TETRA TECH

January 10, 2023

Brittany Hall
Projects Environmental Specialist
New Mexico Energy, Minerals, and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Re: Closure Report / Deferral Request
ConocoPhillips (Heritage COG Operating LLC)
Lychee BWS State Com #001H Release
Unit Letter O, Section 22, Township 21 South, Range 34 East
Lea County, New Mexico
Incident ID# NOY1815234060

Ms. Hall:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips Company (COPC) to assess a historical release that occurred from the Lychee BWS State Com #001H Release (API # 30-025-42445). The approximate release site coordinates are 32.457433°, -103.456074°, located in the Public Land Survey System (PLSS) Unit Letter O, Section 22, Township 21 South, Range 34 East, Lea County, New Mexico (Site). The Site location is shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico Oil Conservation Division (NMOCD) C-141 Initial Report (Appendix A), the release was discovered on May 26, 2018. The release occurred due to a water dump valve eroding allowing fluid to form a hole in the liner. Approximately 200 barrels (bbls) of produced water and 20 bbls of oil were released, of which 105 bbls of produced water and 15 bbls of oil were recovered. The NMOCD received the initial C-141 on June 1, 2018, and subsequently assigned the release the Remediation Permit (RP) 1RP-5077 and the Incident ID nOY1815234060.

LAND OWNERSHIP

According to the NMOCD Oil and Gas Map, the site is located on state lands managed by the New Mexico State Land Office (NMSLO). It is also our understanding that COPC has a Surface Use and Compensation Agreement (SUA) in place with the Merchant Livestock Company (MLSCO). According to information provided by COG, the Merchant SUA stipulates that the site must be remediated and reclaimed per the SUA requirements. This report documents the completion of remediation and reclamation per the SUA. Prior to assessment and remedial activities, the appropriate parties were contacted and informed of the work and remedial work was coordinated with the landowner.

CULTURAL PROPERTIES PROTECTION

Tetra Tech, on behalf of ConocoPhillips, contracted SWCA Environmental Consultants (SWCA) to conduct an Archeological Resources Management Section (ARMS) review in the release area to comply with 19.2.24 New Mexico Administrative Code (NMAC). On September 28, 2023, SWCA completed a literature and file search using the New Mexico Cultural Resources Information System (NMCRIS) online database which included a review of known cultural resources, such as the built environment, archaeological sites, and State/National Register listed properties. Other sources reviewed include the Bureau of Land

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Management General Land Office Records web site, which include land patent and general land office survey data. As this area was not settled by Spain, land grant records were not reviewed.

In the review, SWCA found the area surrounding the site footprint 1 km (0.62 mile) has been subject to thirteen (13) cultural resource surveys, twelve (12) of which are qualifying. Three (3) previously recorded sites are located outside of the project area but within the 1,000-foot search buffer. The project area is entirely located NMSLO-managed lands and is covered by four (4) qualifying surveys conducted within the last ten years (NMCRIS Activity Numbers 136309, 137350, 137737, and 142675) and is located on previously disturbed land from oil and gas construction activities.

All remediation work will remain within the previously qualifying survey area and the approved existing disturbance. If cultural materials are identified during ground disturbing activities, work will be stopped and the NMSLO will be contacted. A copy of the ARMS letter 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, playa lakes, stream bodies, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.29 NMAC. The Site is in an area of low karst potential.

According to the NMOSE reporting system, there are no water wells within ½ mile (800 meters) of the Site. There are two (2) wells within 1.05 miles (1,695 meters) of the Site with an average depth to groundwater of 140 feet below ground surface (bgs). There is one (1) USGS groundwater monitoring well located within 0.6 miles of the Site with a depth to groundwater of 774.99 feet bgs.

Due to the limit of groundwater monitoring wells within 800 meters of the site, a licensed well drilling subcontractor was onsite on July 19, 2023, to drill a groundwater determination borehole (DTW-1) to 55 feet bgs at the southeastern edge of the Lychee BWS State Com #001H lease pad, located approximately 315 feet east of the approximate release point. The borehole location is indicated on Figure 5. The borehole was temporarily set and screened using 2-inch PVC well materials: 20 feet of blank casing and 35 feet of 0.010” slotted screen. The borehole was left for 72 hours and checked for the presence of groundwater. The borehole was dry upon drilling, and no water was present in the well after 72 hours. The well screen and casing were removed, and the borehole was plugged with 3/8-inch bentonite chips. The site characterization data, boring log, and temporary well diagram 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, and the site characterization data was used to determine recommended remedial action levels (RRALs) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX), total petroleum hydrocarbons (TPH), and chlorides in soil.

Based on the site characterization and in accordance with Table I of 19.15.29.12 NMAC, the RRALs for the Site are as follows:

Constituent	Site RRALs
Chloride	10,000 mg/kg
TPH (GRO+DRO+ORO)	2,500 mg/kg
TPH (GRO+DRO)	1,000 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

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

Constituent	Reclamation Requirement
Chloride	600 mg/kg
TPH (GRO+DRO+ORO)	100 mg/kg
BTEX	50 mg/kg

INITIAL SITE ASSESSMENT AND BBC WORK PLAN

Based on information provided by ConocoPhillips, BBC International Incorporated (BBC) was initially contracted to mobilize to the release Site, map the extent and sample the release footprint and the surrounding vicinity. Based on the initial extent provided by BBC, the release area footprint was mapped as approximately 4,800 square feet of lease pad and pastureland.

On July 6 and 9, 2018, BBC installed eight (8) borings (SP-1 through SP-8) within the release footprint to a maximum depth of 3 ft bgs. Eight borings were completed (North, East, South, West, North 2, East 2, South 2, West 2) in the cardinal directions to establish horizontal delineation. Additionally, BBC installed three (3) borings (SP1 through SP3) within the lined area to a depth of 2 feet bgs on December 5, 2018. Boring locations from the July and December 2018 sampling event are shown on Figure 3.

A total of forty-nine (49) samples were collected from the sample locations and transferred under chain of custody by Cardinal Laboratories (Cardinal). All soil samples were analyzed for chloride via Method SM4500Cl-B. Selected samples were analyzed for TPH via Method 8015 Modified and BTEX via Method 8021B.

Based on the results of the July and December 2018 sampling events, BBC prepared a Delineation Work Plan. This work plan proposed to remediate areas in the pastureland to the west to a depth of 1.5 feet bgs and the lease pad area to the east to a depth of 2.5 feet bgs. Sidewall and bottom confirmation samples were proposed to be collected at no greater than 50-foot intervals within the excavated areas. The estimated volume of material proposed to be remediated was approximately 80 cubic yards. As part of the work plan, BBC requested that the area inside the lined facility be deferred until decommissioning of the facility. Photographic documentation was not provided in the Delineation Workplan.

The Delineation Workplan completed by BBC was submitted to NMOCD through CentreStack by COG in 2018. Via the Internal Manual Incident File Supporting Documentation (ENV) (IM-BNF) review by NMOCD, the Delineation Workplan was approved by Brittany Hall via email on Monday November 28, 2022, with the following comments:

- *Remediation plan approved with the condition that the remediation meets 19.15.29.12 and 19.15.29.13 NMAC.*
- *Lined facility area deferral request is denied. Delineation, both vertically and horizontally, in this area is incomplete. Delineation vertically and horizontally must be completed to the most stringent standards of Table I in 19.15.29.12 NMAC.*
- *1RP-5077 closed. Refer to incident #nOY1815234060 in all future communications.*
- *Submit a complete closure and deferral report through the OCD Permitting website by 3/3/2023***.**

A 90-day extension request to June 3, 2023, was approved in an email dated March 22, 2023. Figure 3 shows the initial release extent and the 2018 soil boring locations as depicted in the BBC Workplan. A copy of the BBC Delineation Workplan is available on the NMOCD online incident files.

ADDITIONAL SITE ASSESSMENT AND SAMPLING RESULTS

Based on the lapse of time, Tetra Tech was contracted by COPC to conduct additional assessment activities at the site prior to the NMOCD approval. In September 2022, Tetra Tech personnel conducted a site visit on behalf of ConocoPhillips. No obvious signs of staining nor residual impact on the lease pad and the adjacent pastureland were observed. Photographic documentation of the visual Site inspection is included in Appendix D.

In October 2022, Tetra Tech personnel returned to the Site to conduct a soil sampling event to determine if the site remained impacted at concentrations noted by BBC. Twenty-five (25) borings (AH-22-1 through AH-22-25) were installed using a hand auger within and around the release extent to depths ranging from 1 to 3 feet bgs to confirm vertical and horizontal delineation, as depicted in Figure 4. No sampling was conducted in the interior of the lined containment as it would destroy the liner integrity. Thus, no discrete samples were collected.

A total of twenty-eight (28) samples were collected from the twenty-five (25) borings and submitted to Cardinal Laboratories to be analyzed for chlorides via SM4500Cl-B, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B.

Results from the October 2022 soil sampling event are summarized in Table 2. The analytical results associated with interior boring locations AH-22-14, AH-22-15, AH-22-16 and AH-22-19 exceeded the reclamation requirement for TPH (100 mg/kg) in surface soils (0-4 feet bgs) outside of active oil and gas operations. In addition, AH-22-19 exceeded the reclamation requirements for chloride (600 mg/kg). All other analytical results from the October 2022 sampling event were below Site RRALs and reclamation requirements in surface soils outside of active oil and gas operations.

Results of the additional assessment indicated that the release footprint provided by BBC no longer appears to reflect current site conditions. This discrepancy, given the age of the release, may be due to rain, sheet flow and/or natural attenuation which has condensed the release footprint over time. The release extent observed by Tetra Tech is presented in Figures 4 and 5.

2023 REVISED REMEDIATION WORK PLAN

Based on the conditions of the NMOCD approval and the additional assessment completed in October 2022, Tetra Tech prepared a Revised Release Characterization and Remediation Work Plan dated August 18, 2023 on behalf of ConocoPhillips. In this report, ConocoPhillips proposed to remove the remaining impacted material in the release footprint to a depth of 1 to 3 feet bgs or until a representative sample from the walls and bottom of the excavation is below the RRALs. This report included a deferral request for the lined area of the facility with TPH concentrations greater than the Site RRAL of 100 mg/kg be deferred until facility deconstruction.

The work plan was approved in an email dated September 13, 2023, with the following conditions:

- *Remediation plan and sampling plan approved.*
- *Deferral denied. Per the BBC workplan "When the release occurred the pressure from the ruptured line punctured the liner causing produced water to remain under the liner and then allowed fluids to escape outside of the lined facility onto the pad and into the pasture." Per 19.15.29.11 A.(5)(b) NMAC the entire release will need to be delineated horizontally and vertically.*
- *Per 19.15.29.12 C.(2) NMAC a deferral may be granted as long the contamination is fully delineated.*
- *A variance of any requirement of 19.15.29 NMAC can be requested. A variance request will need to include a statement that explains the need of the variance and a detailed demonstration that the variance will provide equal or better protection of freshwater, public health, and the environment.*
- *Submit a complete report through the OCD Permitting website by 12/13/2023.*

Additionally, during a meeting with the NMOCD on September 21, 2023, the NMOCD agreed that a variance could be requested with additional horizontal locations to the north and south of the tank battery. In the call, Tetra Tech proposed to install one horizontal delineation location to the south and one to the north while heavy equipment was onsite during the remedial activities. The NMOCD agreed with this approach but did request that the sampling be completed to a depth of 4’ to verify subsurface conditions. The NMOCD noted this information, with the variance request, could be submitted with the Remediation Closure Report.

A copy of the Revised Release Characterization and Remediation Work Plan is available on the NMOCD online incident files.

NMSLO CORRESPONDENCE

On September 22, 2023, Tetra Tech sent a request via email to the NMSLO for approval of the initiation of remedial activities at the Site. Tami Knight of the SLO Environmental Compliance Office (ECO) approved remediation activities at the Site via email on October 23, 2023. Documentation of associated regulatory correspondence is included in Appendix B.

REMEDIAL ACTIVITIES AND CONFIRMATION SAMPLING

From November 9 to November 21, 2023, Tetra Tech personnel were onsite to supervise the remedial activities proposed in the approved Revised Work Plan, including excavation, disposal, and confirmation sampling. Prior to confirmation sampling, on November 3, 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.

The approximate release extent was updated based on a historical photograph provided by COPC, which depicts the extent of the release area south of the facility. This photograph is presented in Appendix D and the revised excavation area is shown on Figure 6. The areas within the release footprint above Site RRALs and/or reclamation requirements were excavated to depths ranging from 1 to 3 feet bgs. Due to safety concerns associated with three (3) subsurface pipelines that traverse the excavation area at approximately 4 feet bgs, the excavation above/immediately adjacent to the pipelines was extended to approximately 2 feet bgs. As indicated by the analytical results for sample location FS-1, the 2-foot excavation in this area above/adjacent to the pipelines was sufficient to remove impacted soil above RRALs. The historical data presented by BBC on the east side of the facility indicated impacts to 2' bgs on pad.

Although contemporaneous data indicated that these areas no longer exceeded the proposed limits, based on this historical data and in an abundance of caution, these areas were excavated to 2 feet bgs. Please note this area was not included in the approved Remediation Work Plan. This additional excavation was also completed to satisfy stipulations found within the MLSCO SUA. All excavated material was transported offsite for proper disposal. Approximately 120 cubic yards of material were transported to the R360 Halfway Facility in Hobbs, New Mexico. Copies of the waste manifests are included in Appendix F. Historical photographs of the release and from the excavated areas prior to backfill are provided in Appendix D.

Following excavation, confirmation floor and sidewall samples were collected and submitted for laboratory analysis to verify efficacy of remediation activities. Per NMOCD approval, confirmation samples were collected such that each discrete sample (sidewall and floor) was representative of no more than 400 square feet of excavated area. A total of six (6) confirmation floor samples and seven (7) 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, depths and confirmation sample locations are indicated in Figure 6.

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+MRO) by EPA Method 8015M, BTEX by EPA Method 8021B, and chlorides by SM4500Cl-B. The analytical results were directly compared to the established Site RRALs and/or reclamation requirements 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 November 2023 confirmation sampling events are summarized in Table 4. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix E.

ADDITIONAL DELINEATION AND VARIANCE REQUEST

As noted above, during a meeting between COP, Tetra Tech and NMOCD on September 21, 2023, the NMOCD agreed that a variance could be requested with additional horizontal delineation locations to the north and south of the tank battery.

During remedial activities on November 9, 2023, two (2) trenches (T-1 and T-2) were installed to the north and south of the tank battery to a depth of 4' ft bgs. A total of six (6) samples were collected from the two

trenches and submitted to Cardinal Laboratories to be analyzed for chlorides via SM4500Cl-B, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix E. The two trench locations are indicated in Figures 4 and 5.

Results from the November 2023 soil sampling event are summarized in Table 3. All analytical results from the November 2023 sampling event were below Site RRALs and/or reclamation requirements. Additional horizontal delineation was achieved, per NMOCD request. Based on the results of the additional Site delineation and characterization, COP respectfully requests that further remediation of soils within the fenced area of the facility with TPH concentrations greater than the Site RRAL of 100 mg/kg be deferred until facility deconstruction.

Any additional excavation of the impacted area located inside the walled containment would cause a major facility deconstruction, in addition to creating safety risks associated with excavating near production equipment via aggressive excavation methods (i.e., backhoe/track hoe, excavators, hydraulic hammer, etc.). These aggressive activities pose a risk which could result in a potentially hazardous condition and/or property damage. A depth to groundwater boring was drilled and verified that groundwater is not present at 50 feet bgs or less and the remaining contamination does not pose a threat to freshwater, human health, or the environment. Given the established depth to groundwater determination, the soils in the lined area with TPH concentrations above Site RRALs of 100 mg/kg do not pose a threat to freshwater, human health, or the environment. 19.15.29.13 NMAC will be implemented when completing abandonment of the tank battery and the associated pipelines and equipment. The area requested for deferral is indicated in Figure 6.

RECLAMATION ACTIVITIES

On November 17, 2023, Tetra Tech personnel were onsite to supervise the reclamation and restoration activities at the site. The land surface was recontoured to reflect the surroundings to the best extent practicable. Based on the soils at the site, the NMSLO Loamy Sites seed mix was used for seeding and planted in the amount specified in the pounds pure live seed (PLS) per acre. Photographic documentation of the excavated areas prior to and following reclamation activities are provided in Appendix G.

CONCLUSION

As described above, the facility is currently active. The remedial work completed was successful in removing impacted soils from the release footprint outside the deferral area. ConocoPhillips respectfully requests closure of the release based on the confirmation sampling results and remediation activities performed.

Final remediation and reclamation shall take place in accordance with 19.15.29.12 NMAC once the Site is no longer being used for oil and gas production. Thus, ConocoPhillips requests deferral of the remaining impacted soils associated with the NOY1815234060 within the fenced area of the facility. The completed C-141 forms are enclosed as Appendix A. If you have any questions concerning the remediation activities for the Site, please call me at (512) 560-9064 or Ryan at (832) 251-5161.

Sincerely,
Tetra Tech, Inc.

Lisbeth Chavira
Project Geoscientist

Ryan F. Carroll
Senior Project Manager

cc:
Mr. Ike Tavarez, RMR – ConocoPhillips

LIST OF ATTACHMENTS

Figures:

Figure 1 – Overview Map
Figure 2 – Site Location/Topographic Map
Figure 3 – Approximate Release Extent and Initial Assessment (BBC International)
Figure 4 – Additional Assessment and Inferred Release Extent (Tetra Tech)
Figure 5 – Additional Assessment and Inferred Release Extent and DTW Location (Tetra Tech)
Figure 6 – Remediation Extent and Confirmation Sample Locations

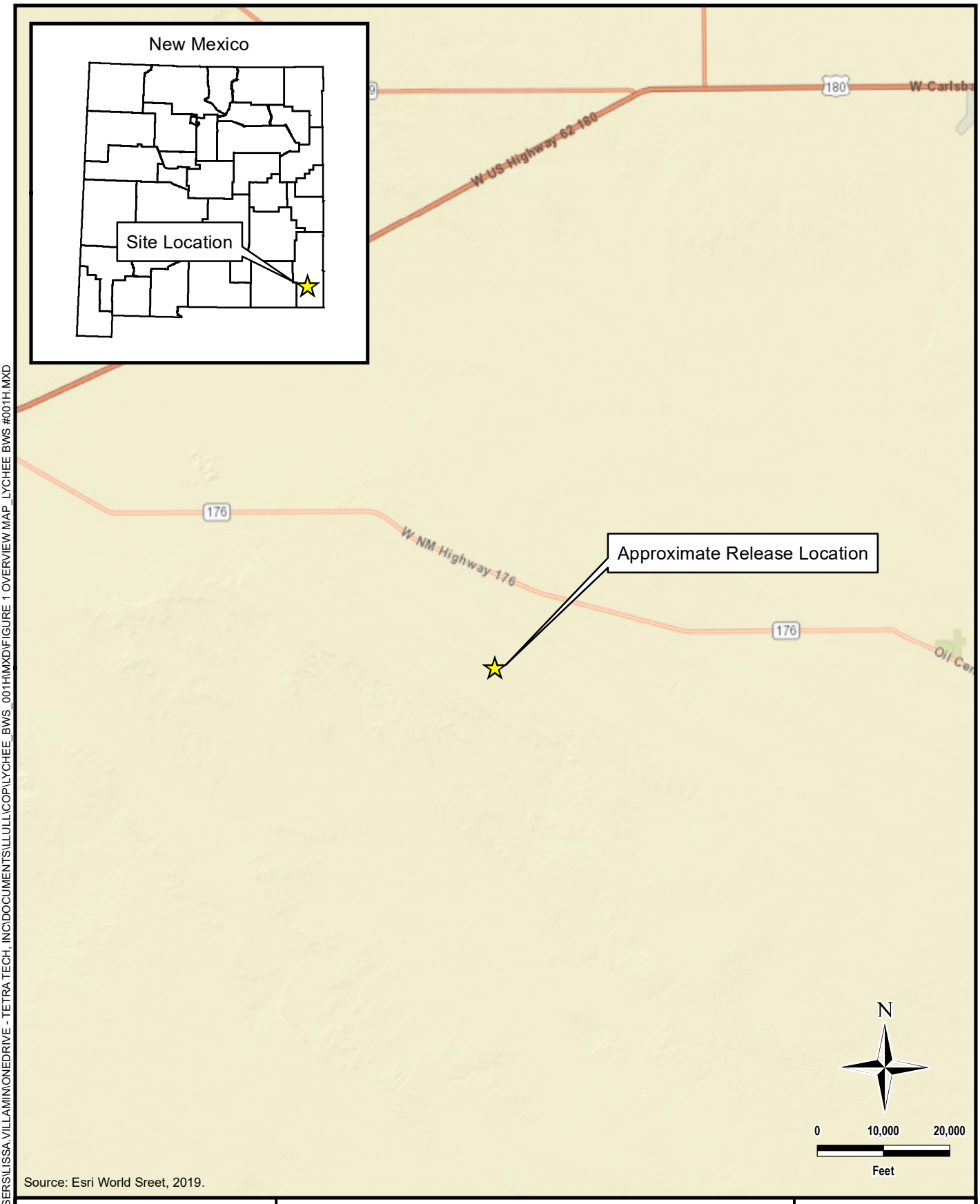
Tables:

Table 1 – Summary of Analytical Results – BBC Soil Assessment (2018)
Table 2 – Summary of Analytical Results – Tetra Tech Additional Soil Assessment
Table 3 – Summary of Analytical Results – Confirmation Sampling

Appendices:

Appendix A – C-141 Forms
Appendix B – Regulatory Correspondence/ARMS Letter
Appendix C – Site Characterization
Appendix D – Photographic Documentation
Appendix E – Laboratory Analytical Data
Appendix F – Waste Manifests
Appendix G – Seed Mixture Details

FIGURES



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DOCUMENT PATH: C:\USERS\LISSA.VILLAMIN\ONEDRIVE - TETRA TECH, INC\DOCUMENTS\LLULL\COP\LYCHEE_BWS_001H\MXD\FIGURE 1 OVERVIEW MAP_LYCHEE BWS #001H.MXD

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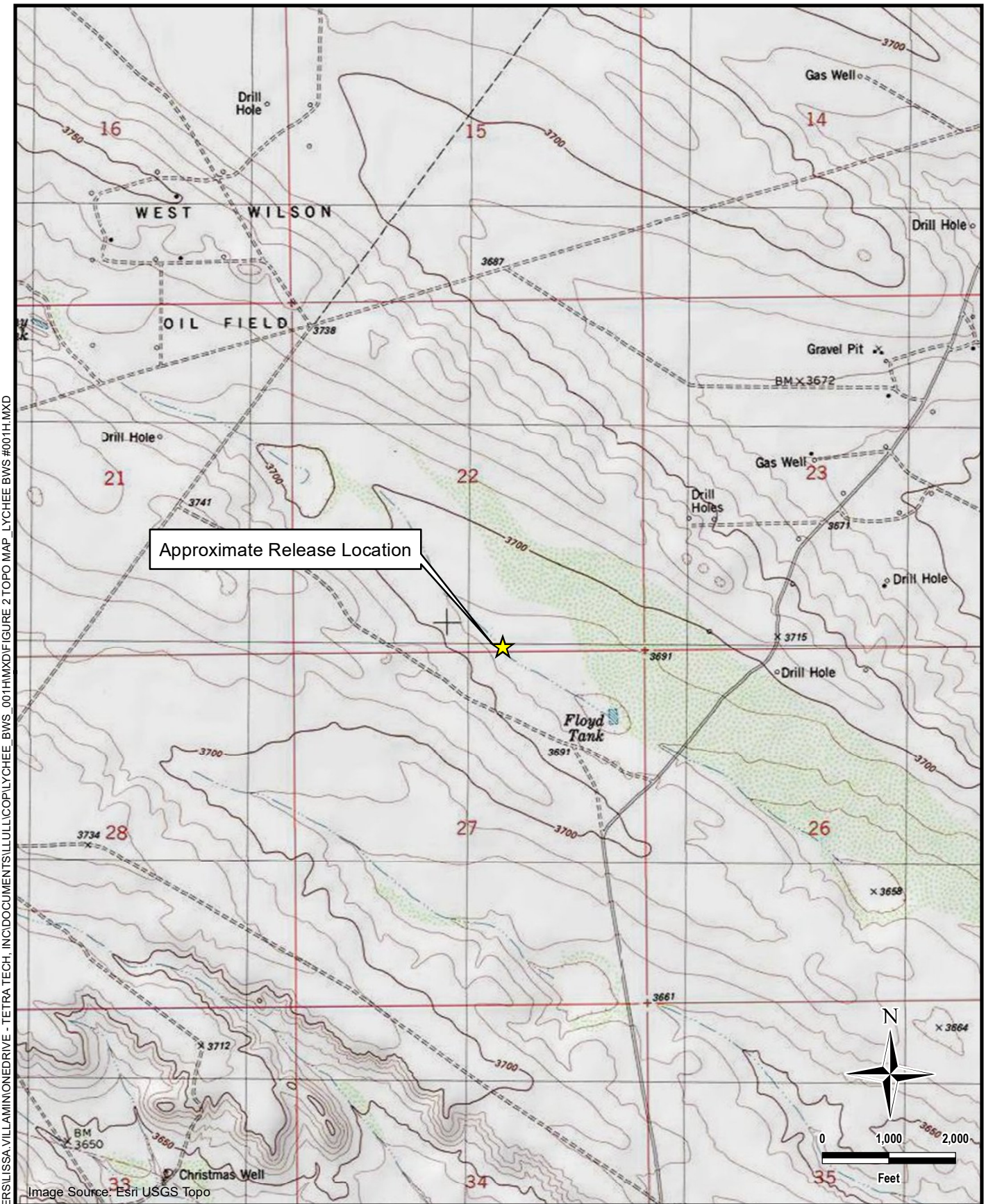
CONOCOPHILLIPS

NOY1815234060
(32.45775001°, -103.4556329°)
LEA COUNTY, NEW MEXICO

LYCHEE BWS STATE COM #001H
OVERVIEW MAP

PROJECT NO.:	212C-MD-02846
DATE:	SEPTEMBER 26, 2022
DESIGNED BY:	LMV

Figure No.
1



DOCUMENT PATH: C:\USERS\LISSA.VILLAMIN\ONEDRIVE - TETRA TECH, INC\DOCUMENTS\LLULL\COP\LYCHEE_BWS_001H\MXD\FIGURE 2 TOPO MAP_LYCHEE BWS #001H.MXD

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LEA COUNTY, NEW MEXICO

LYCHEE BWS STATE COM #001H
TOPOGRAPHIC MAP

PROJECT NO.:	212C-MD-02846
DATE:	SEPTEMBER 26, 2022
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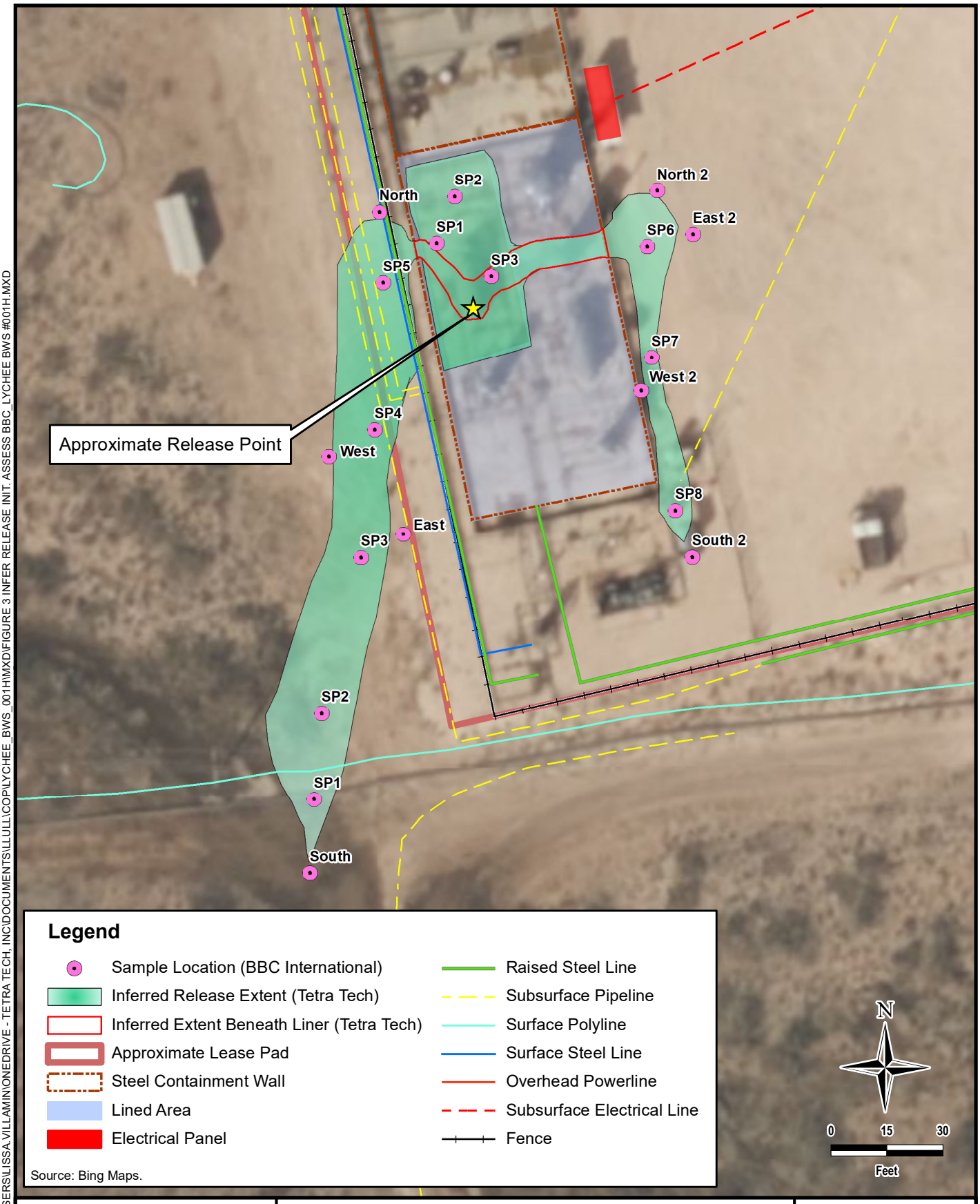
Figure No.
2



DOCUMENT PATH: C:\USERS\LISSA.VILLAMIN\ONEDRIVE - TETRA TECH, INC\DOCUMENTS\LLULL\COP\LYCHEE_BWS_001H\MXD\FIGURE 3 INFER RELEASE INIT. ASSESS BBC_LYCHEE BWS #001H.MXD

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NOY1815234060
(32.45775001°, -103.4556329°)
LEA COUNTY, NEW MEXICO

LYCHEE BWS STATE COM #001H VALVE RELEASE
INFERRED RELEASE EXTENT AND INITIAL SITE ASSESSMENT (BBC)

PROJECT NO.:	212C-MD-02846
DATE:	DECEMBER 07, 2023
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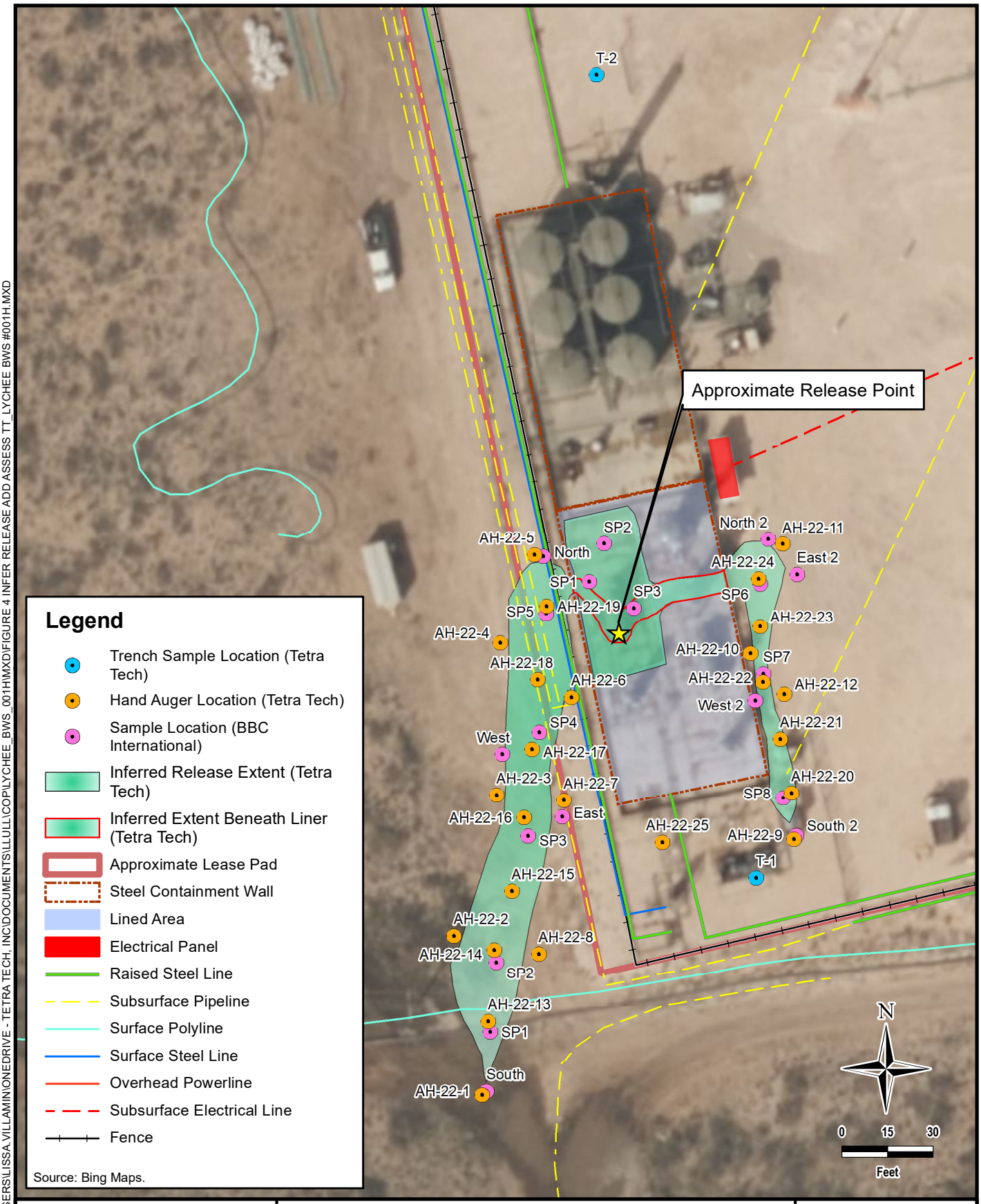
Figure No.
3



DOCUMENT PATH: C:\USERS\LISSA.VILLAMIN\ONEDRIVE - TETRA TECH, INC\DOCUMENTS\LLULL\COP\LYCHEE_BWS_001H\MXD\FIGURE 4 INFER RELEASE ADD ASSESS TT_LYCHEE BWS #001H.MXD

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CONOCOPHILLIPS

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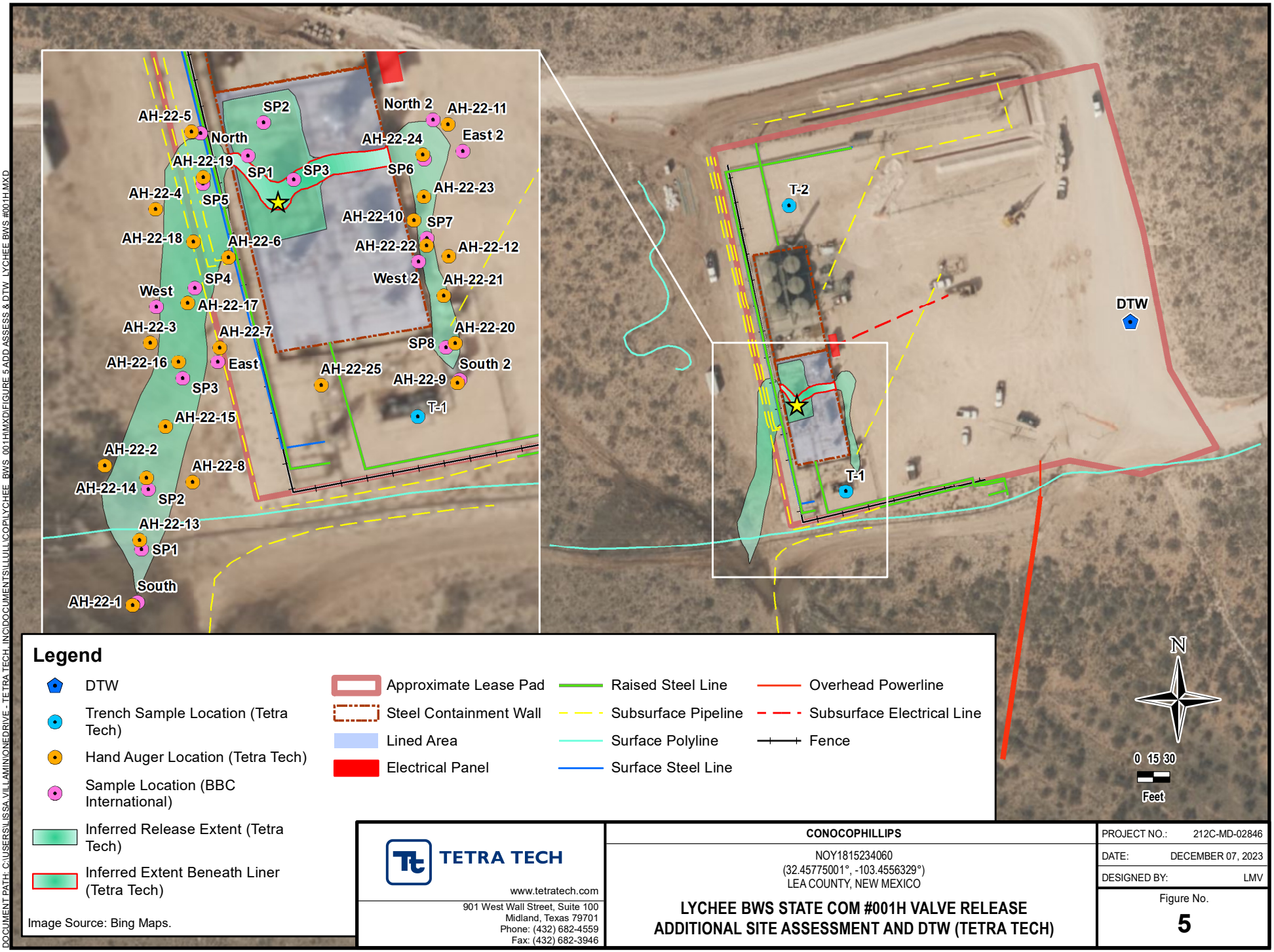
(32.45775001°, -103.4556329°)
LEA COUNTY, NEW MEXICO

LYCHEE BWS STATE COM #001H VALVE RELEASE
INFERRED RELEASE EXTENT AND ADDITIONAL ASSESSMENT
(TETRA TECH)

PROJECT NO.:	212C-MD-02846
DATE:	DECEMBER 07, 2023
DESIGNED BY:	LMV

Figure No.
4



DOCUMENT PATH: C:\USERS\LISSA.VILLAMINO\ONEDRIVE - TETRA TECH, INC\DOCUMENTS\LULL\COP\LYCHEE_BWS_001H\MXD\FIGURE 5 ADD ASSESS & DTW_LYCHEE BWS #001H.MXD

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CONOCOPHILLIPS

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LEA COUNTY, NEW MEXICO

LYCHEE BWS STATE COM #001H VALVE RELEASE
ADDITIONAL SITE ASSESSMENT AND DTW (TETRA TECH)

PROJECT NO.:	212C-MD-02846
DATE:	DECEMBER 07, 2023
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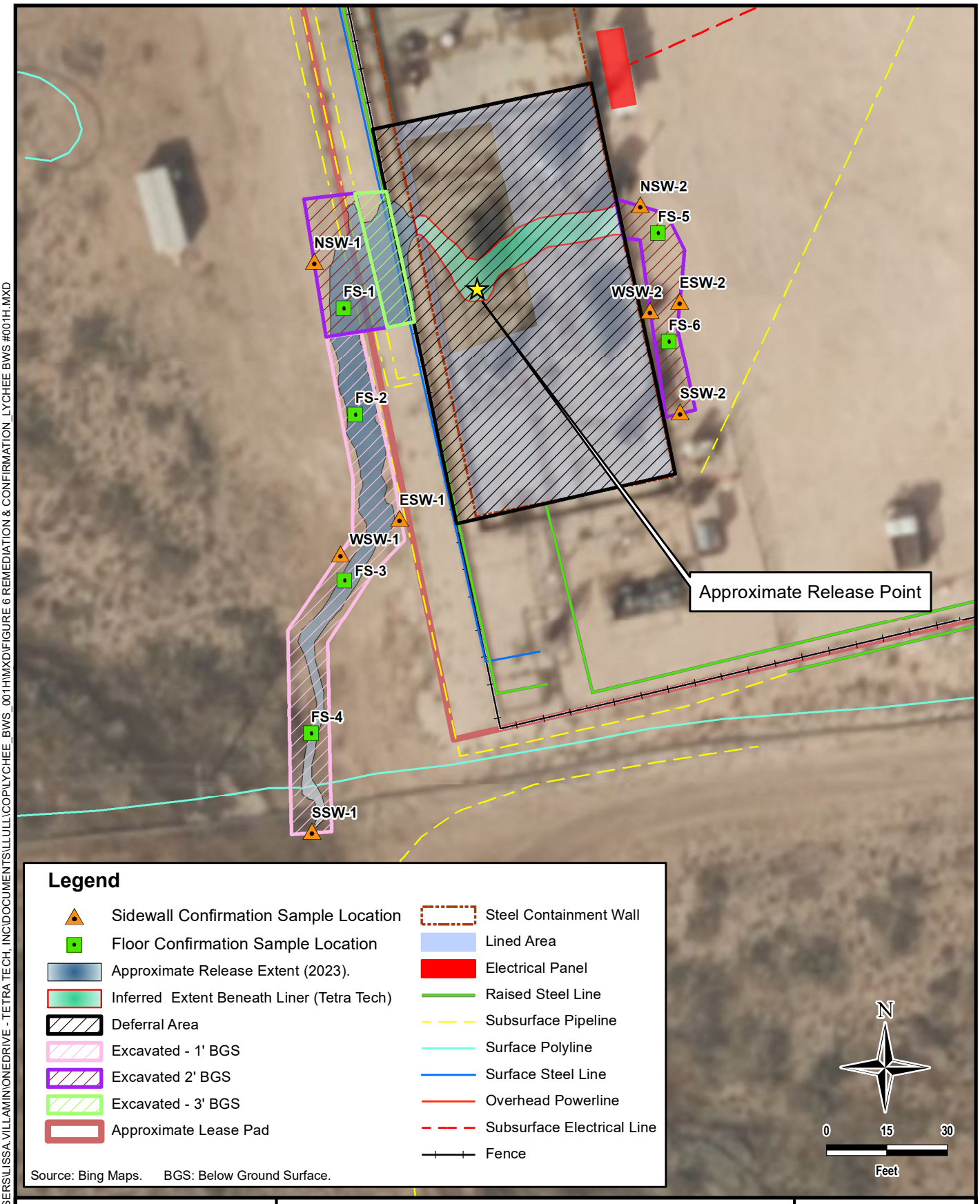
Figure No.
5



Legend

- Sidewall Confirmation Sample Location
- Floor Confirmation Sample Location
- Approximate Release Extent (2023).
- Inferred Extent Beneath Liner (Tetra Tech)
- Deferral Area
- Excavated - 1' BGS
- Excavated 2' BGS
- Excavated - 3' BGS
- Approximate Lease Pad
- Steel Containment Wall
- Lined Area
- Electrical Panel
- Raised Steel Line
- Subsurface Pipeline
- Surface Polyline
- Surface Steel Line
- Overhead Powerline
- Subsurface Electrical Line
- Fence

Source: Bing Maps. BGS: Below Ground Surface.

DOCUMENT PATH: C:\USERS\LISSA.VILLAMIN\ONEDRIVE - TETRA TECH, INC\DOCUMENTS\LLULL\COP\LYCHEE_BWS_001H\MXD\FIGURE 6 REMEDIATION & CONFIRMATION_LYCHEE BWS #001H.MXD

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CONOCOPHILLIPS

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LYCHEE BWS STATE COM #001H VALVE RELEASE
REMEDIATION EXTENT AND CONFIRMATION SAMPLE LOCATIONS

PROJECT NO.:	212C-MD-02846
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Figure No.
6

TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
2018 SOIL ASSESSMENT - 1RP-5077 / NOY1815234060
CONOCOPHILLIPS
LYCHEE BWS STATE COM #001H VALVE 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		TPH (GRO + 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	mg/kg	mg/kg
SP-1	7/6/2018	SURFACE	2,200		< 0.100		0.998		1.32		4.34		6.66		187		35,000		7,650		35,187	42,837
		1	96.0		< 0.050		< 0.050		0.175		0.350		0.526		36.9		1,470		238		1,507	1,745
		2	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	-
		3	176		NA		NA		NA		NA		NA		NA		NA		NA		NA	NA
SP-2	7/6/2018	SURFACE	3,200		< 0.100		0.773		0.992		3.73		5.49		148		41,100		8,990		41,248	50,090
		1	128		< 0.050		0.083		0.362		0.769		1.21		96.2		3,210		503		3,306	3,809
		2	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		30.4		< 10.0		30.4	30.4
		3	160		NA		NA		NA		NA		NA		NA		NA		NA		NA	NA
SP-3	7/6/2018	SURFACE	1,920		< 0.050		0.378		0.654		2.49		3.52		108		34,200		8510	QM-07, QR-03	34,308	42,818
		1	112		< 0.050		< 0.050		0.246		0.62		0.866		36.3		2,330		387		2,366	2,753
		2	160		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		20.1		< 10.0		20.1	20.1
		3	176		NA		NA		NA		NA		NA		NA		NA		NA		NA	NA
SP-4	7/6/2018	SURFACE	2,200		< 0.100		0.646		0.926		3.55		5.12		141		42,000		9,440		42,141	51,581
		1	96.0		< 0.050		< 0.050		0.254		0.546		0.818		61.6		2,400		389		2,462	2,851
		2	32.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		29.3		< 10.0		29.3	29.3
		3	160		NA		NA		NA		NA		NA		NA		NA		NA		NA	NA
SP-5	7/6/2018	SURFACE	1,460		< 0.050		0.407		0.643		2.68		3.73		129		43,700		9,720		43,829	53,549
		1	96.0		< 0.050		< 0.050		0.305		0.647		0.953		55.4		2,460		390		2,515	2,905
		2	16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		37.8		11.7		37.8	49.5
		3	160		NA		NA		NA		NA		NA		NA		NA		NA		NA	NA
SP-6	7/9/2018	SURFACE	7,600		< 0.100		0.988		2.12		8.56		11.7		202		17,500		3,510		17,702	21,212
		1	2,200		< 0.200		0.443		2.08		4.80		7.33		377		4,770		691		5,147	5,838
		2	1,230		< 0.050		0.061		0.380		1.43		1.87		64.5		1,260		188		1,325	1,513
		3	80.0		NA		NA		NA		NA		NA		NA		NA		NA		NA	NA
SP-7	7/9/2018	SURFACE	13,300		< 0.100		1.23		1.67		7.29		10.2		150		18,000		3,580		18,150	21,730
		1	2,200		< 0.200		0.638		3.64		12.6		16.9		433		4,470		653		4,903	5,556
		2	1,250		< 0.050		< 0.050		0.226		0.853		1.08		47.4		1,430		238		1,477	1,715
		3	96.0		NA		NA		NA		NA		NA		NA		NA		NA		NA	NA
SP-8	7/9/2018	SURFACE	15,000		< 0.050		0.998		1.29		6.12		8.41		133		17,900		3,560		18,033	24,593
		1	2,360		< 0.050		0.526		3.21		10.5		14.2		488		5,220		740		5,708	6,448
		2	1,300		< 0.050		0.066		0.325		0.716		1.11		60.8		1,490		229		1,551	1,780
		3	96.0		NA		NA		NA		NA		NA		NA		NA		NA		NA	NA

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
2018 SOIL ASSESSMENT - 1RP-5077 / NOY1815234060
CONOCOPHILLIPS
LYCHEE BWS STATE COM #001H VALVE 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		TPH (GRO + 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	mg/kg	mg/kg
NORTH	7/9/2022	-	160		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	-
EAST	7/9/2022	-	128		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	-
SOUTH	7/9/2022	-	176		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	-
WEST	7/9/2022	-	128		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	-
NORTH 2	7/9/2022	-	80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	-
EAST 2	7/9/2022	-	80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	-
SOUTH 2	7/9/2022	-	112		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	-
WEST 2	7/9/2022	-	96.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	-
SP-1	12/5/2018	SURFACE	1,040		0.237		5.36		< 0.050		16.6		22.2		462		3,540		619		4,002	4,621
		1	3,000		< 0.050		0.115		< 0.050		0.666		0.780		22.4		379		92.7		401	494
		2	912		< 0.050		0.176		< 0.050		0.958		1.13		31.1		814		166		845.1	1,011
SP-2	12/5/2018	SURFACE	3,200	QM-07	< 0.500		15.7		12.8		59.2		87.7		977		6,010		957		6,987	7,944
		1	3,600		2.91		60.8		45.7		121		230		1380		5,730		866		7,110	7,976
		2	2,720		< 0.050		1.12		1.66		6.57		9.36		153		1,780		331		1,933	2,264
SP-3	12/5/2018	SURFACE	5,040		3.04		28.2		12.2		47.4		101		1,670		11,800		2,020		13,470	15,490
		1	3,480		0.672		23.7		21.3		88.3		134		1,240		5,510		820		6,750	7,570
		2	4,400		0.122		5.53		7.64		28.2		41.5		562		3,790		605		4,352	4,957

NOTES:

ft. Feet
bgs Below ground surface
ppm Parts per million
mg/kg Milligrams per kilogram
NA Sample not analyzed
TPH Total Petroleum Hydrocarbons
GRO Gasoline range organics
DRO Diesel range organics
1 Method SM4500Cl-B
2 Method 8021B
3 Method 8015M

QUALIFIERS:

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

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
OCTOBER 2022 SOIL ASSESSMENT- (NOY1815234060)
CONOCOPHILLIPS
LYCHEE BWS STATE #001H VALVE RELEASE
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Field Screening Results	Chloride[1]		BTEX[2]										TPH[3]							
						Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH	(GRO+DRO)
			Chloride													C_6 - C_{10}		> C_{10} - C_{28}		> C_{28} - C_{36}		(GRO+DRO+EXT DRO)	
		ft. bgs	ppm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	mg/kg
		Closure Criteria for Pasture / Off-Pad Soils 0-4' bgs:		<600 mg/kg		< 10 mg/kg		--		--		--		< 50 mg/kg		--		--		--		<100 mg/kg	--
		Closure Criteria for Soils >4' bgs (GW 51-100 ft):		<10,000 mg/kg		< 10 mg/kg		--		--		--		< 50 mg/kg		--		--		--		<2,500 mg/kg	<1,000 mg/kg
AH-22-1	10/26/20222	0-1	96	32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-2	10/26/2022	0-1	77.9	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-3	10/26/2022	0-1	50.6	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		58		16.5		74.5	58.0
AH-22-4	10/26/2022	0-1	40.4	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		12.7		<10.0		12.7	12.7
AH-22-5	10/26/2022	0-1	67.8	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-6	10/26/2022	0-1	62.6	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-7	10/26/2022	0-1	69.1	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-8	10/26/2022	0-1	90.4	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-9	10/26/2022	0-1	71.9	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-10	10/26/2022	0-1	54.7	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		26.9		65.0		91.9	26.9
AH-22-11	10/26/2022	0-1	144	64.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-12	10/26/2022	0-1	293	64.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-13	10/26/2022	0-1	-	48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
		2-3	95.7	32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-14	10/26/2022	0-1	125	32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		66.9		33.3		***100.2***	66.9
AH-22-15	10/26/2022	0-1	-	160		<0.050		<0.050		<0.050		<0.150		<0.300		<50.0		1,890		563		***2453***	1,890
AH-22-16	10/26/2022	0-1	-	80.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		209		85.5		***294.5***	209
AH-22-17	10/26/2022	0-1	53.6	16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-18	10/26/2022	0-1	75.4	32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-19	10/26/2022	0-1	-	***1,140***	S-06	<0.050		<0.050		<0.050		<0.150		<0.300		<50.0		14,100		3,710		***17,810***	***14,100***
		2-2.5	-	224		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		974		216		***1,190***	974
AH-22-20	10/26/2022	0-1	152	32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-21	10/26/2022	0-1	159	32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-22	10/26/2022	0-1	358	16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-23	10/26/2022	0-1	1.44	1,630		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-24	10/26/2022	0-1	529	272		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
		2-3	183	32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
AH-22-25	10/26/2022	0-1	129	16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-

NOTES:

ft. Feet
bgs Below ground surface
mg/kg Milligrams per kilogram
TPH Total Petroleum Hydrocarbons
GRO Gasoline range organics
DRO Diesel range organics
1 Method SM4500Cl-B
2 Method 8021B
3 Method 8015M

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

Shaded rows indicate intervals proposed for excavation.

QUALIFIERS:

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

TABLE 3
SUMMARY OF ANALYTICAL RESULTS
2023 SOIL ASSESSMENT- NOY1815234060
CONOCOPHILLIPS
LYCHEE BWS STATE #001H VALVE RELEASE
LEA COUNTY, NM

19.15.29.12 NMAC Closure Criteria for Soils Impacted by a Release (≤ 50 ft):					Chlorides[1]		BTEX[2]										TPH[3]							
					< 600 mg/kg		< 10 mg/kg							< 50 mg/kg			GRO		DRO		EXT DRO		< 100 mg/kg	-
Sample ID	Sample Date	Sample Depth Interval	Field Screening Results		Chloride		Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		C_6 - C_{10}		> C_{10} - C_{28}		> C_{28} - C_{36}		Total TPH (GRO+DRO+EXT DRO)	GRO+DRO
			Chlorides	PID																				
		ft. bgs	ppm		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	mg/kg
T-1	11/9/2023	0-1	374	-	64		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
		2-3	218	-	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
		3-4	86.9	-	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
T-2	11/10/2023	0-1	111	-	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
		2-3	156	-	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-
		3-4	145	-	64		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	-

NOTES:

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

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

TABLE 4
SUMMARY OF ANALYTICAL RESULTS
SOIL REMEDIATION - NOY1815234060
CONOCOPHILLIPS
LYCHEE BWS STATE #001H VALVE RELEASE
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Field Screening Results		Chloride[1]		BTEX[2]										TPH[3]							
							Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH
			Chloride	PID													C_6 - C_{10}		> C_{10} - C_{28}		> C_{28} - C_{36}		(GRO+DRO+EXT DRO)
		ft. bgs	ppm		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
FS-1	11/14/2023	-	-	-	80		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
FS-2	11/14/2023	-	-	-	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
FS-3	11/14/2023	-	-	-	128		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
FS-4	11/14/2023	-	-	-	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
FS-5	11/17/2023	-	-	-	144		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
FS-6	11/17/2023	-	-	-	144		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
NSW-1	11/14/2023	-	-	-	176		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
NSW-2	11/17/2023	-	-	-	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
SSW-1	11/14/2023	-	-	-	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
SSW-2	11/17/2023	-	-	-	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
ESW-1	11/14/2023	-	-	-	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
ESW-2	11/17/2023	-	-	-	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
WSW-1	11/14/2023	-	-	-	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
WSW-2	11/17/2023	-	-	-	16		<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 Remediation RRALs and Reclamation Requirements.

Gold highlight represents soil horizons that were removed during deepening of excavation floors.

Green highlight represents soil intervals that were removed during horizontal expansion of excavation sidewalls.

* These iterative samples are located to encompass the original sample location that triggered removal, with further excavation in each area indicated in ().

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

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

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: COG Operating, LLC (OGRID #229137)	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland, TX 79701	Telephone No. 432-683-7443
Facility Name: **Lychee BWS State Com #001H**	Facility Type: Tank Battery

Surface Owner: State	Mineral Owner: State	API No. 30-025-42445

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	22	21S	34E	200	South	1,980	East	Lea

Latitude 32.45775001 **Longitude** -103.4556329 NAD83

NATURE OF RELEASE

Type of Release Oil & Produced Water	Volume of Release 20 bbl. – Oil 200 bbl. – Produced Water	Volume Recovered 15 bbl. – Oil 105 bbl. – Produced Water
Source of Release Valve Erosion	Date and Hour of Occurrence May 26, 2018 6:30am	Date and Hour of Discovery May 26, 2018 6:30am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Olivia Yu – NMOCD Ryan Mann – SLO	
By Whom? Dakota Neel	Date and Hour May 26, 2018 10:58pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

RECEIVED
By Olivia Yu at 9:24 am, Jun 01, 2018

Describe Cause of Problem and Remedial Action Taken.*

The release was caused by the water dump valve eroding allowing fluid to form a hole in the liner. The dump valve is being replaced and the oil dump is being inspected for damage.

Describe Area Affected and Cleanup Action Taken.*

The release was in the lined facility, on location and in the pasture. A vacuum truck was dispatched to remove all freestanding fluids. Concho will have the spill area sampled to 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.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: DeAnn Grant	OIL CONSERVATION DIVISION
Printed Name: DeAnn Grant	Approved by Environmental Specialist:
Title: HSE Administrative Assistant	Approval Date: 6/1/2018 Expiration Date:
E-mail Address: agrant@concho.com	Conditions of Approval: See attached directive. Attached ☑
Date: May 29, 2018 Phone: (432) 253-4513	

* Attach Additional Sheets If Necessary

nOY1815234060 pOY1815234776

1RP-5077

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _5/26/2018_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-5077__ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before 7/1/2018__. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

● Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

● Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

● Nominal detection limits for field and laboratory analyses must be provided.

● Composite sampling is not generally allowed.

● Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

●Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

● If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

● Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

From:	Dakota Neel
To:	Ryan Mann; Yu, Olivia, EMNRD
Cc:	Sheldon Hitchcock; Rebecca Haskell; Robert McNeill; DeAnn Grant; Billings, Bradford, EMNRD
Subject:	(Notification) LYCHEE BWS STATE COM #001H (30-025-42445) 5-26-18
Date:	Saturday, May 26, 2018 10:57:58 PM

Ms. Yu/Mr. Mann,

COG Operating LLC is reporting a release from the LYCHEE BWS STATE COM #001H (30-025-42445).
Release location: Unit O Section 22, Township 21S, Range 34E

The release occurred on May 26th, 2018.
Released: Approximately >25 barrels of produced water.

This release occurred within a lined facility and the area is being evaluated and a C-141 will be submitted. If you have any questions please don't hesitate to contact me.

Thanks,

Dakota Neel
Concho Resources
HSE Coordinator
432-215-2783

State of New Mexico
Oil Conservation Division

Incident ID	NOY1815234060
District RP	1RP-5077
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?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☑ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☑ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☑ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☑ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☑ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☑ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☑ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☑ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☑ No

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NOY1815234060
District RP	1RP-5077
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: Ike Tavarez Title: Program Manager, Remediation

Signature:  Date: 8/18/23

email: ike.tavarez@conocophillips.com Telephone: 432-685-2573

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NOY1815234060
District RP	1RP-5077
Facility ID	
Application ID	

Remediation Plan

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

- ☑ Detailed description of proposed remediation technique
- ☑ Scaled sitemap with GPS coordinates showing delineation points
- ☑ Estimated volume of material to be remediated
- ☑ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☑ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

- ☑ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☑ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Ike Tavarez Title: Program Manager, Remediation

Signature: [signature] Date: 8/18/23

email: ike.tavarez@conocophillips.com Telephone: 432-685-2573

OCD Only

Received by: _____ Date: _____

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

Signature: Brittany Hall Date: 09/13/2023

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

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☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: _____ Title: _____

Signature: _____ _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

APPENDIX B
Regulatory Correspondence/ARMS Letter

Chavira, Lisbeth

From: Knight, Tami C. <tknight@slo.state.nm.us>
Sent: Monday, October 23, 2023 3:22 PM
To: Carroll, Ryan; Llull, Christian
Cc: SLO Surface ECO
Subject: Conoco_Remediaton Plan Approval_Lychee BWS State Com #001H_NOY1815234060

Ryan

Documentation of proposed remediation actions for the well site identified as Lychee BWS State Com #001H, NMOCD Incident # NOY1815234060 was received from your office on September 22, 2023. The NMSLO Environmental Compliance Office (ECO) has reviewed the plan, and based on the information provided in the document received from your office, ECO has approved the remediation plan. ECO agrees with NMOCD's conditions of approval, and also encourages the application of a microbial agent to aid in the breakdown of residual hydrocarbons in the areas where mechanical remediation is not feasible. Please submit the remediation closure report to eco@slo.state.nm.us.

Thank you,

PLEASE SUBMIT WORKPLANS AND REPORTS TO ECO@SLO.STATE.NM.US

Tami Knight, CHMM
Environmental Specialist
SRD-Environmental
Compliance Office (ECO)
505.670.1638
New Mexico State Land Office
1300 W. Broadway Avenue, Suite A
Bloomfield, NM 87413
tknight@slo.state.nm.us
nmstatelands.org

Chavira, Lisbeth

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Friday, November 3, 2023 3:05 PM
To: Chavira, Lisbeth
Cc: Carroll, Ryan; Hall, Brittany, EMNRD; Bratcher, Michael, EMNRD
Subject: RE: [EXTERNAL] Incident ID: nOY1815234060 - Confirmation Sampling

Hi Lisbeth,

The OCD has received your notification. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thank you,

Shelly

Shelly Wells * Environmental Specialist-Advanced
Environmental Bureau
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520|Shelly.Wells@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Chavira, Lisbeth <LISBETH.CHAVIRA@tetratech.com>
Sent: Friday, November 3, 2023 1:32 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Carroll, Ryan <RYAN.CARROLL@tetratech.com>
Subject: [EXTERNAL] Incident ID: nOY1815234060 - Confirmation Sampling

Incident ID (n#) **nOY1815234060** (Lychee BWS State Com #001H Valve Release)

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 Thursday, November 9, 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 will be conducted at this site **Thursday**, **November 9, 2023.**

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

Thank you,

Lisbeth Chavira | Staff Geoscientist
Direct Mobile **+1 (512) 596-8201** | Lisbeth.chavira@tetratech.com

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

SWCA
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Albuquerque, New Mexico 87109
Tel 505.254.1115 Fax 505.254.1116
www.swca.com

October 5, 2023

TO: Ethan Ortega, Division Director & Archaeologist, New Mexico State Land Office, Santa Fe, New Mexico

FROM: SWCA Environmental Consultants

SUBJECT: Completion of an Archaeological Records Management Section (ARMS) Review for the Lychee BWS State Com #001H Valve Release Remediation Project on New Mexico State Land Office (NMSLO) lands in Lea County, NM

Company Ref No: None-Provided

PROJECT DESCRIPTION:

Tetra Tech, Inc. has requested that SWCA Environmental Consultants (SWCA) conduct an Archaeological Resources Management Section (ARMS) review for an inadvertent release in Lea County, New Mexico. The proposed project is lands managed by the New Mexico State Land Office (NMSLO) approximately 40.2 kilometers (25.0 miles) southwest of Hobbs, NM in T21S R34E, Section 22 (SESW) and T21S R34E, Section 27.

A literature and file search were conducted on September 28, 2023, using the New Mexico Cultural Resources Information System (NMCRIS) online database which included a review of known cultural resources, such as the built environment, archaeological sites, and State/National Register listed properties. Other sources reviewed include the BLM GLO Records web site, http://www.glorecords.blm.gov, which include land patent and general land office survey data. As this area was not settled by Spain, land grant records were not reviewed. The review was conducted for the Area of Potential Effect (APE) and 1 km (0.62 mile) surrounding the APE. The land the proposed project is located on is part of the June 20, 1910: New Mexico Enabling Act (36 Stat. 557) patented on October 7, 1919.

Recommendation:

The project area and surrounding 1 km (0.62 mile) have been subject to thirteen (13) cultural resource surveys, twelve (12) of which are qualifying. Three (3) previously recorded sites are located outside of the project area but within the 1k search buffer. The project area is entirely located on NMSLO-managed lands and is covered by four (4) qualifying surveys conducted within the last ten years (NMCRIS Activity Numbers 136309, 137350, 137737, and 142675) and is located on previously disturbed land from oil and gas construction activities. SWCA recommends the completion of an ARMS letter to satisfy the requirements of release remediation. All remediation work will remain within the previously qualifying survey area and the approved existing disturbance. If cultural materials are identified during ground disturbing activities, work must stop and the NMSLO must be contacted.

Information regarding the findings can be found in Tables 1-2 and Figure 1.

Archaeologist
Paisley DeFreese
Attached: (1) Review Results, (1) ARMS Map

SWCA ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.®
7770 Jefferson Street NE, Suite 410
Albuquerque, New Mexico 87109
Tel 505.254.1115 Fax 505.254.1116
www.swca.com

Archaeological Resources Management Section (ARMS) Review Results

Table 1: Cultural surveys within 1 kilometer (0.62 mile) of proposed project.

NMCRIS No.	Performing Organization	Date of Investigation	Acres Surveyed	Sites Visited
32771	Pecos Archaeological Consultants	12/31/1990	88.88	0
132962	Boone Arch Svcs of NM	3/18/2015	60.45	0
136309	Boone Archaeological Consultants, LLC.	7/22/2016	20.19	0
137737	Boone Archaeological Consultants, LLC.	3/21/2017	14.04	0
137350	Lone Mountain Archaeological Services	9/15/2017	39,453.25	324
139333	Boone Archaeological Consultants, LLC.	11/13/2017	464.94	2
142675	Tetra Tech, Inc.	3/15/2019	52	0
142718	Lone Mountain Archaeological Services	3/22/2019	56.26	2
143639	SWCA Environmental Consultants	7/25/2019	7.6	0
144697	Boone Archaeological Consultants, LLC.	11/26/2019	2.47	0
145756	Boone Archaeological Consultants, LLC.	5/1/2020	14.09	0
142944	SWCA Environmental Consultants	3/16/2020	433.68	1
147756	Boone Archaeological Consultants, LLC.	4/7/2021	1.62	0

Table 1. Cultural resources within 1 kilometer (0.62 mile) of the proposed project area.

LA No.	Discovering NMCRIS No.	Site Type/Cultural Affiliation and Age	Eligibility	Relationship to APE
187302	137350	Artifact Scatter/Unknown Aboriginal (9500 B.C.–A.D. 1880)	Unevaluated (11/13/2017 HPD Log No. 106514)	Outside
187305	137350	Artifact Scatter/Unknown Aboriginal (A.D. 1100–1500)	Unevaluated (11/13/2017 HPD Log No. 106514)	Outside
193829	142718	Not Listed in NMCRIS	Not Entered in NMCRIS	Outside

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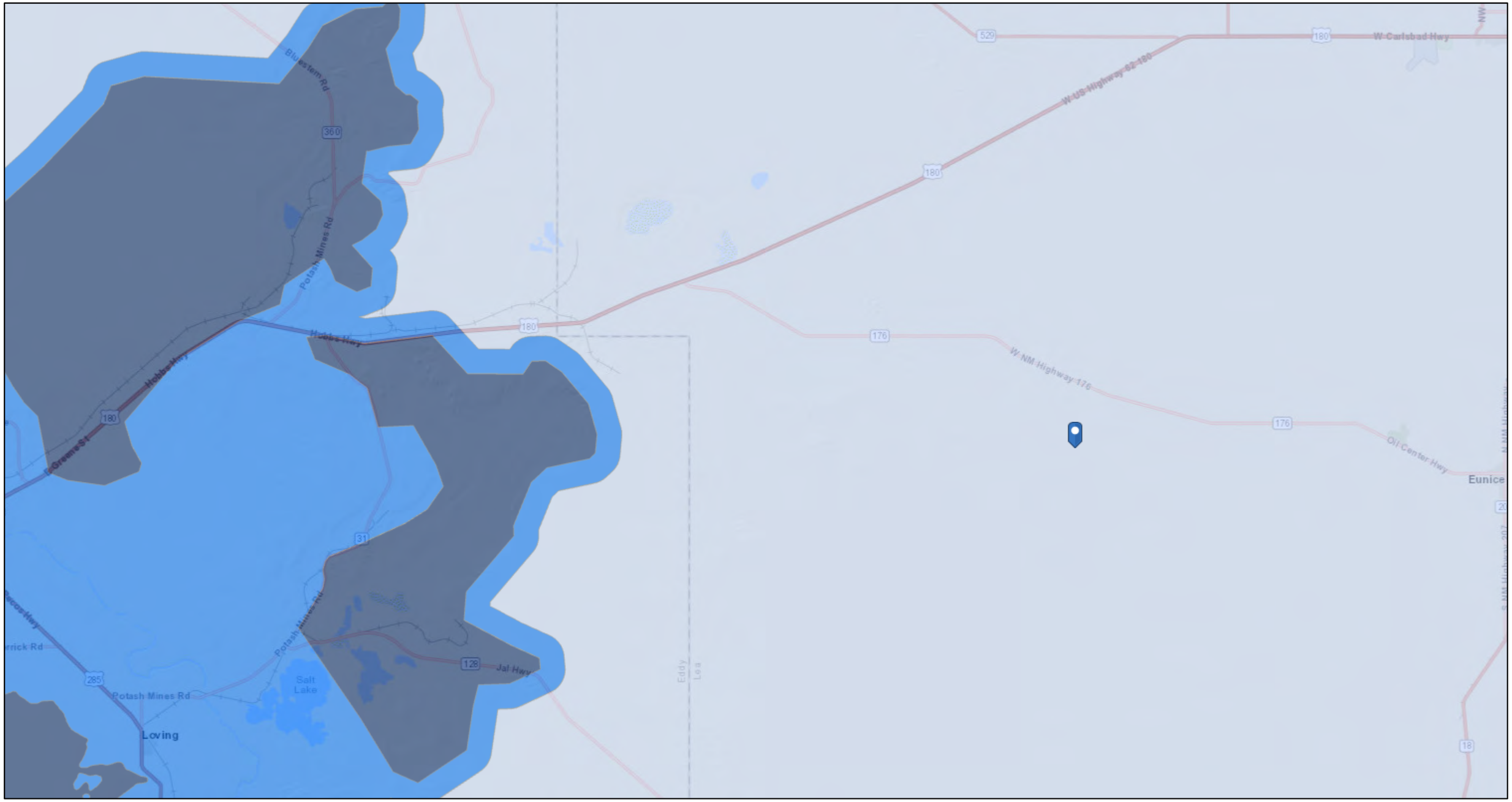
*Redacted

Figure 1. NMCRIS screenshot showing location of the proposed Lychee BWS State Com #001H Valve Release Remediation Project area (blue polygon) with 1 km (0.62 mile) buffer area. Previously conducted investigations are brown and yellow polygons, and previously recorded sites are orange and tan polygons.

APPENDIX C
Site Characterization Data

OCD Karst Potential Map



9/19/2022, 11:19:56 AM

Karst Occurrence Potential

- High
- Medium
- Low

1:288,895

0 3 6 12 mi

0 4.75 9.5 19 km

BLM, OCD, New Mexico Tech, Bureau of Land Management, Esri, HERE, Garmin, NGA, USGS, NPS

OCD USGS Well Data Map

9/20/2022, 1:05:53 PM

- USGS Historical GW Wells
- USGS Active Monitoring GW Wells

1:4,514

0 0.05 0.1 0.19 mi

0 0.07 0.15 0.3 km

Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, Maxar

212C-MD-02846 | TETRA TECH | **LOG OF BORING DTW** | Page 1 of 1

Project Name: Lychee BWS State Com #001H

Borehole Location: GPS Coordinates: 32.457595°, -103.455101° | Surface Elevation: 3694 ft

Borehole Number: DTW | Borehole Diameter (in.): 8 | Date Started: 7/19/2023 | Date Finished: 7/19/2023

WATER LEVEL OBSERVATIONS

While Drilling ▽ DRY ft Upon Completion of Drilling ▼ DRY ft

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
0												**-GP-** GRAVEL: Light brown to reddish brown, dry, fine- to coarse-grained, pad material	2	
												-SM- SAND: Brown to dark brown, dry, fine- to coarse-grained, with Caliche fragments	3	
5												**-GM-** GRAVEL (Caliche): Light gray to white, dry, fine-grained		
10														
15														
20													19	
												-SM- SAND: Light brown to tan, dry, very fine- to fine-grained, trace gravel-sized Caliche	24	
25												**-SP-** SAND: Brown, loose, dry, very fine-grained, trace Caliche fragments		
30														
35													34	
												-SM- SAND: Light brown, very loose to loose, dry, very fine-grained		
40														
45														
50														
55													55	
												-- Cuttings collected at 54 to 55 feet, soil sample dry		

Bottom of borehole at 55.0 feet.

Sampler Types: Split Spoon, Acetate Liner, Shelby, Vane Shear, Bulk Sample, Discrete Sample, Grab Sample, Test Pit

Operation Types: Hand Auger, Mud Rotary, Air Rotary, Continuous Flight Auger, Direct Push, Wash Rotary, Core Barrel

Notes:

Surface elevation is an approximate value obtained from Google Earth data.

Logger: Colton Bickerstaff | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

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

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

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

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01066 POD1	CP	LE	4	3	2	28	21S	34E	643735	3591345	1614	210	140	70
CP 01069 POD1	CP	LE	2	1	4	28	21S	34E	643737	3591191	1698	210	140	70

Average Depth to Water: **140 feet**

Minimum Depth: **140 feet**

Maximum Depth: **140 feet**

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 645110.91 **Northing (Y):** 3592189.94 **Radius:** 1700

OCD Waterbodies Map

9/20/2022, 12:17:39 PM

OSW Water Bodys

OSE Probable Playas

1:9,028

0 0.07 0.15 0.3 mi

0 0.15 0.3 0.6 km

Esri, HERE, Garmin, GeoTechnologies, Inc., Maxar, NM OSE

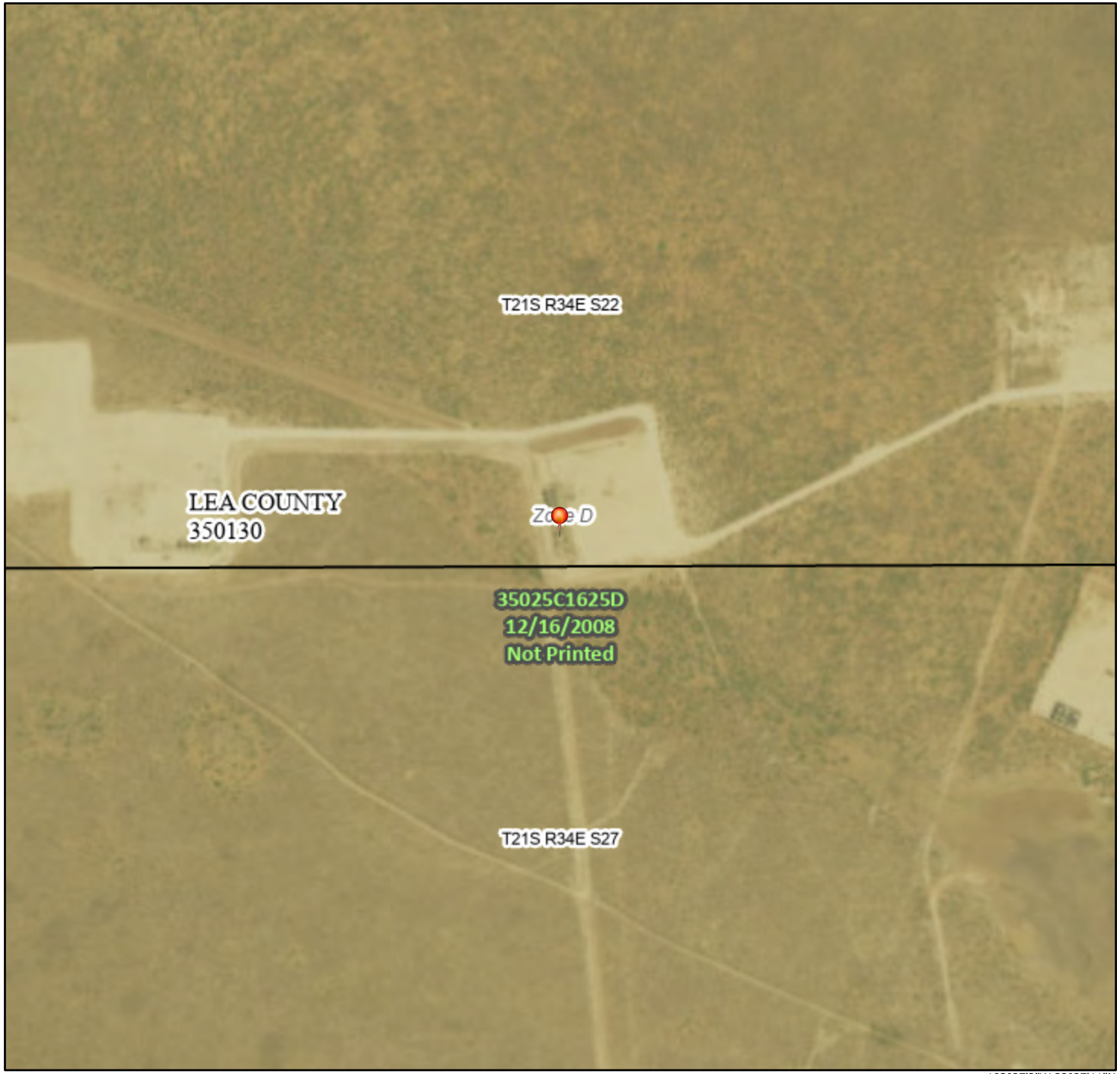
New Mexico Oil Conservation Division

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

National Flood Hazard Layer FIRMette

FEMA

103°27'41"W 32°27'42"N



103°27'3"W 32°27'11"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/5/2022 at 3:45 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX D
Photographic Documentation

TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View south. View of release extent.	1
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	5/29/2018

TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	Site Signage. Lychee BWS State Com #001 Valve Release Site.	2
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	10/26/2022

TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View south southwest. View of lease pad, production equipment and subsurface line.	3
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	10/26/2022

TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View south. View of production equipment and subsurface line.	4
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	10/26/2022

TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View south. View of approximate release. Vegetation present.	5
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	10/26/2022

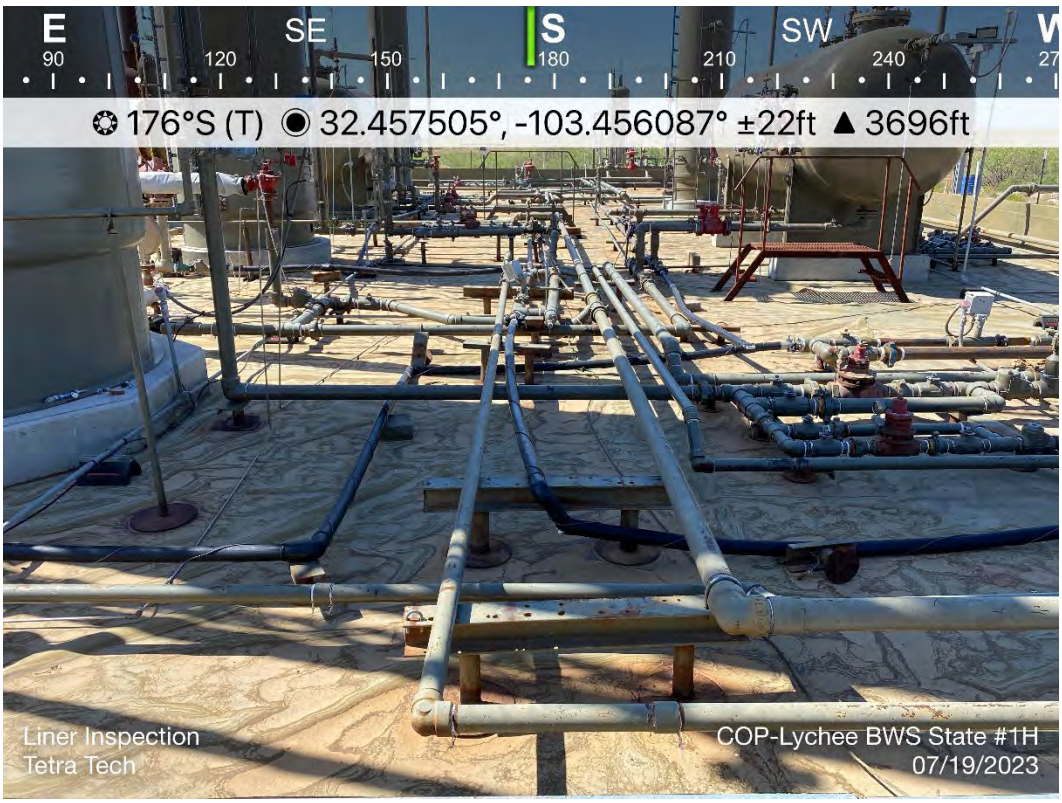
TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View north. Approximate release area. View of surface lines.	6
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	10/26/2022

TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View north. View of approximate release extent.	7
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	10/26/2022

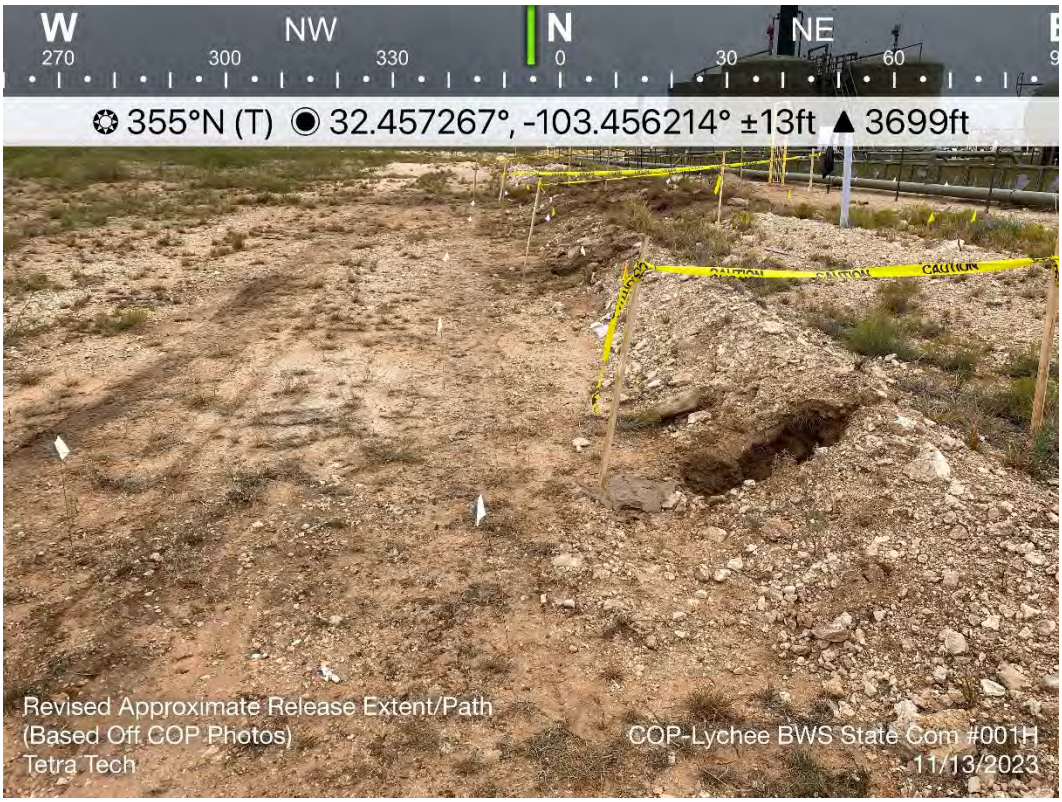
TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View north. View of approximate release extent inside facility. View of multiple steel lines. Liner integrity intact.	8
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	7/19/2023

TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View northwest. View of approximate release extent inside facility. View of production equipment.	9
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	7/19/2023

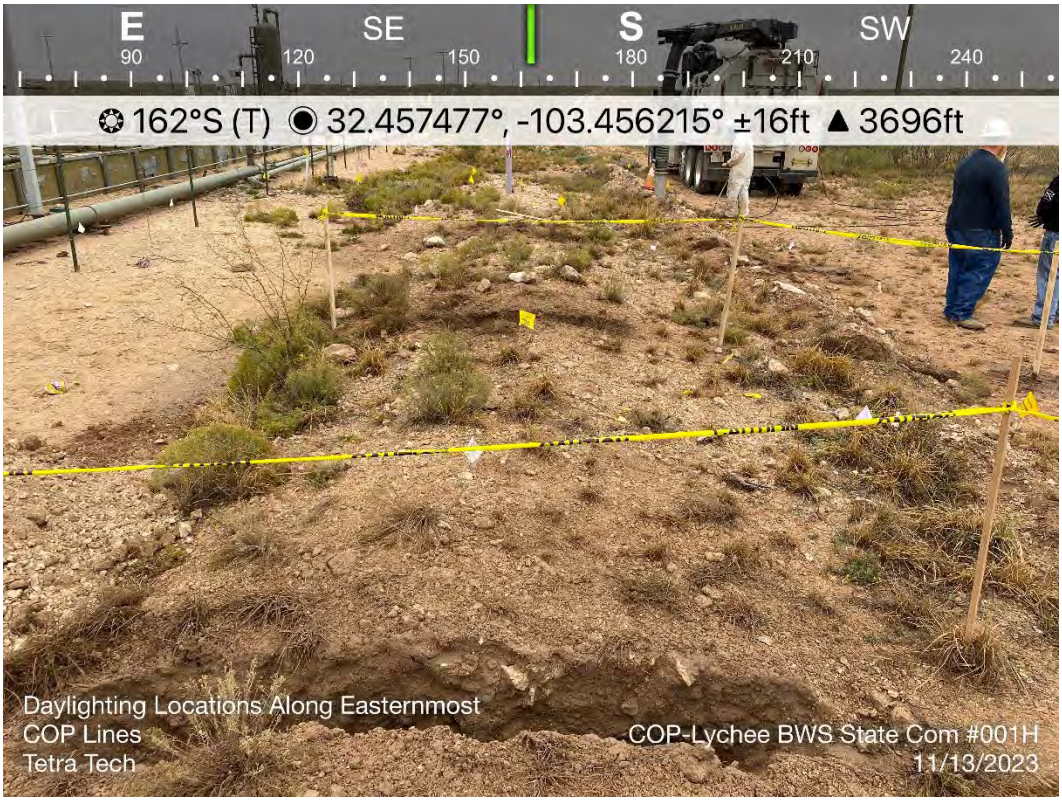
TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View east. View of approximate release extent inside facility. View of multiple steel lines. Liner integrity intact.	10
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	7/19/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View south. View of approximate release extent inside facility. View of multiple steel lines. Liner integrity intact.	11
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	7/19/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View north. View of subsurface lines and approximate release extemt.	12
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	11/13/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View south. View of subsurface lines within the release extent.	13
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	11/13/2023

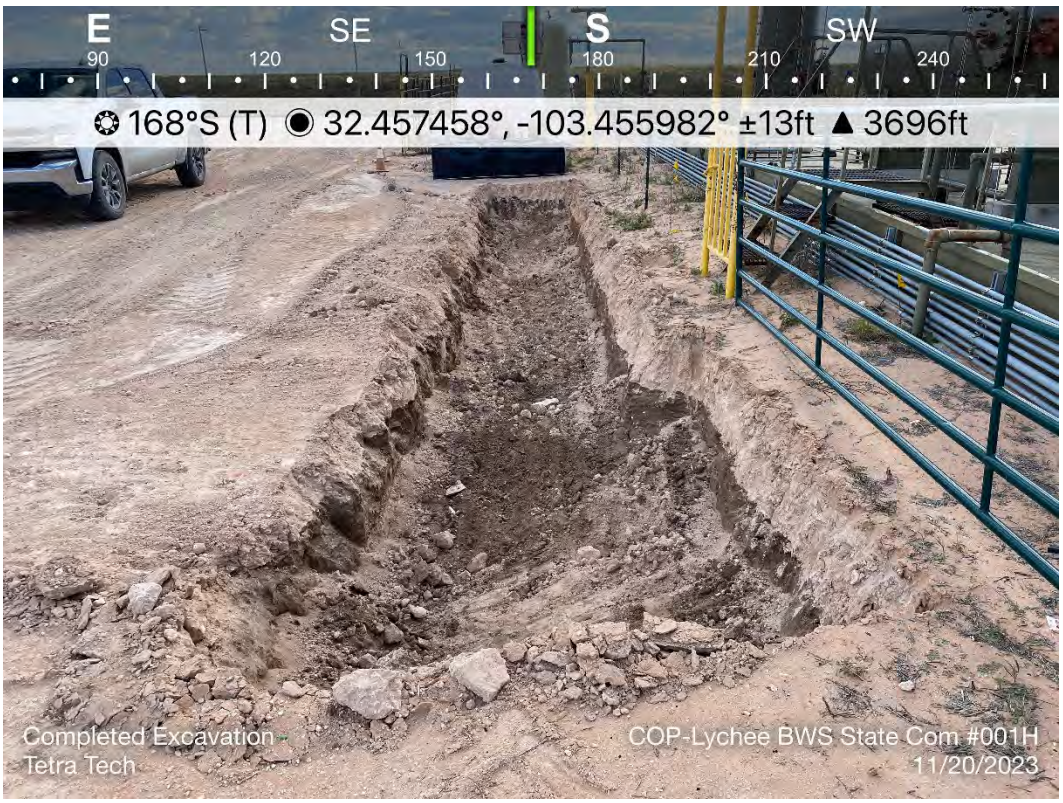
TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View north. View of remedial activities.	14
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	11/16/2023

TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View north. View of remedial activities.	15
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	11/16/2023

TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View north northeast. View of remedial activities.	16
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	11/16/2023

TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View north. View of remedial activities.	17
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	11/16/2023

TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View south southwest. View of remedial activities.	18
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	11/20/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View south. View of remedial activities.	17
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	11/20/2023

TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View southeast. View of backfilled area. View of reclamation activities.	18
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	11/17/2023

TETRA TECH, INC. PROJECT NO. 212C-MD-02846	DESCRIPTION	View northwest. View of backfilled area. View of reclamation activities.	17
	SITE NAME	ConocoPhillips Lychee BWS State Com #001 Valve Release	11/17/2023

APPENDIX E
Laboratory Analytical Data

CARDINAL Laboratories

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

November 10, 2023

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: LYCHEE BWS STATE COM #001H RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 11/09/23 12:50.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	11/09/2023	Sampling Date:	11/09/2023
Reported:	11/10/2023	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #001H RELEA	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: T - 1 (0-1') (H236150-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2023	ND	2.06	103	2.00	0.844	
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	1.72	
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.16	108	2.00	0.335	
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.53	109	6.00	0.190	
Total BTEX	<0.300	0.300	11/10/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *118 %* *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	**64.0**	16.0	11/10/2023	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/10/2023	ND	180	90.0	200	4.09	
DRO >C10-C28*	<10.0	10.0	11/10/2023	ND	182	91.0	200	10.8	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane *92.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *96.2 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	11/09/2023	Sampling Date:	11/09/2023
Reported:	11/10/2023	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #001H RELEA	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: T - 1 (2'-3') (H236150-02)

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	11/10/2023	ND	2.06	103	2.00	0.844	
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	1.72	
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.16	108	2.00	0.335	
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.53	109	6.00	0.190	
Total BTEX	<0.300	0.300	11/10/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *118 %* *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	11/10/2023	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/10/2023	ND	180	90.0	200	4.09	
DRO >C10-C28*	<10.0	10.0	11/10/2023	ND	182	91.0	200	10.8	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane *96.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *101 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	11/09/2023	Sampling Date:	11/09/2023
Reported:	11/10/2023	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #001H RELEA	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: T - 1 (3'-4') (H236150-03)

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	11/10/2023	ND	2.17	109	2.00	0.794	
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.692	
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.14	107	2.00	0.955	
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.65	111	6.00	0.763	
Total BTEX	<0.300	0.300	11/10/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *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	**32.0**	16.0	11/10/2023	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2023	ND	186	92.8	200	1.63	
DRO >C10-C28*	<10.0	10.0	11/09/2023	ND	178	88.9	200	0.998	
EXT DRO >C28-C36	<10.0	10.0	11/09/2023	ND					

Surrogate: 1-Chlorooctane *103 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *100 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	11/09/2023	Sampling Date:	11/09/2023
Reported:	11/10/2023	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #001H RELEA	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: T - 2 (0-1') (H236150-04)

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	11/10/2023	ND	2.17	109	2.00	0.794	
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.692	
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.14	107	2.00	0.955	
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.65	111	6.00	0.763	
Total BTEX	<0.300	0.300	11/10/2023	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	**32.0**	16.0	11/10/2023	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2023	ND	186	92.8	200	1.63	
DRO >C10-C28*	<10.0	10.0	11/09/2023	ND	178	88.9	200	0.998	
EXT DRO >C28-C36	<10.0	10.0	11/09/2023	ND					

Surrogate: 1-Chlorooctane *105 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *102 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	11/09/2023	Sampling Date:	11/09/2023
Reported:	11/10/2023	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #001H RELEA	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: T - 2 (2'-3') (H236150-05)

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	11/10/2023	ND	2.01	101	2.00	3.53	
Toluene*	<0.050	0.050	11/10/2023	ND	2.10	105	2.00	4.41	
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.11	106	2.00	5.26	
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.28	105	6.00	4.76	
Total BTEX	<0.300	0.300	11/10/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *110 %* *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	**48.0**	16.0	11/10/2023	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2023	ND	186	92.8	200	1.63	
DRO >C10-C28*	<10.0	10.0	11/09/2023	ND	178	88.9	200	0.998	
EXT DRO >C28-C36	<10.0	10.0	11/09/2023	ND					

Surrogate: 1-Chlorooctane *101 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *99.0 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	11/09/2023	Sampling Date:	11/09/2023
Reported:	11/10/2023	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #001H RELEA	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: T - 2 (3'-4') (H236150-06)

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	11/10/2023	ND	2.01	101	2.00	3.53	
Toluene*	<0.050	0.050	11/10/2023	ND	2.10	105	2.00	4.41	
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.11	106	2.00	5.26	
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.28	105	6.00	4.76	
Total BTEX	<0.300	0.300	11/10/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *113 %* *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	**64.0**	16.0	11/10/2023	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2023	ND	186	92.8	200	1.63	
DRO >C10-C28*	<10.0	10.0	11/09/2023	ND	178	88.9	200	0.998	
EXT DRO >C28-C36	<10.0	10.0	11/09/2023	ND					

Surrogate: 1-Chlorooctane *105 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *101 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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**	
Project Manager: Christian Llull		P.O. #:	
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-02846	Project Owner: ConocoPhillips	City:	
Project Name: Lychee BWS State Com #001H Release		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	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: TPH 8015M	BTEX 8021B	Chloride SM4500CI-B
H236150																	
1	T-1 (0-1')	G	1			X					X		11/9/2023		X	X	X
2	T-1 (2'-3')	G	1			X					X		11/9/2023		X	X	X
3	T-1 (3'-4')	G	1			X					X		11/9/2023		X	X	X
4	T-2 (0-1')	G	1			X					X		11/9/2023		X	X	X
5	T-2 (2'-3')	G	1			X					X		11/9/2023		X	X	X
6	T-2 (3'-4')	G	1			X					X		11/9/2023		X	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Colton Bickerstaff	Date: 11/9/23	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1250		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 3.3 Corrected Temp. °C	Sample Condition Cool: Yes Intact: Yes / No No	CHECKED BY: (Initials)	Turnaround Time: Standard ☐ Bacteria (only) Sample Condition Rush: Cool Intact Observed Temp. °C Thermometer ID #140 Correction Factor Yes Yes / No 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

CARDINAL Laboratories

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

November 15, 2023

CHRISTIAN LLULL

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: LYCHEE BWS STATE COM #001H RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 11/14/23 15:16.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	11/14/2023	Sampling Date:	11/14/2023
Reported:	11/15/2023	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #001H RELEA	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: FS - 1 (H236229-01)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/15/2023	ND	1.90	95.0	2.00	8.42	
Toluene*	<0.050	0.050	11/15/2023	ND	1.95	97.6	2.00	1.51	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.19	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.31	105	6.00	2.46	
Total BTEX	<0.300	0.300	11/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *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	**80.0**	16.0	11/15/2023	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	11/15/2023	ND	183	91.5	200	0.0371	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	199	99.5	200	0.0131	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					

Surrogate: 1-Chlorooctane *99.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *111 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	11/14/2023	Sampling Date:	11/14/2023
Reported:	11/15/2023	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #001H RELEA	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: FS - 2 (H236229-02)

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	11/15/2023	ND	1.90	95.0	2.00	8.42	
Toluene*	<0.050	0.050	11/15/2023	ND	1.95	97.6	2.00	1.51	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.19	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.31	105	6.00	2.46	
Total BTEX	<0.300	0.300	11/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *111 %* *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	**32.0**	16.0	11/15/2023	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	11/15/2023	ND	183	91.5	200	0.0371	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	199	99.5	200	0.0131	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					

Surrogate: 1-Chlorooctane *93.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *101 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	11/14/2023	Sampling Date:	11/14/2023
Reported:	11/15/2023	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #001H RELEA	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: FS - 3 (H236229-03)

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	11/15/2023	ND	1.90	95.0	2.00	8.42	
Toluene*	<0.050	0.050	11/15/2023	ND	1.95	97.6	2.00	1.51	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.19	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.31	105	6.00	2.46	
Total BTEX	<0.300	0.300	11/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *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	**128**	16.0	11/15/2023	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	11/15/2023	ND	183	91.5	200	0.0371	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	199	99.5	200	0.0131	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					

Surrogate: 1-Chlorooctane *104 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *116 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	11/14/2023	Sampling Date:	11/14/2023
Reported:	11/15/2023	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #001H RELEA	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: FS - 4 (H236229-04)

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	11/15/2023	ND	1.90	95.0	2.00	8.42	
Toluene*	<0.050	0.050	11/15/2023	ND	1.95	97.6	2.00	1.51	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.19	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.31	105	6.00	2.46	
Total BTEX	<0.300	0.300	11/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *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	11/15/2023	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	11/15/2023	ND	183	91.5	200	0.0371	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	199	99.5	200	0.0131	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					

Surrogate: 1-Chlorooctane *100 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *113 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	11/14/2023	Sampling Date:	11/14/2023
Reported:	11/15/2023	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #001H RELEA	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: NSW - 1 (H236229-05)

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	11/15/2023	ND	1.90	95.0	2.00	8.42	
Toluene*	<0.050	0.050	11/15/2023	ND	1.95	97.6	2.00	1.51	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.19	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.31	105	6.00	2.46	
Total BTEX	<0.300	0.300	11/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *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	**176**	16.0	11/15/2023	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	11/15/2023	ND	183	91.5	200	0.0371	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	199	99.5	200	0.0131	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					

Surrogate: 1-Chlorooctane *101 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *114 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	11/14/2023	Sampling Date:	11/14/2023
Reported:	11/15/2023	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #001H RELEA	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: SSW - 1 (H236229-06)

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	11/15/2023	ND	1.90	95.0	2.00	8.42	
Toluene*	<0.050	0.050	11/15/2023	ND	1.95	97.6	2.00	1.51	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	2.08	104	2.00	1.19	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	6.31	105	6.00	2.46	
Total BTEX	<0.300	0.300	11/15/2023	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	11/15/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	183	91.5	200	0.0371	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	199	99.5	200	0.0131	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					

Surrogate: 1-Chlorooctane *93.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *105 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	11/14/2023	Sampling Date:	11/14/2023
Reported:	11/15/2023	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #001H RELEA	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: ESW - 1 (H236229-07)

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	11/14/2023	ND	1.81	90.3	2.00	0.0557	
Toluene*	<0.050	0.050	11/14/2023	ND	1.94	96.8	2.00	0.265	
Ethylbenzene*	<0.050	0.050	11/14/2023	ND	1.95	97.6	2.00	0.694	
Total Xylenes*	<0.150	0.150	11/14/2023	ND	5.91	98.4	6.00	0.565	
Total BTEX	<0.300	0.300	11/14/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *112 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	11/15/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	183	91.5	200	0.0371	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	199	99.5	200	0.0131	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					

Surrogate: 1-Chlorooctane *103 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *115 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	11/14/2023	Sampling Date:	11/14/2023
Reported:	11/15/2023	Sampling Type:	Soil
Project Name:	LYCHEE BWS STATE COM #001H RELEA	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-02846	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: WSW - 1 (H236229-08)

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	11/15/2023	ND	1.81	90.3	2.00	0.0557	
Toluene*	<0.050	0.050	11/15/2023	ND	1.94	96.8	2.00	0.265	
Ethylbenzene*	<0.050	0.050	11/15/2023	ND	1.95	97.6	2.00	0.694	
Total Xylenes*	<0.150	0.150	11/15/2023	ND	5.91	98.4	6.00	0.565	
Total BTEX	<0.300	0.300	11/15/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *112 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/15/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/15/2023	ND	183	91.5	200	0.0371	
DRO >C10-C28*	<10.0	10.0	11/15/2023	ND	199	99.5	200	0.0131	
EXT DRO >C28-C36	<10.0	10.0	11/15/2023	ND					

Surrogate: 1-Chlorooctane *101 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *113 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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**	
Project Manager: Christian Llull		P.O. #:	
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-02846	Project Owner: ConocoPhillips	City:	
Project Name: Lychee BWS State Com #001H Release		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	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	PRESERV.: ACID/BASE:	ICE / COOL	OTHER	SAMPLING: DATE	TIME	TPH 8015M	BTEX 8021B	Chloride SM4500CI-B
H236239																	
1	FS-1	G	1			X					X		11/14/2023		X	X	X
2	FS-2	G	1			X					X		11/14/2023		X	X	X
3	FS-3	G	1			X					X		11/14/2023		X	X	X
4	FS-4	G	1			X					X		11/14/2023		X	X	X
5	NSW-1	G	1			X					X		11/14/2023		X	X	X
6	SSW-1	G	1			X					X		11/14/2023		X	X	X
7	ESW-1	G	1			X					X		11/14/2023		X	X	X
8	WSW-1	G	1			X					X		11/14/2023		X	X	X

ANALYSIS REQUEST

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Colton Bickerstaff	Date: 11/14/23 Time: 1516	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address: Christian.Llull@tetratech.com
Relinquished By:	Date: Time:	Received By:	REMARKS:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 4.9 Corrected Temp. °C	Sample Condition Cool: Yes Intact: Yes / No No	CHECKED BY: (Initials)	Turnaround Time: Standard ☐ Bacteria (only) Sample Condition Rush: YES, 24Hr TAT ☒ Cool Intact Observed Temp. °C Thermometer ID #113 #140 Correction Factor -0.5°C	☐ Yes ☐ Yes ☐ No ☐ 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

R360 ENVIRONMENTAL SOLUTIONS

Permian Basin

Customer:	CONOCOPHILLIPS
Customer #:	CRI2190
Ordered by:	SAM WIDMER
AFE #:	
PO #:	
Manifest #:	1
Manif. Date:	11/13/2023
Hauler:	MCNABB PARTNERS
Driver	NOE
Truck #	104
Card #	
Job Ref #	

Ticket #:	700-1496988
Bid #:	O6UJ9A000JEC
Date:	11/13/2023
Generator:	CONOCOPHILLIPS
Generator #:	40946
Well Ser. #:	42445
Well Name:	LYCHEE BWS STATE COM
Well #:	001H
Field:	
Field #:	
Rig:	NON-DRILLING
County	LEA (NM)

Facility: CRI

Product / Service	Quantity Units
Contaminated Soil (RCRA Exempt)	12.00 yards
Jet Wash (Recycled Water)	1.00 hour

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

X RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste

_ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):

_ MSDS Information _ RCRA Hazardous Waste Analysis _ Process Knowledge _ Other (Provide description above)

Driver/ Agent Signature **R360 Representative Signature**

_____ _____

Customer Approval

THIS IS NOT AN INVOICE!

Approved By: _____ Date: _____

TRANSPORTER'S MANIFEST

MANIFEST # 2

SHIPPING FACILITY NAME & ADDRESS:
ConocoPhillips Company
600 W. Illinois Avenue, Midland, TX 79701
Attn. Ike Tavarez
Ike.Tavarez@conocophillips.com
432.701.8630

ACCOUNTING INFORMATION
Lychee BWS State Com #001H Release – RMR Project
GL Account No.: 702000
WBS Element: WAO.000.7267.00.RM

LOCATION OF MATERIAL:
ConocoPhillips Company

Lychee BWS State Com #001H (AoC 7267)
Unit Letter O, Section 22, Township 21 South, Range 34 East
Lea County, New Mexico

TRANSPORTER NAME AND ADDRESS:

McNabb Partners
4008 N. Grimes
Hobbs, New Mexico 88240
575.397.0050

TRUCK # 481

DESCRIPTION OF WASTE:
Impacted Soil

TRUCK CAPACITY: 20 cy

APPROXIMATE % FULL 90 %

APPROXIMATE VOLUME HAULED OFF 18 cy

FACILITY CONTACT:
Date: 11/16/23
Signature of Contact: (Agent for ConocoPhillips) CB
432-280-9943
Colton Brickerstaff

NAME OF TRANSPORTER (Driver):

Date: 11/16/23
Signature Driver: Jesse Moreno

DISPOSAL SITE:

R360
P.O. Box 388
4507 W Carlsbad Hwy
Hobbs, New Mexico 88241

Date: 11/16/23
Representative Signature: Y Martinez

R360 ENVIRONMENTAL SOLUTIONS

Permian Basin

Customer:	CONOCOPHILLIPS
Customer #:	CRI2190
Ordered by:	IKE TAVAREZ
AFE #:	
PO #:	
Manifest #:	2
Manif. Date:	11/16/2023
Hauler:	MCNABB PARTNERS
Driver	JESSE
Truck #	M81
Card #	
Job Ref #	

Ticket #:	700-1498359
Bid #:	O6UJ9A000JEC
Date:	11/16/2023
Generator:	CONOCOPHILLIPS
Generator #:	40946
Well Ser. #:	42445
Well Name:	LYCHEE BWS STATE COM
Well #:	001H
Field:	
Field #:	
Rig:	NON-DRILLING
County	LEA (NM)

Facility: CRI

Product / Service	Quantity Units
Contaminated Soil (RCRA Exempt)	18.00 yards

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

X RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste

_ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):

_ MSDS Information _ RCRA Hazardous Waste Analysis _ Process Knowledge _ Other (Provide description above)

Driver/ Agent Signature **R360 Representative Signature**

_____ _____

Customer Approval

THIS IS NOT AN INVOICE!

Approved By: _____ Date: _____

TRANSPORTER'S MANIFEST

MANIFEST # 3

SHIPPING FACILITY NAME & ADDRESS:
ConocoPhillips Company
600 W. Illinois Avenue, Midland, TX 79701
Attn. Ike Tavarez
Ike.Tavarez@conocophillips.com
432.701.8630

ACCOUNTING INFORMATION
Lychee BWS State Com #001H Release – RMR Project
GL Account No.: 702000
WBS Element: WAO.000.7267.00.RM

LOCATION OF MATERIAL:
ConocoPhillips Company

Lychee BWS State Com #001H (AoC 7267)
Unit Letter O, Section 22, Township 21 South, Range 34 East
Lea County, New Mexico

TRANSPORTER NAME AND ADDRESS:

McNabb Partners
4008 N. Grimes
Hobbs, New Mexico 88240
575.397.0050

TRUCK # M87

End dump

DESCRIPTION OF WASTE:
Impacted Soil

TRUCK CAPACITY: 20 cy

APPROXIMATE % FULL 90%

APPROXIMATE VOLUME HAULED OFF 18 cy

FACILITY CONTACT:
Date: 11/16/23
Signature of Contact: (Agent for ConocoPhillips) CB Colton Bickerstaff 432-250-9943

NAME OF TRANSPORTER (Driver):
Date: 11-16-23
Signature Driver: Josh Busby

DISPOSAL SITE:

R360
P.O. Box 388
4507 W Carlsbad Hwy
Hobbs, New Mexico 88241

Date: 11/16/23
Representative Signature

R360 ENVIRONMENTAL SOLUTIONS

Permian Basin

Customer:	CONOCOPHILLIPS
Customer #:	CRI2190
Ordered by:	IKE TAVAREZ
AFE #:	
PO #:	
Manifest #:	3
Manif. Date:	11/16/2023
Hauler:	MCNABB PARTNERS
Driver	JOSH
Truck #	M87
Card #	
Job Ref #	

Ticket #:	700-1498360
Bid #:	O6UJ9A000JEC
Date:	11/16/2023
Generator:	CONOCOPHILLIPS
Generator #:	40946
Well Ser. #:	42445
Well Name:	LYCHEE BWS STATE COM
Well #:	001H
Field:	
Field #:	
Rig:	NON-DRILLING
County	LEA (NM)

Facility: CRI

Product / Service	Quantity Units
Contaminated Soil (RCRA Exempt)	18.00 yards

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

X RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste

_ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):

_ MSDS Information _ RCRA Hazardous Waste Analysis _ Process Knowledge _ Other (Provide description above)

Driver/ Agent Signature **R360 Representative Signature**

_____ _____

Customer Approval

THIS IS NOT AN INVOICE!

Approved By: _____ Date: _____

t6UJ9A01XCUZ

11/16/2023 10:08:45AM

TRANSPORTER'S MANIFEST

MANIFEST # 4

SHIPPING FACILITY NAME & ADDRESS:
ConocoPhillips Company
600 W. Illinois Avenue, Midland, TX 79701
Attn. Ike Tavarez
Ike.Tavarez@conocophillips.com
432.701.8630

ACCOUNTING INFORMATION
Lychee BWS State Com #001H Release – RMR Project
GL Account No.: 702000
WBS Element: WAO.000.7267.00.RM

LOCATION OF MATERIAL:
ConocoPhillips Company

Lychee BWS State Com #001H (AoC 7267)
Unit Letter O, Section 22, Township 21 South, Range 34 East
Lea County, New Mexico

TRANSPORTER NAME AND ADDRESS:

McNabb Partners
4008 N. Grimes
Hobbs, New Mexico 88240
575.397.0050

TRUCK # M 81

DESCRIPTION OF WASTE:
Impacted Soil

TRUCK CAPACITY: 20 cy

APPROXIMATE % FULL 90%

APPROXIMATE VOLUME HAULED OFF 18 cy

FACILITY CONTACT:
Date: 11/16/23
Signature of Contact: (Agent for ConocoPhillips) CB 432-250-9943 Colton Brickhoff

NAME OF TRANSPORTER (Driver):

Date: 11/16/23
Signature Driver: Jesse Moreno

DISPOSAL SITE:

R360
P.O. Box 388
4507 W Carlsbad Hwy
Hobbs, New Mexico 88241

Date: 11/16/23
Representative Signature: YMartinez

R360 ENVIRONMENTAL SOLUTIONS

Permian Basin

Customer:	CONOCOPHILLIPS
Customer #:	CRI2190
Ordered by:	IKE TAVAREZ
AFE #:	
PO #:	
Manifest #:	4
Manif. Date:	11/16/2023
Hauler:	MCNABB PARTNERS
Driver	JESSE
Truck #	M81
Card #	
Job Ref #	

Ticket #:	700-1498474
Bid #:	O6UJ9A000JEC
Date:	11/16/2023
Generator:	CONOCOPHILLIPS
Generator #:	40946
Well Ser. #:	42445
Well Name:	LYCHEE BWS STATE COM
Well #:	001H
Field:	
Field #:	
Rig:	NON-DRILLING
County	LEA (NM)

Facility: CRI

Product / Service	Quantity Units
Contaminated Soil (RCRA Exempt)	18.00 yards

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

X RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt wast

_ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):

_ MSDS Information _ RCRA Hazardous Waste Analysis _ Process Knowledge _ Other (Provide description above)

Driver/ Agent Signature **R360 Representative Signature**

Customer Approval

THIS IS NOT AN INVOICE!

Approved By: _____ Date: _____

TRANSPORTER'S MANIFEST

MANIFEST # 5

SHIPPING FACILITY NAME & ADDRESS:
ConocoPhillips Company
600 W. Illinois Avenue, Midland, TX 79701
Attn. Ike Tavarez
Ike.Tavarez@conocophillips.com
432.701.8630

ACCOUNTING INFORMATION
Lychee BWS State Com #001H Release – RMR Project
GL Account No.: 702000
WBS Element: WAO.000.7267.00.RM

LOCATION OF MATERIAL:
ConocoPhillips Company

Lychee BWS State Com #001H (AoC 7267)
Unit Letter O, Section 22, Township 21 South, Range 34 East
Lea County, New Mexico

TRANSPORTER NAME AND ADDRESS:

McNabb Partners
4008 N. Grimes
Hobbs, New Mexico 88240
575.397.0050

TRUCK # M87

DESCRIPTION OF WASTE:
Impacted Soil

TRUCK CAPACITY: 20 cy

APPROXIMATE % FULL 90%

APPROXIMATE VOLUME HAULED OFF 18 cy

FACILITY CONTACT:
Date: 11/16/23
Signature of Contact: (Agent for ConocoPhillips)
432-250-9943
Colton Bickerstaff

NAME OF TRANSPORTER (Driver):

Date: 11-16-23
Signature Driver: Josh Busby

DISPOSAL SITE:

R360
P.O. Box 388
4507 W Carlsbad Hwy
Hobbs, New Mexico 88241

Date: 11.16.23
Representative Signature

R360 ENVIRONMENTAL SOLUTIONS

Permian Basin

Customer:	CONOCOPHILLIPS
Customer #:	CRI2190
Ordered by:	IKE TAVAREZ
AFE #:	
PO #:	
Manifest #:	5
Manif. Date:	11/16/2023
Hauler:	MCNABB PARTNERS
Driver	JOSH
Truck #	M87
Card #	
Job Ref #	

Ticket #:	700-1498475
Bid #:	O6UJ9A000JEC
Date:	11/16/2023
Generator:	CONOCOPHILLIPS
Generator #:	40946
Well Ser. #:	42445
Well Name:	LYCHEE BWS STATE COM
Well #:	001H
Field:	
Field #:	
Rig:	NON-DRILLING
County	LEA (NM)

Facility: CRI

Product / Service	Quantity Units
Contaminated Soil (RCRA Exempt)	18.00 yards

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

X RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste

_ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):

_ MSDS Information _ RCRA Hazardous Waste Analysis _ Process Knowledge _ Other (Provide description above)

Driver/ Agent Signature **R360 Representative Signature**

Customer Approval

THIS IS NOT AN INVOICE!

Approved By: _____ Date: _____

TRANSPORTER'S MANIFEST

MANIFEST # 6

SHIPPING FACILITY NAME & ADDRESS:
ConocoPhillips Company
600 W. Illinois Avenue, Midland, TX 79701
Attn. Ike Tavarez
Ike.Tavarez@conocophillips.com
432.701.8630

ACCOUNTING INFORMATION
Lychee BWS State Com #001H Release – RMR Project
GL Account No.: 702000
WBS Element: WAO.000.7267.00.RM

LOCATION OF MATERIAL:
ConocoPhillips Company

Lychee BWS State Com #001H (AoC 7267)
Unit Letter O, Section 22, Township 21 South, Range 34 East
Lea County, New Mexico

TRANSPORTER NAME AND ADDRESS:

McNabb Partners
4008 N. Grimes
Hobbs, New Mexico 88240
575.397.0050

TRUCK # M33

DESCRIPTION OF WASTE:
Impacted Soil

TRUCK CAPACITY: 16cy

APPROXIMATE % FULL 90 %

APPROXIMATE VOLUME HAULED OFF 14cy

FACILITY CONTACT:
Date: 11/20/23

Signature of Contact: (Agent for ConocoPhillips) CB

432-250-9943
Colton Bickerstaff

NAME OF TRANSPORTER (Driver):

Date: 11-20-23

Signature Driver: Joel Von Buskirk

DISPOSAL SITE:

R360
P.O. Box 388
4507 W Carlsbad Hwy
Hobbs, New Mexico 88241

Date: 11/20/23

Representative Signature

R360 ENVIRONMENTAL SOLUTIONS

Permian Basin

Customer:	CONOCOPHILLIPS
Customer #:	CRI2190
Ordered by:	IKE TAVAREZ
AFE #:	
PO #:	
Manifest #:	6
Manif. Date:	11/20/2023
Hauler:	MCNABB PARTNERS LLC
Driver	JOEL
Truck #	M33
Card #	
Job Ref #	

Ticket #:	700-1499802
Bid #:	O6UJ9A000JEC
Date:	11/20/2023
Generator:	CONOCOPHILLIPS
Generator #:	40946
Well Ser. #:	42445
Well Name:	LYCHEE BWS STATE COM
Well #:	001H
Field:	
Field #:	
Rig:	NON-DRILLING
County	LEA (NM)

Facility: CRI

Product / Service	Quantity Units
Contaminated Soil (RCRA Exempt)	14.00 yards

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

X RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste

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_ MSDS Information _ RCRA Hazardous Waste Analysis _ Process Knowledge _ Other (Provide description above)

Driver/ Agent Signature **R360 Representative Signature**

Customer Approval

THIS IS NOT AN INVOICE!

Approved By: _____ Date: _____

t6UJ9A01XEZC

11/20/2023 8:54:58AM

TRANSPORTER'S MANIFEST

MANIFEST # 7

SHIPPING FACILITY NAME & ADDRESS:
ConocoPhillips Company
600 W. Illinois Avenue, Midland, TX 79701
Attn. Ike Tavarez
Ike.Tavarez@conocophillips.com
432.701.8630

ACCOUNTING INFORMATION
Lychee BWS State Com #001H Release – RMR Project
GL Account No.: 702000
WBS Element: WAO.000.7267.00.RM

LOCATION OF MATERIAL:
ConocoPhillips Company

Lychee BWS State Com #001H (AoC 7267)
Unit Letter O, Section 22, Township 21 South, Range 34 East
Lea County, New Mexico

TRANSPORTER NAME AND ADDRESS:

McNabb Partners
4008 N. Grimes
Hobbs, New Mexico 88240
575.397.0050

TRUCK # M33

DESCRIPTION OF WASTE:
Impacted Soil

TRUCK CAPACITY: 16cy

APPROXIMATE % FULL 90 %

APPROXIMATE VOLUME HAULED OFF 14cy

FACILITY CONTACT:
Date: 11/20/23
Signature of Contact: (Agent for ConocoPhillips) 432-250-9943 Colton Bickerstaff

NAME OF TRANSPORTER (Driver):

Date: 11-20-23 Signature Driver: Joel Van Buskirk

DISPOSAL SITE:

R360
P.O. Box 388
4507 W Carlsbad Hwy
Hobbs, New Mexico 88241

Date: 11/20/23 Representative Signature

R360 ENVIRONMENTAL SOLUTIONS

Permian Basin

Customer:	CONOCOPHILLIPS
Customer #:	CRI2190
Ordered by:	IKE TAVAREZ
AFE #:	
PO #:	
Manifest #:	7
Manif. Date:	11/20/2023
Hauler:	MCNABB PARTNERS LLC
Driver	JOEL
Truck #	M33
Card #	
Job Ref #	

Ticket #:	700-1499860
Bid #:	O6UJ9A000JEC
Date:	11/20/2023
Generator:	CONOCOPHILLIPS
Generator #:	40946
Well Ser. #:	42445
Well Name:	LYCHEE BWS STATE COM
Well #:	001H
Field:	
Field #:	
Rig:	NON-DRILLING
County	LEA (NM)

Facility: CRI

Product / Service	Quantity Units
Contaminated Soil (RCRA Exempt)	14.00 yards

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

X RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste

_ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):

_ MSDS Information _ RCRA Hazardous Waste Analysis _ Process Knowledge _ Other (Provide description above)

Driver/ Agent Signature **R360 Representative Signature**

_____ _____

Customer Approval

THIS IS NOT AN INVOICE!

Approved By: _____ Date: _____

TRANSPORTER'S MANIFEST

MANIFEST # 8

SHIPPING FACILITY NAME & ADDRESS:
ConocoPhillips Company
600 W. Illinois Avenue, Midland, TX 79701
Attn. Ike Tavarez
Ike.Tavarez@conocophillips.com
432.701.8630

ACCOUNTING INFORMATION
Lychee BWS State Com #001H Release – RMR Project
GL Account No.: 702000
WBS Element: WAO.000.7267.00.RM

LOCATION OF MATERIAL:
ConocoPhillips Company

Lychee BWS State Com #001H (AoC 7267)
Unit Letter O, Section 22, Township 21 South, Range 34 East
Lea County, New Mexico

TRANSPORTER NAME AND ADDRESS:

McNabb Partners
4008 N. Grimes
Hobbs, New Mexico 88240
575.397.0050

TRUCK # M33

DESCRIPTION OF WASTE:
Impacted Soil

TRUCK CAPACITY: 16cy

APPROXIMATE % FULL 50%

APPROXIMATE VOLUME HAULED OFF ~8cy

FACILITY CONTACT:
Date: 11-20-23

Signature of Contact:
(Agent for ConocoPhillips) [signature] 432-250-9943 Colton Birkenstaff

NAME OF TRANSPORTER (Driver):

Date: 11-20-23 Signature Driver: Joel Van Brocklin

DISPOSAL SITE:

R360
P.O. Box 388
4507 W Carlsbad Hwy
Hobbs, New Mexico 88241

Date: 11/20/23

Representative
Signature [signature]

R360 ENVIRONMENTAL SOLUTIONS

Permian Basin

Customer:	CONOCOPHILLIPS
Customer #:	CRI2190
Ordered by:	IKE TAVAREZ
AFE #:	
PO #:	
Manifest #:	8
Manif. Date:	11/20/2023
Hauler:	MCNABB PARTNERS LLC
Driver	JOEL
Truck #	M33
Card #	
Job Ref #	

Ticket #:	700-1499977
Bid #:	O6UJ9A000JEC
Date:	11/20/2023
Generator:	CONOCOPHILLIPS
Generator #:	40946
Well Ser. #:	42445
Well Name:	LYCHEE BWS STATE COM
Well #:	001H
Field:	
Field #:	
Rig:	NON-DRILLING
County	LEA (NM)

Facility: CRI

Product / Service	Quantity Units
Contaminated Soil (RCRA Exempt)	8.00 yards

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

X RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste

_ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):

_ MSDS Information _ RCRA Hazardous Waste Analysis _ Process Knowledge _ Other (Provide description above)

Driver/ Agent Signature **R360 Representative Signature**

_____ _____

Customer Approval

THIS IS NOT AN INVOICE!

Approved By: _____ Date: _____

APPENDIX G
Seed Mixture Details

Custom Soil Resource Report
Soil Map

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

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

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

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

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BF	Berino-Cacique fine sandy loams association	0.3	100.0%
Totals for Area of Interest		**0.3**	**100.0%**

Map Unit Descriptions

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

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

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

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

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

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

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

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

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

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

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

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

Lea County, New Mexico

BF—Berino-Cacique fine sandy loams association

Map Unit Setting

National map unit symbol: dmpf
Elevation: 3,000 to 3,900 feet
Mean annual precipitation: 10 to 15 inches
Mean annual air temperature: 60 to 62 degrees F
Frost-free period: 190 to 205 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Berino

Setting

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

Typical profile

A - 0 to 8 inches: fine sandy loam
Btk - 8 to 60 inches: sandy clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Moderate (about 8.7 inches)

Interpretive groups

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

Description of Cacique

Setting

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

Typical profile

A - 0 to 8 inches: fine sandy loam
Bt - 8 to 28 inches: sandy clay loam
Bkm - 28 to 38 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 4.0 inches)

Interpretive groups

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

Minor Components

Kermit

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

Pyote

Percent of map unit: 3 percent
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

Wink

Percent of map unit: 3 percent
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

Custom Soil Resource Report

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1 REVEGETATION PLANS

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

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

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

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

NMSLO Seed Mix Loamy (L)

LOAMY (L) SITES SEED MIXTURE:

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
Grasses:			
Black grama	**VNS, Southern**	**1.0**	**D**
Blue grama	**Lovington**	**1.0**	**D**
Sideoats grama	**Vaughn, El Reno**	**4.0**	**F**
Sand dropseed	**VNS, Southern**	**2.0**	**S**
Alkali sacaton	**VNS, Southern**	**1.0**	
Little bluestem	**Cimarron, Pastura**	**1.5**	**F**
Forbs:			
Firewheel (*Gaillardia*)	**VNS, Southern**	**1.0**	**D**
Shrubs:			
Fourwing saltbush	**Marana, Santa Rita**	**1.0**	**D**
Common winterfat	**VNS, Southern**	**0.5**	**F**
	Total PLS/acre	**18.0**	

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box
VNS = Variety Not Stated, PLS = Pure Live Seed

- Seed mixes should be provided in bags separating seed types into the three categories: small (S), standard (D) and fluffy (F).
- VNS, Southern – Seed should be from a southern latitude collection of this species.
- Double seed application rate for broadcast or hydroseeding.
- If one species is not available, contact the SLO for an approved substitute; alternatively the SLO may require other species proportionately increased.
- Additional information on these seed species can be found on the USDA Plants Database website at http://plants.usda.gov.

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

QUESTIONS

Action 302158

QUESTIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 302158
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nOY1815234060**
Incident Name	**NOY1815234060 LYCHEE BWS STATE COM #001H @ 30-025-42445**
Incident Type	**Oil Release**
Incident Status	**Deferral Request Received**
Incident Well	**[30-025-42445] LYCHEE BWS STATE COM #001H**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	LYCHEE BWS STATE COM #001H
Date Release Discovered	05/26/2018
Surface Owner	State

Incident Details	
Please answer all the questions in this group.	
Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: Corrosion | Valve | Crude Oil | Released: 20 BBL | Recovered: 15 BBL | Lost: 5 BBL.
Produced Water Released (bbls) Details	Cause: Corrosion | Valve | Produced Water | Released: 200 BBL | Recovered: 105 BBL | Lost: 95 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

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QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 302158
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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.

I hereby agree and sign off to the above statement	Name: Christian LLuLL Title: Project Manager Email: christian.llull@tetratech.com Date: 01/10/2024

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QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 302158
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	Estimate or Other
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1000 (ft.) and ½ (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Greater than 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	15000
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	53549
GRO+DRO (EPA SW-846 Method 8015M)	43829
BTEX (EPA SW-846 Method 8021B or 8260B)	230
Benzene (EPA SW-846 Method 8021B or 8260B)	3
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	11/09/2023
On what date will (or did) the final sampling or liner inspection occur	11/09/2023
On what date will (or was) the remediation complete(d)	11/21/2023
What is the estimated surface area (in square feet) that will be reclaimed	2019
What is the estimated volume (in cubic yards) that will be reclaimed	120
What is the estimated surface area (in square feet) that will be remediated	2440
What is the estimated volume (in cubic yards) that will be remediated	120
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 302158
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	HALFWAY DISPOSAL AND LANDFILL [fEEM0112334510]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
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.	
I hereby agree and sign off to the above statement	Name: Christian LLuLL Title: Project Manager Email: christian.llull@tetratech.com Date: 01/10/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 302158
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Deferral Requests Only *Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.*	
Requesting a deferral of the remediation closure due date with the approval of this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	**Yes**
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	Any additional excavation of the impacted area located inside the walled containment would cause a major facility deconstruction, in addition to creating safety risks associated with excavating near production equipment via aggressive excavation methods (i.e., backhoe/track hoe, excavators, hydraulic hammer, etc.). These aggressive activities pose a risk which could result in a potentially hazardous condition and/or property damage.
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	1755
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	195
Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.	
Enter the facility ID (f#) on which this deferral should be granted	LYCHEE BWS STATE COM 1H - BATTERY [fAPP2204034353]
Enter the well API (30-) on which this deferral should be granted	30-025-42445 LYCHEE BWS STATE COM #001H
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
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.	
I hereby agree and sign off to the above statement	Name: Christian LLuLL Title: Project Manager Email: christian.llull@tetratech.com Date: 01/10/2024

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QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 302158
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**294366**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**11/14/2023**
What was the (estimated) number of samples that were to be gathered	**14**
What was the sampling surface area in square feet	**2460**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Action 302158

CONDITIONS

Operator:	OGRID:
COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	229137
	Action Number: 302158
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

CONDITIONS

Created By	Condition	Condition Date
bhall	Deferral approved. Deferral of the lined containment area is approved until plugging and abandonment or a major facility deconstruction, whichever comes first. A complete and accurate remediation report and/or reclamation report will need to be submitted at that time. The reclamation report will need to address all the requirements of 19.15.29.13 NMAC.	1/26/2024
bhall	The reclamation report will need to address all the requirements of 19.15.29.13 NMAC including an executive summary of the reclamation activities; scaled site map including sampling locations; analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing if the backfill is coming from a rancher's pit or other local source AND/OR proof from the landfill/landfarm that their backfill is non-waste containing; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	1/26/2024
bhall	Subsequent to the approval of a reclamation plan, a revegetation report will need to be submitted, including pictures of the revegetated areas, once the site meets the requirements for vegetation cover found in 19.15.29.13 D.(3) NMAC. Per 19.15.29.13 E. NMAC, if a reclamation and revegetation report has been submitted to the surface owner, it may be used as long as the requirements of the surface owner provide equal or better protection of freshwater, human health and the environment.	1/26/2024