



June 3, 2022

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

**Re: Release Characterization and Remediation Work Plan
ConocoPhillips
Zia Hills 20 Trunkline Release
Unit Letter J, Section 20, Township 26 South, Range 32 East
Lea County, New Mexico
Incident ID NAPP2208248869**

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips Company (COP) to assess a release that occurred from the Zia Hills 20 Trunkline. The release footprint is located in Public Land Survey System (PLSS) Unit Letter J, Section 20, Township 26 South, Range 32 East, Lea County, New Mexico (Site). The release site coordinates are 32.026542°, -103.696854°. The Site location is shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico C-141 Initial Report (Appendix A), the release was discovered on March 9, 2022. The release occurred as the result of a trunkline leak. Approximately 5.3 barrels (bbls) of crude oil, of which approximately 1 bbl of fluid was recovered. The spill calculator, included with the C-141, indicates the release affected an area of approximately 425 square feet. The New Mexico Oil Conservation Division (NMOCD) received and approved the C-141 report form for the release on March 23, 2022. The NMOCD Incident ID for the release is NAPP2208248869. Figure 3 depicts the approximate release extent and release point.

SITE CHARACTERIZATION

A site characterization was performed and no watercourses, sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, playa lakes, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.0029 New Mexico Administrative Code (NMAC). The Site is within a New Mexico oil and gas production area and 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 0.5 miles (800 meters) of the Site. There are four wells within 0.9 miles (1,500 meters) with water level data with an average depth to water of 240 feet below ground surface (bgs). The nearest water well is 0.8 miles (1,294 meters) from the Site with a depth to water of 250 feet bgs. Thus, all reviewed water level data indicates depth to water in the vicinity of the Site to be greater than 100 feet bgs. The site characterization data are presented in Appendix B.

REGULATORY FRAMEWORK

Based upon the release footprint location 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

Tetra Tech

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

Tel 432.682.4559

Fax 432.682.3946

www.tetrattech.com

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 and in accordance with Table I of 19.15.29.12 NMAC, the remediation RRALs for the Site are as follows:

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

Additionally, in accordance with the NMOCD guidance *Procedures for Implementation of the Spill Rule (19.15.29 NMAC)* (September 6, 2019), the following reclamation requirements for surface soils (0-4 feet bgs) outside of active oil and gas operations are as follows:

Constituent	Reclamation Requirements
Chloride	600 mg/kg
TPH	100 mg/kg
BTEX	50 mg/kg

INITIAL RESPONSE ACTIVITIES

In accordance with 19.15.29.8. B. (4) NMAC that states “the responsible party may commence remediation immediately after discovery of a release”, COP elected to begin initial remedial response of the impacted area. A portion of the release footprint around the approximate release location along the Zia Hills 20 Trunkline was excavated to approximately 3 feet. Figure 4 depicts the release extent and the excavated area. Photographic documentation of site conditions during the remedial response activities immediately following the release event is included in Appendix C.

INITIAL SITE ASSESSMENT AND SAMPLING RESULTS

Tetra Tech personnel were onsite to delineate and sample the release area on March 29, 2022. Soil samples were collected from eleven (11) sample locations (H-1 through H-5 and AH-1 through AH-6) within and around the release to evaluate the vertical and horizontal extent of the release. AH-1 and AH-6 were installed to within the release extent. H-1 through H-5 were installed around the perimeter of the release footprint to delineate the horizontal extent of impacted soil. The boring locations are shown on Figure 4.

A total of sixteen (16) samples were collected from the sample locations and transferred under chain of custody and analyzed within appropriate holding times by Cardinal Laboratories (Cardinal). The soil samples were analyzed for TPH via Method 8015 Modified, chloride via Method SM4500Cl-B, and BTEX via Method 8021B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix D.

Results from the March 2022 soil sampling event are summarized in Table 1. Analytical results associated with borings AH-1 through AH-6 were above Site RRALs and/or Reclamation Requirements for TPH in soils. All other analytical results from the March 2022 sampling were below Site RRALs and Reclamation Requirements.

ADDITIONAL SITE ASSESSMENT AND SAMPLING RESULTS

After review of analytical results from the sampling event, vertical delineation of the release footprint was not achieved during the March 2022 soil assessment activities. Thus, Tetra Tech personnel returned to the Site to complete vertical delineation of the release area on April 14, 2022. One additional boring was

installed at the previously drilled boring location of AH-2 to a depth of 4.5 feet bgs. This boring was installed to collect soil samples from greater depths at AH-2.

A total of three (3) soil samples were collected from the sample locations and transferred under chain of custody and analyzed within appropriate holding times by Cardinal. The soil samples were analyzed for TPH via Method 8015 Modified, chloride via Method SM4500Cl-B, and BTEX via Method 8021B.

Results from the April 2022 soil sampling event are summarized in Table 1. Analytical results associated with boring location AH-2 exceeded Site RRALs and/or Reclamation requirements for BTEX and/or TPH in soils to a depth of 4 feet bgs. However, analytical results associated with boring AH-2 were below Site RRALs and Reclamation Requirements within the 4 to 4.5-foot sample depth interval. Following the March and April 2022 assessment activities, the release is horizontally and vertically delineated. A copy of the laboratory analytical reports and chain-of-custody documentation are included in Appendix D.

REMEDIATION WORK PLAN

Based on the analytical results from the assessment, impacted material within the release extent is proposed to be removed to depths indicated in Figure 5. Impacted soils will be excavated to a maximum depth of 4 feet below the surrounding surface or until a representative sample from the walls and bottom of the excavation is below the Site RRALs and/or reclamation requirements for soils above 4 feet. Heavy equipment (backhoe and trackhoe) will be utilized to excavate areas outside the immediate vicinity of pressurized lines and will come no more than 4 feet from any pressurized lines. Impacted soils within the vicinity of the surface and subsurface lines will be dug by hand to the maximum extent practicable.

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. In accordance with Subsection D of 19.15.29.12 NMAC, the responsible party will notify the appropriate division district office prior to conducting confirmation sampling. The estimated volume of material to be remediated is approximately 400 cubic yards.

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 7. Seven (7) confirmation floor samples and four (4) confirmation sidewall samples are proposed for verification of remedial activities. The proposed excavation encompasses a surface area of approximately 2,600 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 analytical laboratory for analysis of TPH (Method 8015 modified), BTEX (Method 8260B), and chloride (USEPA Method 300.0 or equivalent). Once results are received, the excavation will then be backfilled with clean material to surface grade.

REVEGETATION PLAN

The backfilled areas will be seeded in Spring 2022, or the first favorable growing season following backfilling, to aid in revegetation. Based on the soils at the site, the New Mexico State Land Office (NMSLO) Sandy Loam (SL) Sites Seed Mixture will be used for seeding and will be planted in the amount specified in the pounds pure live seed (PLS) per acre. The seed mixture will be spread by a drill equipped with a depth regulator or a hand-held broadcaster and raked. If a hand-held broadcaster is used for dispersal, the pounds pure live seed per acre will be doubled.

Site inspections will be performed to assess the revegetation progress and evaluate the site for the presence of primary or secondary noxious weeds. If noxious weeds are identified, the NMSLO will be contacted to determine an effective method for eradication. If the site does not show revegetation after one

Release Characterization and Remediation Work Plan
June 3, 2022

ConocoPhillips

growing season, the area will be reseeded as appropriate. The NMSLO seed mixture details and corresponding pounds pure live seed per acre are included in Appendix E.

CONCLUSION

Remediation activities at the Site are proposed to begin within 90 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.

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.



Ryan C. Dickerson
Project Manager



Christian M. Llull, P.G.
Program Manager

cc:

Ms. Sam Widmer, RMR – ConocoPhillips

List of Attachments

Figures:

- Figure 1 – Overview Map
- Figure 2 – Topographic Map
- Figure 3 – Site Characterization
- Figure 4 – Initial Response and Site Assessment
- Figure 5 – Proposed Remediation Extent
- Figure 6 – Alternative Confirmation Sampling Plan

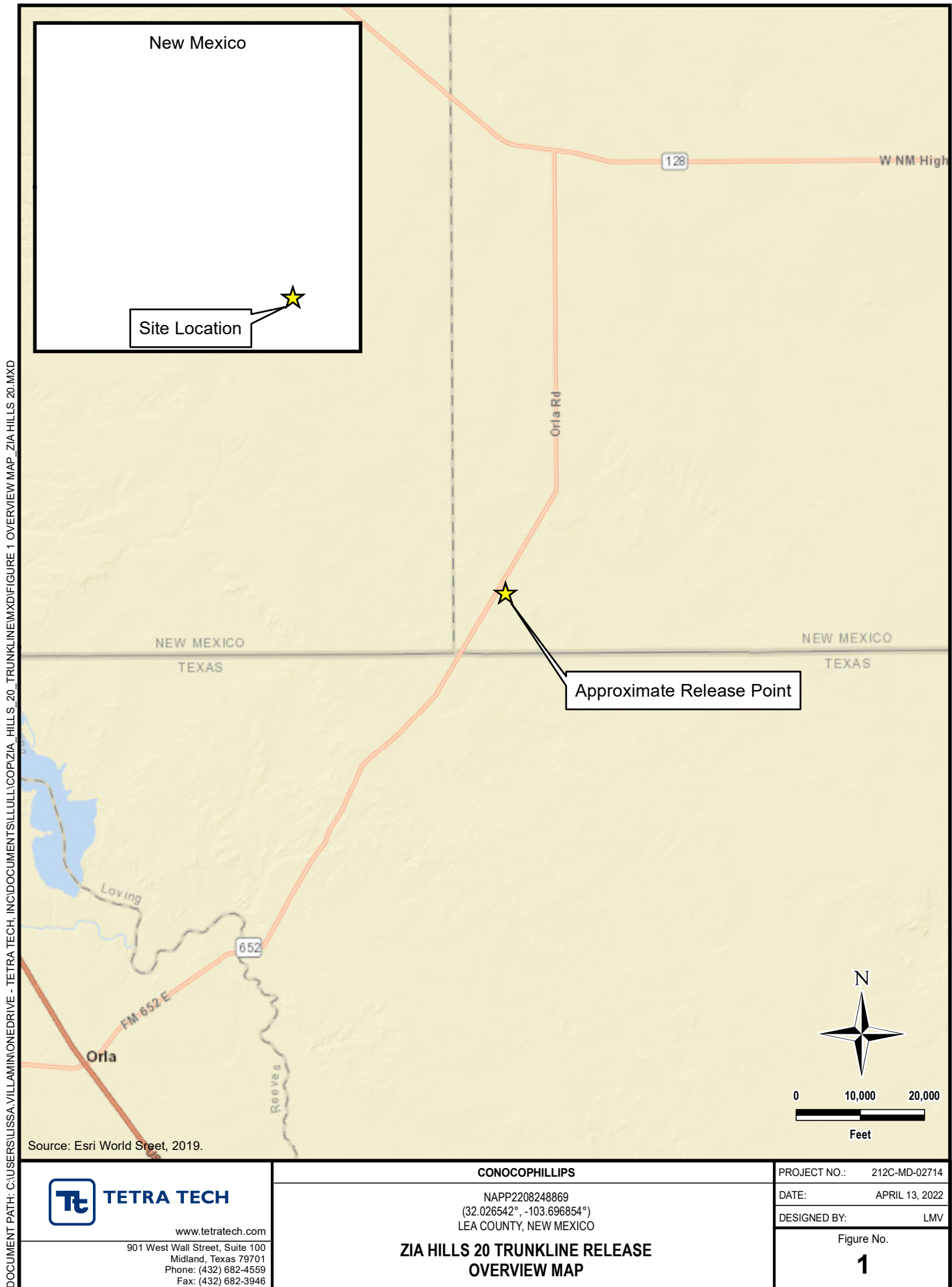
Tables:

- Table 1 – Summary of Analytical Results – Soil Assessment

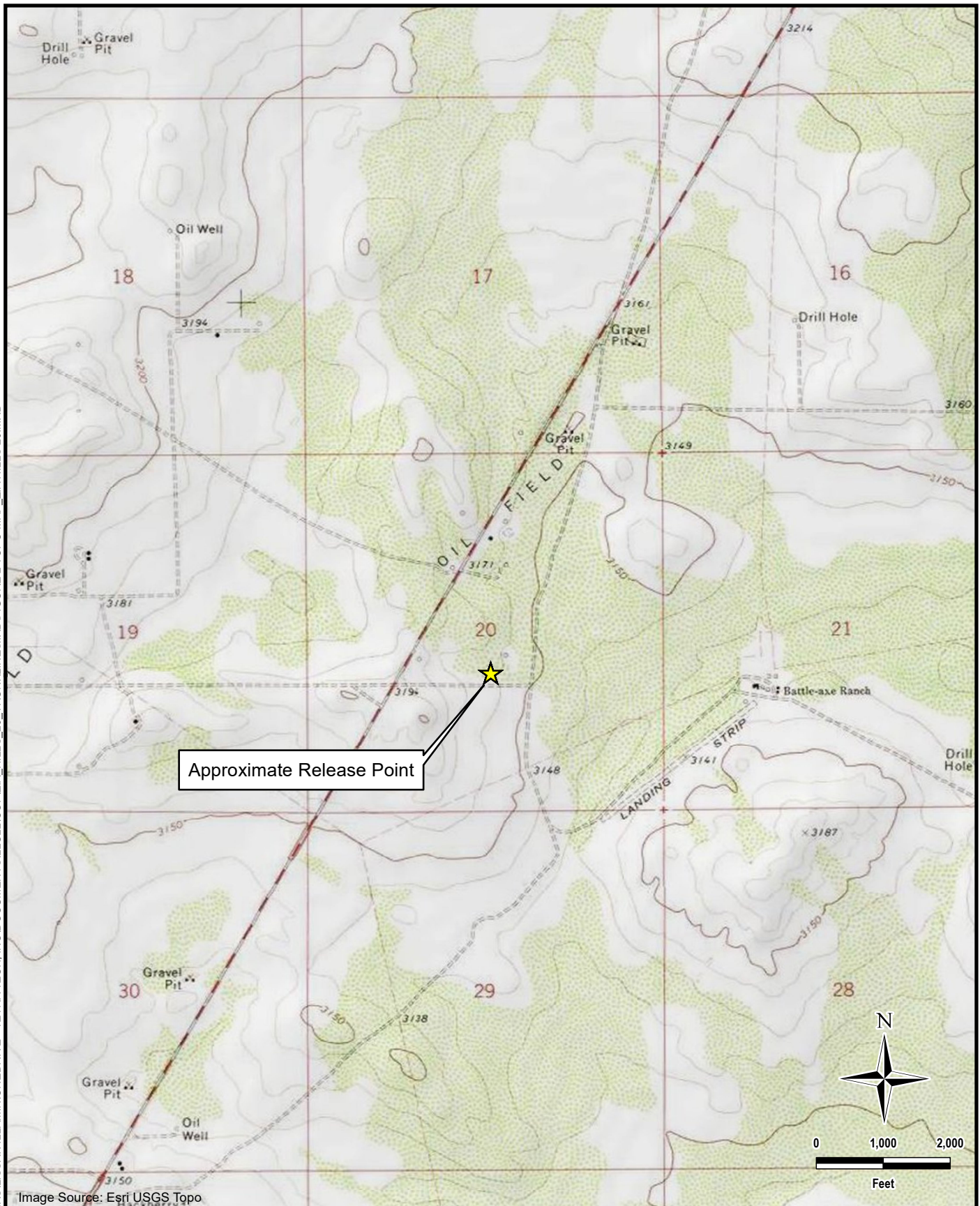
Appendices:

- Appendix A – C-141 Form
- Appendix B – Site Characterization Data
- Appendix C – Photographic Documentation
- Appendix D – Laboratory Analytical Data
- Appendix E – NMSLO Seed Mixture Details

FIGURES



DOCUMENT PATH: C:\USERS\LISSA.VILLAMONEDRIVE - TETRA TECH, INC\DOCUMENTS\TULLL\COPZIA_HILLS_20_TRUNKLINE\MXD\FIGURE 2 TOPO MAP_ZIA_HILLS_20.MXD

**TETRA TECH**

www.tetrattech.com

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

CONOCOPHILLIPS

NAPP2208248869
(32.026542°, -103.696854°)
LEA COUNTY, NEW MEXICO

ZIA HILLS 20 TRUNKLINE RELEASE TOPOGRAPHIC MAP

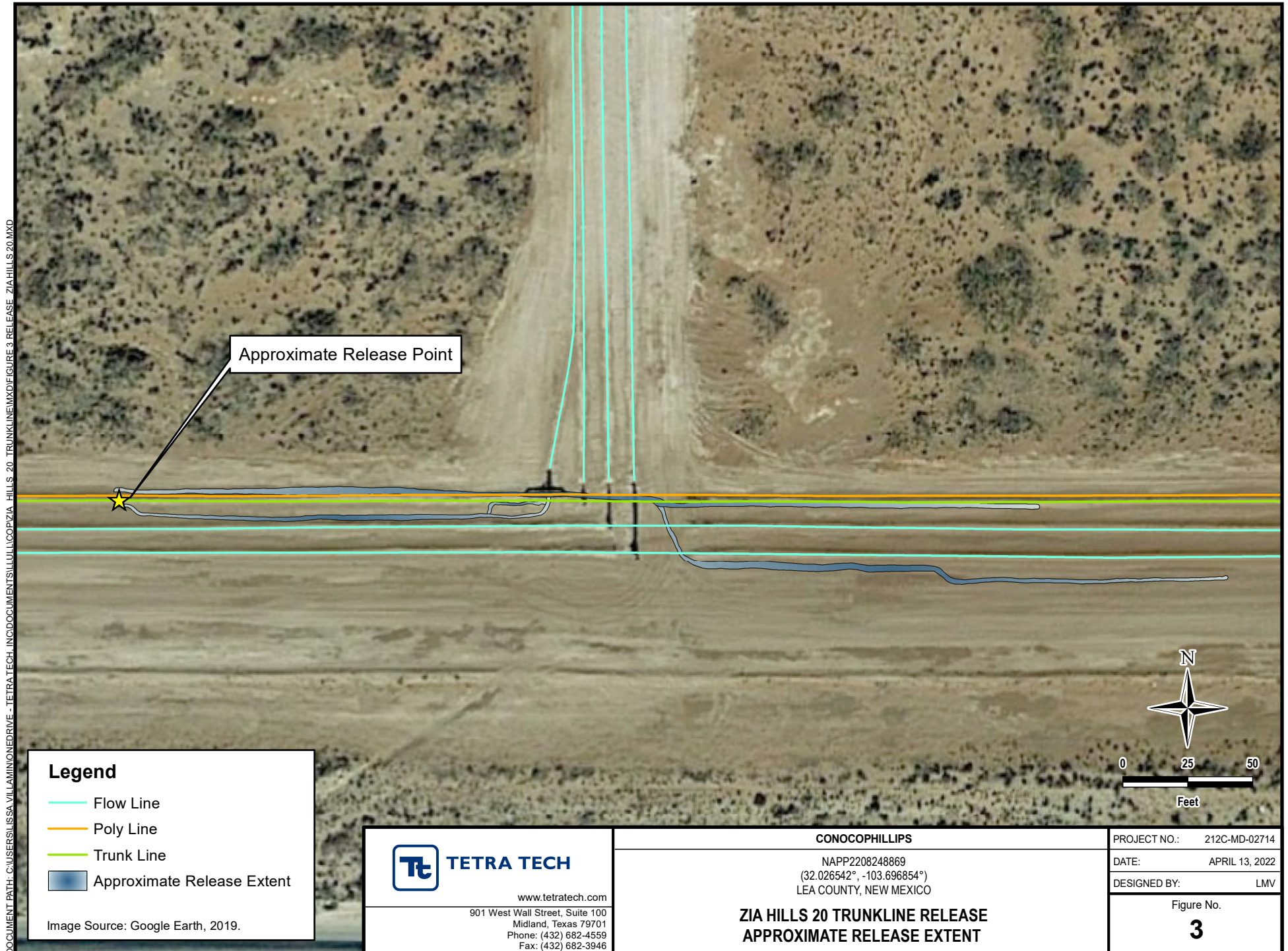
PROJECT NO.: 212C-MD-02714

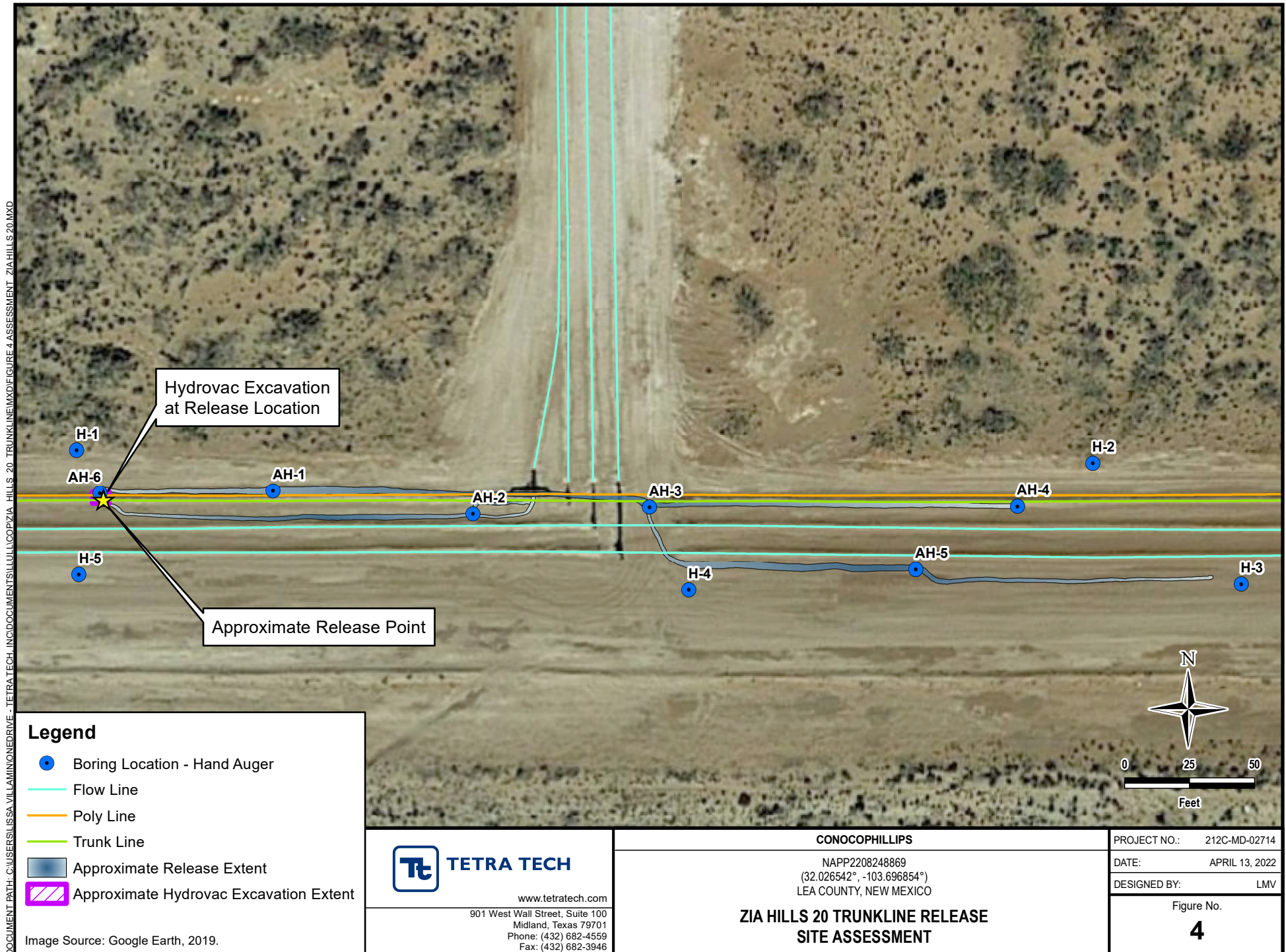
DATE: APRIL 13, 2022

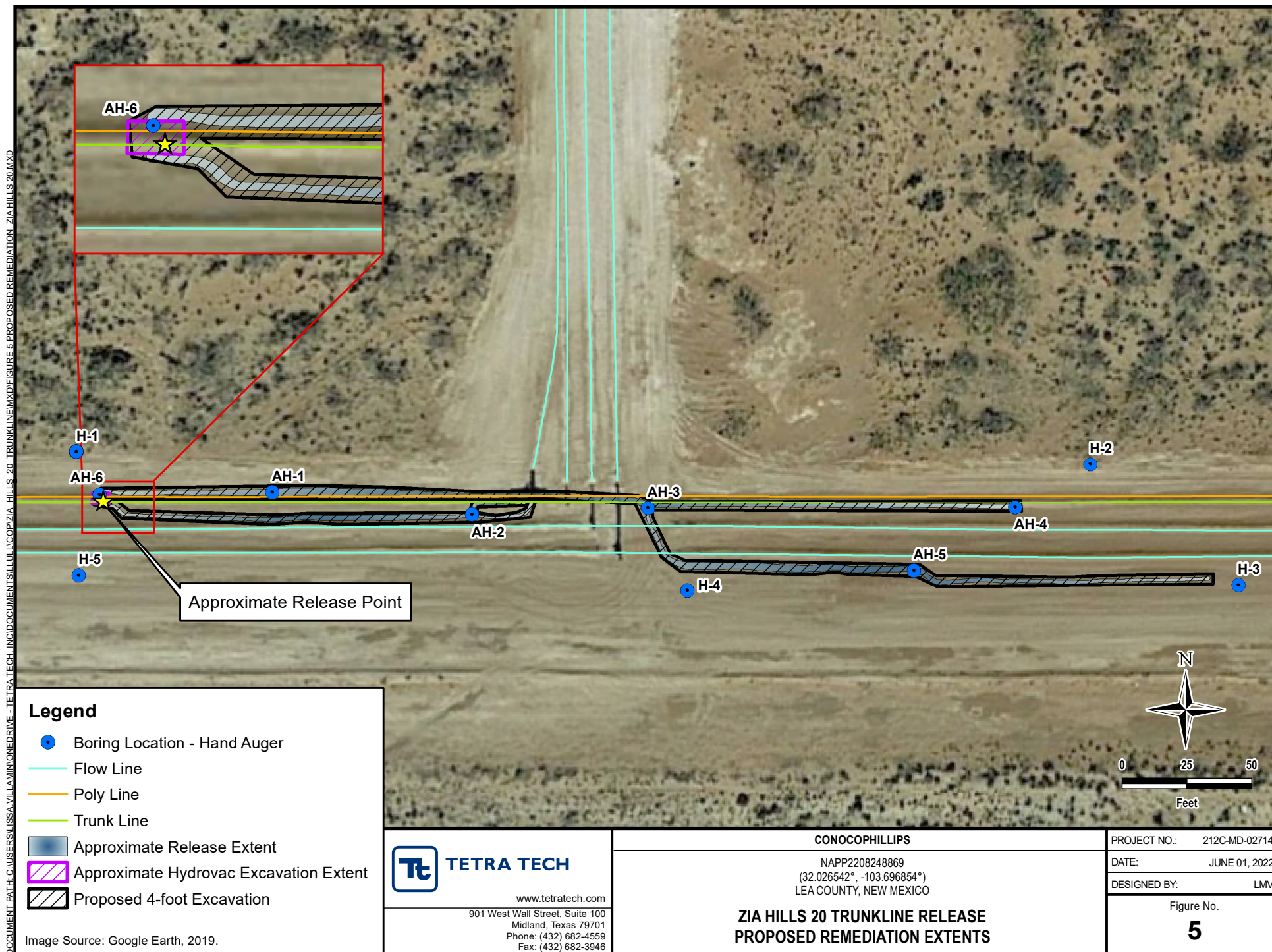
DESIGNED BY: LMV

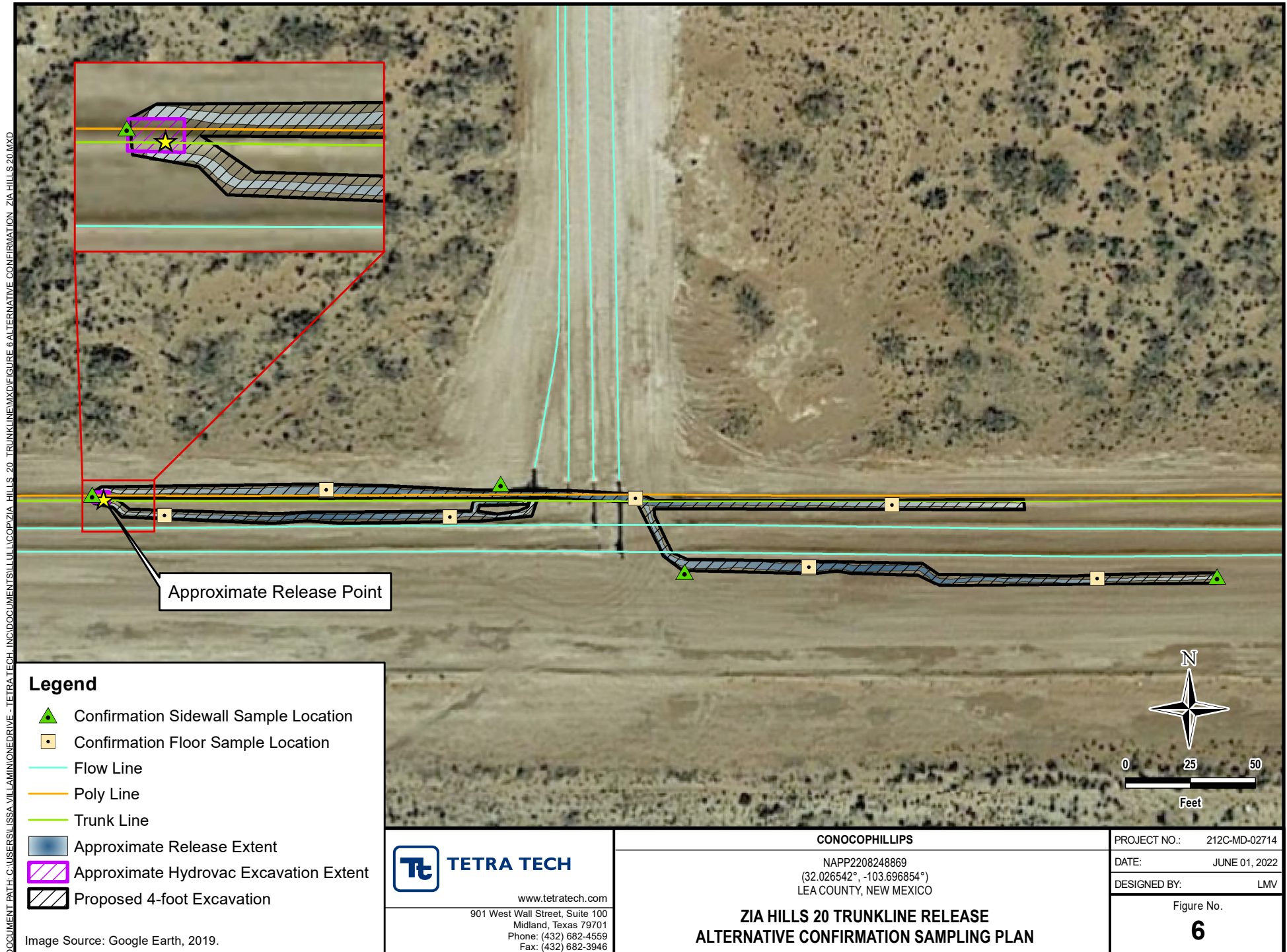
Figure No.

2









TABLE

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
SOIL ASSESSMENT- NAPP2208248869
CONOCOPHILLIPS
ZIA HILLS 20 TRUNKLINE RELEASE
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Field Screening Results		Chloride ¹		BTEX ²										TPH ³						
							Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH
			Chloride	PID			mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	C ₆ - C ₁₀		> C ₁₀ - C ₂₈		> C ₂₈ - C ₃₆		(GRO+DRO+EXT DRO)
		ft. bgs	ppm		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
H-1	3/29/2022	0-1	45.0	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-4	60.1	-	48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
H-2	3/29/2022	0-1	58.5	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-4	40.1	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
H-3	3/29/2022	0-1	89.2	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-2.5	152	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
H-4	3/29/2022	0-1	118	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-2.5	107	-	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
H-5	3/29/2022	0-1	43.9	-	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-2.5	36.4	-	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
AH-1	3/29/2022	0-1	-	-	128		3.76		62.4		17.1		233		316		7,290		11,400		1,100		19,790
AH-2	3/29/2022	0-1	-	-	80.0		3.53		69.6		22.0		308		403		6,970		13,000		1,670		21,640
	4/14/2022	2-3	-	-	32.0		< 0.050		0.909		0.769		8.84		10.5		220		843		122		1,185
		3-4	-	-	32.0		< 0.050		< 0.050		< 0.050		0.207		< 0.300		21.8		405		67.4		494
		4-4.5	-	-	32.0		0.518		7.76		1.15		12.7		22.1		42.5		48.9		< 10.0		91.4
AH-3	3/29/2022	0-1	-	-	16.0		1.70		45.7		17.2		216		281		6,740		12,700		1,600		21,040
AH-4	3/29/2022	0-1	-	-	48.0	QM-07	< 2.00		53.3		18.4		260		331		7,290		12,000		1,380		20,670
AH-5	3/29/2022	0-1	-	-	64.0		1.95		31.5		8.70		117		159		3,140		5,420		687		9,247
AH-6	3/29/2022	3-4	-	-	128		0.405		7.61		2.13		30.0		40.1		362		2,850		301		3,513

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

Bold and italicized values indicate exceedance of proposed Remediation RRALs and Reclamation Requirements.

Shaded rows indicate intervals proposed for excavation.

QUALIFIERS:

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

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	NAPP2208248869
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	ConocoPhillips	OGRID	217817
Contact Name	Charles Beauvais	Contact Telephone	(575) 988-2043
Contact email	Charles.R.Beauvais@ConocoPhillips.com	Incident # (assigned by OCD)	NAPP2208248869
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701		

Location of Release Source

Latitude 32.026565 Longitude -103.696833
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Zia Hills 20 Trunkline	Site Type	Tank Battery
Date Release Discovered	March 9, 2022	API# (if applicable)	

Unit Letter	Section	Township	Range	County
J	20	26S	32E	Lea

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

Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 5.3	Volume Recovered (bbls) 1
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release


The release was caused by a leak on the trunkline.
The release was off pad. A vacuum truck was dispatched to remove all freestanding fluids.
Evaluation will be done at the site to determine if we may commence remediation immediately or delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.

Incident ID	NAPP2208248869
District RP	
Facility ID	
Application ID	

<p>Was this a major release as defined by 19.15.29.7(A) NMAC?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>If YES, for what reason(s) does the responsible party consider this a major release?</p>
<p>If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?</p>	

Initial Response

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

<div style="display: flex; flex-direction: column; gap: 10px;"><div><input type="checkbox"/> The source of the release has been stopped.</div><div><input type="checkbox"/> The impacted area has been secured to protect human health and the environment.</div><div><input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.</div><div><input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.</div></div>	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name Brittany N. Esparza	Title: Environmental Technician
Signature: 	Date: 3/23/2022
email: Brittany.Esparza@ConocoPhillips.com	Telephone: (432) 221-0398
<u>OCD Only</u>	
Received by: Jocelyn Harimon	Date: 03/23/2022

L48 Spill Volume Estimate Form

NAPP2208248869

Received by OCD: 3/23/2022 1:43:16 PM

Facility Name & Number: Zia Hills 20 Trunk Line

Asset Area: Delaware Basin East

Release Discovery Date & Time: 3/9/2022

Release Type: Oil

Provide any known details about the event:

Spill Calculation - On Pad Surface Pool Spill

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Deepest point in each of the areas (in.)	No. of boundaries of "shore" in each area	Estimated <u>Pool</u> Area (sq. ft.)	Estimated Average Depth (ft.)	Estimated volume of each pool area (bbl.)	Penetration allowance (ft.)	Total Estimated Volume of Spill (bbl.)
Rectangle A	200.0	1.0	1.00	3	200.000	0.028	0.989	0.001	0.990
Rectangle B	75.0	2.0	2.50	2	150.000	0.104	2.781	0.005	2.796
Rectangle C	25.0	3.0	4.00	3	75.000	0.111	1.483	0.006	1.492
Rectangle D					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle E					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle F					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle G					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle H					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle I					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle J					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Total Volume Release:									5.278

Released to Imaging: 3/23/2022 3:03:10 PM

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 92539

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 92539
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	3/23/2022

Incident ID	NAPP2208248869
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?	<u>125</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

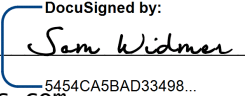
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods,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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	NAPP2208248869
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: Principal Program Manager
Signature:  Date: Jun-03-2022
email: Sam.widmer@conocophillips.com Telephone: 281-206-5298

OCD Only

Received by: _____ Date: _____

Incident ID	NAPP2208248869
District RP	
Facility ID	
Application ID	

Remediation Plan

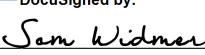
Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☒ 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: Sam widmer Title: Principal Program Manager
Signature:  Date: Jun-03-2022
email: Sam.widmer@conocophillips.com Telephone: 281-206-5298

OCD Only

Received by: _____ Date: _____

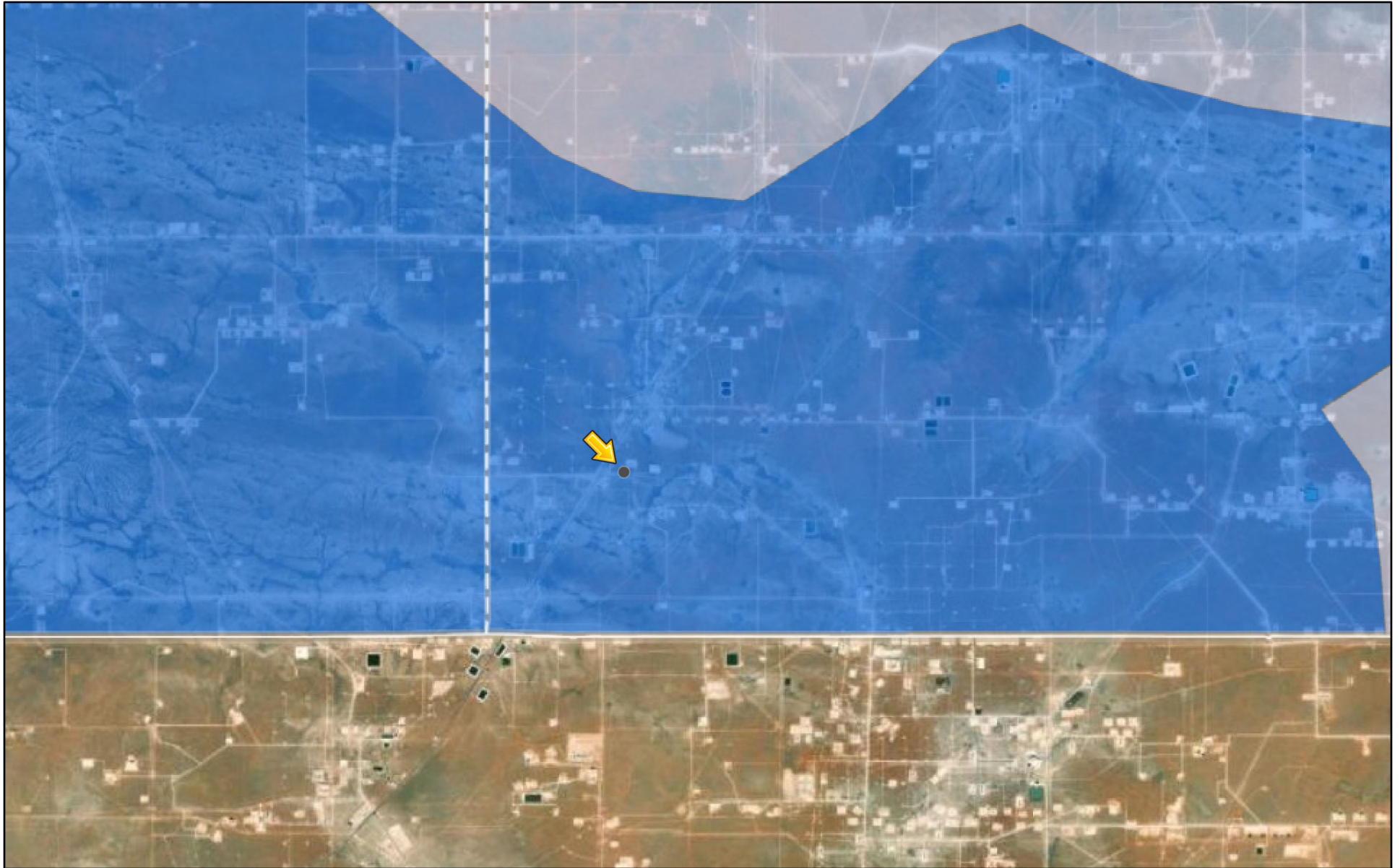
☐ Approved ☒ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature:  Date: 06/07/2022

APPENDIX B

Site Characterization Data

Zia Hills 20 Trunkline Karst Potential



6/1/2022, 10:04:11 PM



Override 1

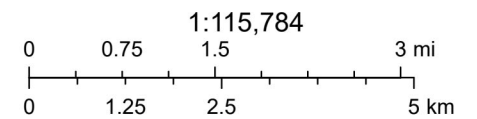


Low

Karst Occurrence Potential



Medium

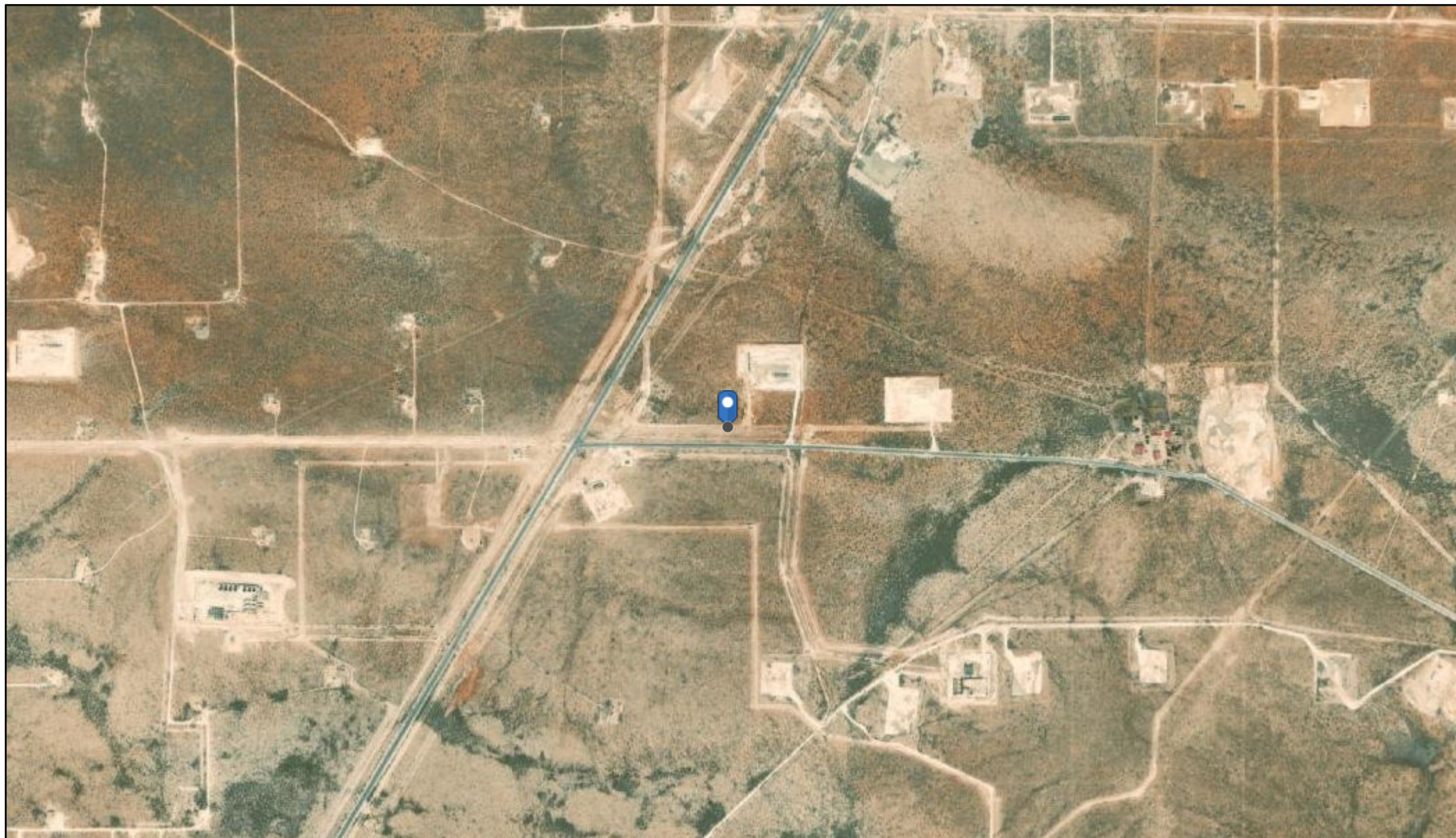


BLM, OCD, New Mexico Tech, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar




New Mexico Oil Conservation Division

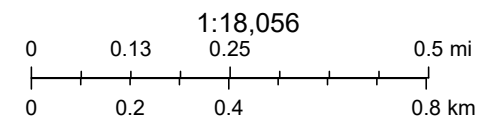
NM OCD Oil and Gas Map. <http://nm-ernrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb9f8f35ca75>: New Mexico Oil Conservation Division

Zia Hills 20 Trunkline - OCD Waterbodies Map



4/12/2022, 11:32:38 AM

-  OSE Water-bodies
-  PLJV Probable Playas
-  OSE Streams



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

Released to Imaging: 6/7/2022 2:21:49 PM



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 03537 POD1	CUB	LE		3	2	3	21	26S	32E	624250	3543985	1199	850		
C 02271 POD2	CUB	LE		3	2	3	21	26S	32E	624348	3544010*	1294	270	250	20
C 02323	C	LE		3	2	3	21	26S	32E	624348	3544010*	1294	405	405	0
C 03595 POD1	CUB	LE		4	2	3	21	26S	32E	624423	3544045	1366	280	180	100
C 02271	R CUB	LE			2	3	21	26S	32E	624449	3544111*	1390	150	125	25

Average Depth to Water: **240 feet**

Minimum Depth: **125 feet**

Maximum Depth: **405 feet**

Record Count: 5

UTM NAD83 Radius Search (in meters):

Easting (X): 623058.33

Northing (Y): 3544119.93

Radius: 1500

*UTM location was derived from PLSS - see Help

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

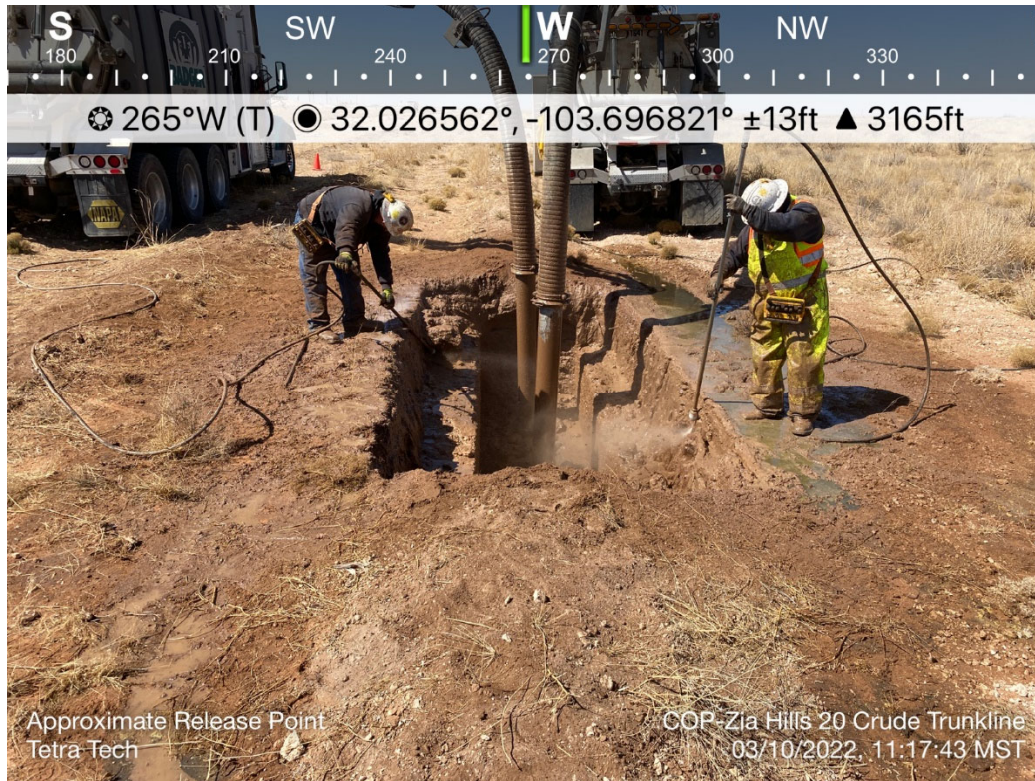
4/12/22 10:29 AM

Page 1 of 1

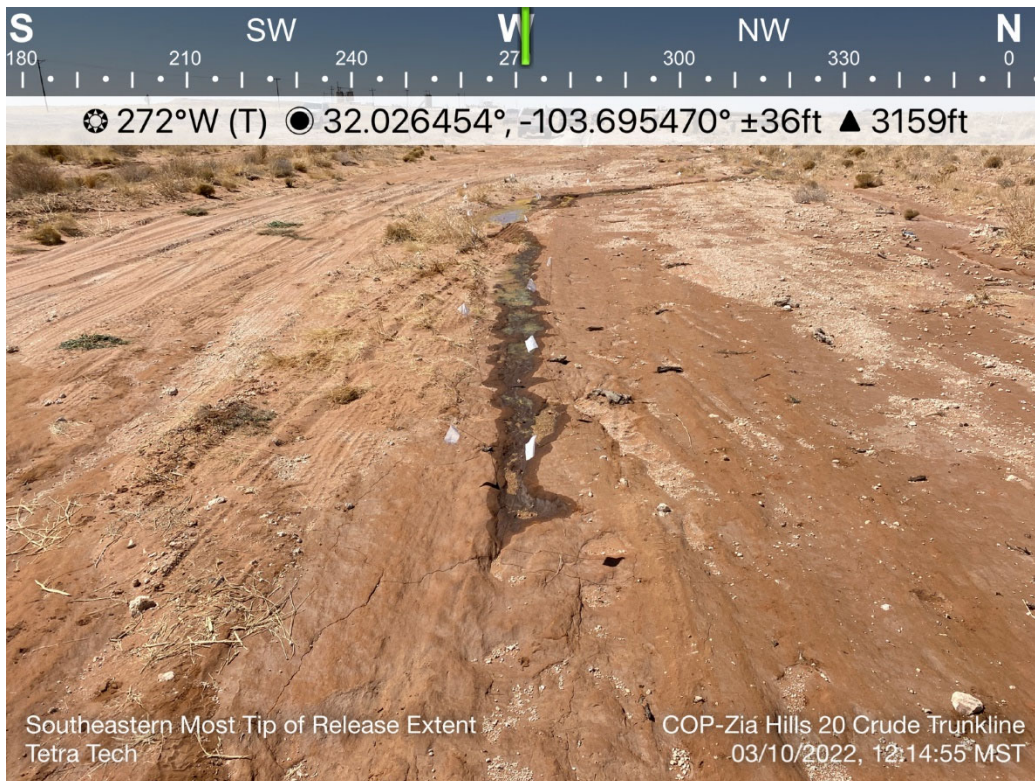
WATER COLUMN/ AVERAGE
DEPTH TO WATER

APPENDIX C

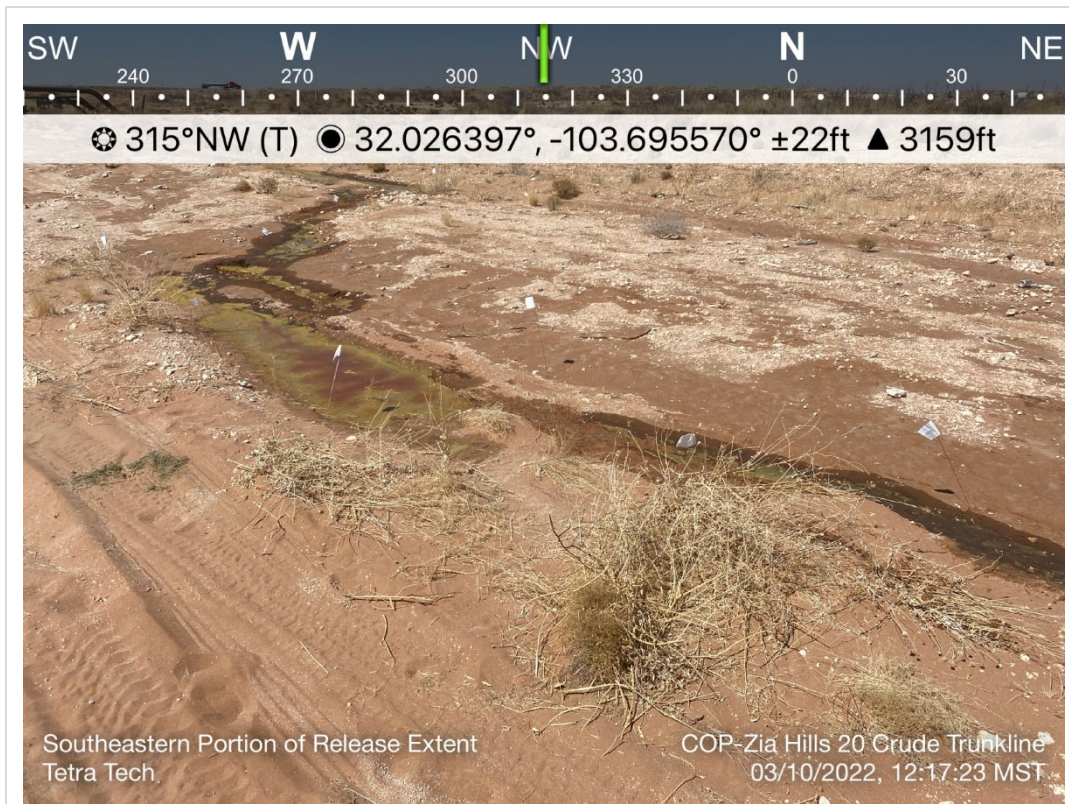
Photographic Documentation



TETRA TECH, INC. PROJECT NO. 212C-MD-02714A	DESCRIPTION	View west. Hydrovac excavation at the release point.	1
	SITE NAME	COP – Zia Hills 20 Trunkline Release	3/10/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02714A	DESCRIPTION	View west. Southeastern extent of the release footprint.	2
	SITE NAME	COP – Zia Hills 20 Trunkline Release	3/10/2022



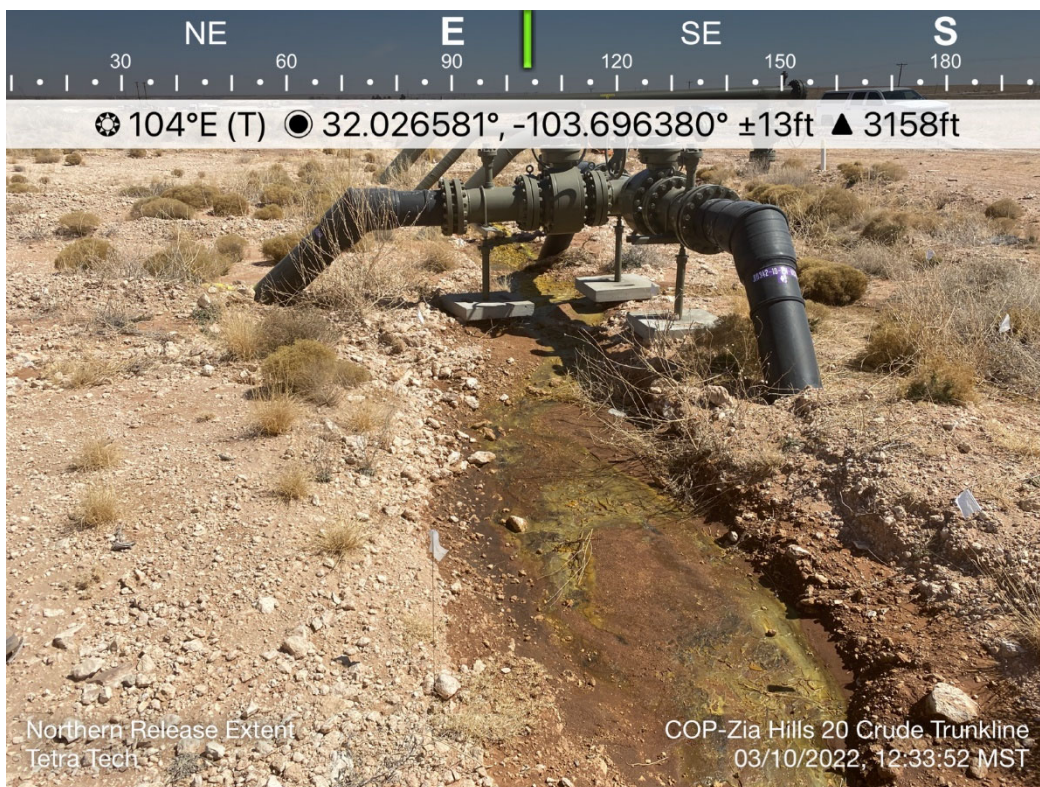
TETRA TECH, INC. PROJECT NO. 212C-MD-02714A	DESCRIPTION	View northwest. Southeastern portion of the release footprint.	3
	SITE NAME	COP – Zia Hills 20 Trunkline Release	3/10/2022



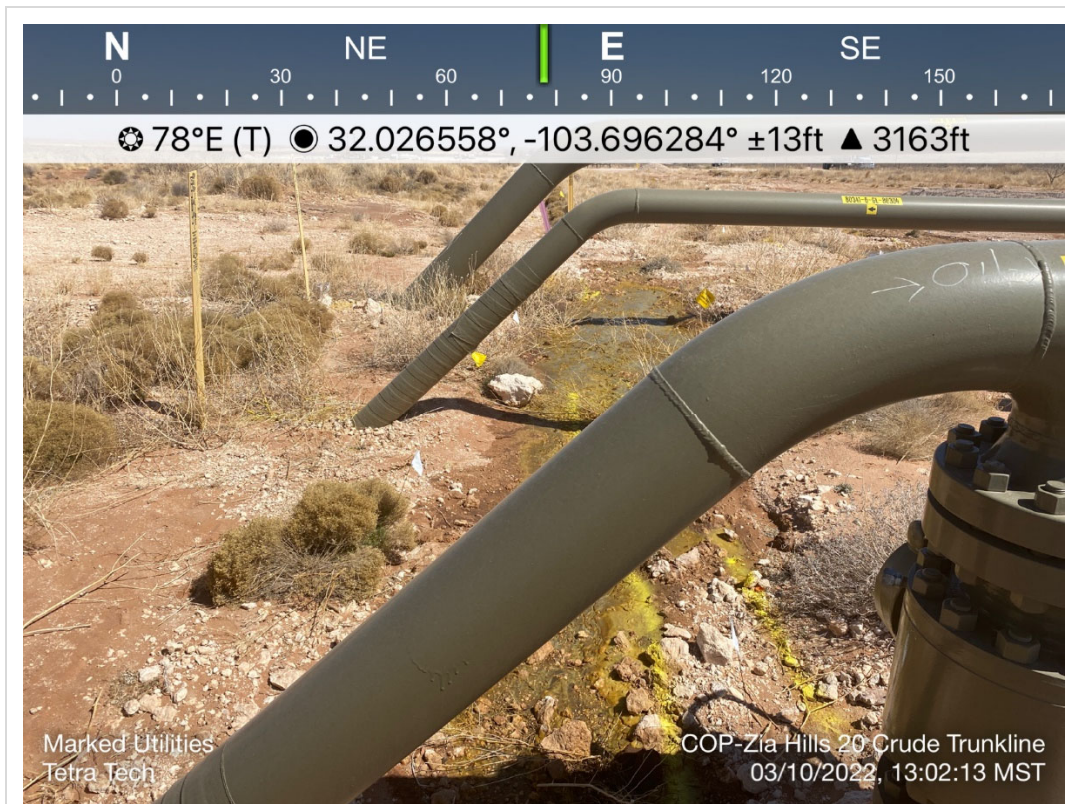
TETRA TECH, INC. PROJECT NO. 212C-MD-02714A	DESCRIPTION	View west. Eastern portion of the release footprint.	4
	SITE NAME	COP – Zia Hills 20 Trunkline Release	3/10/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02714A	DESCRIPTION	View southeast. Northern extent of the release footprint.	5
	SITE NAME	COP – Zia Hills 20 Trunkline Release	3/10/2022



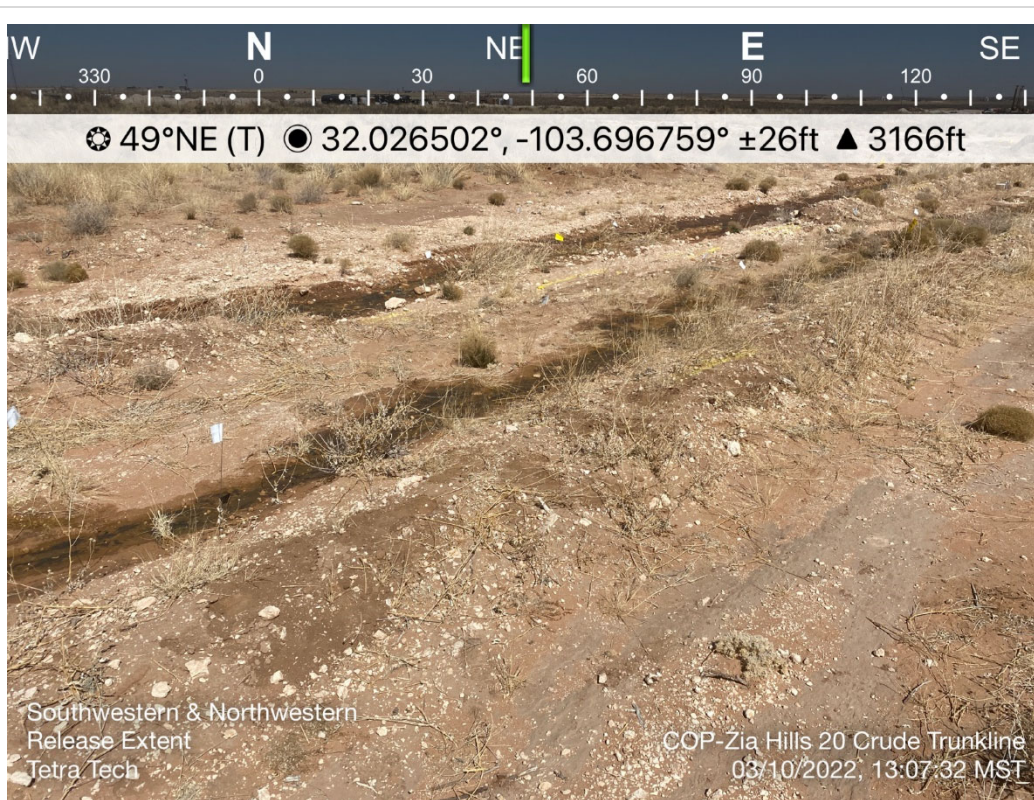
TETRA TECH, INC. PROJECT NO. 212C-MD-02714A	DESCRIPTION	View east. Release footprint near production piping.	6
	SITE NAME	COP – Zia Hills 20 Trunkline Release	3/10/2022



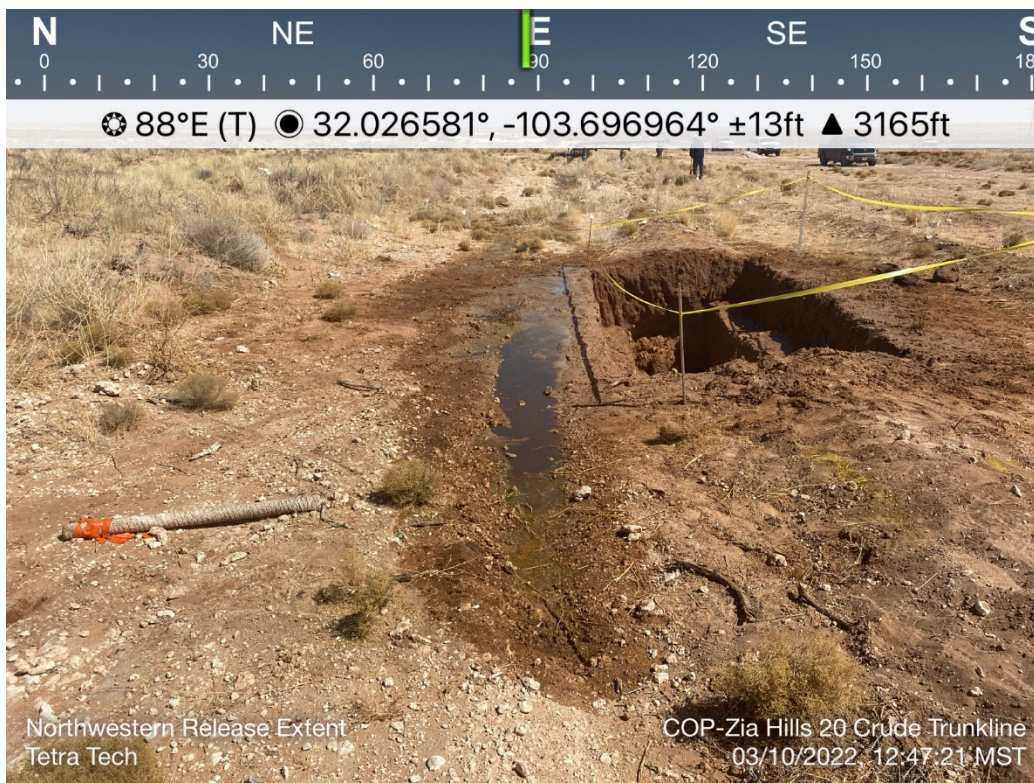
TETRA TECH, INC. PROJECT NO. 212C-MD-02714A	DESCRIPTION	View east. Release footprint near production piping.	7
	SITE NAME	COP – Zia Hills 20 Trunkline Release	3/10/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02714A	DESCRIPTION	View east. Western portion of the release footprint.	8
	SITE NAME	COP – Zia Hills 20 Trunkline Release	3/10/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02714A	DESCRIPTION	View northeast. Western portion of the release footprint.	9
	SITE NAME	COP – Zia Hills 20 Trunkline Release	3/10/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02714A	DESCRIPTION	View east. Completed hydrovac excavation at release point.	10
	SITE NAME	COP – Zia Hills 20 Trunkline Release	3/10/2022

APPENDIX D

Laboratory Analytical Data



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

April 01, 2022

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: ZIA HILLS 20 TRUNKLINE

Enclosed are the results of analyses for samples received by the laboratory on 03/29/22 15:15.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	03/29/2022	Sampling Date:	03/29/2022
Reported:	04/01/2022	Sampling Type:	Soil
Project Name:	ZIA HILLS 20 TRUNKLINE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02714	Sample Received By:	Shalyn Rodriguez
Project Location:	CONOCO PHILLIPS - LEA CO NM		

Sample ID: H - 1 (0-1') (H221247-01)

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	03/31/2022	ND	2.17	109	2.00	1.46	
Toluene*	<0.050	0.050	03/31/2022	ND	2.21	110	2.00	5.26	
Ethylbenzene*	<0.050	0.050	03/31/2022	ND	2.24	112	2.00	6.34	
Total Xylenes*	<0.150	0.150	03/31/2022	ND	6.66	111	6.00	6.45	
Total BTEX	<0.300	0.300	03/31/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

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	03/31/2022	ND	432	108	400	3.77		

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	03/30/2022	ND	203	101	200	2.51	
DRO >C10-C28*	<10.0	10.0	03/30/2022	ND	234	117	200	0.622	
EXT DRO >C28-C36	<10.0	10.0	03/30/2022	ND					

Surrogate: 1-Chlorooctane 81.6 % 66.9-136

Surrogate: 1-Chlorooctadecane 80.5 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 03/29/2022
 Reported: 04/01/2022
 Project Name: ZIA HILLS 20 TRUNKLINE
 Project Number: 212C - MD - 02714
 Project Location: CONOCO PHILLIPS - LEA CO NM

Sampling Date: 03/29/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: H - 1 (2-4') (H221247-02)

BTX 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	03/31/2022	ND	2.17	109	2.00	1.46		
Toluene*	<0.050	0.050	03/31/2022	ND	2.21	110	2.00	5.26		
Ethylbenzene*	<0.050	0.050	03/31/2022	ND	2.24	112	2.00	6.34		
Total Xylenes*	<0.150	0.150	03/31/2022	ND	6.66	111	6.00	6.45		
Total BTX	<0.300	0.300	03/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500CI-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	03/31/2022	ND	432	108	400	3.77		

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	03/30/2022	ND	203	101	200	2.51	
DRO >C10-C28*	<10.0	10.0	03/30/2022	ND	234	117	200	0.622	
EXT DRO >C28-C36	<10.0	10.0	03/30/2022	ND					

Surrogate: 1-Chlorooctane 89.8 % 66.9-136

Surrogate: 1-Chlorooctadecane 90.2 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 03/29/2022
 Reported: 04/01/2022
 Project Name: ZIA HILLS 20 TRUNKLINE
 Project Number: 212C - MD - 02714
 Project Location: CONOCO PHILLIPS - LEA CO NM

Sampling Date: 03/29/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: H - 2 (0-1') (H221247-03)

BTX 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	03/31/2022	ND	2.17	109	2.00	1.46		
Toluene*	<0.050	0.050	03/31/2022	ND	2.21	110	2.00	5.26		
Ethylbenzene*	<0.050	0.050	03/31/2022	ND	2.24	112	2.00	6.34		
Total Xylenes*	<0.150	0.150	03/31/2022	ND	6.66	111	6.00	6.45		
Total BTX	<0.300	0.300	03/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500CI-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	03/31/2022	ND	432	108	400	3.77		

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	03/30/2022	ND	203	101	200	2.51	
DRO >C10-C28*	<10.0	10.0	03/30/2022	ND	234	117	200	0.622	
EXT DRO >C28-C36	<10.0	10.0	03/30/2022	ND					

Surrogate: 1-Chlorooctane 88.0 % 66.9-136

Surrogate: 1-Chlorooctadecane 85.7 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 03/29/2022
 Reported: 04/01/2022
 Project Name: ZIA HILLS 20 TRUNKLINE
 Project Number: 212C - MD - 02714
 Project Location: CONOCO PHILLIPS - LEA CO NM

Sampling Date: 03/29/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: H - 2 (2-4') (H221247-04)

BTX 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	03/31/2022	ND	2.17	109	2.00	1.46		
Toluene*	<0.050	0.050	03/31/2022	ND	2.21	110	2.00	5.26		
Ethylbenzene*	<0.050	0.050	03/31/2022	ND	2.24	112	2.00	6.34		
Total Xylenes*	<0.150	0.150	03/31/2022	ND	6.66	111	6.00	6.45		
Total BTX	<0.300	0.300	03/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500CI-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	03/31/2022	ND	432	108	400	3.77		

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	03/30/2022	ND	203	101	200	2.51	
DRO >C10-C28*	<10.0	10.0	03/30/2022	ND	234	117	200	0.622	
EXT DRO >C28-C36	<10.0	10.0	03/30/2022	ND					

Surrogate: 1-Chlorooctane 90.2 % 66.9-136

Surrogate: 1-Chlorooctadecane 88.3 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 03/29/2022
 Reported: 04/01/2022
 Project Name: ZIA HILLS 20 TRUNKLINE
 Project Number: 212C - MD - 02714
 Project Location: CONOCO PHILLIPS - LEA CO NM

Sampling Date: 03/29/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: H - 3 (0-1') (H221247-05)

BTX 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	03/31/2022	ND	2.17	109	2.00	1.46		
Toluene*	<0.050	0.050	03/31/2022	ND	2.21	110	2.00	5.26		
Ethylbenzene*	<0.050	0.050	03/31/2022	ND	2.24	112	2.00	6.34		
Total Xylenes*	<0.150	0.150	03/31/2022	ND	6.66	111	6.00	6.45		
Total BTX	<0.300	0.300	03/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	03/31/2022	ND	432	108	400	3.77		

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	03/30/2022	ND	203	101	200	2.51	
DRO >C10-C28*	<10.0	10.0	03/30/2022	ND	234	117	200	0.622	
EXT DRO >C28-C36	<10.0	10.0	03/30/2022	ND					

Surrogate: 1-Chlorooctane 89.3 % 66.9-136

Surrogate: 1-Chlorooctadecane 87.4 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 03/29/2022
 Reported: 04/01/2022
 Project Name: ZIA HILLS 20 TRUNKLINE
 Project Number: 212C - MD - 02714
 Project Location: CONOCO PHILLIPS - LEA CO NM

Sampling Date: 03/29/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: H - 3 (2'-2.5') (H221247-06)

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	03/31/2022	ND	2.17	109	2.00	1.46		
Toluene*	<0.050	0.050	03/31/2022	ND	2.21	110	2.00	5.26		
Ethylbenzene*	<0.050	0.050	03/31/2022	ND	2.24	112	2.00	6.34		
Total Xylenes*	<0.150	0.150	03/31/2022	ND	6.66	111	6.00	6.45		
Total BTEX	<0.300	0.300	03/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	03/31/2022	ND	432	108	400	3.77		

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	03/30/2022	ND	203	101	200	2.51	
DRO >C10-C28*	<10.0	10.0	03/30/2022	ND	234	117	200	0.622	
EXT DRO >C28-C36	<10.0	10.0	03/30/2022	ND					

Surrogate: 1-Chlorooctane 89.1 % 66.9-136

Surrogate: 1-Chlorooctadecane 87.2 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 03/29/2022
 Reported: 04/01/2022
 Project Name: ZIA HILLS 20 TRUNKLINE
 Project Number: 212C - MD - 02714
 Project Location: CONOCO PHILLIPS - LEA CO NM

Sampling Date: 03/29/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: H - 4 (0-1') (H221247-07)

BTX 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	03/31/2022	ND	2.17	109	2.00	1.46		
Toluene*	<0.050	0.050	03/31/2022	ND	2.21	110	2.00	5.26		
Ethylbenzene*	<0.050	0.050	03/31/2022	ND	2.24	112	2.00	6.34		
Total Xylenes*	<0.150	0.150	03/31/2022	ND	6.66	111	6.00	6.45		
Total BTX	<0.300	0.300	03/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	03/31/2022	ND	432	108	400	3.77		

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	03/30/2022	ND	203	101	200	2.51	
DRO >C10-C28*	<10.0	10.0	03/30/2022	ND	234	117	200	0.622	
EXT DRO >C28-C36	<10.0	10.0	03/30/2022	ND					

Surrogate: 1-Chlorooctane 87.5 % 66.9-136

Surrogate: 1-Chlorooctadecane 85.3 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 03/29/2022
 Reported: 04/01/2022
 Project Name: ZIA HILLS 20 TRUNKLINE
 Project Number: 212C - MD - 02714
 Project Location: CONOCO PHILLIPS - LEA CO NM

Sampling Date: 03/29/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: H - 4 (2'-2.5') (H221247-08)

BTX 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	03/31/2022	ND	2.17	109	2.00	1.46		
Toluene*	<0.050	0.050	03/31/2022	ND	2.21	110	2.00	5.26		
Ethylbenzene*	<0.050	0.050	03/31/2022	ND	2.24	112	2.00	6.34		
Total Xylenes*	<0.150	0.150	03/31/2022	ND	6.66	111	6.00	6.45		
Total BTX	<0.300	0.300	03/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.9-140

Chloride, SM4500CI-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	03/31/2022	ND	432	108	400	3.77		

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	03/31/2022	ND	203	101	200	2.51	
DRO >C10-C28*	<10.0	10.0	03/31/2022	ND	234	117	200	0.622	
EXT DRO >C28-C36	<10.0	10.0	03/31/2022	ND					

Surrogate: 1-Chlorooctane 84.4 % 66.9-136

Surrogate: 1-Chlorooctadecane 83.7 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 03/29/2022
 Reported: 04/01/2022
 Project Name: ZIA HILLS 20 TRUNKLINE
 Project Number: 212C - MD - 02714
 Project Location: CONOCO PHILLIPS - LEA CO NM

Sampling Date: 03/29/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: H - 5 (0-1') (H221247-09)

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	03/31/2022	ND	2.16	108	2.00	1.17		
Toluene*	<0.050	0.050	03/31/2022	ND	2.15	108	2.00	0.794		
Ethylbenzene*	<0.050	0.050	03/31/2022	ND	2.12	106	2.00	2.08		
Total Xylenes*	<0.150	0.150	03/31/2022	ND	6.61	110	6.00	0.922		
Total BTEx	<0.300	0.300	03/31/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	03/31/2022	ND	432	108	400	3.77		

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	03/31/2022	ND	203	101	200	2.51	
DRO >C10-C28*	<10.0	10.0	03/31/2022	ND	234	117	200	0.622	
EXT DRO >C28-C36	<10.0	10.0	03/31/2022	ND					

Surrogate: 1-Chlorooctane 91.1 % 66.9-136

Surrogate: 1-Chlorooctadecane 88.3 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 03/29/2022
 Reported: 04/01/2022
 Project Name: ZIA HILLS 20 TRUNKLINE
 Project Number: 212C - MD - 02714
 Project Location: CONOCO PHILLIPS - LEA CO NM

Sampling Date: 03/29/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: H - 5 (2'-2.5') (H221247-10)

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	03/31/2022	ND	2.16	108	2.00	1.17	
Toluene*	<0.050	0.050	03/31/2022	ND	2.15	108	2.00	0.794	
Ethylbenzene*	<0.050	0.050	03/31/2022	ND	2.12	106	2.00	2.08	
Total Xylenes*	<0.150	0.150	03/31/2022	ND	6.61	110	6.00	0.922	
Total BTEx	<0.300	0.300	03/31/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/31/2022	ND	432	108	400	3.77		

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	03/31/2022	ND	203	101	200	2.51	
DRO >C10-C28*	<10.0	10.0	03/31/2022	ND	234	117	200	0.622	
EXT DRO >C28-C36	<10.0	10.0	03/31/2022	ND					

Surrogate: 1-Chlorooctane 91.6 % 66.9-136

Surrogate: 1-Chlorooctadecane 90.4 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 03/29/2022
 Reported: 04/01/2022
 Project Name: ZIA HILLS 20 TRUNKLINE
 Project Number: 212C - MD - 02714
 Project Location: CONOCO PHILLIPS - LEA CO NM

Sampling Date: 03/29/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: AH - 1 (0-1') (H221247-11)

BTEx 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	3.76	2.00	03/31/2022	ND	2.16	108	2.00	1.17	
Toluene*	62.4	2.00	03/31/2022	ND	2.15	108	2.00	0.794	
Ethylbenzene*	17.1	2.00	03/31/2022	ND	2.12	106	2.00	2.08	
Total Xylenes*	233	6.00	03/31/2022	ND	6.61	110	6.00	0.922	
Total BTEX	316	12.0	03/31/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 132 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	03/31/2022	ND	432	108	400	3.77		
TPH 8015M		mg/kg		Analyzed By: MS						S-06

Surrogate: 1-Chlorooctane		356 %	66.9-136							
Surrogate: 1-Chlorooctadecane		214 %	59.5-142							

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 03/29/2022
 Reported: 04/01/2022
 Project Name: ZIA HILLS 20 TRUNKLINE
 Project Number: 212C - MD - 02714
 Project Location: CONOCO PHILLIPS - LEA CO NM

Sampling Date: 03/29/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: AH - 2 (0-1') (H221247-12)

BTEx 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	3.53	2.00	03/31/2022	ND	2.16	108	2.00	1.17	
Toluene*	69.6	2.00	03/31/2022	ND	2.15	108	2.00	0.794	
Ethylbenzene*	22.0	2.00	03/31/2022	ND	2.12	106	2.00	2.08	
Total Xylenes*	308	6.00	03/31/2022	ND	6.61	110	6.00	0.922	
Total BTEX	403	12.0	03/31/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 139 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	03/31/2022	ND	432	108	400	3.77		

TPH 8015M	mg/kg		Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	6970	50.0	03/31/2022	ND	203	101	200	2.51	
DRO >C10-C28*	13000	50.0	03/31/2022	ND	234	117	200	0.622	
EXT DRO >C28-C36	1670	50.0	03/31/2022	ND					

Surrogate: 1-Chlorooctane 781 % 66.9-136

Surrogate: 1-Chlorooctadecane 468 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 03/29/2022
 Reported: 04/01/2022
 Project Name: ZIA HILLS 20 TRUNKLINE
 Project Number: 212C - MD - 02714
 Project Location: CONOCO PHILLIPS - LEA CO NM

Sampling Date: 03/29/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: AH - 3 (0-1') (H221247-13)

BTX 8021B		mg/kg	Analyzed By: MS\					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	1.70	0.500	03/31/2022	ND	2.16	108	2.00	1.17	
Toluene*	45.7	0.500	03/31/2022	ND	2.15	108	2.00	0.794	
Ethylbenzene*	17.2	0.500	03/31/2022	ND	2.12	106	2.00	2.08	
Total Xylenes*	216	1.50	03/31/2022	ND	6.61	110	6.00	0.922	
Total BTX	281	3.00	03/31/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 209 % 69.9-140

Chloride, SM4500CI-B		mg/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/31/2022	ND	432	108	400	3.77	

TPH 8015M		mg/kg	Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	6740	50.0	03/31/2022	ND	203	101	200	2.51	
DRO >C10-C28*	12700	50.0	03/31/2022	ND	234	117	200	0.622	
EXT DRO >C28-C36	1600	50.0	03/31/2022	ND					

Surrogate: 1-Chlorooctane 807 % 66.9-136

Surrogate: 1-Chlorooctadecane 441 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 03/29/2022
 Reported: 04/01/2022
 Project Name: ZIA HILLS 20 TRUNKLINE
 Project Number: 212C - MD - 02714
 Project Location: CONOCO PHILLIPS - LEA CO NM

Sampling Date: 03/29/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: AH - 4 (0-1') (H221247-14)

BTEX 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	03/31/2022	ND	2.16	108	2.00	1.17	
Toluene*	53.3	2.00	03/31/2022	ND	2.15	108	2.00	0.794	
Ethylbenzene*	18.4	2.00	03/31/2022	ND	2.12	106	2.00	2.08	
Total Xylenes*	260	6.00	03/31/2022	ND	6.61	110	6.00	0.922	
Total BTEX	331	12.0	03/31/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 133 % 69.9-140

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	03/31/2022	ND	416	104	400	3.77	QM-07	
TPH 8015M		mg/kg		Analyzed By: MS						S-06

Surrogate: 1-Chlorooctane 820 % 66.9-136

Surrogate: 1-Chlorooctadecane 413 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 03/29/2022
 Reported: 04/01/2022
 Project Name: ZIA HILLS 20 TRUNKLINE
 Project Number: 212C - MD - 02714
 Project Location: CONOCO PHILLIPS - LEA CO NM

Sampling Date: 03/29/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: AH - 5 (0-1') (H221247-15)

BTX 8021B		mg/kg	Analyzed By: MS\					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	1.95	0.500	03/31/2022	ND	2.16	108	2.00	1.17	
Toluene*	31.5	0.500	03/31/2022	ND	2.15	108	2.00	0.794	
Ethylbenzene*	8.70	0.500	03/31/2022	ND	2.12	106	2.00	2.08	
Total Xylenes*	117	1.50	03/31/2022	ND	6.61	110	6.00	0.922	
Total BTX	159	3.00	03/31/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 159 % 69.9-140

Chloride, SM4500CI-B		mg/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	03/31/2022	ND	416	104	400	3.77	

TPH 8015M		mg/kg	Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	3140	50.0	03/31/2022	ND	203	101	200	2.51	
DRO >C10-C28*	5420	50.0	03/31/2022	ND	234	117	200	0.622	
EXT DRO >C28-C36	687	50.0	03/31/2022	ND					

Surrogate: 1-Chlorooctane 385 % 66.9-136

Surrogate: 1-Chlorooctadecane 237 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 03/29/2022
 Reported: 04/01/2022
 Project Name: ZIA HILLS 20 TRUNKLINE
 Project Number: 212C - MD - 02714
 Project Location: CONOCO PHILLIPS - LEA CO NM

Sampling Date: 03/29/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: AH - 6 (3'-4') (H221247-16)

BTEx 8021B		mg/kg		Analyzed By: MS\					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.405	0.100	03/31/2022	ND	2.16	108	2.00	1.17	
Toluene*	7.61	0.100	03/31/2022	ND	2.15	108	2.00	0.794	
Ethylbenzene*	2.13	0.100	03/31/2022	ND	2.12	106	2.00	2.08	
Total Xylenes*	30.0	0.300	03/31/2022	ND	6.61	110	6.00	0.922	
Total BTEX	40.1	0.600	03/31/2022	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	03/31/2022	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	362	10.0	03/31/2022	ND	203	101	200	2.51	
DRO >C10-C28*	2850	10.0	03/31/2022	ND	234	117	200	0.622	
EXT DRO >C28-C36	301	10.0	03/31/2022	ND					

Surrogate: 1-Chlorooctane 132 % 66.9-136

Surrogate: 1-Chlorooctadecane 142 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

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

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

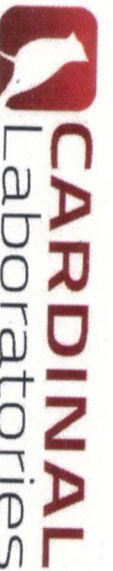
Company Name: ConocoPhillips				BILL TO				P.O. #:			
Project Manager: Christopher Lull								Company: Tetra Tech			
Address:								Attn: Christopher Lull			
City:				State:				Zip:			
Phone #:				Fax #:				Address: by email			
Project #: 212C-MD-02714				Project Owner:				City:			
Project Name: 21st HHS 20 truckline								State:			
Project Location: 2nd County MN								Zip:			
Sampler Name: Colton Bakelaar								Phone #:			
FOR LAB USE ONLY								Fax #:			

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	SAMPLING								
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:			ICE / COOL	OTHER :							
H02A47	H-1 (0-1')	G	1			X						3/29/22			X	TPH					
	H-1 (2'-4')														X	BTEX					
	H-2 (0-1')														X	Chlorides					
	H-2 (2'-4')																				
	H-3 (0-1')																				
	H-3 (2'-2.5')																				
	H-4 (0-1')																				
	H-4 (2'-2.5')																				
	H-5 (0-1')																				
	H-5 (2'-2.5')																				

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the 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 consequential 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.

Relinquished By:				Date: 3/29/22				Received By:				Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #:			
Colton Bakelaar				Time: 5:15				Signature:				All Results are emailed. Please provide Email address:			
REMARKS: Christopher Lull @tetratech.com															

Delivered By: (Circle One)	Observed Temp. °C: 20.9	Sample Condition: Cool Intact	CHECKED BY: [initials]	Turnaround Time:	Standard Rush: <input checked="" type="checkbox"/>	Bacteria (only) Sample Condition:
Sampler - UPS - Bus - Other:	Corrected Temp. °C: 20.4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Thermometer ID #13	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Cool Intact Observed Temp. °C:
FORM P006 REVZ 10/07/21				Correction Factor -0.5°C	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Corrected Temp. °C:



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Canoco Phillips</u> Project Manager: <u>Christen Lull</u> Address: City: State: Zip: Phone #: Fax #: Project #: <u>212C-MD-02714</u> Project Owner: Project Name: <u>21st Hills 20 truckline</u> Project Location: <u>Lea County, NM</u> Sampler Name: <u>Coleen Birkstead</u>		BILL TO P.O. #: Company: <u>Tetra Tech</u> Attn: <u>Christen Lull</u> Address: <u>by email</u> City: State: Zip: Phone #: Fax #:		ANALYSIS REQUEST	
FOR LAB USE ONLY Lab I.D. Sample I.D.		(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER :		MATRIX PRESERV. SAMPLING	
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the 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 consequential 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.		DATE TIME		REMARKS:	
Relinquished By: <u>Coleen Birkstead</u> Date: <u>3/29/22</u> Time: <u>1515</u> Received By: <u>Christen Lull</u> Date: Time:		Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #: All Results are emailed. Please provide Email address:		Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Turnaround Time: Thermometer ID #13 Correction Factor -0.5°C	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Observed Temp. °C Corrected Temp. °C		Sample Condition Cool Intact Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> CHECKED BY: <u>SC</u>	
POINT#006 R-3-Z 10/07/21		Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com		Corrected Temp. °C	

212



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

April 21, 2022

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: ZIA HILLS 20 TRUNKLINE

Enclosed are the results of analyses for samples received by the laboratory on 04/14/22 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 accredited through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/14/2022	Sampling Date:	04/14/2022
Reported:	04/21/2022	Sampling Type:	Soil
Project Name:	ZIA HILLS 20 TRUNKLINE	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 02714	Sample Received By:	Tamara Oldaker
Project Location:	CONOCO PHILLIPS - LEA CO NM		

Sample ID: AH - 2 (2'-3') (H221558-01)

BTX 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/19/2022	ND	1.81	90.6	2.00	15.1	
Toluene*	0.909	0.050	04/19/2022	ND	1.87	93.3	2.00	14.3	
Ethylbenzene*	0.769	0.050	04/19/2022	ND	1.87	93.6	2.00	15.8	
Total Xylenes*	8.84	0.150	04/19/2022	ND	5.53	92.1	6.00	17.2	
Total BTX	10.5	0.300	04/19/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 237 % 69.9-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/19/2022	ND	400	100	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	220	10.0	04/19/2022	ND	207	103	200	0.778	
DRO >C10-C28*	943	10.0	04/19/2022	ND	189	94.7	200	20.5	
EXT DRO >C28-C36	122	10.0	04/19/2022	ND					

Surrogate: 1-Chlorooctane 125 % 66.9-136

Surrogate: 1-Chlorooctadecane 124 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 04/14/2022
 Reported: 04/21/2022
 Project Name: ZIA HILLS 20 TRUNKLINE
 Project Number: 212C - MD - 02714
 Project Location: CONOCO PHILLIPS - LEA CO NM

Sampling Date: 04/14/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: AH - 2 (3'-4') (H221558-02)

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	04/19/2022	ND	1.81	90.6	2.00	15.1		
Toluene*	<0.050	0.050	04/19/2022	ND	1.87	93.3	2.00	14.3		
Ethylbenzene*	<0.050	0.050	04/19/2022	ND	1.87	93.6	2.00	15.8		
Total Xylenes*	0.207	0.150	04/19/2022	ND	5.53	92.1	6.00	17.2		
Total BTEX	<0.300	0.300	04/19/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 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	04/19/2022	ND	400	100	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	21.8	10.0	04/19/2022	ND	207	103	200	0.778	
DRO >C10-C28*	405	10.0	04/19/2022	ND	189	94.7	200	20.5	
EXT DRO >C28-C36	67.4	10.0	04/19/2022	ND					

Surrogate: 1-Chlorooctane 111 % 66.9-136

Surrogate: 1-Chlorooctadecane 115 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 04/14/2022
 Reported: 04/21/2022
 Project Name: ZIA HILLS 20 TRUNKLINE
 Project Number: 212C - MD - 02714
 Project Location: CONOCO PHILLIPS - LEA CO NM

Sampling Date: 04/14/2022
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: AH - 2 (4'-4.5') (H221558-03)

BTX 8021B		mg/kg	Analyzed By: JH					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.518	0.050	04/19/2022	ND	1.81	90.6	2.00	15.1	
Toluene*	7.76	0.050	04/19/2022	ND	1.87	93.3	2.00	14.3	
Ethylbenzene*	1.15	0.050	04/19/2022	ND	1.87	93.6	2.00	15.8	
Total Xylenes*	12.7	0.150	04/19/2022	ND	5.53	92.1	6.00	17.2	
Total BTX	22.1	0.300	04/19/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 166 % 69.9-140

Chloride, SM4500CI-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	04/19/2022	ND	400	100	400	7.69	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	42.5	10.0	04/19/2022	ND	207	103	200	0.778	
DRO >C10-C28*	48.9	10.0	04/19/2022	ND	189	94.7	200	20.5	
EXT DRO >C28-C36	<10.0	10.0	04/19/2022	ND					

Surrogate: 1-Chlorooctane 83.5 % 66.9-136

Surrogate: 1-Chlorooctadecane 86.5 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-04	The RPD for the BS/BSD was outside of historical limits.
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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

APPENDIX E

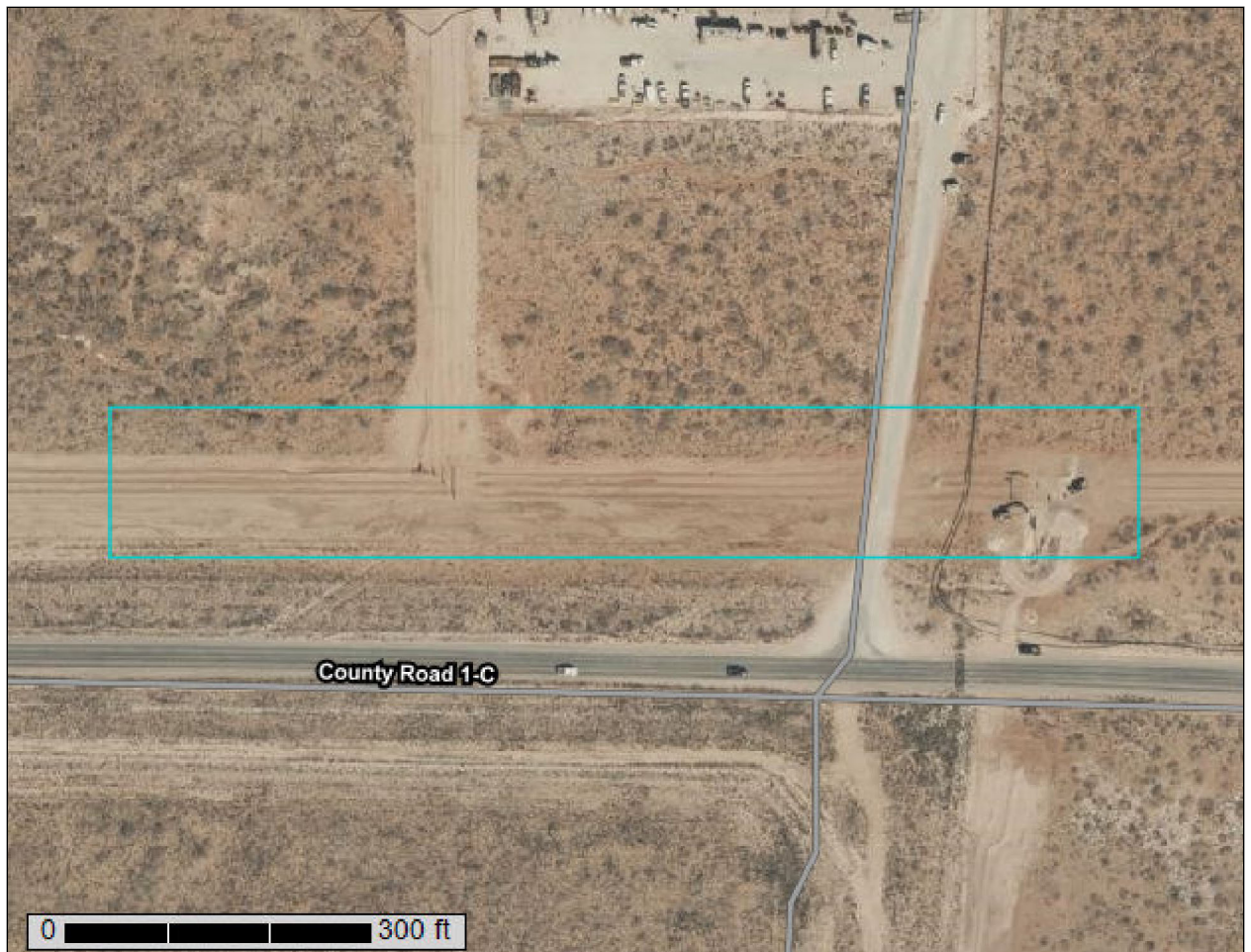
NMSLO Seed Mixture Details



A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Lea County, New Mexico

Zia Hills 20 Trunkline

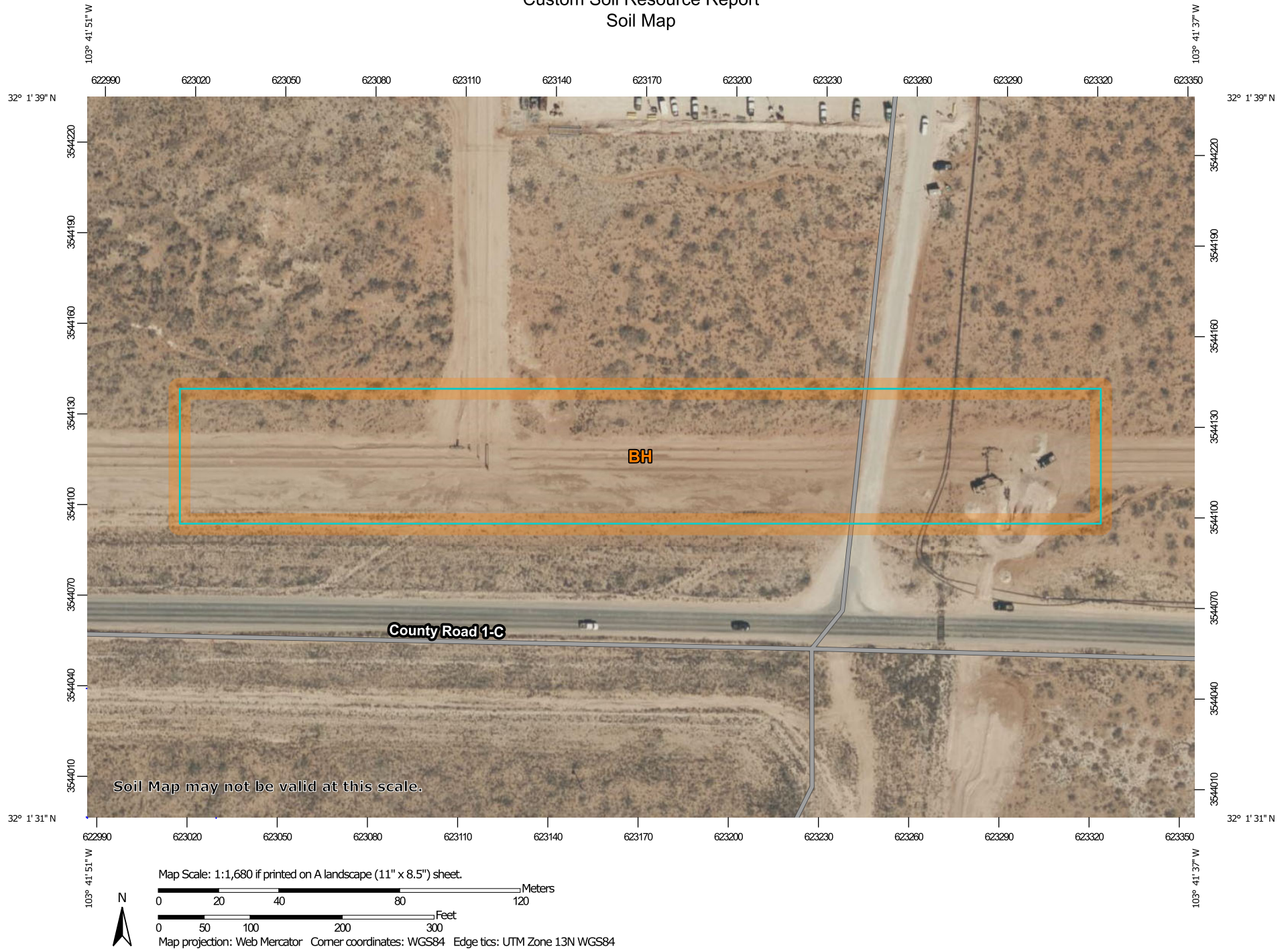


June 2, 2022

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features


 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow


 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water


 Perennial Water

 Rock Outcrop


 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features


Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 18, Sep 10, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BH	Berino-Cacique association, hummocky	3.4	100.0%
Totals for Area of Interest		3.4	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Custom Soil Resource Report

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Custom Soil Resource Report

Lea County, New Mexico

BH—Berino-Cacique association, hummocky**Map Unit Setting**

National map unit symbol: dmpg
Elevation: 3,000 to 4,400 feet
Mean annual precipitation: 10 to 13 inches
Mean annual air temperature: 60 to 62 degrees F
Frost-free period: 190 to 205 days
Farmland classification: Not prime farmland

Map Unit Composition

Berino and similar soils: 50 percent
Cacique and similar soils: 40 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Berino**Setting**

Landform: Plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits derived from sedimentary rock over calcareous sandy alluvium derived from sedimentary rock

Typical profile

A - 0 to 10 inches: fine sand
Btk - 10 to 60 inches: sandy clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: B
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

Custom Soil Resource Report

Description of Cacique**Setting**

Landform: Plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 7 inches: fine sand
Bt - 7 to 28 inches: sandy clay loam
Bkm - 28 to 38 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: C
Ecological site: R042XC004NM - Sandy
Hydric soil rating: No

Minor Components**Kermit**

Percent of map unit: 4 percent
Ecological site: R042XC005NM - Deep Sand
Hydric soil rating: No

Maljamar

Percent of map unit: 3 percent
Ecological site: R077CY028TX - Limy Upland 16-21" PZ
Hydric soil rating: No

Palomas

Percent of map unit: 2 percent
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

Dune land

Percent of map unit: 1 percent
Hydric soil rating: No

SLO Seed Mix

SM Series

1 REVEGETATION PLANS

The following Revegetation Plans were developed for revegetation of sites in southeastern New Mexico. To determine which revegetation plan is appropriate follow procedures in the section titled Determining the Revegetation Plan.

Revegetation Plans contain seed mixtures, as well as seed bed preparation and planting requirements. The detailed instructions for seedbed preparation and planting can be found in the section Revegetation Techniques.

Table 3 - Revegetation Plans, Codes, and Soil Types for Southeastern New Mexico

REVEGETATION PLANS	CODE	SOIL TEXTURES
Clay	C	Clay, Silty Clay, Stony Silty Clay, Clay Loam, Silty Clay Loam (including saline and sodic Clay soils)
Loam	L	Silty Loam, Cobbly Silt Loam, Stony Silt Loam, Silt, Loam, Sandy, Clay Loam
Sandy Loam	SL	Very Fine Sandy Loam, Fine Sandy Loam, Cobbly Fine Sandy Loam, Sandy Loam, Cobbly Sandy Loam, Gravelly Fine Sandy Loam, Very Gravelly Fine Sand Loam, Stony Fine Sandy Loam, Stony Sandy Loam
Shallow	SH	Rocky Loam, Cobbly Loam
Course	CS	Gravelly Loam, very Gravelly Loam, Gravelly Sandy Loam, Very Gravelly Sandy Loam, Stony Loam, Stony Sandy Loam
Sandy	S	Loamy Fine Sand, Loam Sand, Very Gravelly Loamy Fine Sand
Blow Sand	BS	Fine Sand, Sand, Coarse Sand
Mountain Meadow	MM	Clay, Loam
Mountain Upland	MU	Clay Loam, Loam



NMSLO Seed Mix**Sandy Loam (SL)****SANDY LOAM (SL) SITES SEED MIXTURE:**

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
Grasses:			
Galleta grass	Viva, VNS, So.	2.5	F
Little bluestem	Cimmaron, Pastura	2.5	F
Blue grama	Hachita, Lovington	2.0	D
Sideoats grama	Vaughn, El Reno	2.0	F
Sand dropseed	VNS, Southern	1.0	S
Forbs:			
Indian blanketflower	VNS, Southern	1.0	D
Parry penstemon	VNS, Southern	1.0	D
Blue flax	Appar	1.0	D
Desert globemallow	VNS, Southern	1.0	D
Shrubs:			
Fourwing saltbush	VNS, Southern	2.0	D
Common winterfat	VNS, Southern	1.0	F
Apache plume	VNS, Southern	0.75	F
Total PLS/acre		17.75	

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box

- VNS, Southern – No Variety Stated, seed should be from a southern latitude collection of this species.
- Double above seed rates for broadcast or hydroseeding.
- If Parry penstemon is not available, substitute firecracker penstemon.
- If desert globemallow is not available, substitute scarlet globemallow or Nelson globemallow.
- If a species is not available, provide a suggested substitute to the New Mexico Land Office for approval. Increasing all other species proportionately may be acceptable.



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 113530

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 113530
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved with Conditions. Composite confirmation samples will be collected from the bottom and sidewalls of the excavation from areas representing no more than four hundred (400) square feet. Please ensure vertical and lateral delineation is complete at bottom and sidewalls of excavation to the specified criteria.	6/7/2022