs, New Mexico to be analyzed for TPH via EPA Method 8015M and BTEX via EPA Method 8021B. The soil samples were not analyzed for chloride during the January 2016 soil assessment activities. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix C.

Analytical results from the January 2016 assessment activities are summarized in Table 1. The analytical results associated with the surface sample (S1-SURFACE) exceeded the Site RRALs for TPH (100 mg/kg), BTEX (50 mg/kg), and benzene (10 mg/kg).

ADDITIONAL SITE ASSESSMENT AND SAMPLING RESULTS

Tetra Tech conducted a visual inspection at the Site on September 21, 2021 to assess current conditions. The liner was observed in the tank battery containment, as reported. Stained gravels were observed in a portion of the lined containment, appearing too fresh and minor in extent to be related to the November 2015 release. No additional staining or evidence of a release was observed in the remainder of the containment and surrounding pad. Photographic documentation from the September 2021 visual inspection is presented in Appendix D.

In order to complete the release assessment and delineation per NMOCD regulations, Tetra Tech conducted additional soil sampling at the release site on behalf of ConocoPhillips on January 24 and February 9, 2022. Tetra Tech installed one (1) air rotary soil boring (BH-1) within the release extent to 10 feet bgs to achieve vertical delineation of the release. The BH-1 boring was installed immediately outside of the tank battery containment in order to preserve the integrity of the liner, and because the area inside of the berm was inaccessible to the drill rig. An additional four (4) hand auger borings (AH-1 through AH-4) were installed along the perimeter of the release to depths of 2 feet bgs to complete horizontal delineation of the release. Boring locations are presented in Figure 4.

A total of fifteen (15) soil samples were collected and sent to Cardinal Laboratories in Hobbs, New Mexico to be analyzed for chloride via EPA Method SM4500CI-B, TPH via EPA Method 8015M and BTEX via EPA

Release Characterization and Remediation Work Plan February 28, 2022

Method 8261B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix C.

Analytical results from the 2022 assessment activities are summarized in Table 2. The analytical results associated with the 0-1 foot sampling interval at BH-1 exceeded the Site RRAL for chloride (600 mg/kg). There were no other sampling intervals at BH-1 which exceeded Site RRALs. All analytical results associated with samples from perimeter borings (AH-1 through AH-4) were below the applicable Site RRALs for soils in active oil and gas production areas.

REMEDIATION WORK PLAN

Based on the analytical results, ConocoPhillips proposes to remove the remaining impacted material as shown in Figure 5. Impacted soils in the area around BH-1 will be excavated using heavy equipment (backhoes, hoe rams, and track hoes) to a maximum depth of 1 foot below the surrounding surface or until a representative sample from the walls and bottom of the excavation is below the RRALs. Any area containing pressurized lines will be hand-dug to a depth of 1 foot or the maximum extent practicable and heavy equipment will come no more than 3 ft from any pressurized lines.

Excavated soils will be transported offsite and disposed of at an NMOCD-approved or permitted facility. Confirmation bottom and sidewall samples will be collected for verification of remedial activities, and analyzed for TPH, BTEX, and chlorides. Once results are received, NMOCD will be notified, and the excavation will then be backfilled with clean material to surface grade. The estimated volume of material to be remediated is approximately 30 cubic yards.

Given that the 2016 sampling results indicated TPH and BTEX impacts to surface soils that were not encountered in the 2022 sampling event, coupled with the unknown location of the 2016 sampling location, ConocoPhillips additionally proposes to conduct an inspection of the liner in accordance with 19.15.29.11(A)(5). The gravel will be removed, and the liner will be inspected for rips, tears, or holes. If damage to the liner is observed, then additional soil samples will be collected from beneath the liner to vertically delineate soil impacts beneath the tank battery facility.

ALTERNATIVE CONFIRMATION SAMPLING PLAN

In accordance with 19.15.29.12(D)(1)(b) NMAC, ConocoPhillips proposes the following alternative confirmation sampling plan to adhere with NMOCD requirements. The proposed confirmation sample locations are depicted in Figure 6. Two (2) confirmation floor samples and eight (8) confirmation sidewall samples are proposed for verification of remedial activities. The proposed excavation encompasses a surface area of approximately 770 square feet.

These confirmation sidewall and floor samples will be representative of no more than approximately 500 square feet of excavated area. Confirmation samples will be sent to an accredited laboratory for analysis of TPH (Method 8015 modified), BTEX (Method 8260B), and chloride (USEPA Method 300.0). Once results are received, NMOCD will be notified, and the excavation will then be backfilled with clean material to surface grade.

CONCLUSION

ConocoPhillips proposes to begin remediation activities at the Site within 120 days of NMOCD plan approval. Upon completion of the proposed work, a final closure report detailing the remediation activities and the results of the confirmation sampling will be submitted to NMOCD.

Release Characterization and Remediation Work Plan February 28, 2022

ConocoPhillips

If you have any questions concerning the soil assessment or the proposed remediation activities for the Site, please call me at (512) 217-7254 or Christian at (512) 338-2861.

Sincerely, Tetra Tech, Inc.

Samantha K. Abbott, P.G. Senior Staff Geologist

Christian M. Llull, P.G. Project Manager

cc: Mr. Charles Beauvais, BU – ConocoPhillips

.

Release Characterization and Remediation Work Plan February 28, 2022

ConocoPhillips

LIST OF ATTACHMENTS

Figures:

- Figure 1 Overview Map
- Figure 2 Topographic Map
- Figure 3 Approximate Release Extent Map
- Figure 4 Site Assessment Map
- Figure 5 Proposed Remediation Extent
- Figure 6 Alternative Confirmation Sampling Plan

Tables:

- Table 1 Summary of Analytical Results Initial Soil Assessment
- Table 2 Summary of Analytical Results Additional Soil Assessment

Appendices:

Appendix A – C-141 Forms

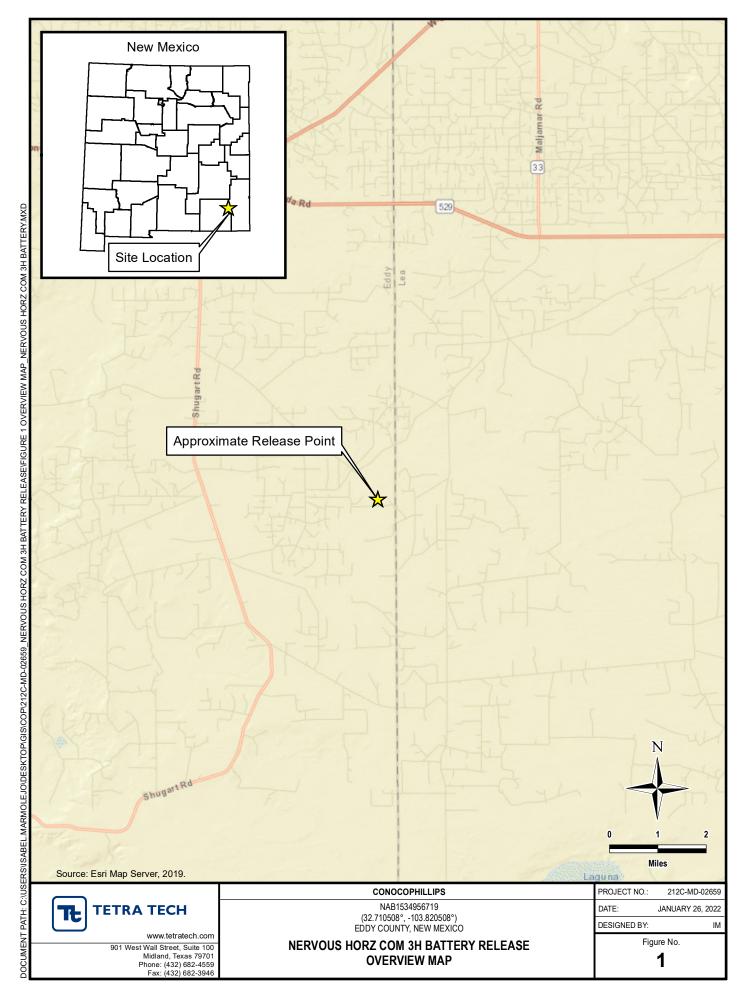
Appendix B – Site Characterization Data

- Appendix C Laboratory Analytical Data
- Appendix D Photographic Documentation

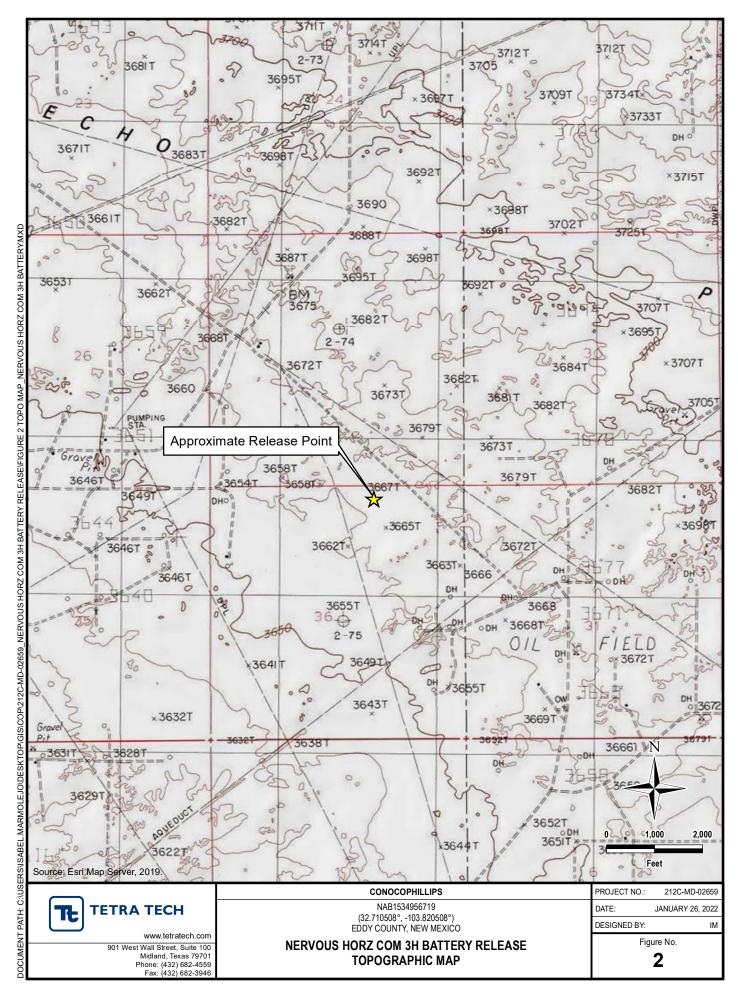
5

FIGURES

Received by OCD: 2/28/2022 11:50:00 AM



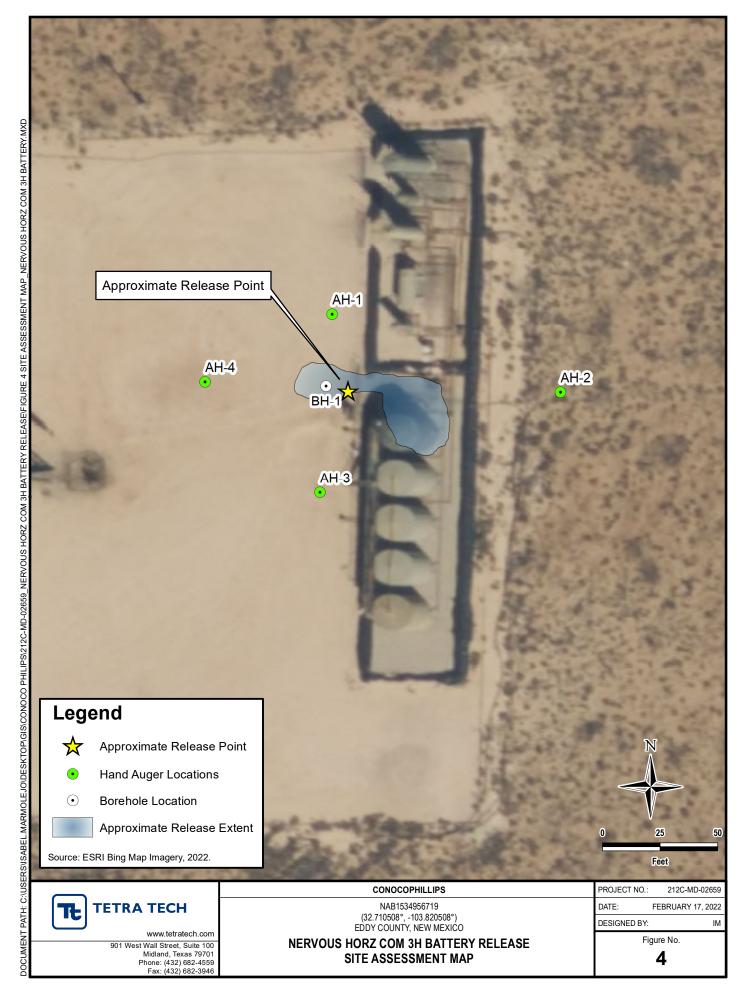
Released to Imaging: 3/7/2022 11:42:26 AM

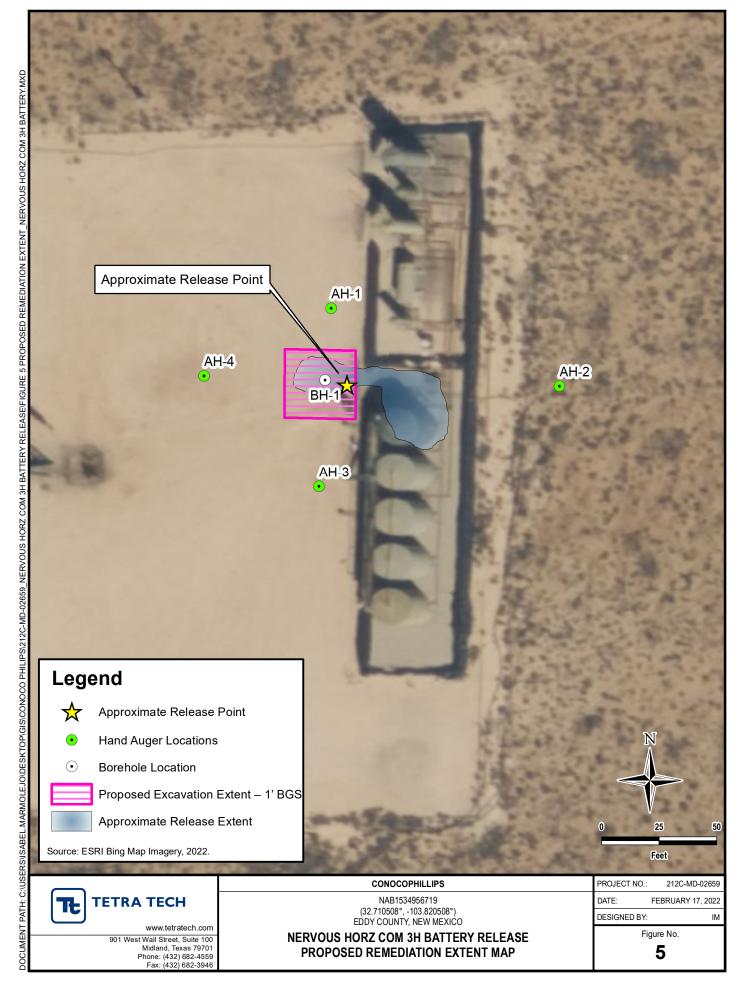


Released to Imaging: 3/7/2022 11:42:26 AM

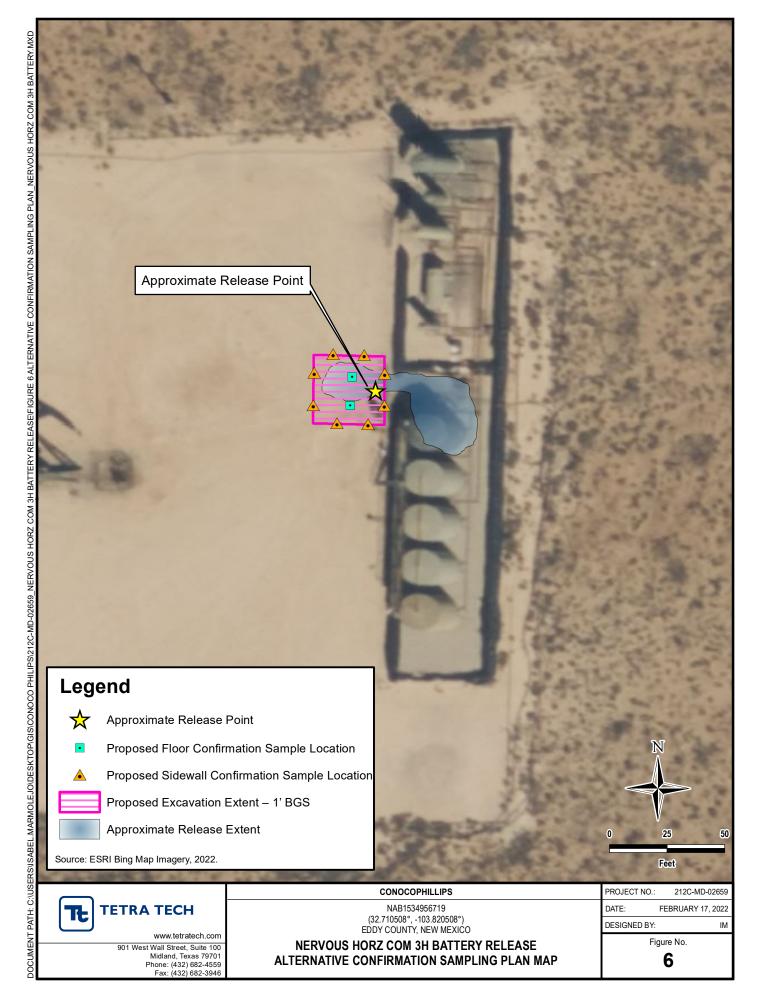
Received by OCD: 2/28/2022 11:50:00 AM







Received by OCD: 2/28/2022 11:50:00 AM



TABLES

TABLE 1 SUMMARY OF ANALYTICAL RESULTS INITIAL SOIL ASSESSMENT- 2RP-3450 / NAB1534956719 HERITAGE CONCHO NERVOUS HORZ COM 3H EDDY COUNTY, NM

			BTEX ²										TPH ³				
Sample ID	Sample Date	Sample Depth	Ponto		Toluor		Ethylbon	1000	Total Vul		Total BT	Total BTEX		GRO DRO		Total TPH	
Sample ID			Benzei	ene Toluene		Ethylbenzene		Total Xylenes		TOTALDIEX		C ₆ - C ₁₀		> C ₁₀ - C ₂₈		(GRO+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
S1-SURFACE	1/19/2016	SURFACE	11.5		107		51.2		118		288		1150		1930		3080
S1-1'	1/19/2016	1	< 0.050		0.390		0.107		0.426		0.923		< 10.0		12.1		12.1
S1-2'	1/19/2016	2	< 0.050		0.064		< 0.050		< 0.150		< 0.300		< 10.0		10.7		10.7
S1-3'	1/19/2016	3	< 0.050		0.193		0.191		0.665		1.05		< 10.0		< 10.0		-
S1-4'	1/19/2016	4	0.134		3.12		2.17		7.02		12.4		103		712		815

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 8021B

2 Method 8015M

Bold and italicized values indicate exceedance of proposed Remediation RRALs

TABLE 2 SUMMARY OF ANALYTICAL RESULTS ADDITIONAL SOIL ASSESSMENT- 2RP-3450 / NAB1534956719 HERITAGE CONCHO NERVOUS HORZ COM 3H EDDY COUNTY, NM

Field Screening							BTEX ²									TPH ³							
Sample ID	Sample Date	Sample Depth	Res	ults	Chlorid	e1	Benzei	10	Toluen	0	Ethylben	7000	Total Xyl	anas	Total B	EX	GRO		DRO		EXT DI	RO	Total TPH
Sample ib	Sample Date		Chloride	PID			Delizei	ie	Toldell	C	Luiyiben	20110	TOtal Ayr	enes	TOTALBLEX		C ₆ - C ₁₀		> C ₁₀ - C ₂₈		> C ₂₈ - C ₃₆	(GRO+DRO+EXT DRO)	
		ft. bgs	рр	om	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
		0-1	-	-	12,600		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-3	-	-	272		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
	1/24/2022	3-4	-	-	160		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
BH-1		4-5	-	-	96.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		6-7	-	-	80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		8-9	-	-	96.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		9-10	-	-	80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
AH-1	2/9/2022	0-1	311	-	208		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
AII-1	2/ 3/ 2022	1-2	402	-	224		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
	2/0/2022	0-1	23.2	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
AH-2	2/9/2022	1-2	70.2	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
	2/0/2022	0-1	39.4	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
AH-3	2/9/2022	1-2	253.3	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
AH-4	2/9/2022	0-1	75.1	-	48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
AU-4	2/3/2022	1-2	72.4	-	48.0		< 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

Method SM4500Cl-B 1

2 Method 8021B

3 Method 8015M Bold and italicized values indicate exceedance of proposed Remediation RRALs and Reclamation Requirements. Shaded rows indicate intervals proposed for excavation.

QUALIFIERS:

•

.

APPENDIX A C-141 Forms

Io25 N. French Dr., Hobbs, NM 88240 Energy Mi District II Energy Mi 811 S. First St., Artesia, NM 88210 Oil C District III Oil C	inerals Conser	New Mex and Natura vation Div St. Franc	l Resources	Form C-141 Revised August 8, 2011 Submit 1 Copy to appropriate District Office in accordance with 19,15,29 NMAC.			
	NM 87505 Santa Fe						
Release Notific		-		ction			
NAB1534956719	_	OPERA	ſOR		Initial Report 🔲 Final Report		
Name of Company: COG Operating LLC 22913	<u> </u>		bert McNeill		<u> </u>		
Address: 600 West Illinois Avenue, Midland TX 79701 Facility Name: Nervous Horz Com #3H		Telephone Facility Typ	No. 432-230-00	77			
		raenny ryp	e. Dattery	· · · ·			
Surface Owner: State Mineral O	Owner:	· · · · · · · · · · · · · · · · · · ·			PI No. 30-015-37145		
		N OF RE		-			
Unit Letter Section Township Range Feet from the B 36 18S 31E 330'		/South Line North	Feet from the 1980'	East/West I East	Line County Eddy		
				1,100			
		Ų	-103.8208313				
	ΓURE	OF REL		1			
Type of Release: Oil		Volume of 30 bbls Oi			ume Recovered: bls Oil		
Source of Release:		Date and F	lour of Occurrent	e: Date	e and Hour of Discovery:		
Open Valve Was Immediate Notice Given?		11/24/2015		11/2	24/2015 7:30 am		
Yes No Not R	equired		her – NMOCD				
By Whom? Lupe Carrasco			lour: Tue 11/24/2		SE. ARTESIA DISTRICT		
Was a Watercourse Reached?		If YES, Vo	lume Impacting	the Watercour	Se. ARTESIA DISTRICT		
Describe Cause of Problem and Remedial Action Taken.* This release was caused when a valve was left open on battery pi	iping. Va	acuum trucks	were dispatched t	to recover all s	RECEIVED		
Describe Area Affected and Cleanup Action Taken.* This release occurred within a lined containment, however we are into service. Concho will have the spill site sampled to delineate to the NMOCD for approval prior to any significant remediation	any poss						
I hereby certify that the information given above is true and compregulations all operators are required to report and/or file certain a public health or the environment. The acceptance of a C-141 represent their operations have failed to adequately investigate and to or the environment. In addition, NMOCD acceptance of a C-141 federal, state, or local laws and/or regulations.	release n ort by th remediat	otifications a e NMOCD m e contaminati	nd perform correct arked as "Final R on that pose a thr e the operator of	ctive actions for eport" does not eat to ground responsibility	or releases which may endanger ot relieve the operator of liability water, surface water, human health for compliance with any other		
Amanda T. Dewis			<u>OIL CON</u>	SERVATI	ION DIVISION		
Signature: Printed Name: Amanda Trujillo Davis		Approved by	Environmental S	pecialist:	hh		
			MICHE		NIA		
Title: Senior Environmental Coordinator		Approval Da		J Expira	ation Date: NIA		
E-mail Address: atrujillo@concho.com		Conditions o Remediat	ion per O.C.I	D. Rules &	Attached Guidelines		
Date: December 8, 2015 Phone: 575-748-6940 Attach Additional Sheets If Necessary		SUBMIT I	REMEDIATIO	N PROPO 10110	SALNO 2RP-3450		

•

Page 17 of 60

۰.

•

Received by OCD: 2/28/2022 11:50:00 AM

• . •

.

Oil Conservation Division

Facility ID Application ID

Site Assessment/Characterization

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

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

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

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

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

Laboratory data including chain of custody

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

Received by OCD: 2/28/2 Form C-141 Page 4	O22 11:50:00 AM State of New Me Oil Conservation I		Incident ID District RP Facility ID Application ID	Page 19 of 6
regulations all operators a public health or the enviro failed to adequately invest addition, OCD acceptance and/or regulations. Printed Name:	formation given above is true and com re required to report and/or file certain nment. The acceptance of a C-141 rep igate and remediate contamination that of a C-141 report does not relieve the <i>Beauvais 99</i>	release notifications and perform port by the OCD does not relieve t pose a threat to groundwater, su operator of responsibility for cor Title:	e and understand that pursu n corrective actions for relea the operator of liability sho urface water, human health npliance with any other fed	ases which may endanger ould their operations have or the environment. In leral, state, or local laws
email:		Telephone:		
OCD Only Received by:		Date:		

Received by OCD: 2/28/2022 11:50:00 AM Form C-141 State of New Mexico

Page 5

Oil Conservation Division

<u>Remediation Plan Checklist</u>: Each of the following items must be included in the plan.

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation points Estimated volume of material to be remediated Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation. Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction. Extents of contamination must be fully delineated. Contamination does not cause an imminent risk to human health, the environment, or groundwater. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Printed Name: Title: Signature: Charles R. Beauvais 99 Date: email: Telephone: _____ OCD Only Received by: Date: Approved with Attached Conditions of Approval Approved Denied Deferral Approved Bradford Billings Signature: Date:

APPENDIX B Site Characterization Data

OCD Water Bodies



Released to Imaging: 3/7/2022 11:42:26 AM

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

New Mexico Oil Conservation Division

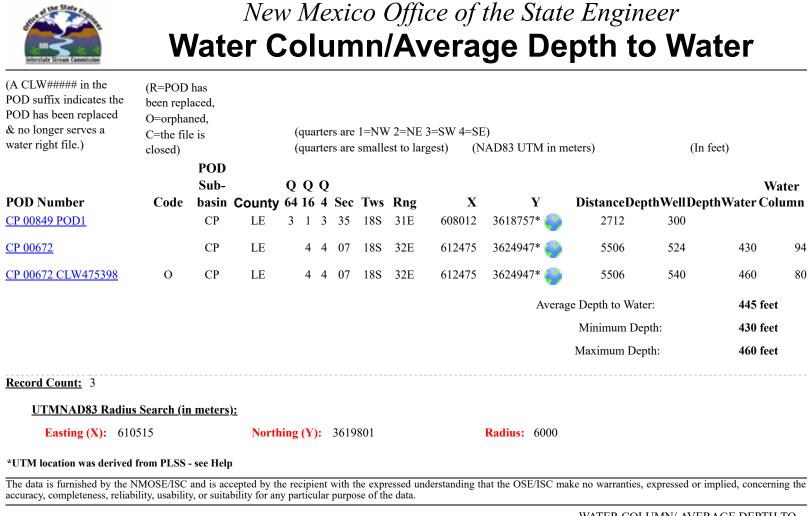


Google East 13/7/2022 11:42:26 AM

Approximate Release Point

7 mi

N



1/11/22 9:26 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

APPENDIX C Laboratory Analytical Data



January 25, 2016

DAKOTA NEEL

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: NERVOUS HORZ COM #3H

Enclosed are the results of analyses for samples received by the laboratory on 01/20/16 14:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. 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/ga/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. Keine

Celey D. Keene Lab Director/Quality Manager



COG OPERATING DAKOTA NEEL P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:	01/20/2016	Sampling Date:	01/19/2016
Reported:	01/25/2016	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM #3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S-1 SURFACE (H600132-01)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	11.5	0.500	01/22/2016	ND	1.71	85.6	2.00	6.03	
Toluene*	107	0.500	01/22/2016	ND	1.83	91.6	2.00	5.89	
Ethylbenzene*	51.2	0.500	01/22/2016	ND	1.70	85.2	2.00	5.40	
Total Xylenes*	118	1.50	01/22/2016	ND	5.26	87.7	6.00	5.81	
Total BTEX	288	3.00	01/22/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	114	% 73.6-14	0						
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1150	50.0	01/21/2016	ND	186	92.9	200	7.25	
DRO >C10-C28	1930	50.0	01/21/2016	ND	189	94.3	200	4.86	
Surrogate: 1-Chlorooctane	88.9	% 35-142	7						
Surrogate: 1-Chlorooctadecane	60.8	% 28-171	!						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



COG OPERATING DAKOTA NEEL P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:	01/20/2016	Sampling Date:	01/19/2016
Reported:	01/25/2016	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM #3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S-1 1' (H600132-02)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/22/2016	ND	1.71	85.6	2.00	6.03	
Toluene*	0.390	0.050	01/22/2016	ND	1.83	91.6	2.00	5.89	
Ethylbenzene*	0.107	0.050	01/22/2016	ND	1.70	85.2	2.00	5.40	
Total Xylenes*	0.426	0.150	01/22/2016	ND	5.26	87.7	6.00	5.81	
Total BTEX	0.923	0.300	01/22/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	% 73.6-14	0						
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/21/2016	ND	186	92.9	200	7.25	
DRO >C10-C28	12.1	10.0	01/21/2016	ND	189	94.3	200	4.86	
Surrogate: 1-Chlorooctane	83.8	% 35-147	7						
Surrogate: 1-Chlorooctadecane	79.9	% 28-171	1						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



COG OPERATING DAKOTA NEEL P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:	01/20/2016	Sampling Date:	01/19/2016
Reported:	01/25/2016	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM #3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S-1 2' (H600132-03)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/22/2016	ND	1.71	85.6	2.00	6.03	
Toluene*	0.064	0.050	01/22/2016	ND	1.83	91.6	2.00	5.89	
Ethylbenzene*	<0.050	0.050	01/22/2016	ND	1.70	85.2	2.00	5.40	
Total Xylenes*	<0.150	0.150	01/22/2016	ND	5.26	87.7	6.00	5.81	
Total BTEX	<0.300	0.300	01/22/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	% 73.6-14	0						
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/21/2016	ND	186	92.9	200	7.25	
DRO >C10-C28	10.7	10.0	01/21/2016	ND	189	94.3	200	4.86	
Surrogate: 1-Chlorooctane	83.6	% 35-147	7						
Surrogate: 1-Chlorooctadecane	81.9	% 28-171	,						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



COG OPERATING DAKOTA NEEL P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:	01/20/2016	Sampling Date:	01/19/2016
Reported:	01/25/2016	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM #3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S-1 3' (H600132-04)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/22/2016	ND	1.71	85.6	2.00	6.03	
Toluene*	0.193	0.050	01/22/2016	ND	1.83	91.6	2.00	5.89	
Ethylbenzene*	0.191	0.050	01/22/2016	ND	1.70	85.2	2.00	5.40	
Total Xylenes*	0.665	0.150	01/22/2016	ND	5.26	87.7	6.00	5.81	
Total BTEX	1.05	0.300	01/22/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	73.6-14	0						
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/21/2016	ND	186	92.9	200	7.25	
DRO >C10-C28	<10.0	10.0	01/21/2016	ND	189	94.3	200	4.86	
Surrogate: 1-Chlorooctane	81.7	% 35-147	7						
Surrogate: 1-Chlorooctadecane	80.0	% 28-171							

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



COG OPERATING DAKOTA NEEL P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:	01/20/2016	Sampling Date:	01/19/2016
Reported:	01/25/2016	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM #3H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S-1 4' (H600132-05)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.134	0.050	01/22/2016	ND	1.71	85.6	2.00	6.03	
Toluene*	3.12	0.050	01/22/2016	ND	1.83	91.6	2.00	5.89	
Ethylbenzene*	2.17	0.050	01/22/2016	ND	1.70	85.2	2.00	5.40	
Total Xylenes*	7.02	0.150	01/22/2016	ND	5.26	87.7	6.00	5.81	
Total BTEX	12.4	0.300	01/22/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	117 9	73.6-14	0						
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	103	10.0	01/21/2016	ND	186	92.9	200	7.25	
DRO >C10-C28	712	10.0	01/21/2016	ND	189	94.3	200	4.86	
Surrogate: 1-Chlorooctane	98.6	% 35-147	7						
Surrogate: 1-Chlorooctadecane	90.4	28-171	!						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

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

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: COG Operating LLC	COG Operating LLC						C	F	BILL TO				-	A	ANALISIS	2		į	NEWOLO.	1			1		
	a Neel				P.O. #:	.#									-			_							
≶	2.				Con	Company:	ny:	0	COG Operating LLC	ng LLC							da -								
Inte	State: NM		Zip	88210	Attn:			-	Robert McNeill	aill		-		-			1								
le #	8-6930 Fax #:				Adc	Address:	ŝ		600 W Illinois	ois			_												
	Project Owner:	a			City:	2			Midland						_			_					-		
ame:	Nervous Horz Com #3H				Sta	State: TX	X	N	Zip: 79701																
<u>o</u>					Pho	one	#	432)	Phone #: (432) 221-0388			-	-					_							
Sampler Name: Dakota Neel	a Neel				Fax #:	÷																			
1				MATRIX		PRE	PRESERV.	Ĩ	SAMPLING	G		_		-									_		
Lab I.D.	Sample I.D.	OR (C)OMP.	AINERS					:																	
		(G)RAB	# CONT	GROUN WASTE SOIL OIL SLUDGI	OTHER	ACID/B/	ICE / CO	OTHER	DATE	TIME	BTEX	трн	Chlorid	-			-			+	_		-		
	S1- Surface						×		1/19/16	8:00 AM	×	×	-	+			-			-			-		
2-	S1-1						×	_	1/19/16	8:00 AM	×	×	-	-						-			-		
Ca	S1-2'						×		1/19/16	8:00 AM	×	×	-	-			-			-			-		
¢(S1-3'						×		1/19/16	8:00 AM	×	×	-	-			-								
<u>с</u> п.	S1-4'						×	_	1/19/16	8:00 AM	×	×	-	-			-			-			-		
																								1	
LEASE NOTE: Liability and Damages. Ca nalyses. All claims including those for neg en/ce. In no event shall Cardinal be liable	d a nt	r any clai	im aris ed wai put limi	arising whether based in contract or tort, shall be limited to the amount paid warked unless made in writing and received by Cardinal within 30 days after limitation, business interruptions, loss of use, or loss of profits incurred by cli monatore of whether such claims to based upon any of the above stated rea	ct or tor ind rece s, loss o	rt, shal eived b of use,	I be lin y Card or loss	inal wi	o the amount paid ithin 30 days after ofits incurred by cl	by the client for the completion of the ient, its subsidiarie isons or otherwise.	ne applica IS,	ble										1.28			
affiliates or successors arising out of or related to the performance Relinquished By:	ted to the performance of services nereuniver by caruman, Re	R	ece	Received By:						Phone Result: Fax Result:	: ult:	□ Yes	I I No		dd"	Add'l Phone #: Add'l Fax #:	#:								
Relinquished By:	Tippe: 00 Date:	ZOL	ece	Received By:	t	C	B	2		REMARKS: dneel2@concho.com lcarrasco@concho.com atruiillo@concho.com	(Q)CO	ho.com ncho.com sho.com													
Delivered Rv: (Circle One)	One)	-		Sample Cond	lition	-	SH	ECX	HECKED BY:																
Sampler - UPS - Bus -	.1	4.80	8	Cool Intact	No	0	A	X																	



5



January 28, 2022

SAM ABBOTT TETRA TECH 901 WEST WALL STREET , STE 100 MIDLAND, TX 79701

RE: NERVOUS HORZ COM 3H

Enclosed are the results of analyses for samples received by the laboratory on 01/24/22 15:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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/ga/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. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	01/24/2022	Sampling Date:	01/24/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM 3H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD - 02659.101	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 1 (0-1') (H220268-01)

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	01/27/2022	ND	2.13	107	2.00	4.69	
Toluene*	<0.050	0.050	01/27/2022	ND	2.19	110	2.00	0.630	
Ethylbenzene*	<0.050	0.050	01/27/2022	ND	2.06	103	2.00	1.56	
Total Xylenes*	<0.150	0.150	01/27/2022	ND	6.44	107	6.00	2.61	
Total BTEX	<0.300	0.300	01/27/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12600	16.0	01/27/2022	ND	416	104	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GRO C6-C10*	<10.0	10.0	01/27/2022	ND	196	98.0	200	8.76	
DRO >C10-C28*	<10.0	10.0	01/27/2022	ND	202	101	200	3.34	
EXT DRO >C28-C36	<10.0	10.0	01/27/2022	ND					
Surrogate: 1-Chlorooctane	87.1	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	84.5	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	01/24/2022	Sampling Date:	01/24/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM 3H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD - 02659.101	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 1 (2-3') (H220268-02)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/28/2022	ND	2.13	107	2.00	4.69	
Toluene*	<0.050	0.050	01/28/2022	ND	2.19	110	2.00	0.630	
Ethylbenzene*	<0.050	0.050	01/28/2022	ND	2.06	103	2.00	1.56	
Total Xylenes*	<0.150	0.150	01/28/2022	ND	6.44	107	6.00	2.61	
Total BTEX	<0.300	0.300	01/28/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	01/27/2022	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/27/2022	ND	196	98.0	200	8.76	
DRO >C10-C28*	<10.0	10.0	01/27/2022	ND	202	101	200	3.34	
EXT DRO >C28-C36	<10.0	10.0	01/27/2022	ND					
Surrogate: 1-Chlorooctane	92.3	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	90.5	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	01/24/2022	Sampling Date:	01/24/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM 3H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD - 02659.101	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 1 (3-4') (H220268-03)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/28/2022	ND	2.13	107	2.00	4.69	
Toluene*	<0.050	0.050	01/28/2022	ND	2.19	110	2.00	0.630	
Ethylbenzene*	<0.050	0.050	01/28/2022	ND	2.06	103	2.00	1.56	
Total Xylenes*	<0.150	0.150	01/28/2022	ND	6.44	107	6.00	2.61	
Total BTEX	<0.300	0.300	01/28/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	01/27/2022	ND	416	104	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/27/2022	ND	196	98.0	200	8.76	
DRO >C10-C28*	<10.0	10.0	01/27/2022	ND	202	101	200	3.34	
EXT DRO >C28-C36	<10.0	10.0	01/27/2022	ND					
Surrogate: 1-Chlorooctane	100	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	99.0	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	01/24/2022	Sampling Date:	01/24/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM 3H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD - 02659.101	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 1 (4-5') (H220268-04)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/28/2022	ND	2.13	107	2.00	4.69	
Toluene*	<0.050	0.050	01/28/2022	ND	2.19	110	2.00	0.630	
Ethylbenzene*	<0.050	0.050	01/28/2022	ND	2.06	103	2.00	1.56	
Total Xylenes*	<0.150	0.150	01/28/2022	ND	6.44	107	6.00	2.61	
Total BTEX	<0.300	0.300	01/28/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	01/27/2022	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/27/2022	ND	196	98.0	200	8.76	
DRO >C10-C28*	<10.0	10.0	01/27/2022	ND	202	101	200	3.34	
EXT DRO >C28-C36	<10.0	10.0	01/27/2022	ND					
Surrogate: 1-Chlorooctane	99.8	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	97.4	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	01/24/2022	Sampling Date:	01/24/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM 3H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD - 02659.101	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 1 (6-7') (H220268-05)

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/28/2022	ND	2.13	107	2.00	4.69	
Toluene*	<0.050	0.050	01/28/2022	ND	2.19	110	2.00	0.630	
Ethylbenzene*	<0.050	0.050	01/28/2022	ND	2.06	103	2.00	1.56	
Total Xylenes*	<0.150	0.150	01/28/2022	ND	6.44	107	6.00	2.61	
Total BTEX	<0.300	0.300	01/28/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	01/27/2022	ND	416	104	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/27/2022	ND	196	98.0	200	8.76	
DRO >C10-C28*	<10.0	10.0	01/27/2022	ND	202	101	200	3.34	
EXT DRO >C28-C36	<10.0	10.0	01/27/2022	ND					
Surrogate: 1-Chlorooctane	98.4	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	100	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	01/24/2022	Sampling Date:	01/24/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM 3H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD - 02659.101	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 1 (8-9') (H220268-06)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/28/2022	ND	2.13	107	2.00	4.69	
Toluene*	<0.050	0.050	01/28/2022	ND	2.19	110	2.00	0.630	
Ethylbenzene*	<0.050	0.050	01/28/2022	ND	2.06	103	2.00	1.56	
Total Xylenes*	<0.150	0.150	01/28/2022	ND	6.44	107	6.00	2.61	
Total BTEX	<0.300	0.300	01/28/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	01/27/2022	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/27/2022	ND	196	98.0	200	8.76	
DRO >C10-C28*	<10.0	10.0	01/27/2022	ND	202	101	200	3.34	
EXT DRO >C28-C36	<10.0	10.0	01/27/2022	ND					
Surrogate: 1-Chlorooctane	92.1	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	93.6	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	01/24/2022	Sampling Date:	01/24/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM 3H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD - 02659.101	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 1 (9-10') (H220268-07)

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/28/2022	ND	2.13	107	2.00	4.69	
Toluene*	<0.050	0.050	01/28/2022	ND	2.19	110	2.00	0.630	
Ethylbenzene*	<0.050	0.050	01/28/2022	ND	2.06	103	2.00	1.56	
Total Xylenes*	<0.150	0.150	01/28/2022	ND	6.44	107	6.00	2.61	
Total BTEX	<0.300	0.300	01/28/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.8	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	01/27/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/27/2022	ND	196	98.0	200	8.76	
DRO >C10-C28*	<10.0	10.0	01/27/2022	ND	202	101	200	3.34	
EXT DRO >C28-C36	<10.0	10.0	01/27/2022	ND					
Surrogate: 1-Chlorooctane	86.7	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	85.0	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

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

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

X	
	0
abo	PF
ora	20
ato	3
7	2
PS	F

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

company name: Tetra Te	ch, Inc.	BILL TO		ANALYSIS REQUEST
Project Manager: Sam Au	bbott	P.O. #:	,)	
Address: 901 W. Wal	57.	Company: Tetra Tea	λ	
City: Millard	State: 7% Zip: 79701	1	0m n	
Phone #: (5/2) 739-78	874 Fax #:		*	
Project #: 2/2/-MD-0265	12-02659 MProject Owner: Longe Phillips	City: M	45 DR	
Project Name: Nervous		State: TX Zip: 7970		
Project Location: Eddy Cos	ounty MM	Z.	7874 2	
via S	Jac 1	Fax #:	13	
FOR LAB USE ONLY	MATRIX		2	
×	RS		00	
Lab I.D. Sample I.D.	RAB OR (ONTAINE OUNDWA STEWAT	JDGE HER : D/BASE: / COOL HER :	STEX Llor PH S	
R9COCKH	# C	SLU OTH ACI	1	
BH-1(0-1	x 19	× 1.24.22	X X X 0571	
2 BH-1+000	(2-3')		12.35	
3 BH-103-4			1240 0421	
4 34-1 (4-5			1245	
S BH-1(6-7	2		250	
6 311-118-5	2'}		225	
7 BH-1 (9-11	() * *	*	1300 V + V	
EASE MOTE: Linklike and Domonous Conditions.				
nalyses. All claims including those for negligence and any on nvice. In no event shall Cardinal be liable for incidental or on filiates or successors arising out of or related to the perform	analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.	ing and received by Cardinal within 30 days after or fuons, loss of use, or loss of profits incurred by client claim is based upon any of the above stated reason	ompletion of the applicable nt, its subsidiaries, ns of otherwise	
Relinquished By:	Date: Received By:		Verbal Result: Ves No	Add'I Phone #:
in the	Time: 100	a filled a for a	All results are emailed. Please provide Email address:	nde Email address:
Relinquished By:	Date: Received By:	Kanak M	REMARKS: SAM A.	
	Time:			
Delivered By: (Circle One)		CHECKED BY:	Turnaround Time: Standard	ly) S
Sampler - UPS - Bus - Other:		Yes Junitary	Thermometer ID #113 Correction Factor -0.5°C	
	† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com	changes. Please email change	es to celey.keene@cardinallabs	
PORM-000 R 3.2 10/07/21		No Y Concerning Concer	es to celey.keene@cardinallabs	Snm.com

Received by OCD: 2/28/2022 11:50:00 AM



February 15, 2022

SAM ABBOTT TETRA TECH 901 WEST WALL STREET , STE 100 MIDLAND, TX 79701

RE: NERVOUS HORZ COM 3H

Enclosed are the results of analyses for samples received by the laboratory on 02/11/22 13:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	02/11/2022	Sampling Date:	02/09/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM 3H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD - 02659	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 1 (0-1') (H220550-01)

BTEX 8021B	mg/	/kg	Analyze	d By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/13/2022	ND	1.84	91.8	2.00	7.05	
Toluene*	<0.050	0.050	02/13/2022	ND	1.86	93.0	2.00	6.57	
Ethylbenzene*	<0.050	0.050	02/13/2022	ND	1.81	90.6	2.00	6.06	
Total Xylenes*	<0.150	0.150	02/13/2022	ND	5.67	94.5	6.00	5.02	
Total BTEX	<0.300	0.300	02/13/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	02/14/2022	ND	400	100	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	231	116	200	2.45	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	206	103	200	3.66	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	103	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	114 9	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	02/11/2022	Sampling Date:	02/09/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM 3H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD - 02659	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 1 (1'-2') (H220550-02)

BTEX 8021B	mg/	/kg	Analyze	d By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/14/2022	ND	1.83	91.7	2.00	6.71	
Toluene*	<0.050	0.050	02/14/2022	ND	1.85	92.6	2.00	6.15	
Ethylbenzene*	<0.050	0.050	02/14/2022	ND	1.80	90.2	2.00	5.26	
Total Xylenes*	<0.150	0.150	02/14/2022	ND	5.65	94.1	6.00	4.35	
Total BTEX	<0.300	0.300	02/14/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	02/14/2022	ND	400	100	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	231	116	200	2.45	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	206	103	200	3.66	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	104 9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	115 9	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	02/11/2022	Sampling Date:	02/09/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM 3H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD - 02659	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 2 (0-1') (H220550-03)

BTEX 8021B	mg,	/kg	Analyze	d By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/14/2022	ND	1.83	91.7	2.00	6.71	
Toluene*	<0.050	0.050	02/14/2022	ND	1.85	92.6	2.00	6.15	
Ethylbenzene*	<0.050	0.050	02/14/2022	ND	1.80	90.2	2.00	5.26	
Total Xylenes*	<0.150	0.150	02/14/2022	ND	5.65	94.1	6.00	4.35	
Total BTEX	<0.300	0.300	02/14/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	02/14/2022	ND	400	100	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	231	116	200	2.45	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	206	103	200	3.66	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	106	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	116 9	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	02/11/2022	Sampling Date:	02/09/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM 3H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD - 02659	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 2 (1'-2') (H220550-04)

BTEX 8021B	mg,	/kg	Analyze	d By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/14/2022	ND	1.83	91.7	2.00	6.71	
Toluene*	<0.050	0.050	02/14/2022	ND	1.85	92.6	2.00	6.15	
Ethylbenzene*	<0.050	0.050	02/14/2022	ND	1.80	90.2	2.00	5.26	
Total Xylenes*	<0.150	0.150	02/14/2022	ND	5.65	94.1	6.00	4.35	
Total BTEX	<0.300	0.300	02/14/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/14/2022	ND	400	100	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	231	116	200	2.45	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	206	103	200	3.66	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	105	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	117 9	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	02/11/2022	Sampling Date:	02/09/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM 3H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD - 02659	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 3 (0-1') (H220550-05)

BTEX 8021B	mg,	/kg	Analyze	d By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/14/2022	ND	1.83	91.7	2.00	6.71	
Toluene*	<0.050	0.050	02/14/2022	ND	1.85	92.6	2.00	6.15	
Ethylbenzene*	<0.050	0.050	02/14/2022	ND	1.80	90.2	2.00	5.26	
Total Xylenes*	<0.150	0.150	02/14/2022	ND	5.65	94.1	6.00	4.35	
Total BTEX	<0.300	0.300	02/14/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	02/14/2022	ND	400	100	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	231	116	200	2.45	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	206	103	200	3.66	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	110 9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	127	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	02/11/2022	Sampling Date:	02/09/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM 3H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD - 02659	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 3 (1'-2') (H220550-06)

BTEX 8021B	mg/	/kg	Analyzed By: MS/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/14/2022	ND	1.83	91.7	2.00	6.71	
Toluene*	<0.050	0.050	02/14/2022	ND	1.85	92.6	2.00	6.15	
Ethylbenzene*	<0.050	0.050	02/14/2022	ND	1.80	90.2	2.00	5.26	
Total Xylenes*	<0.150	0.150	02/14/2022	ND	5.65	94.1	6.00	4.35	
Total BTEX	<0.300	0.300	02/14/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0 16.0		02/14/2022 ND		400	100	400	0.00	
TPH 8015M	mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	231	116	200	2.45	
DRO >C10-C28*	<10.0	10.0	02/13/2022	ND	206	103	200	3.66	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane 110 % 66.9-13		6							
Surrogate: 1-Chlorooctadecane	128	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	02/11/2022	Sampling Date:	02/09/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM 3H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD - 02659	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 4 (0-1') (H220550-07)

BTEX 8021B	mg/kg		Analyzed By: MS/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/14/2022	ND	1.83	91.7	2.00	6.71	
Toluene*	<0.050	0.050	02/14/2022	ND	1.85	92.6	2.00	6.15	
Ethylbenzene*	<0.050	0.050	02/14/2022	ND	1.80	90.2	2.00	5.26	
Total Xylenes*	<0.150	0.150	02/14/2022	ND	5.65	94.1	6.00	4.35	
Total BTEX	<0.300	0.300	02/14/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0 16.0		02/14/2022 ND		400	100	400	0.00	
TPH 8015M	mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/13/2022	ND	231	116	200	2.45	
DRO >C10-C28*	<10.0	10.0	02/13/2022	02/13/2022 ND		103 200		3.66	
EXT DRO >C28-C36	<10.0	10.0	02/13/2022	ND					
Surrogate: 1-Chlorooctane	urrogate: 1-Chlorooctane 106 % 66.9-130		6						
Surrogate: 1-Chlorooctadecane	122	59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	02/11/2022	Sampling Date:	02/09/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	NERVOUS HORZ COM 3H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD - 02659	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 4 (1'-2') (H220550-08)

BTEX 8021B	mg/	′kg	Analyzed By: MS/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/14/2022	ND	1.83	91.7	2.00	6.71	
Toluene*	<0.050	0.050	02/14/2022	ND	1.85	92.6	2.00	6.15	
Ethylbenzene*	<0.050	0.050	02/14/2022	ND	1.80	90.2	2.00	5.26	
Total Xylenes*	<0.150	0.150	02/14/2022	ND	5.65	94.1	6.00	4.35	
Total BTEX	<0.300	0.300	02/14/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	02/14/2022	ND	400	100	400	0.00	
TPH 8015M	mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/14/2022	ND	211	106	200	2.00	
DRO >C10-C28*	<10.0	10.0	02/14/2022	2/14/2022 ND		117 200		9.93	
EXT DRO >C28-C36	<10.0	10.0	02/14/2022	ND					
Surrogate: 1-Chlorooctane	120 9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	129 9	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

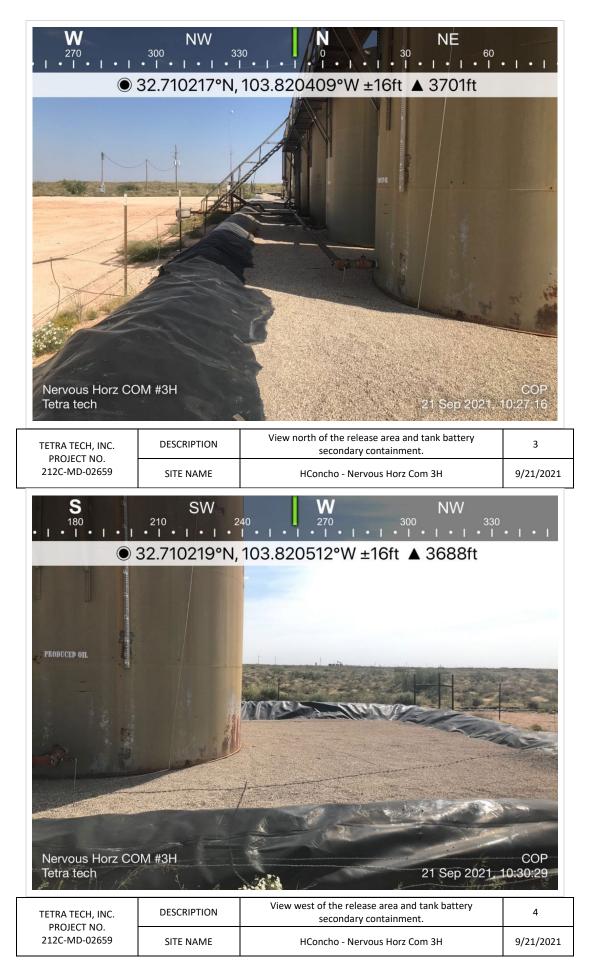
Received by	0CD: 2/2	8/2022 11	50:00 A	IM											Pa	ige 54 of 60
- Dus - Other: Correct	One) Observed Temp. °C 4,7 Samp	Date	Damages. Cardinal's liability and client's exclu- those for negligence and any other cause whi- dinal be liable for incidential or consequential di- out of or related to the performance of service out of or related to the performance of service	8 Att-9 (1-21) V V	5 AH - 3 (0 - 2') 6 AH - 3 (0 - 2') 7 AH - 4 (n - 1')	14-2)	AM-1	VERS VATER TER	FOR LAB USE ONLY MATCHING AND	Project Location: Eddy Lountry MM	-02659	Phone #: Eav #.	Address: Joh, Abboth Ottoptech. Can	Project Manager: Sova Abbott	101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476	Laboratories
s. Please email chan	CHECKED BY: Turnaround Time: Standard IN	in the based upon any of the above stated treasms or otherwise.	sive remedy for any claim arising whether based in contract or fort, shall be limited to the amount paid by the client for the atoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable				SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER: DATE TPH BTES (LL W/	PRESERV. SAMPLING	Fax #:	Phone #	Address: by emot	m Abbr	many: The Took	BILL TO ANALYSIS REQUEST		CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

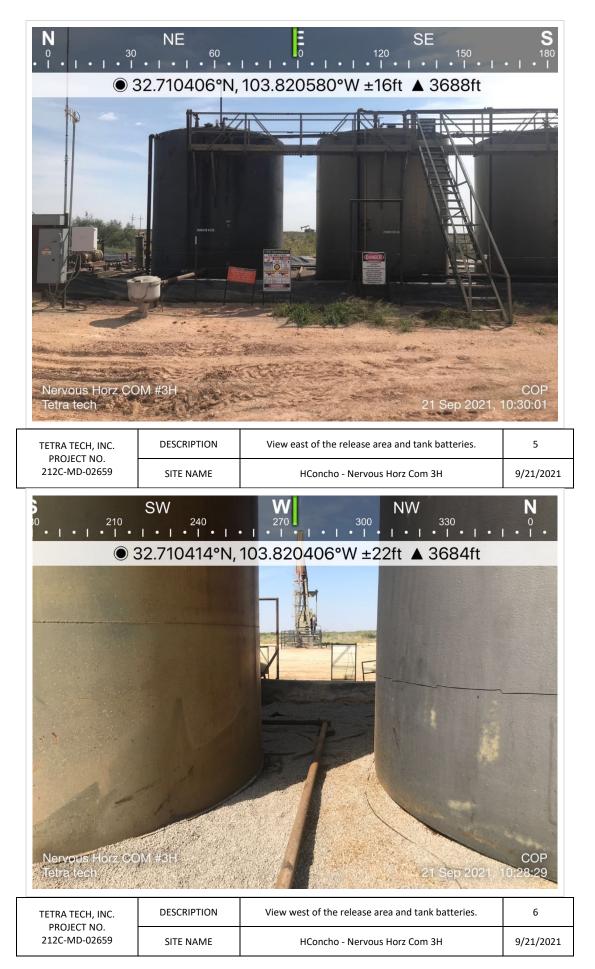
Page 11 of 11

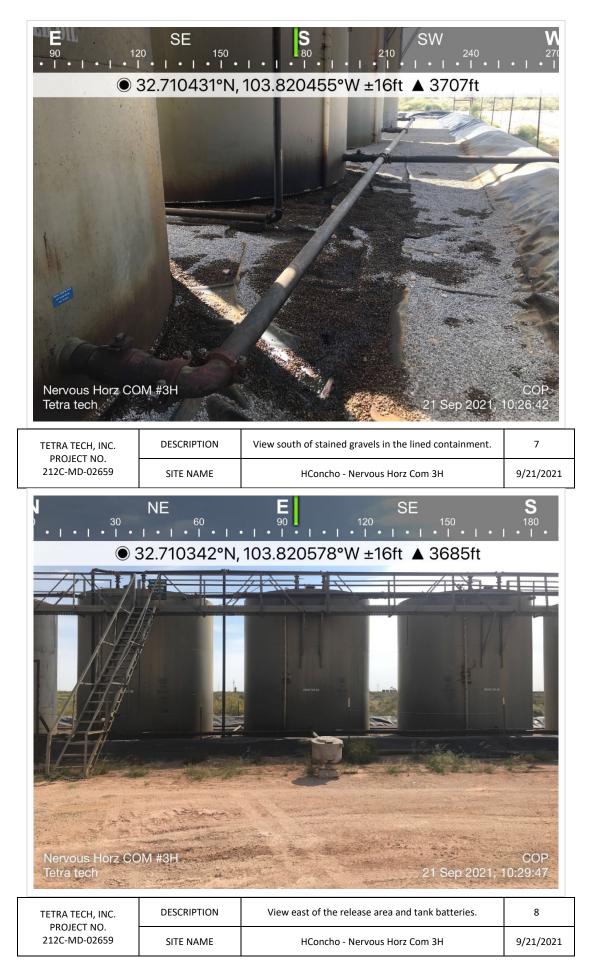
Released to Imaging: 3/7/2022 11:42:26 AM

APPENDIX D Photographic Documentation









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

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

District III

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

District IV

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

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

CONDITIONS

Operator:	OGRID:
COG OPERATING LLC	229137
600 W Illinois Ave	Action Number:
Midland, TX 79701	84753
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS Created By Condition Condition Date bbillings DTW determination not accurate enough. However, it appears you may be able to excavate on pad to 50 foot or less Table 1 needs in the range of 1-2 feet. 3/7/2022 Requested confirm samples at better than 700 sq/ft is denied but you can go to a max of 500 sq/ft. If acceptable, carry on.

CONDITIONS

Action 84753