



June 14, 2023

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

**Re: Release Characterization, Remediation, and Closure Report
ConocoPhillips
Heritage Concho
Ushanka Federal Com #023H Flowline Release
Unit Letter C, Section 01, Township 26 South, Range 35 East
Lea County, New Mexico
Incident ID# NAPP2309431095**

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips (COP) to assess a release that occurred from a flowline associated with the Ushanka Federal Com #023H (API# 30-025-44505). The release footprint is located in Public Land Survey System (PLSS) Unit Letter C, Section 01, Township 26 South, Range 35 East, in Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.078571°, -103.322728° as shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico C-141 Initial Report (Appendix A), the release occurred from a hole in the flowline due to pressure build up, and was discovered on March 26, 2023. Approximately 0.75 barrels (bbls) of crude oil and 6.75 bbls of produced water were reported released. The provided spill calculator indicates a footprint of approximately 1,690 square feet of impacted area. Following discovery of the release, ConocoPhillips repaired the line. This release extent was verified based on information provided by ConocoPhillips representatives, a review of photographs and observations made during a site visit at the release area on April 26, 2023. The New Mexico Oil Conservation District (NMOCD) received the C-141 report form for the release on March 26, 2023. The NMOCD Incident ID for this release is NAPP2309431095.

LAND OWNERSHIP

The Site is located on land owned by the Bureau of Land Management (BLM). Following the release, Tetra Tech requested BLM clearance to remediate via email. The BLM cleared the Site for remediation activities via email, following a desktop review conducted by Shelly Taylor of the BLM. Email correspondence with the BLM is included in Appendix B.

SITE CHARACTERIZATION

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

According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there are no water wells within ½ mile (800 meters) of the Site. The search radius was expanded and based on available data

Tetra Tech

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from five (5) water wells located with 1.5 miles (2,414 meters) of the site with an average depth to groundwater of 240 feet below ground surface (bgs). The site characterization data are presented in Appendix C.

REGULATORY FRAMEWORK

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

Due to the lack of depth to groundwater data within 0.5-mile of the Site, the most stringent RRALs from Table I of 19.15.29.12 NMAC will be applied to the Site. Hence, the proposed RRALs for the Site are as follows:

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

SITE ASSESSMENT ACTIVITIES AND RESULTS

Tetra Tech personnel were onsite to delineate and sample the release area on April 26, 2023. A total of nine (9) soil borings (HA-1 through HA-9) were installed using a hand auger within and around the release to evaluate the vertical and horizontal extents. HA-1, HA-2, and HA-3 were installed within the release extent to assess the vertical extent of impact. The remainder of the borings were installed around the perimeter of the release footprint to delineate the horizontal extent. Photographic documentation of site conditions during assessment activities is included in Appendix D. 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. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix E.

Results from the April 2023 soil sampling event are summarized in Table 1. Analytical results associated with boring location HA-1 and HA-3 exceeded the proposed Site RRALs for chloride in soils. All other analytical results from the April 2023 sampling were below Site RRALs. Both horizontal and vertical delineation of the release area footprint were achieved.

REMEDIAL ACTIVITIES AND CONFIRMATION SAMPLING

In accordance with 19.15.29.12 B (2) NMAC, COP elected to begin remediation of the impacted area in May 2023. Based on the analytical results from the soil assessment, impacted soils were excavated to a depth of 1.5 feet below surrounding grade. From May 22 to May 24, 2023, Tetra Tech personnel were onsite to supervise the remedial activities, including excavation, disposal, and confirmation sampling. Prior to confirmation sampling, on May 22, 2023, the NMOCD district office was notified via email in accordance with Subsection D of 19.15.29.12 NMAC. Documentation of associated regulatory correspondence is included in Appendix B.

Impacted soils were excavated as shown in Figure 5. Impacted soils within the vicinity of the subsurface lines which intersect the release footprint were excavated to a depth of 1.5 feet below surrounding grade via hydro-excavation. Excavation work continued until a representative sample from the walls and bottom of the excavation had a field screening value inferred as lower than the RRALs for the Site. All excavated material was transported offsite for proper disposal. Approximately 127 cubic yards of material were

Closure Report
June 14, 2023

ConocoPhillips

transported to the North Delaware Basin Landfill in Jal, New Mexico. Copies of the waste tickets are included in Appendix F.

Following excavation, confirmation floor and sidewall samples were collected and submitted for laboratory analysis to verify efficacy of remedial activities. In accordance with 19.15.29.12(D)(1)(b) NMAC, confirmation samples were collected such that each discrete sample (sidewall and floor) was representative of no more than 200 square feet of excavated area. A total of four (4) confirmation floor samples and five (5) confirmation sidewall samples were collected during remedial activities. Confirmation sidewall sample locations were categorized with the cardinal direction (N, E, S, W) followed by SW-#. Confirmation floor sample locations were labeled with "FS"-#. Excavated areas and depths and confirmation sample locations are indicated in Figure 5.

Collected confirmation samples were placed into laboratory-provided sample containers, transferred under chain-of-custody, and analyzed within appropriate holding times by Cardinal. The soil samples were analyzed for TPH (GRO, DRO and ORO) by EPA Method 8015M, BTEX by EPA Method 8021B, and chlorides by SM4500Cl-B. The analytical results were directly compared to the Site RRALs and reclamation requirements for soils above 4 feet bgs to demonstrate compliance. All final confirmation soil samples (floor and sidewall) were below applicable cleanup levels for chloride, TPH and BTEX. The results of the May 2023 confirmation sampling event are summarized in Table 2. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix G. The total remediated area encompassed a surface area of approximately 1,800 square ft. The impacted surface area at the site was remediated to meet the standards of Table I of 19.15.29.12 NMAC.

RECLAMATION ACTIVITIES

Once confirmation sampling activities were completed and associated analytical results were below the RRALs, the excavated areas were backfilled with clean material to surface grade. The backfilled areas were seeded in May 2023 to aid in revegetation. Based on the location of the Site, the BLM seed mixture for LPC Sand/Shinnery Sites (Appendix H) was used for seeding and planted in the amount specified in the pounds pure live seed per acre. Photographic documentation of the excavated areas prior to and immediately following placement of backfill and seeding are provided in Appendix D.

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 BLM will be contacted to determine an effective method for eradication. If the Site does not show revegetation after one growing season the area will be reseeded as appropriate.

CONCLUSION

ConocoPhillips has completed remediation at the release site. This final closure report has been submitted within 90 days of discovery of the release. This final closure report details the release characterization and remediation activities and the results of the confirmation sampling. ConocoPhillips respectfully requests closure of the incident based on the confirmation sampling results and remedial activities performed. The final C-141 forms are enclosed in Appendix A. If you have any questions concerning the remediation activities for the Site, please call me at (512) 338-2861.

Sincerely,
Tetra Tech, Inc.



Christian M. Llull, P.G.
Program Manager

cc:
Mr. Jacob Laird, GPBU – ConocoPhillips
Ms. Shelly Taylor, BLM

Closure Report
June 14, 2023

ConocoPhillips

LIST OF ATTACHMENTS

Figures:

- Figure 1 – Overview Map
- Figure 2 – Site Location/Topographic Map
- Figure 3 – Approximate Release Extent and Initial Response
- Figure 4 – Site Assessment
- Figure 5 – Remedial Activities and Confirmation Sampling

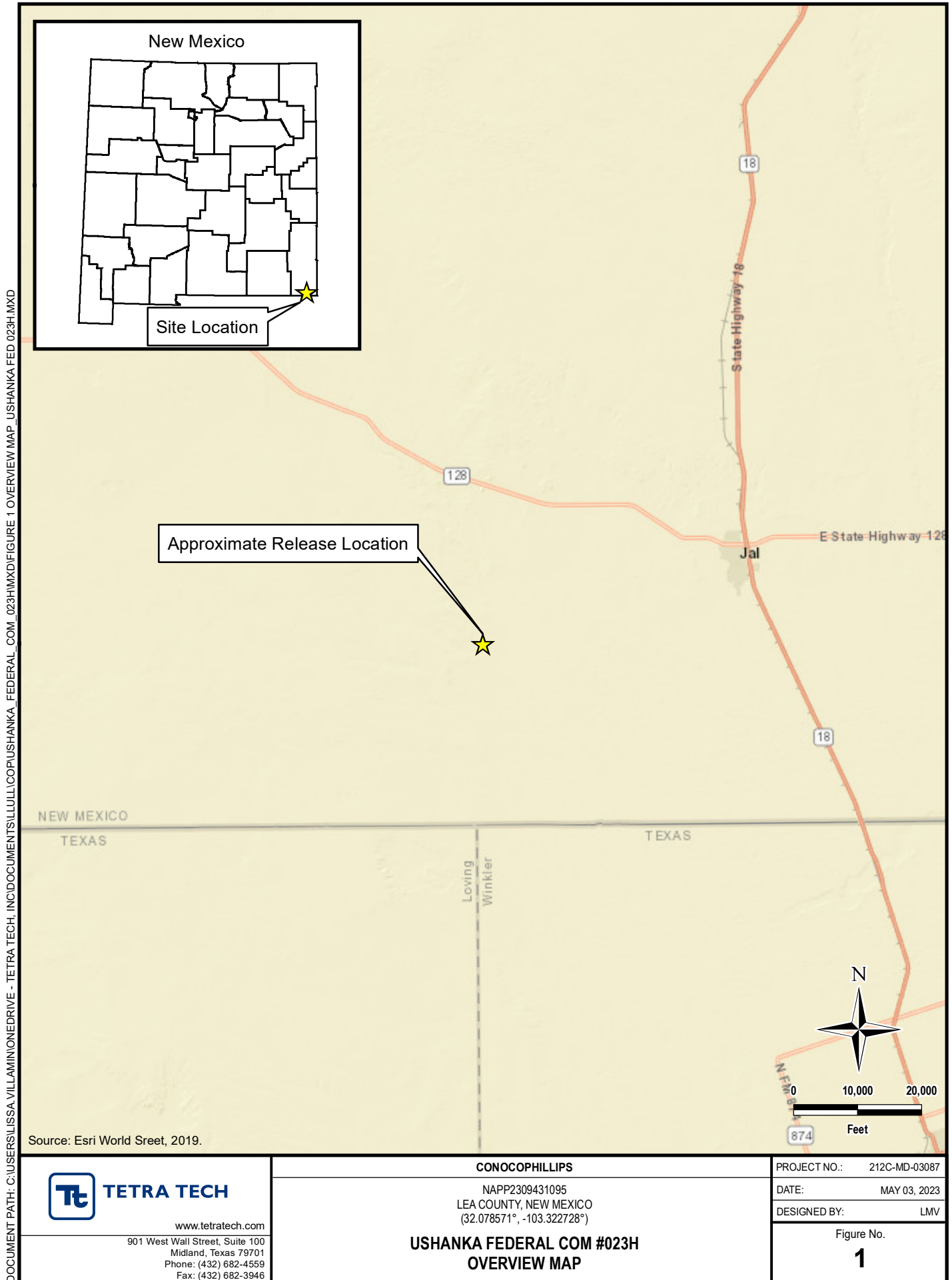
Tables:

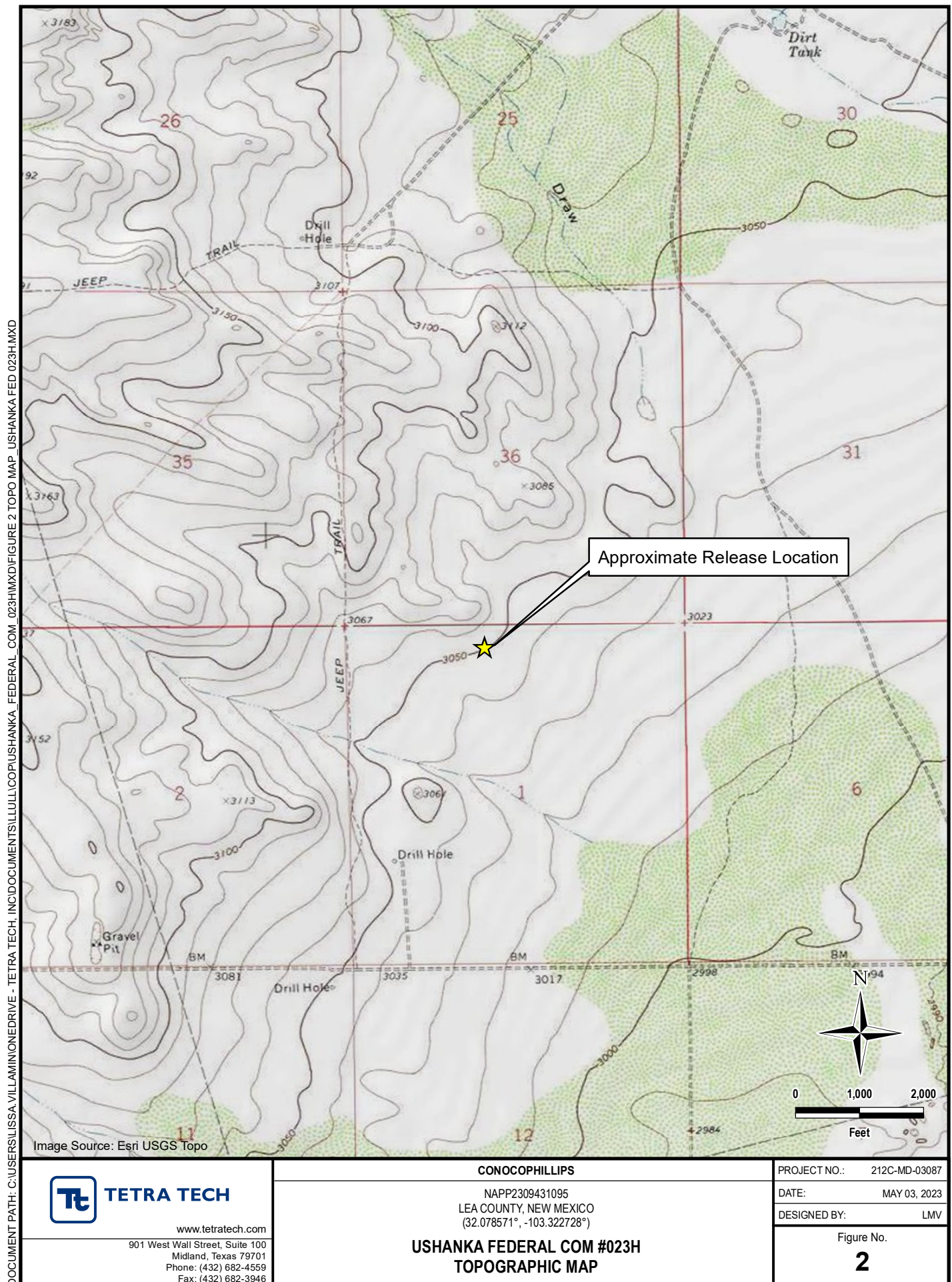
- Table 1 – Summary of Analytical Results – Soil Assessment
- Table 2 – Summary of Analytical Results – Confirmation Sampling

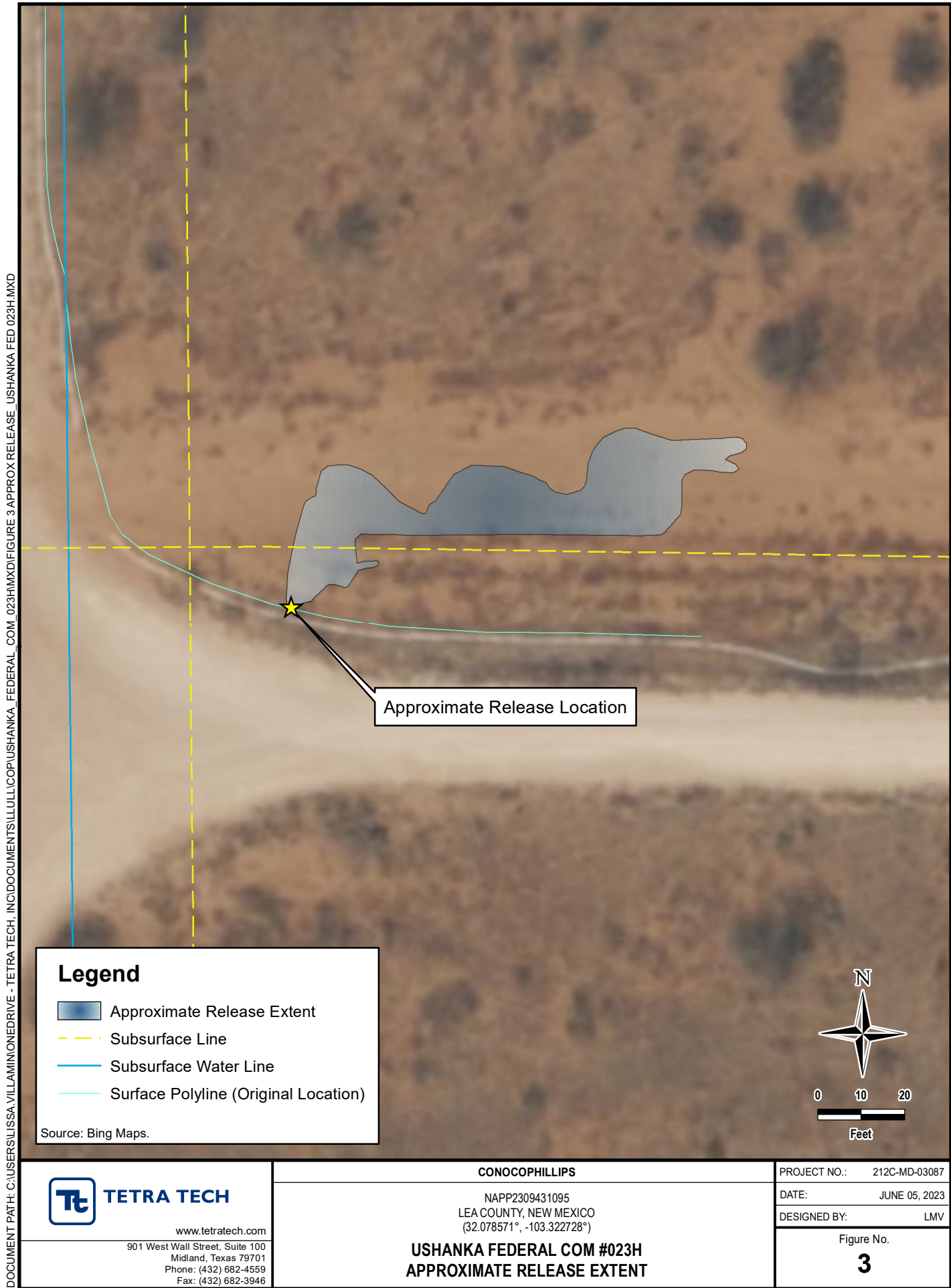
Appendices:

- Appendix A – C-141 Forms
- Appendix B – Regulatory Correspondence
- Appendix C – Site Characterization Data
- Appendix D – Photographic Documentation
- Appendix E – Analytical Laboratory Data - Assessment
- Appendix F – Waste Manifests
- Appendix G – Analytical Laboratory Data – Remediation
- Appendix H – BLM Seed Mix

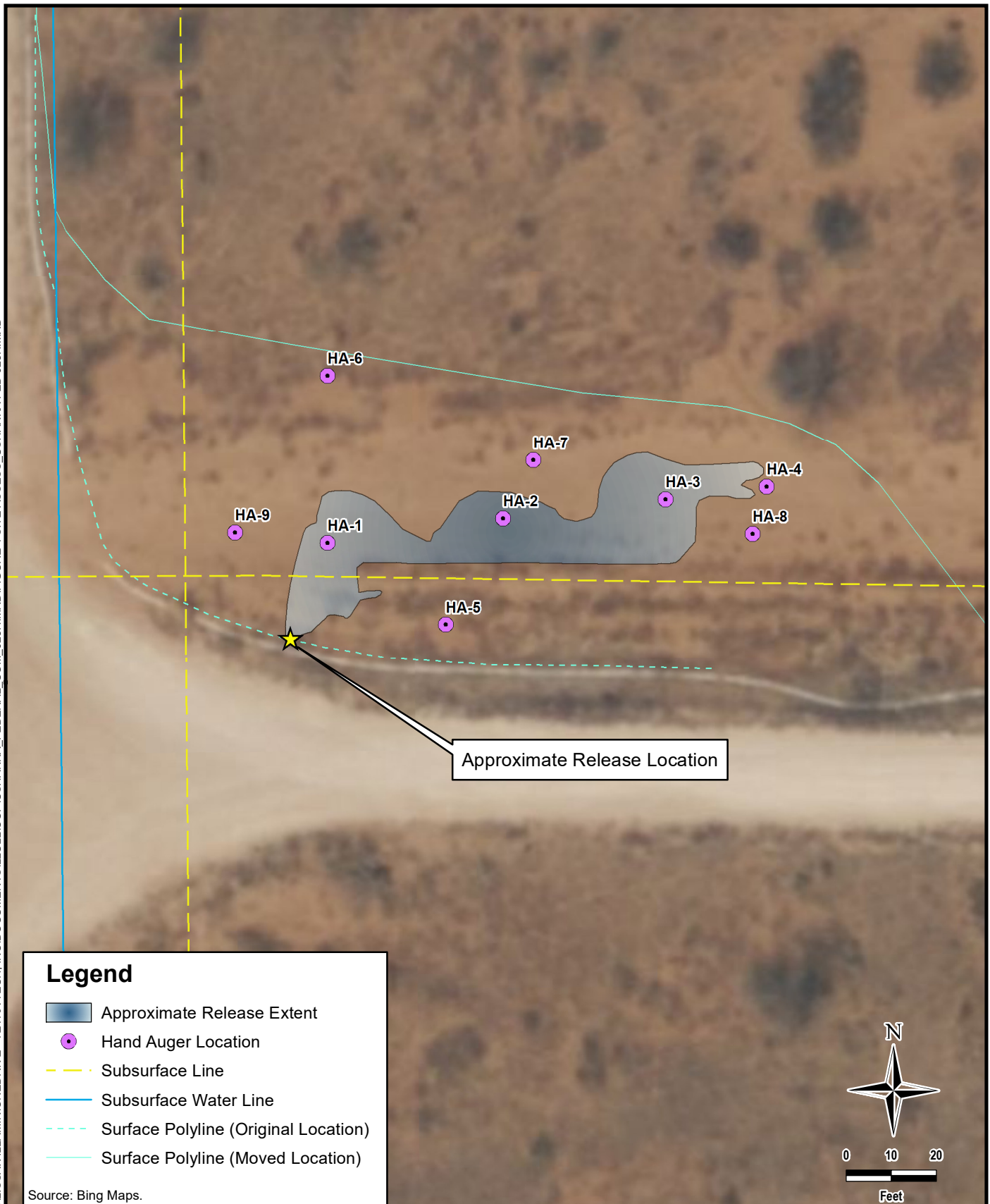
FIGURES







DOCUMENT PATH: C:\USERS\LISSA.VILLAMINON\DRIVE - TETRA TECH\INC\DOCUMENTS\ILLULLICOP\USHANKA_FEDERAL_COM_023H\MXD\FIGURE 4 SITE ASSESS_ USHANKA FED 023H.MXD

**TETRA TECH**

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CONOCOPHILLIPS

NAPP2309431095
LEA COUNTY, NEW MEXICO
(32.078571°, -103.322728°)

**USHANKA FEDERAL COM #023H
SITE ASSESSMENT**

PROJECT NO.: 212C-MD-03087

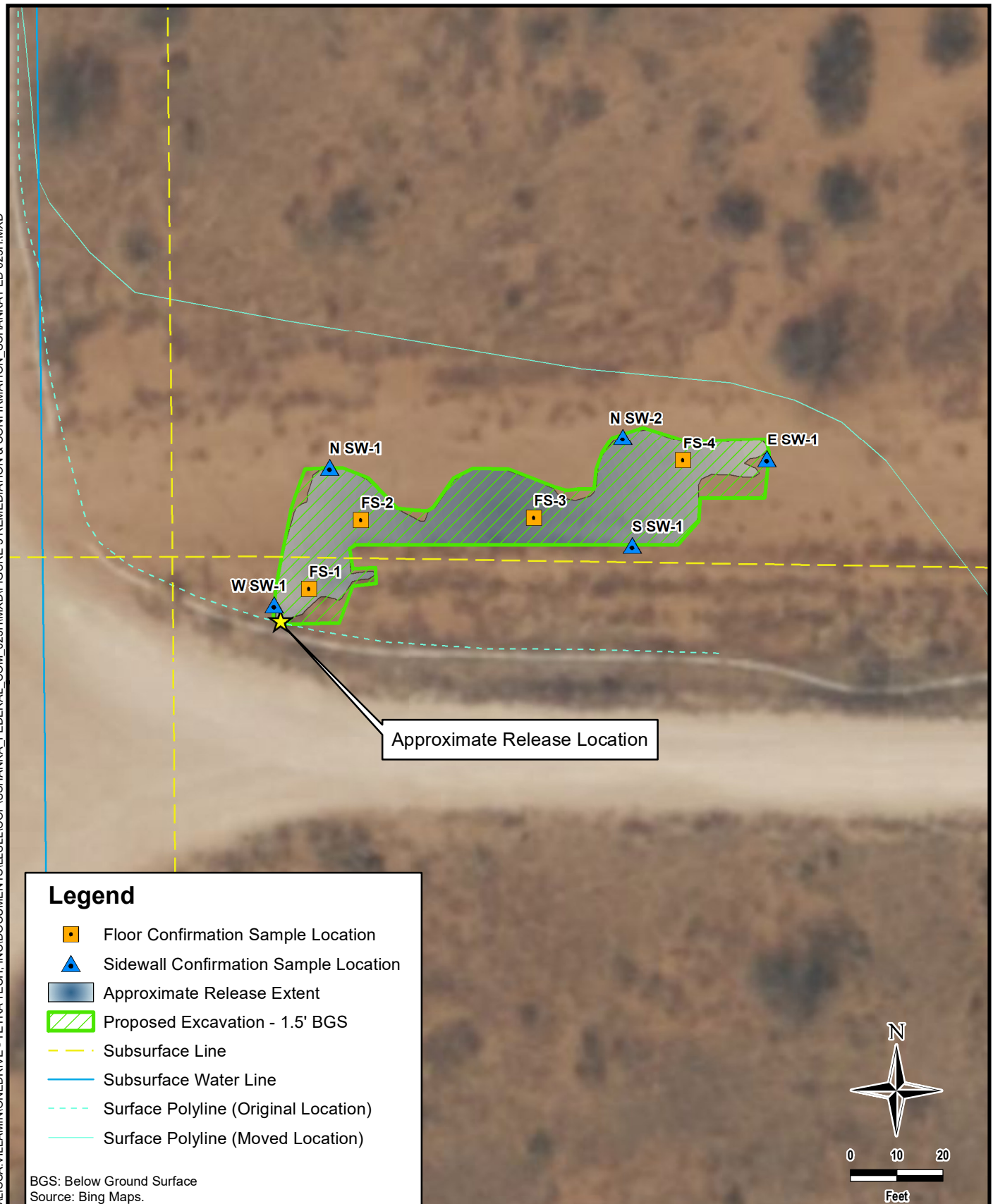
DATE: JUNE 05, 2023

DESIGNED BY: LMV

Figure No.

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DOCUMENT PATH: C:\USERS\LISSA.VILLAMINON\DRIVE - TETRA TECH\INC\DOCUMENTS\ULLULLCOP\USHANKA_FEDERAL_COM_023H\MXD\FIGURE 5 REMEDIATION & CONFIRMATION_USHANKA_FED_023H.MXD

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CONOCOPHILLIPS

NAPP2309431095
LEA COUNTY, NEW MEXICO
(32.078571°, -103.322728°)

**USHANKA FEDERAL COM #023H
REMEDIATION EXTENT AND CONFIRMATION SAMPLING**

PROJECT NO.: 212C-MD-03087

DATE: JUNE 05, 2023

DESIGNED BY: LMV

Figure No.

5

TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
SOIL ASSESSMENT- NAPP2309431095
CONOCOPHILLIPS
USHANKA FEDERAL COM 23H FLOWLINE RELEASE
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride ¹		BTEx ²										TPH ³							
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEx		GRO		DRO		EXT DRO		Total TPH	
		ft. bgs	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	(GRO+DRO+EXT DRO)		
HA-1	4/26/2023	0-1	1,870		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		13.2		<10.0		13.2	
		2-3	448		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		14.7		<10.0		14.7	
		3-4	176		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
		4-5	192		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
HA-2	4/26/2023	0-1	592		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
		2-3	160		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
		3-4	96.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
HA-3	4/26/2023	0-1	2,680		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		37.5		<10.0		37.5	
		2-3	96.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
		3-4	528		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
HA-4	4/26/2023	0-1	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
HA-5	4/26/2023	0-1	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
HA-6	4/26/2023	0-1	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
HA-7	4/26/2023	0-1	96.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
HA-8	4/26/2023	0-1	80.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
HA-9	4/26/2023	0-1	64.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

1 Method SM4500Cl-B

2 Method 8021B

3 Method 8015M

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

Shaded rows indicate intervals removed during remedial activities.

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
CONFIRMATION SAMPLING - NAPP2309431095
CONOCOPHILLIPS
USHANKA FEDERAL COM 23H FLOWLINE RELEASE
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride ¹		BTEX ²										TPH ³							
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH (GRO+DRO+EXT DRO)	
															C ₆ - C ₁₀		> C ₁₀ - C ₂₈		> C ₂₈ - C ₃₆			
		ft. bgs	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q		
NSW-1	5/22/2023	-	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
NSW-2	5/22/2023	-	112		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
ESW-1	5/22/2023	-	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
SSW-1	5/22/2023	-	64.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
WSW-1	5/22/2023	-	64.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
FS-1	5/22/2023	1.5	80.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
FS-2	5/22/2023	1.5	64.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
FS-3	5/22/2023	1.5	64.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
FS-4	5/22/2023	1.5	48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

1 Method SM4500Cl-B

2 Method 8021B

3 Method 8015M

APPENDIX A C-141 Forms

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	NAPP2309431095
District RP	
Facility ID	fAPP2203453585
Application ID	

Release Notification

Responsible Party

Responsible Party	COG Operating, LLC	OGRID	217817
Contact Name	Jacob Laird	Contact Telephone	(575) 703-5482
Contact email	Jacob.Laird@ConocoPhillips.com	Incident # (assigned by OCD)	NAPP2309431095
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701		

Location of Release Source

Latitude 32.0785 Longitude -103.3226
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Ushanka Federal Com 023H	Site Type	Flowline
Date Release Discovered	March 26, 2023	API# (if applicable)	

Unit Letter	Section	Township	Range	County
C	01	26S	35E	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)	0.7531	Volume Recovered (bbls)	0
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls)	6.7775	Volume Recovered (bbls)	0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
<input type="checkbox"/> Condensate	Volume Released (bbls)		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 hole in a flowline due to built up pressure.

The release was off the pad.

Evaluation will be made of 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	NAPP2309431095
District RP	
Facility ID	fAPP2203453585
Application ID	

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

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name Brittany N. Esparza Signature:  email: Brittany.Esparza@ConocoPhillips.com	Title: Environmental Technician Date: 4/4/2023 Telephone: (432) 221-0398
<u>OCD Only</u> Received by: Jocelyn Harimon Date: 04/04/2023	

Mapped Area (sq. ft.)	Average Depth (in.)	On/Off Pad	Percentage of Oil if Spilled Fluid is a Mixture (%)	Soil Spilled-Fluid Saturation	Total Estimated Volume of Spill (bbl.)	Total Estimated Volume of Spilled Oil (bbl.)	NAPP2309431095 Total Estimated Volume of Spilled Liquid other than Oil (bbl.)
1690	2	Off-Pad 	10%	15.02%	7.5305	0.7531	6.7775

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input 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 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 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 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 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 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 type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input 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	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: Jacob Laird Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Jocelyn Harimon Date: 06/20/2023

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

- ☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

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

Printed Name: _____ Title: _____

Signature: Jacob Laird Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Jocelyn Harimon Date: 06/20/2023

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

Closure Approved by: Nelson Velez Date: 09/18/2023

Printed Name: Nelson Velez Title: Environmental Specialist - Adv

APPENDIX B

Regulatory Correspondence

Poole, Nicholas

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Tuesday, May 23, 2023 9:15 AM
To: Poole, Nicholas
Cc: Bratcher, Michael, EMNRD; Velez, Nelson, EMNRD
Subject: RE: [EXTERNAL] Incident ID: NAPP2309431095- Confirmation Sampling

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

Nicholas,

Please be aware that notification requirements are **two business days**, per rule. You may proceed on your schedule. This, and all correspondence, should be included in the closure report to insure inclusion in the project file.

JH

Jocelyn Harimon • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
[http:// www.emnrd.nm.gov](http://www.emnrd.nm.gov)



From: Poole, Nicholas <NICHOLAS.POOLE@tetrattech.com>
Sent: Monday, May 22, 2023 3:36 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] Incident ID: NAPP2309431095- Confirmation Sampling

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Incident ID (n#) **NAPP2309431095** (Ushanka Federal Com 23H)

To whom it may concern,

In accordance with Subsection D of 19.15.29.12 NMAC, the responsible party must verbally notify the appropriate division district office prior to conducting confirmation sampling.

Remediation activities of the release will begin Tuesday, May 23, 2023.

Thus, on behalf of ConocoPhillips for the above referenced incident, Tetra Tech is duly providing this communication which serves as notification that final confirmation sampling of the release will be conducted at this site Wednesday afternoon, May 24, 2023.

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

Nicholas Poole | Staff Geoscientist
Mobile +1 (512) 560-9064 | nicholas.poole@tetrattech.com

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

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



From: [Taylor, Shelly J](#)
To: [Llull, Christian](#)
Subject: Re: [EXTERNAL] PBU - Ushanka Federal Com 23H - Site Assessment and Hydrovac SOW
Date: Friday, May 05, 2023 1:15:47 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[Outlook-ossek5c3.png](#)

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

You are cleared to proceed with remedial activities. I will get you the PBPA cost for this site.

Sincerely,

Shelly J Taylor

Environmental Protection Specialist
Realty - Compliance

Bureau of Land Management/Carlsbad Field Office
620 E. Greene St
Carlsbad, NM 88220
Direct 575.234.5706
Mobile 575.499.6831
sjtaylor@blm.gov

Spill/Release email: **BLM_NM_CFO_REALTY_SPILL@BLM.GOV**

PLEASE NOTE: I have a new email address: sjtaylor@blm.gov



From: Llull, Christian <Christian.Llull@tetrattech.com>
Sent: Friday, May 5, 2023 11:24 AM
To: Taylor, Shelly J <sjtaylor@blm.gov>
Subject: [EXTERNAL] PBU - Ushanka Federal Com 23H - Site Assessment and Hydrovac SOW

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Shelly, can you clear this release site for remediation?

BACKGROUND

- According to the State of New Mexico C-141 Initial Report, on March 26, 2023 a release occurred as a result of a hole in a flowline due to built up pressure. The release consisted of approximately 0.7531 bbls of oil and 6.7775 bbls of produced water, of which none were recovered.
 - The release reportedly affected a 1690 square feet of pasture and pipeline right of way.
 - The NMOCD approved the initial C-141 on April 4, 2023 and subsequently assigned the release the Incident ID NAPP2309431095.

Christian

Tetra Tech | *Leading with Science*® | OGA

8911 N. Capital of Texas Highway | Bldg. 2, Suite 2310 | Austin, TX 78759 | tetratech.com

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APPENDIX C

Site Characterization Data



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01170 POD1	CP	LE		3	3	3	06	26S	36E	659282	3548984	1701	500	280	220
CP 01170 POD1	C	CP	LE	3	3	3	06	26S	36E	659282	3548984	1701	500	280	220
CP 01263 POD3	CP	LE		4	1	3	06	26S	36E	660038	3549729	1852	516	240	276
CP 01920 POD1	CP	LE		4	3	4	31	25S	36E	660282	3550531	1985	101		
CP 01267 POD1	CP	LE		3	4	3	06	26S	36E	659759	3548807	2140	585	200	385

Average Depth to Water: **250 feet**

Minimum Depth: **200 feet**

Maximum Depth: **280 feet**

Record Count: 5

UTM NAD83 Radius Search (in meters):

Easting (X): 658301.96

Northing (Y): 3550375.55

Radius: 2400

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.

4/18/23 8:24 AM

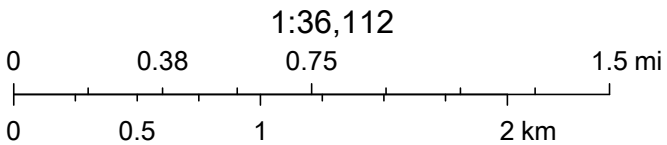
Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER

OCD Karst Potential Map

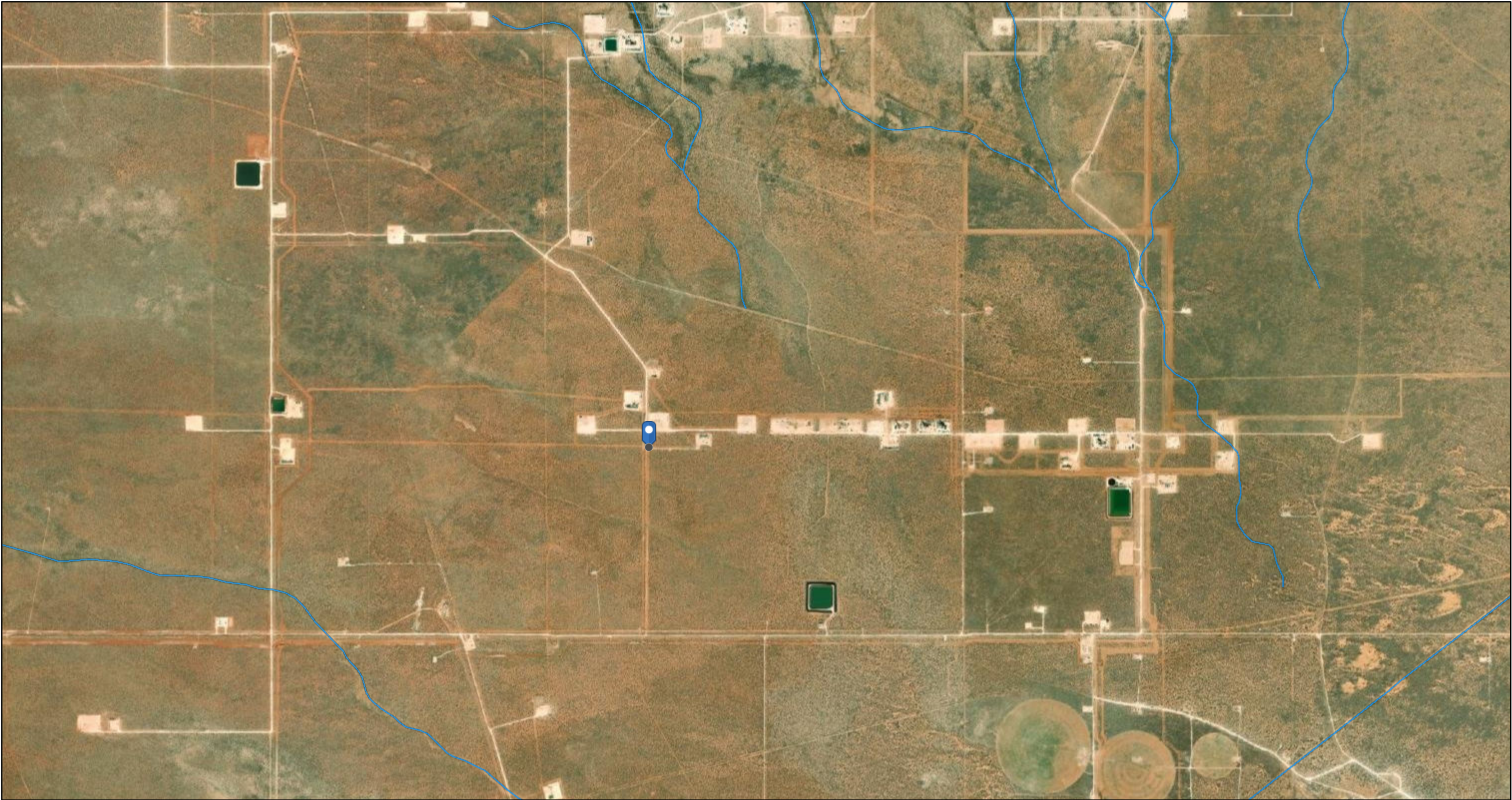


4/18/2023, 8:36:36 AM
Karst Occurrence Potential
Low



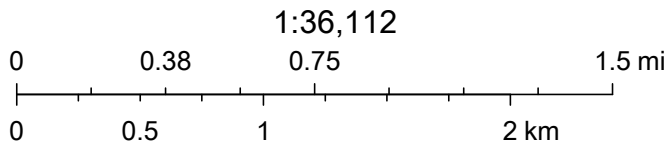
BLM, OCD, New Mexico Tech, Esri, HERE, Garmin, Maxar

OCD Waterbodies Map



4/18/2023, 8:48:52 AM

— OSE Streams



Esri, HERE, Garmin, Maxar, NM OSE

APPENDIX D

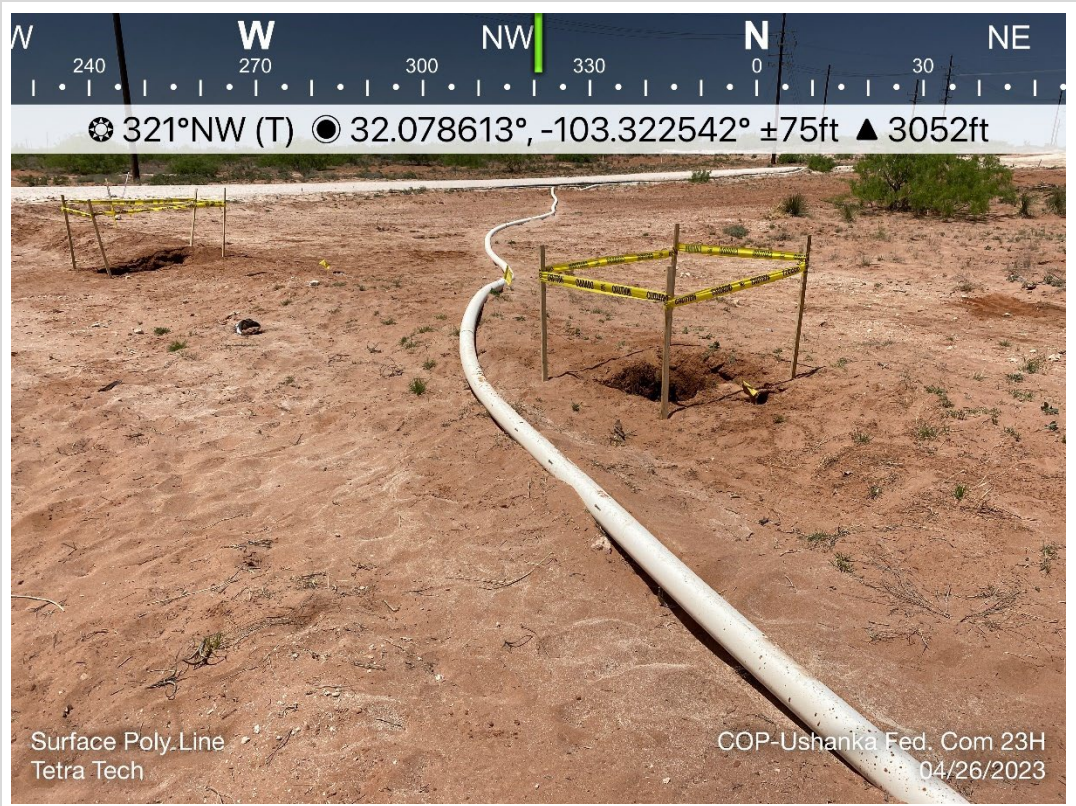
Photographic Documentation



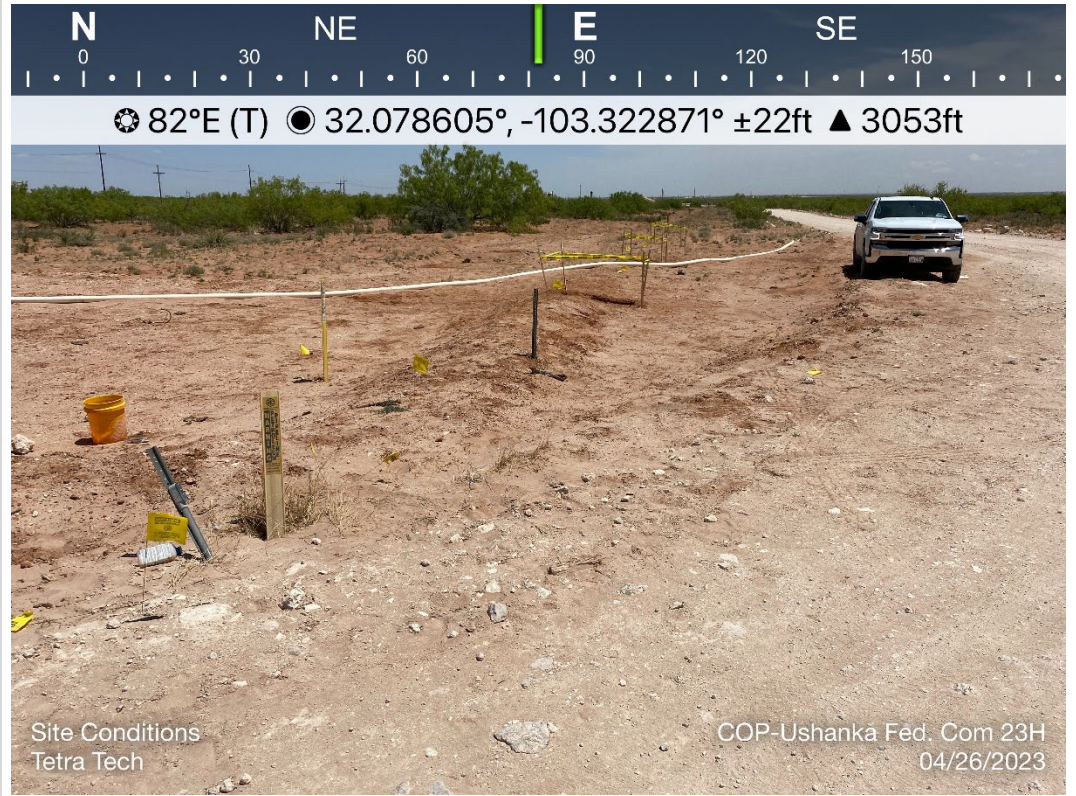
TETRA TECH, INC. PROJECT NO. 212C-MD-03087	DESCRIPTION	Facing east. Spill release and extent.	1
	SITE NAME	Ushanka Federal Com 23H Flowline Release	3/26/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03087	DESCRIPTION	Facing north. Spill release and extent.	2
	SITE NAME	Ushanka Federal Com 23H Flowline Release	4/26/23



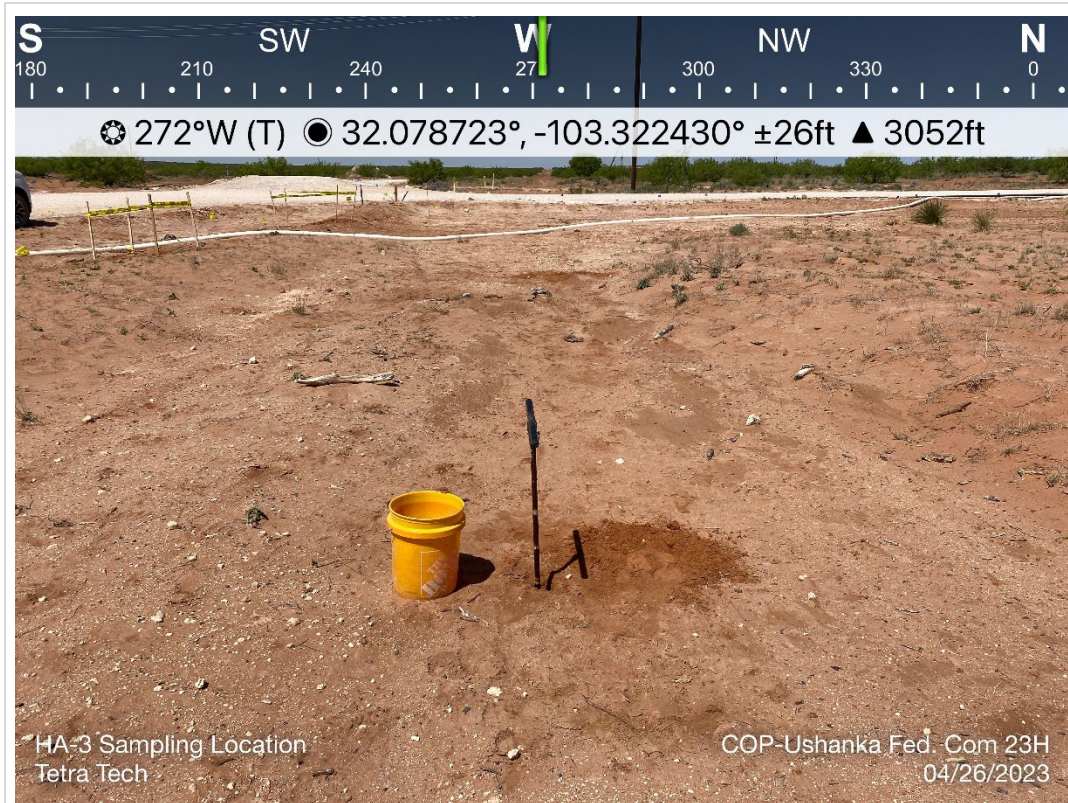
TETRA TECH, INC. PROJECT NO. 212C-MD-03087	DESCRIPTION	View northwest. Release extent, surface flowline, and daylighting Plains subsurface line.	3
	SITE NAME	Ushanka Federal Com 23H Flowline Release	4/26/2023



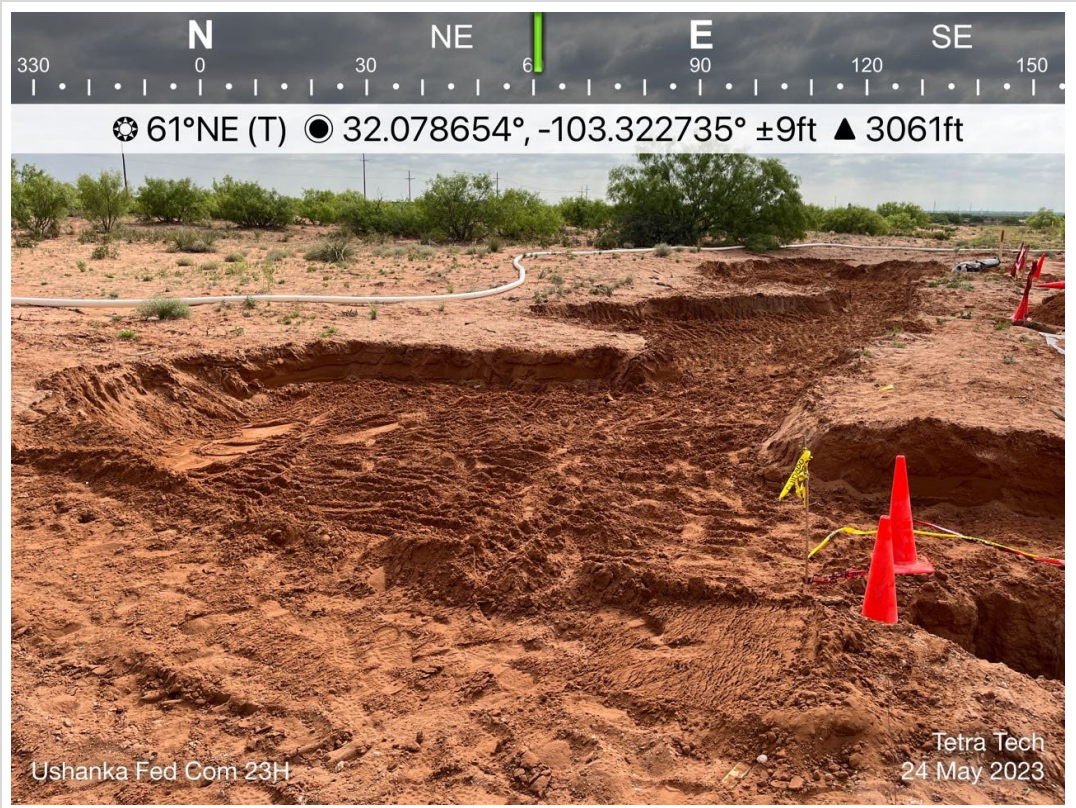
TETRA TECH, INC. PROJECT NO. 212C-MD-03087	DESCRIPTION	View east. Plains subsurface line extending east-west through the release extent.	4
	SITE NAME	Ushanka Federal Com 23H Flowline Release	4/26/23



TETRA TECH, INC. PROJECT NO. 212C-MD-03087	DESCRIPTION	View north. Solaris subsurface line located west of the release extent.	5
	SITE NAME	Ushanka Federal Com 23H Flowline Release	4/26/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03087	DESCRIPTION	View west. Hand auger sampling during assessment.	6
	SITE NAME	Ushanka Federal Com 23H Flowline Release	4/26/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03087	DESCRIPTION	View east. Excavated area, 1.5 ft bgs.	7
	SITE NAME	Ushanka Federal Com 23H Flowline Release	5/24/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03087	DESCRIPTION	View east. Excavated area, 1.5 ft bgs.	8
	SITE NAME	Ushanka Federal Com 23H Flowline Release	5/24/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03087	DESCRIPTION	View northeast. Excavated area, 1.5 ft bgs.	9
	SITE NAME	Ushanka Federal Com 23H Flowline Release	5/24/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03087	DESCRIPTION	View east. Backfill activities following excavation.	10
	SITE NAME	Ushanka Federal Com 23H Flowline Release	5/24/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-03087	DESCRIPTION	View southwest. Seeding activities following backfill.	11
	SITE NAME	Ushanka Federal Com 23H Flowline Release	5/24/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03087	DESCRIPTION	View west. Seeding activities following backfill.	12
	SITE NAME	Ushanka Federal Com 23H Flowline Release	5/24/2023

APPENDIX E

Analytical Laboratory Data – Assessment



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

May 02, 2023

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: USHANKA FED. COM 23H

Enclosed are the results of analyses for samples received by the laboratory on 04/27/23 12:42.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". 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:	04/27/2023	Sampling Date:	04/26/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03087	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: HA - 1 (0-1') (H232071-01)

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	04/28/2023	ND	1.68	84.1	2.00	16.0	
Toluene*	<0.050	0.050	04/28/2023	ND	1.92	95.9	2.00	15.5	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.18	109	2.00	14.4	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	6.47	108	6.00	15.9	
Total BTX	<0.300	0.300	04/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 122 % 71.5-134

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1870	16.0	04/28/2023	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*	<10.0	10.0	04/28/2023	ND	191	95.3	200	2.29	
DRO >C10-C28*	13.2	10.0	04/28/2023	ND	172	86.0	200	0.298	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 91.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.0 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/27/2023	Sampling Date:	04/26/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03087	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: HA - 1 (2'-3') (H232071-02)

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	04/28/2023	ND	1.68	84.1	2.00	16.0	
Toluene*	<0.050	0.050	04/28/2023	ND	1.92	95.9	2.00	15.5	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.18	109	2.00	14.4	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	6.47	108	6.00	15.9	
Total BTEx	<0.300	0.300	04/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 117 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	448	16.0	04/28/2023	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*	<10.0	10.0	04/28/2023	ND	191	95.3	200	2.29	
DRO >C10-C28*	14.7	10.0	04/28/2023	ND	172	86.0	200	0.298	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 97.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/27/2023	Sampling Date:	04/26/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03087	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: HA - 1 (3'-4') (H232071-03)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/28/2023	ND	1.68	84.1	2.00	16.0	
Toluene*	<0.050	0.050	04/28/2023	ND	1.92	95.9	2.00	15.5	
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.18	109	2.00	14.4	
Total Xylenes*	<0.150	0.150	04/28/2023	ND	6.47	108	6.00	15.9	
Total BTEx	<0.300	0.300	04/28/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	04/28/2023	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*	<10.0	10.0	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 91.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/27/2023	Sampling Date:	04/26/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03087	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: HA - 1 (4'-5') (H232071-04)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/28/2023	ND	1.68	84.1	2.00	16.0		
Toluene*	<0.050	0.050	04/28/2023	ND	1.92	95.9	2.00	15.5		
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	2.18	109	2.00	14.4		
Total Xylenes*	<0.150	0.150	04/28/2023	ND	6.47	108	6.00	15.9		
Total BTEX	<0.300	0.300	04/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	04/28/2023	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*	<10.0	10.0	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 131 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/27/2023	Sampling Date:	04/26/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03087	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: HA - 2 (0-1') (H232071-05)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/29/2023	ND	1.68	84.1	2.00	16.0	
Toluene*	<0.050	0.050	04/29/2023	ND	1.92	95.9	2.00	15.5	
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.18	109	2.00	14.4	
Total Xylenes*	<0.150	0.150	04/29/2023	ND	6.47	108	6.00	15.9	
Total BTEx	<0.300	0.300	04/29/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 122 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	04/28/2023	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*	<10.0	10.0	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.6 % 49.1-148

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Analytical Results For:

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

Received:	04/27/2023	Sampling Date:	04/26/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03087	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: HA - 2 (2'-3') (H232071-06)

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	04/29/2023	ND	1.68	84.1	2.00	16.0		
Toluene*	<0.050	0.050	04/29/2023	ND	1.92	95.9	2.00	15.5		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.18	109	2.00	14.4		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	6.47	108	6.00	15.9		
Total BTEx	<0.300	0.300	04/29/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	04/28/2023	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	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 122 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

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Analytical Results For:

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

Received:	04/27/2023	Sampling Date:	04/26/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03087	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: HA - 2 (3'-4') (H232071-07)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/29/2023	ND	1.68	84.1	2.00	16.0		
Toluene*	<0.050	0.050	04/29/2023	ND	1.92	95.9	2.00	15.5		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.18	109	2.00	14.4		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	6.47	108	6.00	15.9		
Total BTEX	<0.300	0.300	04/29/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 123 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	04/28/2023	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	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 125 % 48.2-134

Surrogate: 1-Chlorooctadecane 123 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	04/27/2023	Sampling Date:	04/26/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03087	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: HA - 3 (0-1') (H232071-08)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/29/2023	ND	1.68	84.1	2.00	16.0		
Toluene*	<0.050	0.050	04/29/2023	ND	1.92	95.9	2.00	15.5		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.18	109	2.00	14.4		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	6.47	108	6.00	15.9		
Total BTEx	<0.300	0.300	04/29/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 123 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2680	16.0	04/28/2023	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	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	37.5	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 127 % 48.2-134

Surrogate: 1-Chlorooctadecane 128 % 49.1-148

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Analytical Results For:

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

Received:	04/27/2023	Sampling Date:	04/26/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03087	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: HA - 3 (2'-3') (H232071-09)

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	04/29/2023	ND	1.68	84.1	2.00	16.0		
Toluene*	<0.050	0.050	04/29/2023	ND	1.92	95.9	2.00	15.5		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.18	109	2.00	14.4		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	6.47	108	6.00	15.9		
Total BTEx	<0.300	0.300	04/29/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	04/28/2023	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	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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Analytical Results For:

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

Received:	04/27/2023	Sampling Date:	04/26/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03087	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: HA - 3 (3'-4') (H232071-10)

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	04/29/2023	ND	1.68	84.1	2.00	16.0		
Toluene*	<0.050	0.050	04/29/2023	ND	1.92	95.9	2.00	15.5		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.18	109	2.00	14.4		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	6.47	108	6.00	15.9		
Total BTEx	<0.300	0.300	04/29/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 122 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	528	16.0	04/28/2023	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	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 93.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	04/27/2023	Sampling Date:	04/26/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03087	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: HA - 4 (0-1') (H232071-11)

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	04/29/2023	ND	1.90	95.1	2.00	11.0		
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5		
Total BTEx	<0.300	0.300	04/29/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 133 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	04/28/2023	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	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

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Analytical Results For:

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

Received:	04/27/2023	Sampling Date:	04/26/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03087	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: HA - 5 (0-1') (H232071-12)

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	04/29/2023	ND	1.90	95.1	2.00	11.0	
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6	
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7	
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5	
Total BTX	<0.300	0.300	04/29/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 141 % 71.5-134

Chloride, SM4500CI-B			mg/kg					Analyzed By: AC	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/28/2023	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	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 123 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/27/2023	Sampling Date:	04/26/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03087	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: HA - 6 (0-1') (H232071-13)

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	04/29/2023	ND	1.90	95.1	2.00	11.0	
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6	
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7	
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5	
Total BTX	<0.300	0.300	04/29/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 140 % 71.5-134

Chloride, SM4500CI-B			mg/kg					Analyzed By: AC	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/28/2023	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	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 123 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/27/2023	Sampling Date:	04/26/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03087	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: HA - 7 (0-1') (H232071-14)

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	04/29/2023	ND	1.90	95.1	2.00	11.0		
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5		
Total BTX	<0.300	0.300	04/29/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 130 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	04/28/2023	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	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/27/2023	Sampling Date:	04/26/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03087	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: HA - 8 (0-1') (H232071-15)

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	04/29/2023	ND	1.90	95.1	2.00	11.0	
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6	
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7	
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5	
Total BTEx	<0.300	0.300	04/29/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 133 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	04/28/2023	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	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/27/2023	Sampling Date:	04/26/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03087	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA CO NM		

Sample ID: HA - 9 (0-1') (H232071-16)

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	04/29/2023	ND	1.90	95.1	2.00	11.0	
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6	
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7	
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5	
Total BTX	<0.300	0.300	04/29/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 136 % 71.5-134

Chloride, SM4500CI-B			mg/kg					Analyzed By: AC	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	04/28/2023	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	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-04	The RPD for the BS/BSD was outside of historical limits.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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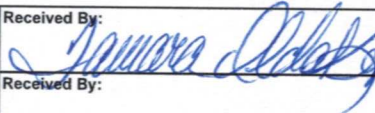
*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



Company Name: Tetra Tech				BILL TO				ANALYSIS REQUEST																							
Project Manager: Christian Llull				P.O. #:				<div style="display: flex; justify-content: space-between;"> <div> TPH 8015M BTEX 8021B Chloride SM4500C1-B </div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>																							
Address: 8911 Capital o Texas Hwy, Suite 2310				Company: Tetra Tech																											
City: Austin State: TX Zip:				Attn: Christian Llull																											
Phone #: (512)565-0190 Fax #:				Address: EMAIL																											
Project #: 212C-MD-03087 Project Owner: ConocoPhillips				City:																											
Project Name: Ushanka Fed. Com 23H				State: Zip:																											
Project Location: Lea County, New Mexico				Phone #:																											
Sampler Name: Colton Bickerstaff				Fax #:																											
FOR LAB USE ONLY																															
Lab I.D.		Sample I.D.		G/RAB OR (COMP. # CONTAINERS)		MATRIX		PRESERV.		SAMPLING																					
						GROUNDWATER																									
						WASTEWATER																									
						SOIL																									
						OIL																									
						SLUDGE																									
						OTHER : ACID/BASE:																									
						ICE / COOL																									
						OTHER :																									
										DATE		TIME																			
H232071				G 1		X				X		4/26/2023		X		X		X													
2		HA-1 (2'-3')		G 1		X				X		4/26/2023		X		X		X													
3		HA-1 (3'-4')		G 1		X				X		4/26/2023		X		X		X													
4		HA-1 (4'-5')		G 1		X				X		4/26/2023		X		X		X													
5		HA-2 (0-1')		G 1		X				X		4/26/2023		X		X		X													
6		HA-2 (2'-3')		G 1		X				X		4/26/2023		X		X		X													
7		HA-2 (3'-4')		G 1		X				X		4/26/2023		X		X		X													
8		HA-3 (0-1')		G 1		X				X		4/26/2023		X		X		X													
9		HA-3 (2'-3')		G 1		X				X		4/26/2023		X		X		X													
10		HA-3 (3'-4')		G 1		X				X		4/26/2023		X		X		X													
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Relinquished By: Colton Bickerstaff				Date: 4/27/23		Received By:				Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No				Add'l Phone #:																	
				Time: 1242						All Results are emailed. Please provide Email address: Christian.Llull@tetratech.com																					
Relinquished By:				Date:						REMARKS:																					
				Time:																											
Delivered By: (Circle One) Sampler - UPS - Bus - Other:				Observed Temp. °C Corrected Temp. °C		Sample Condition Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> <input type="checkbox"/> Yes <input type="checkbox"/> No		CHECKED BY: (Initials) TO		Turnaround Time: Standard <input checked="" type="checkbox"/> Rush: N/A, Standard TAT <input type="checkbox"/>				Bacteria (only) Sample Condition Cool Intact <input type="checkbox"/> Observed Temp. °C																	
				2.4 1.8						Thermometer ID #113 Correction Factor -0.5°C				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No Corrected Temp. °C																	

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Tetra Tech				BILL TO												ANALYSIS REQUEST											
Project Manager: Christian Llull				P.O. #:												<div style="display: flex; flex-direction: column; align-items: center;"> <div>TPH 8015M</div> <div>BTEX 8021B</div> <div>Chloride SM4500CI-B</div> </div>											
Address: 8911 Capital o Texas Hwy, Suite 2310				Company: Tetra Tech																							
City: Austin State: TX Zip:				Attn: Christian Llull																							
Phone #: (512)565-0190 Fax #:				Address: EMAIL																							
Project #: 212C-MD-03087 Project Owner: ConocoPhillips				City:																							
Project Name: Ushanka Fed. Com 23H				State: Zip:																							
Project Location: Lea County, New Mexico				Phone #:																							
Sampler Name: Colton Bickerstaff				Fax #:																							
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:	DATE	TIME													
H232071																											
11	HA-4 (0-1')	G	1		X								4/26/2023		X	X	X										
12	HA-5 (0-1')	G	1		X								4/26/2023		X	X	X										
13	HA-6 (0-1')	G	1		X								4/26/2023		X	X	X										
14	HA-7 (0-1')	G	1		X								4/26/2023		X	X	X										
15	HA-8 (0-1')	G	1		X								4/26/2023		X	X	X										
16	HA-9 (0-1')	G	1		X								4/26/2023		X	X	X										

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Relinquished By: Colton Bickerstaff	Date: 4/27/23	Received By:	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time: 12:42	<i>Amara Olatunji</i>	All Results are emailed. Please provide Email address: Christian.Llull@tetratech.com	
Relinquished By:	Date:	Received By:	REMARKS:	
	Time:			
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C Corrected Temp. °C	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initials) <i>TO</i>	Turnaround Time: Standard <input checked="" type="checkbox"/> Bacteria (only) Sample Condition Rush: N/A, Standard TAT <input type="checkbox"/> Cool Intact Observed Temp. °C Thermometer ID #113 Correction Factor -0.5°C
	2.4 1.8			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No Corrected Temp. °C

FORM-006 R 3.2 10/07/21

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

APPENDIX F

Waste Manifests



Customer Copy

-----WEIGHT TICKET-----

Ticket # 171615

Start: 05/22/2023 04:31 PM

End: 05/22/2023 05:35 PM

By: owl.amy

GROSS	TARE	NET	PRICE	AMOUNT
-------	------	-----	-------	--------

Contaminated Soil

C5	00	05	\$0.01	\$0.05
----	----	----	--------	--------

Hauler: McNabb Partners

Driver: Isaiah Garcia

Lease: Lshanka Fed Com

Well: 23H

AFE #: N/A

County, State: LEA (NM)

API #: 3002544505

Manifest #: 01

Client Company, Man: Andrew Garcia

Rig Name & Number: N/A

Trucking Co Ticket #: N/A

Truck Type: Hydro Vac

DOM: DUYD

DOM Count: 5

PF Test Result: Pass

H2S Test: Pass

H2S Testing - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

Paint Filter - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

NORM - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

Additional Photos

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

C9			\$0.01	\$0.05
----	--	--	--------	--------

SUBTOTAL ----> \$0.05

TAX ----> \$0.00

ROUNDING ----> \$0.00

TOTAL ----> \$0.05

Customer: ConocoPhillips Company

Driver: Karen Work

ID/License:



Customer Copy

-----WEIGHT TICKET-----

Ticket # 171751

Start: 05/23/2023 11:28 AM

End: 05/23/2023 11:40 AM

By: cwl.adan

GROSS	TARE	NET	PRICE	AMOUNT
Contaminated Soil				
16	00	16	\$0.01	\$0.16
Hauler: McNabb				
Driver: Josh Busby				
Lease: Lshanka Fed Com				
Well: 023H				
AFE #: N/A				
County, State: LEA (NM)				
API #: 6002544505				
Manifest #: 02				
Client Company Man: Andrew Garcia				
Rig Name & Number: N/A				
Trucking Co Ticket #: N/A				
Truck Type: Dump Truck				
UOM: Cuyd				
UOM Count: 16				
PF Test Result: Pass				
H2S Test: Pass				

H2S Testing - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

Paint Filter - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

NORM - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

Additional Photos

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

20			\$0.01	\$0.16
----	--	--	--------	--------

SUE TOTAL ----> \$0.16

TAX ----> \$0.01

ROUNDING ----> \$0.00

TOTAL ----> \$0.17

Customer: ConocoPhillips Company

Driver: Karen Work

ID/License:



Customer Copy

WEIGHT TICKET

Ticket # 171753

Start: 05/23/2023 11:33 AM

End: 05/23/2023 11:42 AM

By: owl.adan

GROSS	TARE	NET	PRICE	AMOUNT
Contaminated Soil				
16	00	16	\$0.01	\$0.16

Hauler: McNabb

Driver: Lumer Rdz

Lease: Lshanka Fed Com

Well: 023H

AFE #: N/A

County, State: LEA (NM)

API #: 5002544505

Manifest #: 03

Client Company Man: Andrew Garcia

Rig Name & Number: N/A

Trucking Co Ticket #: N/A

Truck Type: Dump Truck M36

UOM: CuYd

UOM Count: 16

PF Test Result: Pass

H2S Test: Pass

H2S Testing - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

Paint Filter - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

NORM - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

Additional Photos

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

20			\$0.01	\$0.16
----	--	--	--------	--------

SUBTOTAL ----> \$0.16

TAX ----> \$0.01

ROUNDING ----> \$0.00

TOTAL ----> \$0.17

Customer: ConocoPhillips Company

Driver: Karen Work

ID/License:



WEIGHT TICKET

Ticket # 171778

Start: 05/23/2023 01:05 PM

End: 05/23/2023 01:11 PM

By: cwl.adan

GROSS	TARE	NET	PRICE	AMOUNT
Contaminated Soil				
14	00	14	\$0.01	\$0.14

Hauler: McNabb

Driver: Josh Bushy

Lease: Lshanka Fed Com

Well: 083H

AFE #: N/A

County, State: LEA (NM)

API #: 8002544505

Manifest #: 04

Client Company Man: Andrew Garcia

Rig Name & Number: N/A

Trucking Co Ticket #: N/A

Truck Type: Dump Truck

UOM: CuYd

UOM Count: 14

PF Test Result: Pass

H2S Test: Pass

H2S Testing - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

Paint Filter - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

NORM - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

Additional Photos

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

18

\$0.01

\$0.14

SLE TOTAL → \$0.14

TAX → \$0.00

SCENDING → \$0.00

TOTAL → \$0.15

Customer: ConocoPhillips

Driver: Karen

ID/License:



Customer Copy

WEIGHT TICKET

Ticket # 171780

Start: 05/23/2023 01:18 PM

End: 05/23/2023 01:26 PM

By: owl.adan

GROSS	TARE	NET	PRICE	AMOUNT
Contaminated Soil				
16	00	16	\$0.01	\$0.16

Hauler: McNabb

Driver: Lumer Rdz

Lease: Lshanka Fed Com

Well: 023H

AFE #: N/A

County, State: LEA (NM)

API #: 3002544505

Manifest #: 05

Client Company Man: Andrew Garcia

Rig Name & Number: N/A

Trucking Co Ticket #: N/A

Truck Type: Dump Truck M36

UOM: CuYd

UOM Count: 16

PF Test Result: Pass

H2S Test: Pass

H2S Testing - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

Paint Filter - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

NORM - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

Additional Photos

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

20

\$0.01

\$0.16

SLE TOTAL ----> \$0.16

TAX ----> \$0.01

ROUNDING ----> \$0.00

TOTAL ----> \$0.17

Customer: ConocoPhillips Company

Driver: Karen Work

ID/Licence:



WEIGHT TICKET

Ticket # 171804

Start: 05/23/2023 03:05 PM

End: 05/23/2023 03:14 PM

By: cwl.adan

GROSS	TARE	NET	PRICE	AMOUNT
Contaminated Soil				
14	00	14	\$0.01	\$0.14

Hauler: McNabb

Driver: Josh Busby

Lease: Lshanka Fed Com

Well: 023H

AFE #: N/A

County, State: LEA (NM)

API #: 0002544505

Manifest #: 06

Client Company Man: Andrew Garcia

Rig Name & Number: N/A

Trucking Co Ticket #: N/A

Truck Type: Dump Truck

UOM: CuYd

UOM Count: 14

PF Test Result: Pass

H2S Test: Pass

H2S Testing - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

Paint Filter - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

NORM - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

Additional Photos

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

13			\$0.01	\$0.14
----	--	--	--------	--------

SUBTOTAL ----> \$0.14

TAX ----> \$0.01

ROUNDING ----> \$-0.00

TOTAL ----> \$0.15

Customer: ConocoPhillips Company

Driver: Karen Work

ID/License:

powered by TrueCloudERP.com



Customer Copy

WEIGHT TICKET

Ticket # 171808
 Start: 05/23/2023 03:23 PM
 End: 05/23/2023 03:33 PM
 By: owl.judy

GROSS	TARE	NET	PRICE	AMOUNT
Contaminated Soil				
16	00	16	\$0.01	\$0.16
Hauler: McNabb				
Driver: Lumer Rdz				
Lease: Lshanka Fed Com				
Well: 023H				
AFE #: N/A				
County, State: LEA (NM)				
API #: 3002544505				
Manifest #: 07				
Client Company Man: Andrew Garcia				
Rig Name & Number: N/A				
Trucking Co Ticket #: N/A				
Truck Type: Dump Truck				
UOM: Cuyd				
UOM Count: 16				
PF Test Result: Fail				
H2S Test: Pass				
H2S Testing - PASS				
C1	00	01	\$0.00	\$0.00
Paint Filter - PASS				
C1	00	01	\$0.00	\$0.00
NORM - PASS				
C1	00	01	\$0.00	\$0.00
Additional Photos				
C1	00	01	\$0.00	\$0.00
20			\$0.01	\$0.16
			SUBTOTAL ---->	\$0.16
			TAX ---->	\$0.01
			ROUNDING ---->	\$0.00
			TOTAL ---->	\$0.17
Customer: ConocoPhillips Company				
Driver: Karen Work				
ID/License:				



Customer Copy

---WEIGHT TICKET---

Ticket # 171922

Start: 05/24/2023 10:40 AM

End: 05/24/2023 10:52 AM

By: owl.amy

GROSS	TARE	NET	PRICE	AMOUNT
-------	------	-----	-------	--------

Contaminated Soil

10	00	10	\$0.01	\$0.10
----	----	----	--------	--------

Hauler: McNabb Partners

Driver: Michael Quinones

Lease: Lshanka Fed Com

Well: 023H

AFE #: N/A

County, State: LEA (NM)

API #: 3002544505

Manifest #: 08

Client Company Man: Andrew Garcia

Rig Name & Number: N/A

Trucking Co Ticket #: N/A

Truck Type: Dump Truck

UOM: Cuyd

UOM Count: 10

PF Test Result: Pass

H2S Test: Pass

H2S Testing - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

Paint Filter - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

NORM - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

Additional Photos

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

14			\$0.01	\$0.10
----	--	--	--------	--------

SUE TOTAL ----> \$0.10

TAX ----> \$0.01

ROUNDING ----> \$0.00

TOTAL ----> \$0.11

Customer: ConocoPhillips Company

Driver: Karen Work

ID/License:



Customer Copy

WEIGHT TICKET

Ticket # 171950

Start: 05/24/2023 12:26 PM

End: 05/24/2023 12:32 PM

By: owl.amy

GROSS	TARE	NET	PRICE	AMOUNT
Contaminated Soil				
10	00	10	\$0.01	\$0.10

Hauler: McNabb Partners

Driver: Michael Quinones

Lease: Lshanka Fed Com

Well: 023H

AFE #: N/A

County, State: LEA (NM)

API #: 8002544505

Manifest #: 09

Client Company Man: Andrew Garcia

Rig Name & Number: N/A

Trucking Co Ticket #: N/A

Truck Type: Dump Truck

UOM: CuYd

UOM Count: 10

PF Test Result: Pass

H2S Test: Pass

H2S Testing - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

Paint Filter - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

NORM - PASS

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

Additional Photos

C1	00	01	\$0.00	\$0.00
----	----	----	--------	--------

14

\$0.01 \$0.10

SUE TOTAL ----> \$0.10

TAX ----> \$0.01

ROUNDING ----> \$0.00

TOTAL ----> \$0.11

Customer: ConocoPhillips Company

Driver: Karen Work

ID/Licence:



Customer Copy

WEIGHT TICKET

Ticket # 171973

Start: 05/24/2023 02:11 PM

End: 05/24/2023 02:33 PM

By: owl.amy

GROSS	TARE	NET	PRICE	AMOUNT
Contaminated Soil (IL)				
10	00	10	\$0.01	\$0.10

Hauler: McNabb Partners

Driver: Michael Guinones

Lease: Lshanka Fed Com

Well: 023H

AFE #: N/A

County, State: LEA (NM)

API #: 0002544505

Manifest #: 10

Client Company Man: Andrew Garcia

Rig Name & Number: N/A

Trucking Co Ticket #: N/A

Truck Type: Dump Truck

UOM: Cuyd

UOM Count: 10

PF Test Result: Pass

H2S Test: Pass

H2S Testing - PASS				
C1	00	01	\$0.00	\$0.00

Paint Filter - PASS				
C1	00	01	\$0.00	\$0.00

NORM - PASS				
C1	00	01	\$0.00	\$0.00

Additional Photos				
C1	00	01	\$0.00	\$0.00

14			\$0.01	\$0.10
----	--	--	--------	--------

SUBTOTAL	---->	\$0.10
TAX	---->	\$0.01
ROUNDING	---->	\$0.00
TOTAL	---->	\$0.11

Customer: ConocoPhillips Company

Driver: Karen Work

ID/Licence:

APPENDIX G

Analytical Laboratory Data – Remediation



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

May 23, 2023

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: USHANKA FED. COM 23H

Enclosed are the results of analyses for samples received by the laboratory on 05/22/23 16:35.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". 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:	05/22/2023	Sampling Date:	05/22/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 03087	Sample Received By:	Shari Cisneros
Project Location:	COP - LEA CO NM		

Sample ID: NSW - 1 (H232591-01)

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	05/23/2023	ND	2.34	117	2.00	3.31	
Toluene*	<0.050	0.050	05/23/2023	ND	2.32	116	2.00	4.38	
Ethylbenzene*	<0.050	0.050	05/23/2023	ND	2.24	112	2.00	3.16	
Total Xylenes*	<0.150	0.150	05/23/2023	ND	6.81	114	6.00	3.01	
Total BTX	<0.300	0.300	05/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	05/23/2023	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2023	ND	201	101	200	7.18	
DRO >C10-C28*	<10.0	10.0	05/23/2023	ND	179	89.3	200	0.0991	
EXT DRO >C28-C36	<10.0	10.0	05/23/2023	ND					

Surrogate: 1-Chlorooctane 80.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.9 % 49.1-148

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	05/22/2023	Sampling Date:	05/22/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 03087	Sample Received By:	Shari Cisneros
Project Location:	COP - LEA CO NM		

Sample ID: NSW - 2 (H232591-02)

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	05/23/2023	ND	2.34	117	2.00	3.31		
Toluene*	<0.050	0.050	05/23/2023	ND	2.32	116	2.00	4.38		
Ethylbenzene*	<0.050	0.050	05/23/2023	ND	2.24	112	2.00	3.16		
Total Xylenes*	<0.150	0.150	05/23/2023	ND	6.81	114	6.00	3.01		
Total BTEx	<0.300	0.300	05/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	05/23/2023	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2023	ND	201	101	200	7.18	
DRO >C10-C28*	<10.0	10.0	05/23/2023	ND	179	89.3	200	0.0991	
EXT DRO >C28-C36	<10.0	10.0	05/23/2023	ND					

Surrogate: 1-Chlorooctane 75.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 63.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	05/22/2023	Sampling Date:	05/22/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 03087	Sample Received By:	Shari Cisneros
Project Location:	COP - LEA CO NM		

Sample ID: ESW - 1 (H232591-03)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/23/2023	ND	2.34	117	2.00	3.31		
Toluene*	<0.050	0.050	05/23/2023	ND	2.32	116	2.00	4.38		
Ethylbenzene*	<0.050	0.050	05/23/2023	ND	2.24	112	2.00	3.16		
Total Xylenes*	<0.150	0.150	05/23/2023	ND	6.81	114	6.00	3.01		
Total BTEx	<0.300	0.300	05/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

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	05/23/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2023	ND	201	101	200	7.18	
DRO >C10-C28*	<10.0	10.0	05/23/2023	ND	179	89.3	200	0.0991	
EXT DRO >C28-C36	<10.0	10.0	05/23/2023	ND					

Surrogate: 1-Chlorooctane 79.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	05/22/2023	Sampling Date:	05/22/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 03087	Sample Received By:	Shari Cisneros
Project Location:	COP - LEA CO NM		

Sample ID: SSW - 1 (H232591-04)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/23/2023	ND	2.34	117	2.00	3.31		
Toluene*	<0.050	0.050	05/23/2023	ND	2.32	116	2.00	4.38		
Ethylbenzene*	<0.050	0.050	05/23/2023	ND	2.24	112	2.00	3.16		
Total Xylenes*	<0.150	0.150	05/23/2023	ND	6.81	114	6.00	3.01		
Total BTEx	<0.300	0.300	05/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	05/23/2023	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2023	ND	201	101	200	7.18	
DRO >C10-C28*	<10.0	10.0	05/23/2023	ND	179	89.3	200	0.0991	
EXT DRO >C28-C36	<10.0	10.0	05/23/2023	ND					

Surrogate: 1-Chlorooctane 80.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.7 % 49.1-148

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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:	05/22/2023	Sampling Date:	05/22/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 03087	Sample Received By:	Shari Cisneros
Project Location:	COP - LEA CO NM		

Sample ID: WSW - 1 (H232591-05)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/23/2023	ND	2.34	117	2.00	3.31		
Toluene*	<0.050	0.050	05/23/2023	ND	2.32	116	2.00	4.38		
Ethylbenzene*	<0.050	0.050	05/23/2023	ND	2.24	112	2.00	3.16		
Total Xylenes*	<0.150	0.150	05/23/2023	ND	6.81	114	6.00	3.01		
Total BTEx	<0.300	0.300	05/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	05/23/2023	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2023	ND	201	101	200	7.18	
DRO >C10-C28*	<10.0	10.0	05/23/2023	ND	179	89.3	200	0.0991	
EXT DRO >C28-C36	<10.0	10.0	05/23/2023	ND					

Surrogate: 1-Chlorooctane 82.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.7 % 49.1-148

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Analytical Results For:

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

Received:	05/22/2023	Sampling Date:	05/22/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 03087	Sample Received By:	Shari Cisneros
Project Location:	COP - LEA CO NM		

Sample ID: FS - 1 (H232591-06)

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	05/23/2023	ND	2.34	117	2.00	3.31		
Toluene*	<0.050	0.050	05/23/2023	ND	2.32	116	2.00	4.38		
Ethylbenzene*	<0.050	0.050	05/23/2023	ND	2.24	112	2.00	3.16		
Total Xylenes*	<0.150	0.150	05/23/2023	ND	6.81	114	6.00	3.01		
Total BTEx	<0.300	0.300	05/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	05/23/2023	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2023	ND	201	101	200	7.18	
DRO >C10-C28*	<10.0	10.0	05/23/2023	ND	179	89.3	200	0.0991	
EXT DRO >C28-C36	<10.0	10.0	05/23/2023	ND					

Surrogate: 1-Chlorooctane 84.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	05/22/2023	Sampling Date:	05/22/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 03087	Sample Received By:	Shari Cisneros
Project Location:	COP - LEA CO NM		

Sample ID: FS - 2 (H232591-07)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/23/2023	ND	2.34	117	2.00	3.31		
Toluene*	<0.050	0.050	05/23/2023	ND	2.32	116	2.00	4.38		
Ethylbenzene*	<0.050	0.050	05/23/2023	ND	2.24	112	2.00	3.16		
Total Xylenes*	<0.150	0.150	05/23/2023	ND	6.81	114	6.00	3.01		
Total BTEx	<0.300	0.300	05/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	05/23/2023	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2023	ND	201	101	200	7.18	
DRO >C10-C28*	<10.0	10.0	05/23/2023	ND	179	89.3	200	0.0991	
EXT DRO >C28-C36	<10.0	10.0	05/23/2023	ND					

Surrogate: 1-Chlorooctane 79.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	05/22/2023	Sampling Date:	05/22/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 03087	Sample Received By:	Shari Cisneros
Project Location:	COP - LEA CO NM		

Sample ID: FS - 3 (H232591-08)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/23/2023	ND	2.34	117	2.00	3.31		
Toluene*	<0.050	0.050	05/23/2023	ND	2.32	116	2.00	4.38		
Ethylbenzene*	<0.050	0.050	05/23/2023	ND	2.24	112	2.00	3.16		
Total Xylenes*	<0.150	0.150	05/23/2023	ND	6.81	114	6.00	3.01		
Total BTEx	<0.300	0.300	05/23/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	05/23/2023	ND	400	100	400	3.92		

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	05/23/2023	ND	201	101	200	7.18	
DRO >C10-C28*	<10.0	10.0	05/23/2023	ND	179	89.3	200	0.0991	
EXT DRO >C28-C36	<10.0	10.0	05/23/2023	ND					

Surrogate: 1-Chlorooctane 86.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.0 % 49.1-148

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Analytical Results For:

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

Received:	05/22/2023	Sampling Date:	05/22/2023
Reported:	05/23/2023	Sampling Type:	Soil
Project Name:	USHANKA FED. COM 23H	Sampling Condition:	** (See Notes)
Project Number:	212C - MD - 03087	Sample Received By:	Shari Cisneros
Project Location:	COP - LEA CO NM		

Sample ID: FS - 4 (H232591-09)

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	05/23/2023	ND	2.34	117	2.00	3.31	
Toluene*	<0.050	0.050	05/23/2023	ND	2.32	116	2.00	4.38	
Ethylbenzene*	<0.050	0.050	05/23/2023	ND	2.24	112	2.00	3.16	
Total Xylenes*	<0.150	0.150	05/23/2023	ND	6.81	114	6.00	3.01	
Total BTEx	<0.300	0.300	05/23/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	05/23/2023	ND	400	100	400	3.92	

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	05/23/2023	ND	201	101	200	7.18	
DRO >C10-C28*	<10.0	10.0	05/23/2023	ND	179	89.3	200	0.0991	
EXT DRO >C28-C36	<10.0	10.0	05/23/2023	ND					

Surrogate: 1-Chlorooctane 83.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.7 % 49.1-148

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Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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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

page 1 of 1

Company Name: <u>Loroco Phillips</u>				BILL TO				ANALYSIS REQUEST																																									
Project Manager: <u>Christian Linn</u>				P.O. #:																																													
Address:				Company: <u>Tetra Tech</u>																																													
City:		State:		Zip:		Attn: <u>Christian Linn</u>																																											
Phone #:		Fax #:		Address:																																													
Project #: <u>2120 MD-03087</u> Project Owner:				City:																																													
Project Name: <u>USDA AG Ushanka Fed Com 23H</u>				State: Zip:																																													
Project Location: <u>Lea Co, NM</u>				Phone #:																																													
Sampler Name: <u>Andrew Garcia</u>				Fax #:																																													
FOR LAB USE ONLY																																																	
Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		MATRIX		PRESERV.		SAMPLING																																					
				GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER:		ACID/BASE:		ICE / COOL		OTHER:		DATE		TIME																									
<u>H232591</u>		<u>NSW-1</u>		<u>G</u>		<u>1</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>2023</u>		<u>22 May</u>		<u>900</u>		<u>930</u>		<u>1000</u>		<u>1030</u>		<u>1100</u>		<u>1130</u>		<u>1200</u>		<u>1230</u>		<u>1300</u>													
<u>2</u>		<u>NSW-2</u>																																															
<u>3</u>		<u>ESW-1</u>																																															
<u>4</u>		<u>SSW-1</u>																																															
<u>5</u>		<u>WSW-1</u>																																															
<u>6</u>		<u>FS-1</u>																																															
<u>7</u>		<u>FS-2</u>																																															
<u>8</u>		<u>FS-3</u>																																															
<u>9</u>		<u>FS-4</u>																																															

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Relinquished By: <u>Andrew Garcia</u>		Date: <u>5/22/23</u>		Received By: <u>Shari Cisneros</u>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:	
Time: <u>16:35</u>		Time: <u>16:35</u>		Time: <u>16:35</u>		All Results are emailed. Please provide Email address:	
Relinquished By:		Date:		Received By:		REMARKS:	
Time:		Time:		Time:		Time:	
Delivered By: (Circle One)		Observed Temp. °C <u>8.6</u>		Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Turnaround Time: <u>Standard</u> <input type="checkbox"/> Rush <input checked="" type="checkbox"/>	
Sampler - UPS - Bus - Other:		Corrected Temp. °C <u>8.0</u>		CHECKED BY: (Initials) <u>SC</u>		Bacteria (only) Sample Condition Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	
						Thermometer ID #113 Correction Factor -0.6°C <u>24hrs</u>	
						Observed Temp. °C Corrected Temp. °C	

FORM-006 R 5.3 07/18/22

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

APPENDIX H

BLM Seed Mix

(27)

BLM Serial #:

Company Reference:

3.2 Seed Mixture for LPC Sand/Shinnery Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

*Pounds of pure live seed: Pounds of seed x percent purity x percent germination = pounds pure live seed

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 229983

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 229983
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	9/18/2023