TETRA TECH

May 8, 2023

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

Re: Release Characterization and Closure Request
ConocoPhillips
Heritage Concho
Myox 5 State Com #022H Release
Unit Letter O, Section 05, Township 26 South, Range 28 East
Eddy County, New Mexico
Incident ID# nAB1821442601

Ms. Hall:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips to assess a Heritage Concho release that occurred at the tank battery located on the Myox 5 State Com #022H lease pad (API No. 30-015-43706). The release footprint is located in Public Land Survey System (PLSS) Unit Letter O, Section 05, Township 26 South, Range 28 East, in Eddy County, New Mexico (Site). The approximate release point occurred at coordinates 32.06501508°, -104.1082911°, as shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico Oil Conservation Division (NMOCD) C-141 Initial Report, the release occurred on July 25, 2018 when a gasket on the fire tube failed. The C-141 states that approximately 10 barrels (bbls) of produced water and 20 bbls of oil were released in the containment on location. Vacuum trucks were utilized to recover approximately 5 bbls of produced water and 18 bbls of oil during the initial response. The NMOCD approved the initial C-141 on August 2, 2018 and subsequently assigned the release the Incident ID nAB1821442601. The initial C-141 form is included in Appendix A.

This incident is included in an Agreed Compliance Order-Releases (ACO-R) between COG Operating LLC (Concho) and the NMOCD signed on November 20 and 26, 2018, respectively.

SITE CHARACTERIZATION

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

There are no water wells listed in the NMOSE database located within approximately ½ mile (800 meters) of the site. According to data from one (1) water well listed in the NMOSE database within approximately 2.23 miles (3,592 meters) of the Site, the depth to groundwater is 90 feet below ground surface (bgs). However, a groundwater determination boring was drilled by ConocoPhillips at the SRO SWD #101 lease pad, which is located approximately 0.60 miles northeast the Site. On March 15, 2022, a licensed drilling

Tetra Tech
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subcontractor was onsite at the SRO SWD #101 to drill a borehole (DTW-1) to 55 feet bgs. The borehole was located on-pad. The borehole was dry upon completion, and soils were dry from surface to total depth. The depth to groundwater in the area was thus verified as greater than 55 feet bgs. The borehole was plugged with 3/8-inch bentonite chips. The borehole coordinates are 32.072938°, -104.101518°, as shown on Figure 5. The site characterization data, along with the boring log, is included in Appendix B.

REGULATORY FRAMEWORK

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

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

Constituent	RRAL
Chloride	10,000 mg/kg
TPH	2,500 mg/kg
BTEX	50 mg/kg

2018 INITIAL SITE ASSESSMENT AND NMOCD REJECTION

HRL Compliance Solutions (HRL) conducted initial soil assessment activities on August 29, 2018. Two (2) soil borings (S1 and S2) to 8 feet bgs were installed to 8 feet bgs within the release extent on pad. Initial assessment sampling locations are shown in Figure 3.

A total of fourteen (14) soil samples were collected from the two (2) soil borings to Hall Environmental Analysis Laboratory, Inc, in Albuquerque, New Mexico to be analyzed for chloride via EPA Method 300.0, TPH via EPA Method 8015M/D and BTEX via EPA Method 8021B. Analytical results from the August 2018 initial assessment activities are summarized in Table 1.

HRL summarized the 2018 assessment activities in a Soil Remediation Plan dated October 26, 2018. A copy of the 2018 Soil Remediation Plan is available in the NMOCD online incident files.

The NMOCD rejected the 2018 Soil Remediation Plan Report in an email from Brittany Hall dated December 2, 2022, with the following comments:

- *"All C-141 forms need to be signed by the operator.*
- *The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater.*
- *Horizontal delineation submitted was incomplete and did not meet the requirements of 19.15.29.11 NMAC. The values for determination of horizontal impact are derived by either approved "background" values or Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less. This is especially important for "on-pad" releases to ensure the release did not extend to the "off-pad"/pasture area. A visual footprint on the surface is not sufficient to assess the horizontal extent of the release. Laboratory data must be provided as evidence of delineation efforts. Any sample exceeding approved "background" values or Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less requires additional samples for horizontal delineation.*

- *Deferral denied. A deferral will only be approved if the contamination is fully delineated and does not cause an imminent risk to human health, the environment, or ground water.*
- *2RP-4890 closed. Refer to incident #nAB1821442601 in all future communication.*
- *Please submit a complete report through the OCD Permitting website by 3/3/2023."*

A request for an extension to June 3, 2023, was approved by Brittany Hall via email dated March 3, 2023. A copy of the regulatory correspondence is included in Appendix C.

2023 ADDITIONAL SITE ASSESSMENT AND SAMPLING RESULTS

Following receipt of the NMOCD rejection of the 2018 Soil Remediation Plan, Tetra Tech conducted additional assessment sampling at the Site on behalf of ConocoPhillips in order to complete horizontal delineation of the release and assess the current soil concentration levels. On March 27, 2023, and April 24, 2023, Tetra Tech installed three (3) hand auger borings (AH-23-5 through AH-23-7) within the previously reported release extent to confirm current soil concentration levels and six (6) hand auger borings (AH-23-1 through AH-23-4, AH-23-8, and AH-23-9) along the perimeter of the previously reported release extent to complete horizontal delineation. The 2023 boring locations and revised release extent are shown on Figure 4. Photographic documentation of the release Site is presented in Appendix D.

A total of twelve (12) soil samples were collected from the nine (9) borings and sent to Cardinal Laboratories in Midland, Texas to be analyzed for chloride via EPA Method 300.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8261B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix E.

Analytical results from the 2023 additional assessment activities are summarized in Table 2. All analytical results were below the applicable Site RRALs for all constituents.

CONCLUSION

All analytical results associated with the horizontal delineation to the east, south, and west of the release area were below the Site RRALs for all constituents. Horizontal delineation was achieved, per NMOCD request. A depth to groundwater boring was located on a lease pad that is approximately 0.60 miles from the site and has verified that groundwater is not present at 55 feet bgs or less.

Based on the site characterization, the remaining soils on the production lease pad meet the closure criteria of Table I of 19.15.29.12 NMAC. All analytical results associated with the 2023 assessment results were below the Site RRALs; therefore, no remediation of the release footprint is necessary. Based on the above, ConocoPhillips respectfully requests closure of the Myox 5 State Com #022H Release (nAB1821442601). Final reclamation of the well pad shall take place in accordance with 19.15.29.13 NMAC once the Site is no longer being used for oil and gas operations. The final C-141 forms are enclosed in Appendix A. If you have any questions concerning the soil assessment activities for the Site, please call me at (512) 739-7874.

Sincerely,
Tetra Tech, Inc.

Samantha Abbott, P.G.
Project Manager

Christian M. Llull, P.G.
Program Manager

cc:
Mr. Moises H Cantu Garcia, PBU – ConocoPhillips

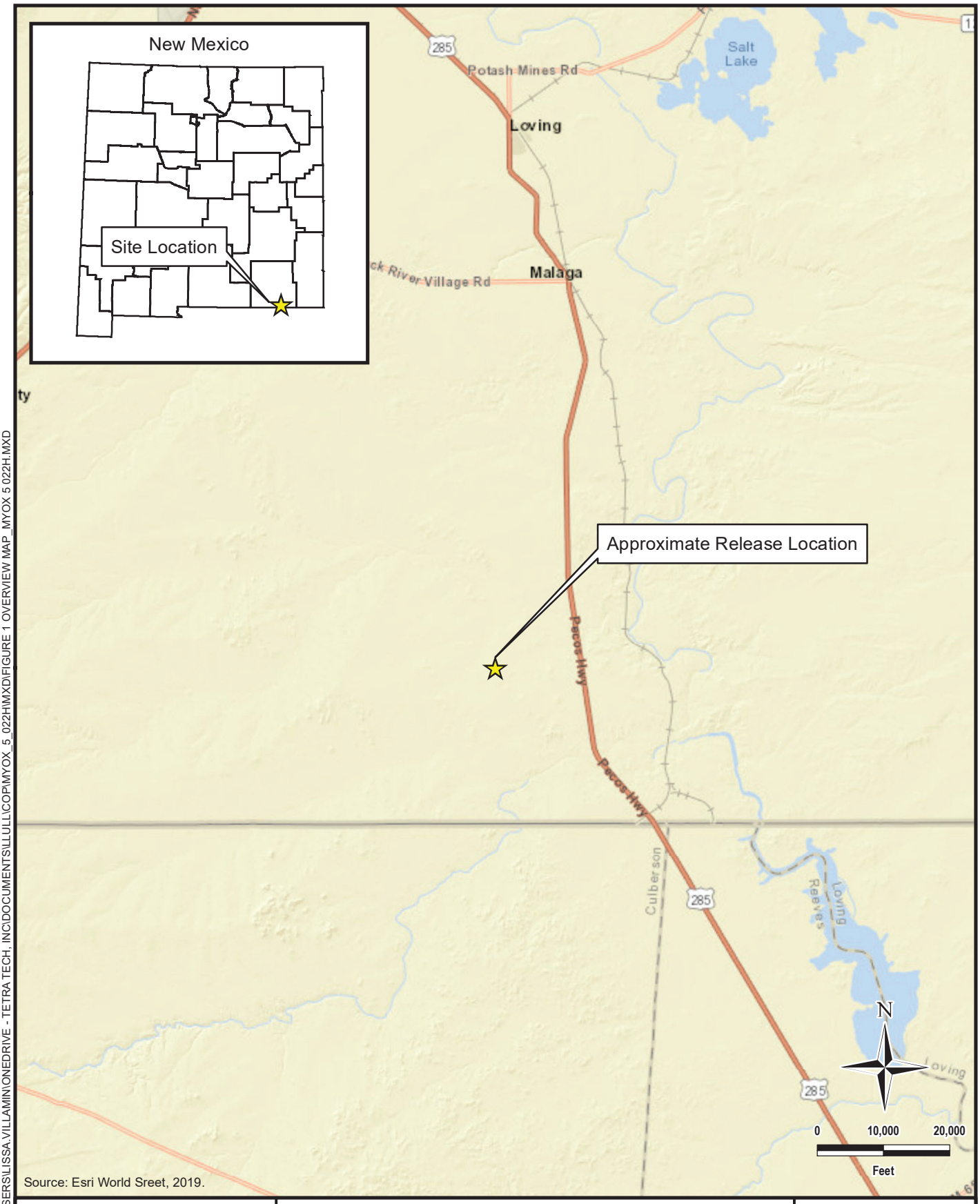
LIST OF ATTACHMENTS

Figures:

Tables:

Appendices:

FIGURES



DOCUMENT PATH: C:\USERS\LISSA.VILLAMIN\ONEDRIVE - TETRA TECH, INC\DOCUMENTS\LLULL\COP\MYOX_5_022H\MXD\FIGURE 1 OVERVIEW MAP_MYOX 5 022H.MXD

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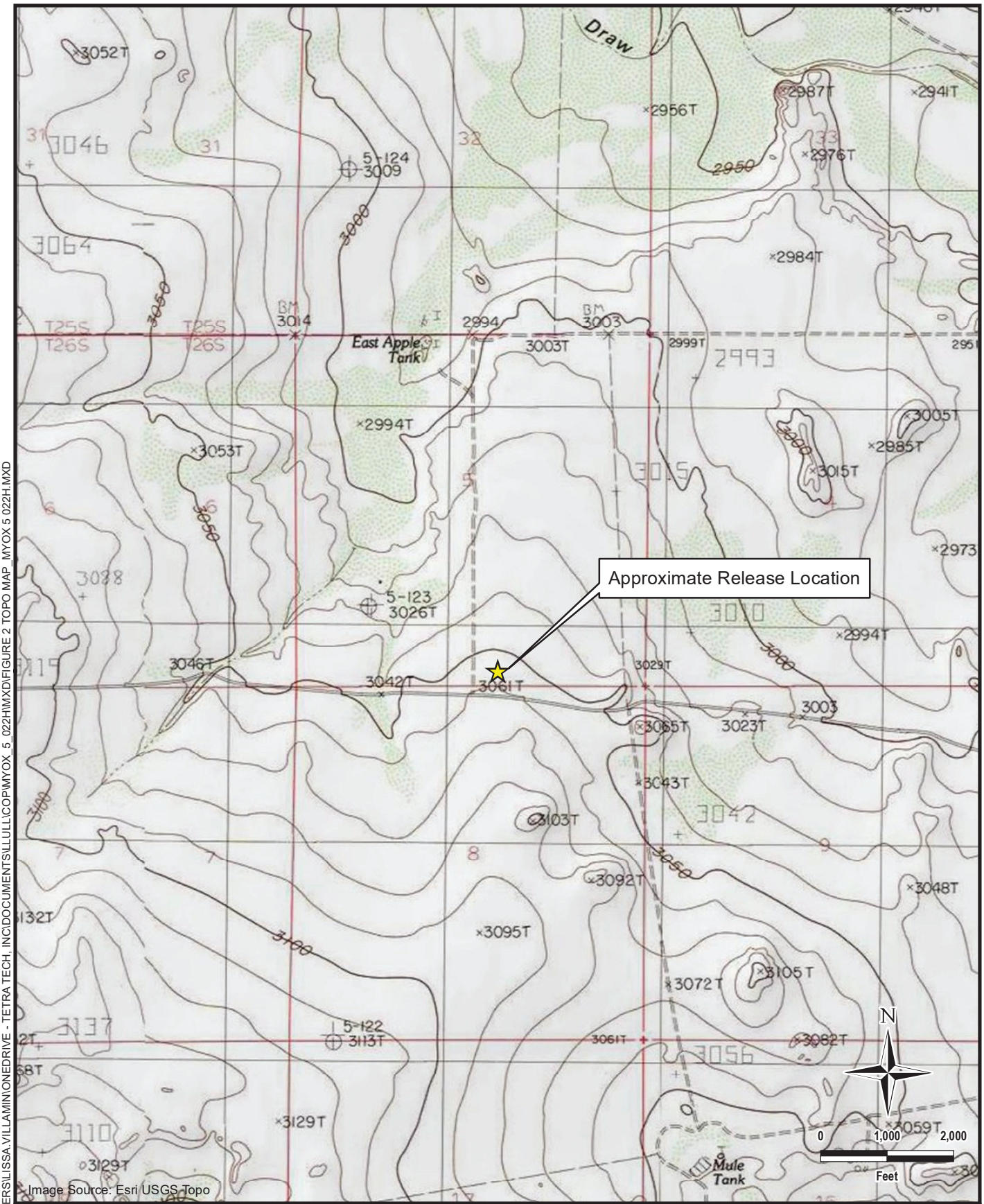
CONOCOPHILLIPS

NAB1821442601
(32.06501508°, -104.1082911°)
EDDY COUNTY, NEW MEXICO

MYOX 5 STATE COM #022H
OVERVIEW MAP

PROJECT NO.:	212C-MD-03004
DATE:	APRIL 14, 2023
DESIGNED BY:	LMV

Figure No.
1



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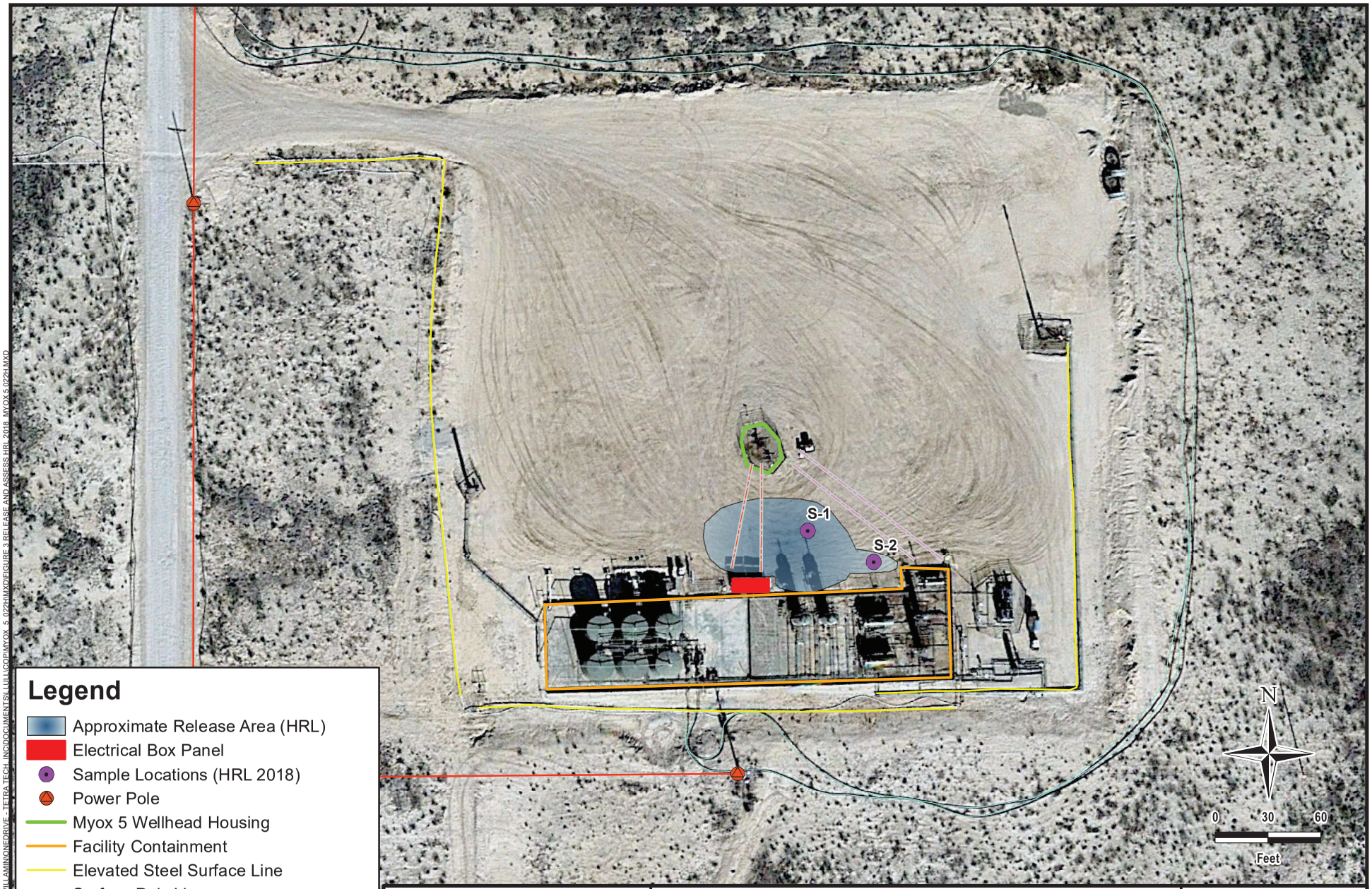
CONOCOPHILLIPS

NAB1821442601
(32.06501508°, -104.1082911°)
EDDY COUNTY, NEW MEXICO

MYOX 5 STATE COM #022H
TOPOGRAPHIC MAP

PROJECT NO.:	212C-MD-03004
DATE:	APRIL 14, 2023
DESIGNED BY:	LMV

Figure No.
2



Legend

- Approximate Release Area (HRL)
- Electrical Box Panel
- Sample Locations (HRL 2018)
- Power Pole
- Myox 5 Wellhead Housing
- Facility Containment
- Elevated Steel Surface Line
- Surface Poly Line
- Overhead Powerlines
- Inferred Electrical Line
- Inferred Flowline

Image Source: Google Earth.

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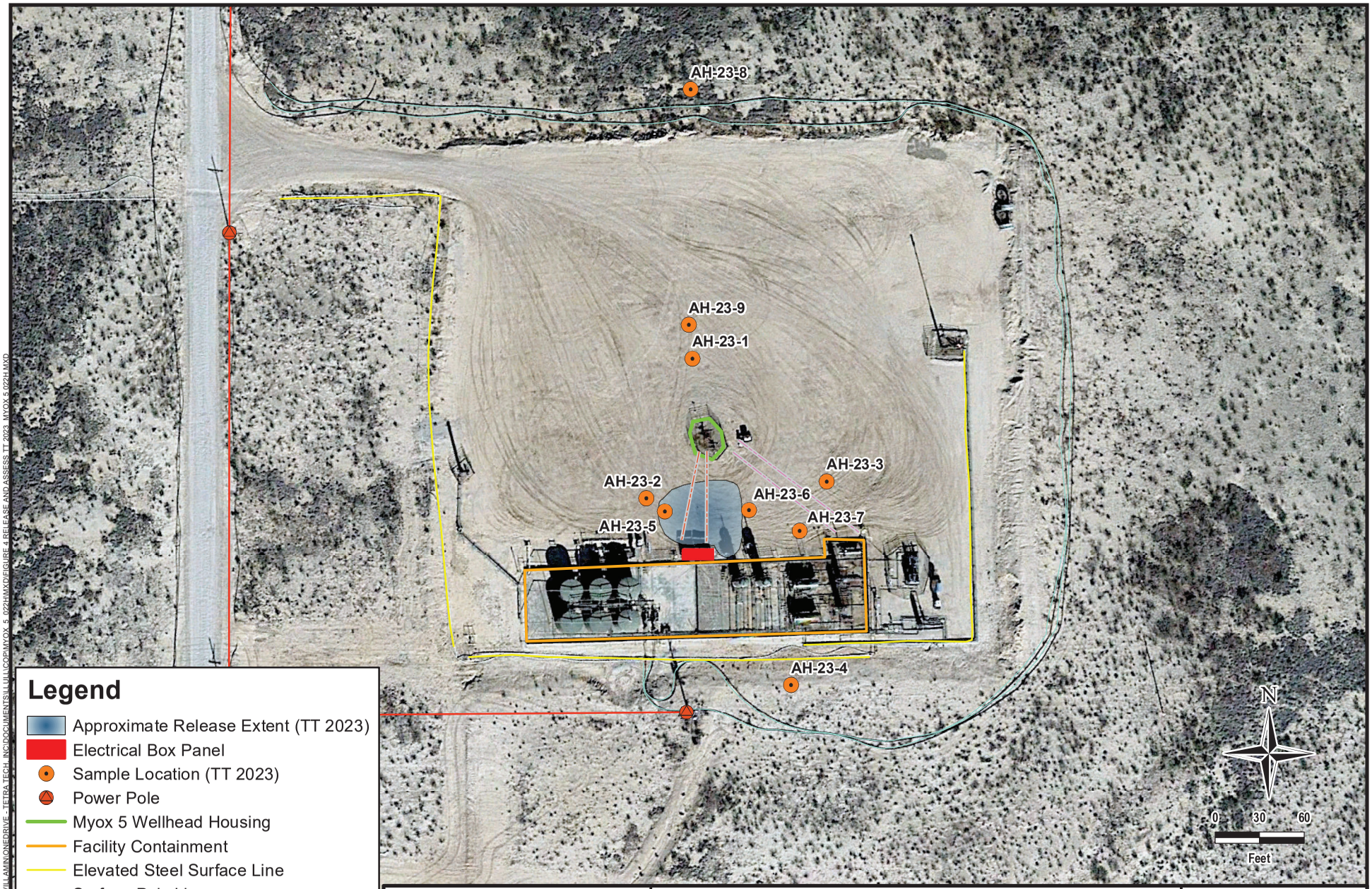
CONOCOPHILLIPS

NAB1821442601
(32.06501508°, -104.1082911°)
EDDY COUNTY, NEW MEXICO

MYOX 5 STATE COM #022H
APPROXIMATE RELEASE EXTENT AND SITE ASSESSMENT (HRL 2018)

PROJECT NO.:	212C-MD-03004
DATE:	APRIL 17, 2023
DESIGNED BY:	LMV

Figure No.
3



Legend

- Approximate Release Extent (TT 2023)
- Electrical Box Panel
- Sample Location (TT 2023)
- Power Pole
- Myox 5 Wellhead Housing
- Facility Containment
- Elevated Steel Surface Line
- Surface Poly Line
- Overhead Powerlines
- Inferred Electrical Line
- Inferred Flowline

Image Source: Google Earth.

DOCUMENT PATH: C:\USERS\LISSA.VILLAMIN\ONEDRIVE - TETRA TECH, INC\DOCUMENTS\LULLO\PJ\MYOX_5_022H\MXD\FIGURE 4 RELEASE AND ASSESS TT 2023_MYOX 5 022H.MXD

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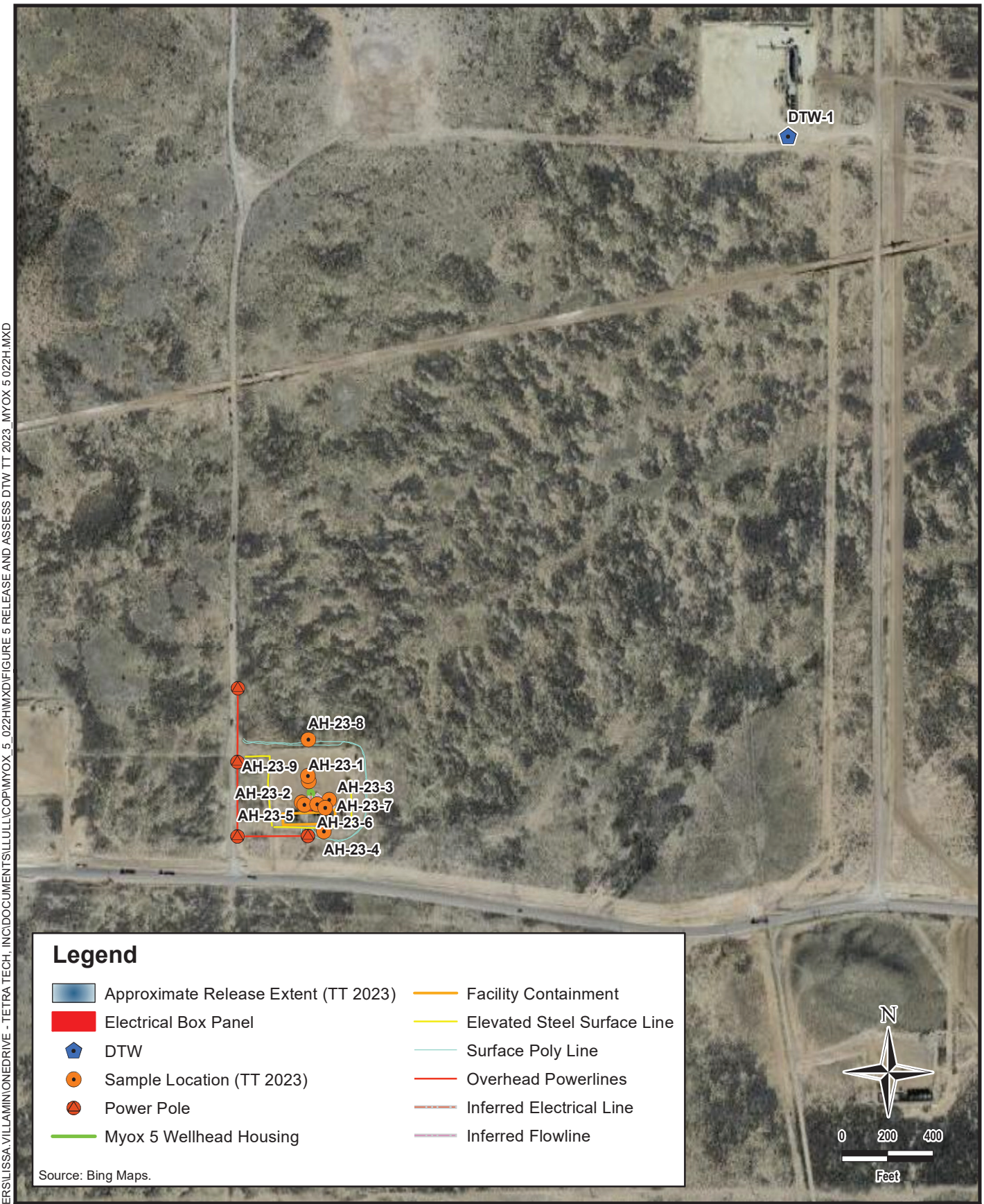
CONOCOPHILLIPS

NAB1821442601
(32.06501508°, -104.1082911°)
EDDY COUNTY, NEW MEXICO

MYOX 5 STATE COM #022H
APPROXIMATE RELEASE EXTENT AND SITE ASSESSMENT (TT 2023)

PROJECT NO.:	212C-MD-03004
DATE:	MAY 02, 2023
DESIGNED BY:	LMV

Figure No.
4



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CONOCOPHILLIPS

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(32.06501508°, -104.1082911°)
EDDY COUNTY, NEW MEXICO

MYOX 5 STATE COM #022H
APPROXIMATE RELEASE EXTENT AND SITE ASSESSMENT WITH DTW LOCATION (TT 2023)

PROJECT NO.:	212C-MD-03004
DATE:	MAY 02, 2023
DESIGNED BY:	LMV

Figure No.
5

TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
2018 INITIAL SOIL ASSESSMENT - nAB1821442601
CONOCOPHILLIPS
MYOX 5 STATE COM #022H
EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride[1]	BTEX[2]										TPH[3]							
				Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		MRO		Total TPH	
		ft. bgs	mg/kg	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
S-1	8/29/2018	SURFACE	1,300	< 0.24		3.3		2.9		56		***62.2***		1,100		20,000		2,600		***23,700***	
		1	190	< 0.47		30		12		230		***272***		4,100		26,000		2,400		***32,500***	
		2	56	< 0.50		30		11		230		***271***		3500		22000		2000		***27500***	
		3	< 30	< 0.024		< 0.047		< 0.047		< 0.094		-		< 4.7		29		< 46		29	
		4	< 30	< 0.024		< 0.048		< 0.048		< 0.096		-		< 4.8		< 9.7		< 48		-	
		5	< 30	< 0.023		< 0.047		< 0.047		< 0.094		-		< 4.7		< 9.9		< 49		-	
		6	< 30	< 0.023		< 0.046		< 0.046		< 0.091		-		< 4.6		< 9.8		< 49		-	
S-2	8/29/2018	SURFACE	***38,000***	< 0.024		0.96		1.6		37		39.6		850		16,000		2,400		***19,250***	
		1	***16,000***	< 0.024		< 0.049		< 0.049		< 0.098		-		< 4.9		350		< 47		350	
		2	8,400	< 0.024		< 0.048		< 0.048		< 0.096		-		< 4.8		29		< 48		29	
		3	1,800	< 0.023		< 0.046		< 0.046		< 0.092		-		< 4.6		< 9.7		< 49		-	
		4	190	< 0.024		< 0.048		< 0.048		< 0.097		-		< 4.8		< 9.4		< 47		-	
		6	89	NS		NS		NS		NS		-		NS		NS		NS		-	
		8	79	NS		NS		NS		NS		-		NS		NS		NS		-	

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

MRO Motor Oil range organics

NS Sample not analyzed for parameter

1 EPA Method 300.0

2 EPA Method 8021B

3 Method SW8015 Mod

Bold and italicized values indicate exceedance of proposed RRALs.

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
2023 ADDITIONAL SOIL ASSESSMENT- nAB1821442601
CONOCOPHILLIPS
MYOX 5 STATE COM #022H
EDDY 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													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
AH-23-1	3/27/2023	0-1	500	560		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		162		82.4		244.4
AH-23-2	3/27/2023	0-1	470	272		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-23-3	3/27/2023	0-1	240	368		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-23-4	3/27/2023	0-1	200	48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-23-5	3/27/2023	0-1	-	672		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
		1-2	-	464		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-23-6	3/27/2023	0-1	480	480		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
		1-2	575	480		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-23-7	3/27/2023	0-1	620	480		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
		1-2	460	480		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-23-8	4/24/2023	0-1	353	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-23-9	4/24/2023	0-1	482	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.

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

NAB1821442601

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: **Myox 5 State Com #022H**	Facility Type: Tank Battery

Surface Owner: State	Mineral Owner: State	API No. 30-015-43706

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	05	26S	28E	225	South	2,280	East	Eddy

Latitude 32.06501508 **Longitude** -104.1082911 NAD83

NATURE OF RELEASE

Type of Release Oil & Produced Water	Volume of Release 20 bbl. - Oil 10 bbl. - Produced Water	Volume Recovered 18 bbl. - Oil 5 bbl. - Produced Water
Source of Release Gasket Failure	Date and Hour of Occurrence July 25, 2018 11:15am	Date and Hour of Discovery July 25, 2018 11:15am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher – NMOCD Ryan Mann – SLO Maria Pruett – NMOCD	
By Whom? Rebecca Haskell	Date and Hour July 26, 2018 10:15am	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

The release was caused when a gasket on the fire tube failed. The gasket is being replaced.

Describe Area Affected and Cleanup Action Taken.*

The release was in the containment and on location. 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: Maria Pruett
Title: HSE Administrative Assistant	Approval Date: 8/2/18 Expiration Date: N/A
E-mail Address: agrant@concho.com	Conditions of Approval: See attached Attached ☐
Date: July 30, 2018 Phone: (432) 253-4513	

* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _07/30/18_____ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4840 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 _2__ office in Artesia_ on or before __08/25/18_____. 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

Bustamante, Amalia, EMNRD

From: Pruett, Maria, EMNRD
Sent: Wednesday, August 1, 2018 6:22 AM
To: Bustamante, Amalia, EMNRD
Subject: FW: (C-141 Initial) Myox 5 State Com #022H (30-015-43706) 07-25-2018
Attachments: Signed Dated C-141 directive of 11-4-16.pdf; OCD Received Signed (C-141 Initial) Myox 5 State Com #022H (30-015-43706) 07-25-2018.pdf

Good Morning Amalia,

Attached please find dated/signed C-141 and directive. I'm not sure if Mike gave this to you already, if so please disregard.

Best Regards,

Maria Pruett

Environmental Specialist
N.M. Oil Conservation Division
District 2
811 S. 1st Street
Artesia, NM 88210
Desk: 575 748-1283 X 101
Cell: 575 840-5963
Fax: 575748-9720

From: DeAnn Grant <agrant@concho.com>
Sent: Monday, July 30, 2018 3:52 PM
To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Mann, Ryan <rmann@slo.state.nm.us>
Cc: Pruett, Maria, EMNRD <Maria.Pruett@state.nm.us>; Ike Tavarez <itavarez@concho.com>; Robert McNeill <RMcNeill@concho.com>; Sheldon Hitchcock <SLHitchcock@concho.com>; Dakota Neel <DNeel2@concho.com>; Rebecca Haskell <RHaskell@concho.com>; DeAnn Grant <agrant@concho.com>
Subject: (C-141 Initial) Myox 5 State Com #022H (30-015-43706) 07-25-2018

Mr. Bratcher/Mr. Mann,

Please find the attached Initial C-141 for your consideration. If you have any questions or concerns please contact me.

Thank you,

DeAnn Grant
HSE Administrative Assistant
agrant@concho.com
COG Operating LLC
600 W Illinois Avenue | Midland, TX 79701
Direct: 432-253-4513 | Main: 432.683.7443
CONCHO

State of New Mexico
Oil Conservation Division

Incident ID	nAB1821442601
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	51 -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	nAB1821442601
District RP	
Facility ID	
Application ID	

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

Printed Name: Moises H Cantu Garcia Title: Sr. Environmental Engineer

Signature: Moises H Cantu Garcia Date: 5/8/2023

email: Moises.H.CantuGarcia@conocophillips.com Telephone: 432.688-6090

OCD Only

Received by: Jocelyn Harimon Date: 05/09/2023

State of New Mexico
Oil Conservation Division

Incident ID	nAB1821442601
District RP	
Facility ID	
Application ID	

Closure

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

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

☑ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☑ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☐ Description of remediation activities

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

Printed Name: Moises H Cantu Garcia Title: Sr. Environmental Engineer

Signature: Moises H Cantu Garcia Date: 5/8/2023

email: Moises.H.CantuGarcia@conocophillips.com Telephone: 432-688-6090

OCD Only

Received by: Jocelyn Harimon Date: 05/09/2023

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

Closure Approved by: Brittany Hall Date: 6/6/2023

Printed Name: Brittany Hall Title: Environmental Specialist

APPENDIX B
Site Characterization Data

OCD Karst Potential Map

2/8/2023, 3:14:45 PM

Karst Occurrence Potential

- High
- Medium

1:9,028

0 0.07 0.15 0.3 mi

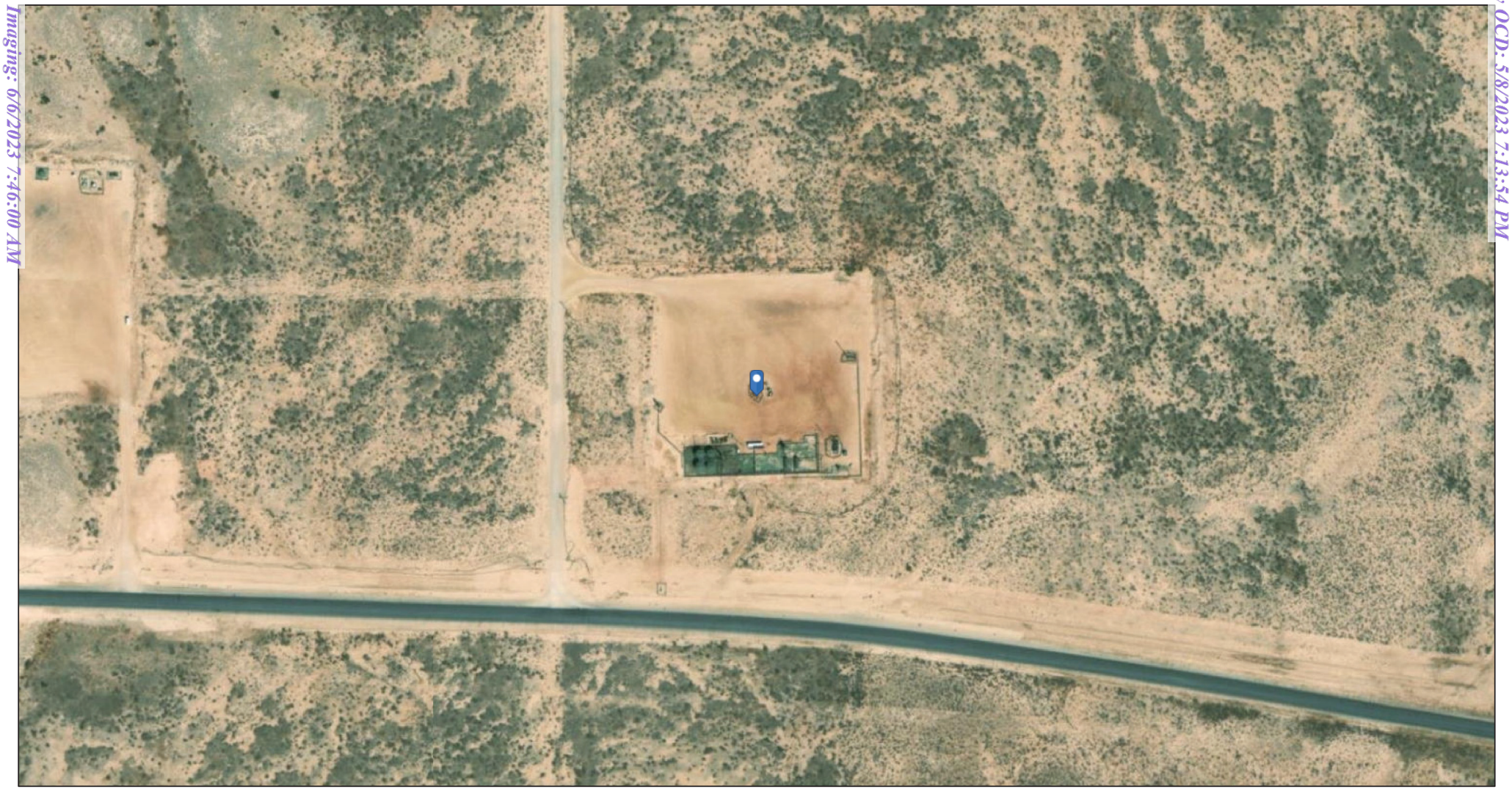
0 0.15 0.3 0.6 km

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

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

OCD Waterbodies Map



2/8/2023, 3:13:48 PM

1:2,257

0 0.02 0.04 0.09 mi

0 0.04 0.07 0.15 km

Maxar, Microsoft, Esri, HERE, Garmin, iPC, NM OSE

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

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

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

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

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02478	CUB	ED	2	1	05	26S	28E	583848	3549325*		1373	100		
C 02477	CUB	ED	1	1	03	26S	28E	586687	3549347*		2860	150		
C 01278	C	ED	4	3	28	25S	28E	585470	3551338*		3592	205	90	115

Average Depth to Water: **90 feet**

Minimum Depth: **90 feet**

Maximum Depth: **90 feet**

Record Count: 3

UTMNAD83 Radius Search (in meters):

Easting (X): 584168.68 **Northing (Y):** 3547989.89 **Radius:** 3600

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

212C-MD-02660 | TETRA TECH | **LOG OF BORING DTW-1** | Page 1 of 1

Project Name: SRO SWD #101

Borehole Location: GPS: 32.072938°, -104.101518° | Surface Elevation (ft): 3009

Borehole Number: DTW-1 | Borehole Diameter (in.): 3 | Date Started: 3/15/2022 | Date Finished: 3/15/2022

WATER LEVEL OBSERVATIONS

While Drilling ▽ DRY ft | 24 Hours After Completion of Drilling ▽ DRY ft

Remarks:

DEPTH (ft)	OPERATION TYPES	SAMPLE	STANDARD PENETRATION TEST SPT	PID (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	WELL DIAGRAM
0												**-SM-** SILTY SAND: Pale Brown, dry	1	
												-SM- SILTY SAND: Pale Brown, with angular to subangular Gravel, dry.	2	
												-SM- SILTY SAND: Light Reddish Brown, dry.	3	
5												**-SM-** SILTY SAND: Light Reddish Brown, with angular to subangular Gravel, dry.	4	
												-SM- SILTY SAND: Reddish Brown, with angular to subangular Gravel, dry.		
10														4" Schedule 40 PVC Casing
15												**-CL-** CLAY: Brown, trace Sand, dry to moist.	15	
20												**-CL-** CLAY: Grayish Brown, trace Sand, dry to moist.	20	
25												**-SANDSTONE-** SANDSTONE: Gray, fine to medium grained, weakly to moderately cemented, dry.	25	
30														
35														
40														4" Schedule 40 PVC Slotted Screen (0.010")
45														
50														
55													55	

Bottom of borehole at 55.0 feet.

Sampler Types: Split Spoon, Acetate Liner, Shelby, Vane Shear, Bulk Sample, California, Grab Sample, Sonic

Operation Types: Auger, Mud Rotary, Air Rotary, Continuous Flight Auger, Direct Push, Hollow Stem Auger, HSA

Notes:
Surface elevation is an estimated value based on Google Earth data.

Logger: Nicholas Poole | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

APPENDIX C
Regulatory Correspondence

Chavira, Lisbeth

From: OCDOnline@state.nm.us
Sent: Friday, December 2, 2022 9:08 AM
To: Beauvais, Charles R
Subject: [EXTERNAL]The Oil Conservation Division (OCD) has rejected the application, Application ID: 163246

To whom it may concern (c/o Charles Beauvais for COG OPERATING LLC),

The OCD has rejected the submitted *Internal Manual Incident File Supporting Documentation (ENV)* (IM-BNF), for incident ID (n#) nAB1821442601,
for the following reasons:

- **All C-141 forms need to be signed by the operator.**
- **The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater.**
- **Horizontal delineation submitted was incomplete and did not meet the requirements of 19.15.29.11 NMAC. The values for determination of horizontal impact are derived by either approved "background" values or Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less. This is especially important for "on-pad" releases to ensure the release did not extend to the "off-pad"/pasture area. A visual footprint on the surface is not sufficient to assess the horizontal extent of the release. Laboratory data must be provided as evidence of delineation efforts. Any sample exceeding approved "background" values or Table I Closure Criteria for releases where groundwater is at a depth of 50 feet or less requires additional samples for horizontal delineation.**
- **Deferral denied. A deferral will only be approved if the contamination is fully delineated and does not cause an imminent risk to human health, the environment, or ground water.**
- **2RP-4890 closed. Refer to incident #nAB1821442601 in all future communication.**
- **Please submit a complete report through the OCD Permitting website by 3/3/2023.**

The rejected IM-BNF can be found in the OCD Online: Permitting - Action Status, under the Application ID: 163246.
Please review and make the required correction(s) prior to resubmitting.
If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional IM-BNF.

Thank you,
Brittany Hall
Projects Environmental Specialist - A
505-517-5333
Brittany.Hall@emnrd.nm.gov

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

Chavira, Lisbeth

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Friday, March 3, 2023 12:57 PM
To: Abbott, Sam
Cc: Beauvais, Charles R; Llull, Christian; Chavira, Lisbeth
Subject: RE: [EXTERNAL] Extension Request - Application ID 163246 (nAB1821442601)

Sam,
Your extension request for **nAB1821442601** is approved. The new due date is June 3, 2023.

Please 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,
Brittany Hall • Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

From: Abbott, Sam <Sam.Abbott@tetratech.com>
Sent: Friday, March 3, 2023 11:55 AM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Cc: Beauvais, Charles R <Charles.R.Beauvais@conocophillips.com>; Llull, Christian <Christian.Llull@tetratech.com>; Chavira, Lisbeth <LISBETH.CHAVIRA@tetratech.com>
Subject: [EXTERNAL] Extension Request - Application ID 163246 (nAB1821442601)

Ms. Hall:

On behalf of ConocoPhillips, Tetra Tech is requesting a 90-day extension (until June 3, 2023) to complete additional assessment activities and associated reporting for the Myox 5 State Com #002H Release site (**nAB1821442601**).

ConocoPhillips recently received a large volume of NMOCD determinations related to unresolved releases from ConocoPhillips' predecessor-in-interest ("COG") via the *Internal Manual Incident File Supporting Documentation (ENV)* (IM-BNF) process.

Given the difficulties inherent with available resource allocation for several projects with similar deadlines within a short period of time, this extension is required to safely complete the additional assessment. ConocoPhillips plans to conduct the additional assessment in the coming month however, and once the sampling data is collected, tabulated, and evaluated, a revised report will be submitted to the OCD.

Please let me know if you have any questions or concerns.

Sam

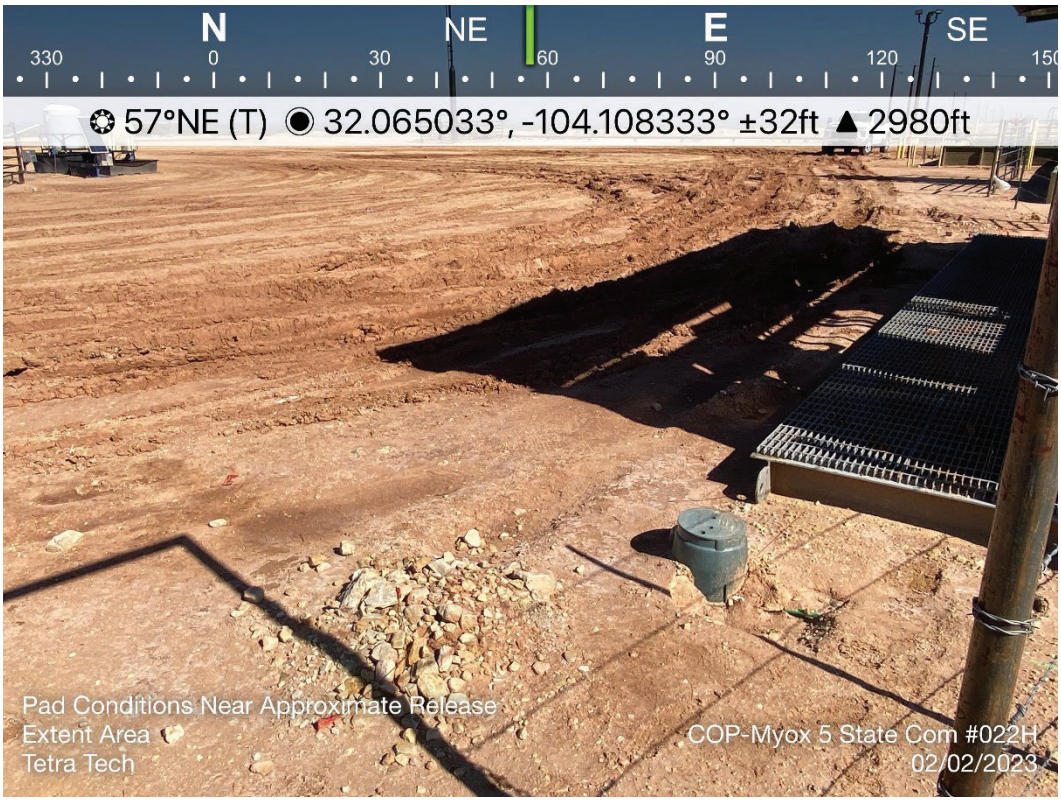
Samantha Abbott, PG | Project Manager
Direct Mobile **+1 (512) 739-7874** | Business **+1 (512) 338-1667** | Sam.Abbott@tetratech.com

Tetra Tech, Inc. | *Leading with Science®* | OGA
8911 N Capital of Texas Hwy #2310 | Austin, TX 78759 | tetratech.com

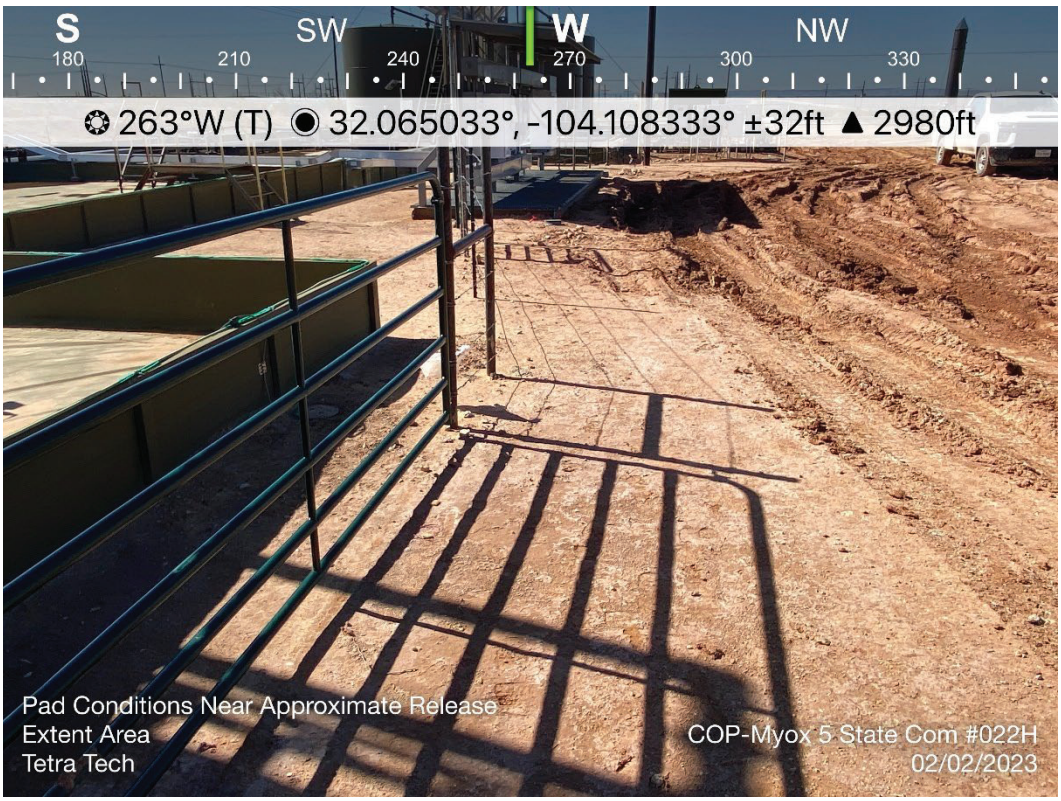
APPENDIX D
Photographic Documentation

TETRA TECH, INC. PROJECT NO. 212C-MD-03004	DESCRIPTION	View of site signage.	1
	SITE NAME	Myox 5 State Com #22H	2/2/2023

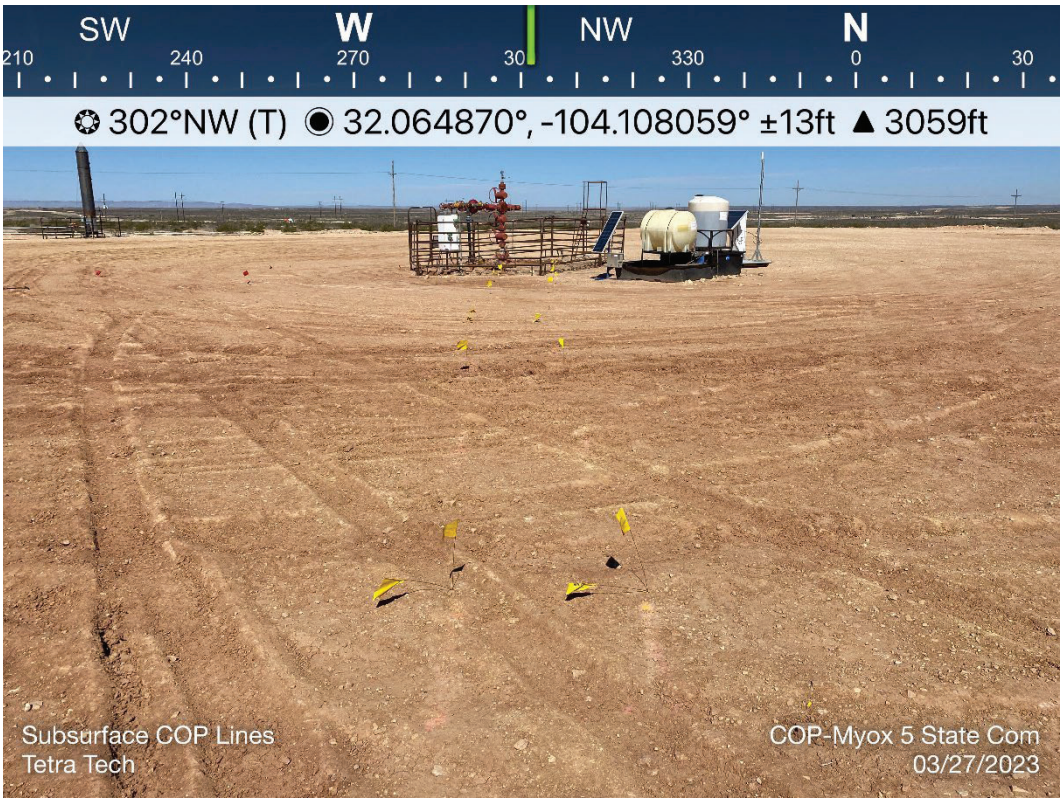
TETRA TECH, INC. PROJECT NO. 212C-MD-02832	DESCRIPTION	View north of site conditions near approximate release extent.	2
	SITE NAME	Myox 5 State Com #22H	2/2/2023



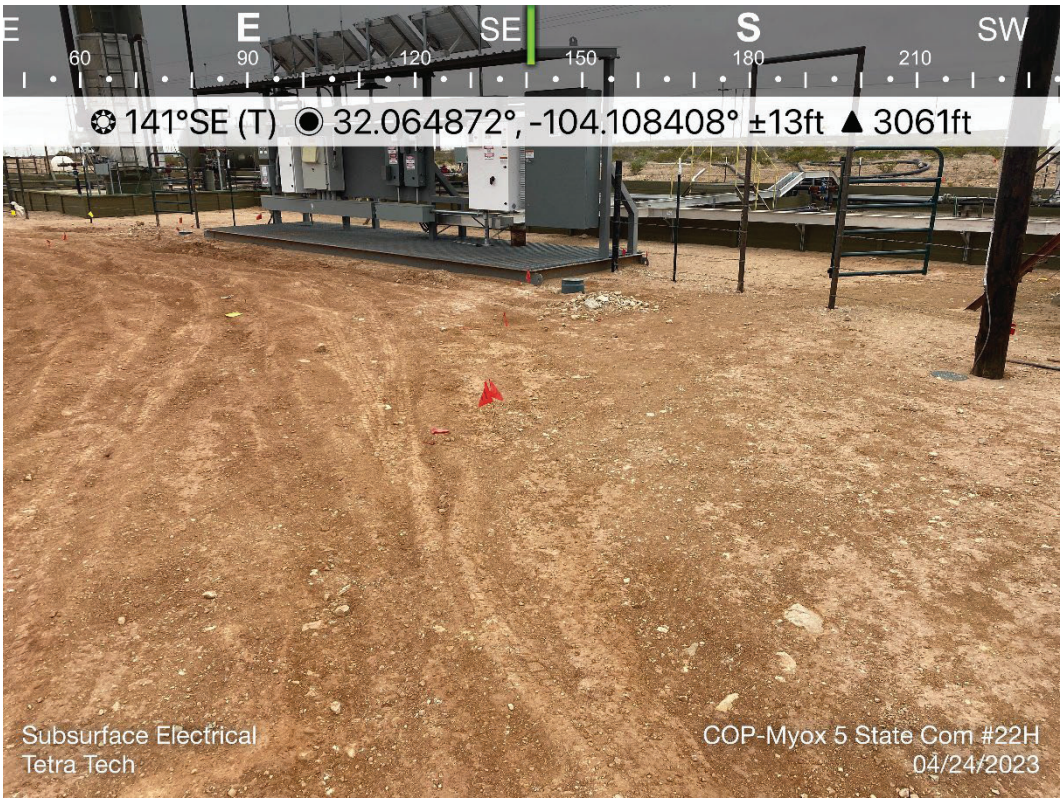
TETRA TECH, INC. PROJECT NO. 212C-MD-03004	DESCRIPTION	View northeast of pad conditions near release extent.	3
	SITE NAME	Myox 5 State Com #22H	2/2/2023



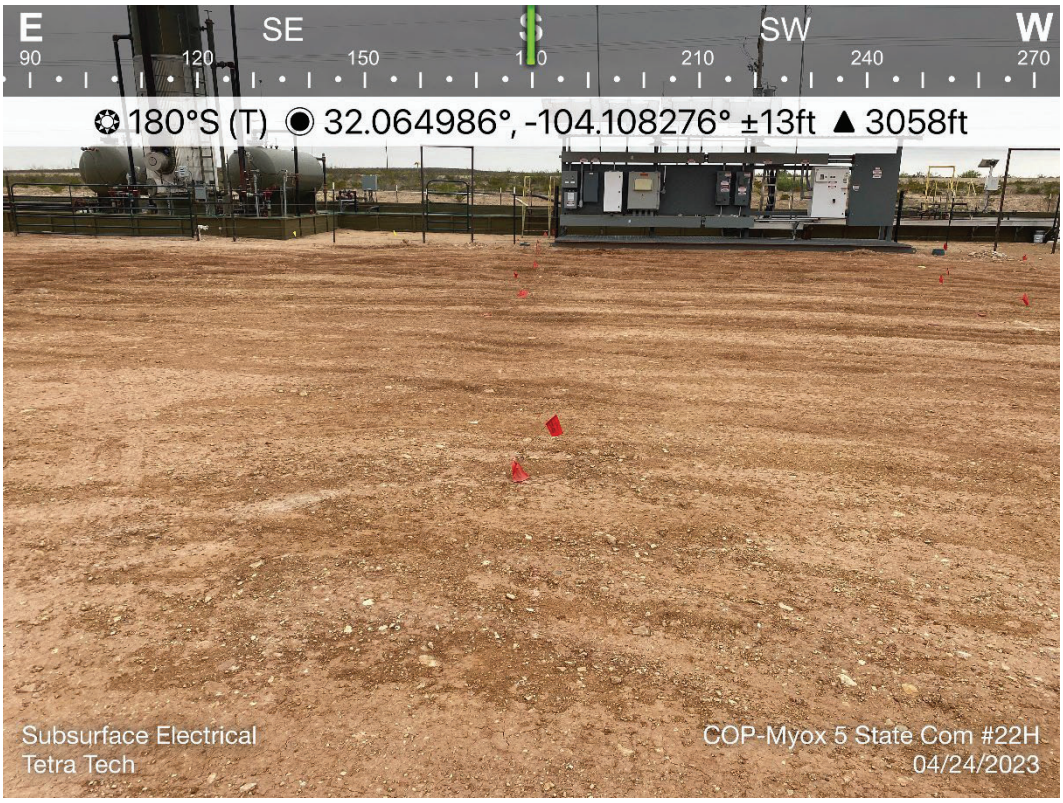
TETRA TECH, INC. PROJECT NO. 212C-MD-03004	DESCRIPTION	View west of pad conditions near release extent.	4
	SITE NAME	Myox 5 State Com #22H	2/2/2023



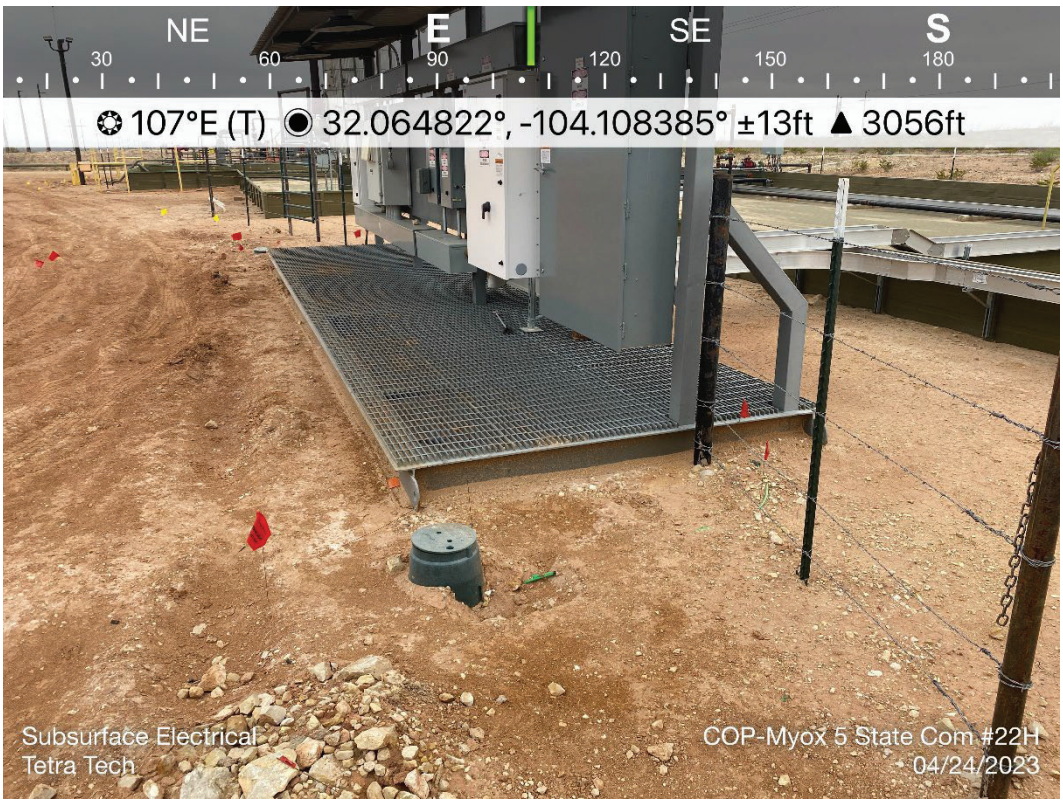
TETRA TECH, INC. PROJECT NO. 212C-MD-03004	DESCRIPTION	View northwest. View of pad conditions and production equipment.	5
	SITE NAME	Myox 5 State Com #22H	3/27/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03004	DESCRIPTION	View southeast of pad conditions near the release extent. View of electrical panel.	6
	SITE NAME	Myox 5 State Com #22H	4/24/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03004	DESCRIPTION	View south. View of approximate release extent and production equipment.	7
	SITE NAME	Myox 5 State Com #22H	4/24/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03004	DESCRIPTION	View east. View of pad conditions in the release extent. Electrical panel present with fence.	8
	SITE NAME	Myox 5 State Com #22H	4/24/2023

APPENDIX E
Laboratory Analytical Data

CARDINAL Laboratories

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

March 30, 2023

SAM ABBOTT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: MYOX 5 STATE COM #022H

Enclosed are the results of analyses for samples received by the laboratory on 03/28/23 14:50.

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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	03/28/2023	Sampling Date:	03/27/2023
Reported:	03/30/2023	Sampling Type:	Soil
Project Name:	MYOX 5 STATE COM #022H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03004	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO, NEW MEXICO		

Sample ID: AH - 23 - 1 (0-1') (H231410-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/29/2023	ND	1.89	94.4	2.00	3.90	
Toluene*	<0.050	0.050	03/29/2023	ND	1.86	93.2	2.00	4.02	
Ethylbenzene*	<0.050	0.050	03/29/2023	ND	1.74	87.0	2.00	2.28	
Total Xylenes*	<0.150	0.150	03/29/2023	ND	5.05	84.1	6.00	1.83	
Total BTEX	<0.300	0.300	03/29/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *83.0 %* *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	**560**	16.0	03/30/2023	ND	448	112	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	03/30/2023	ND	188	94.1	200	7.38	
DRO >C10-C28*	**162**	10.0	03/30/2023	ND	179	89.3	200	5.21	
EXT DRO >C28-C36	**82.4**	10.0	03/30/2023	ND					

Surrogate: 1-Chlorooctane *112 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *125 %* *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
SAM ABBOTT
901 WEST WALL STREET , STE 100
MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	03/28/2023	Sampling Date:	03/27/2023
Reported:	03/30/2023	Sampling Type:	Soil
Project Name:	MYOX 5 STATE COM #022H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03004	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO, NEW MEXICO		

Sample ID: AH - 23 - 2 (0-1') (H231410-02)

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	03/29/2023	ND	1.89	94.4	2.00	3.90	
Toluene*	<0.050	0.050	03/29/2023	ND	1.86	93.2	2.00	4.02	
Ethylbenzene*	<0.050	0.050	03/29/2023	ND	1.74	87.0	2.00	2.28	
Total Xylenes*	<0.150	0.150	03/29/2023	ND	5.05	84.1	6.00	1.83	
Total BTEX	<0.300	0.300	03/29/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *80.1 %* *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	**272**	16.0	03/30/2023	ND	448	112	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	03/30/2023	ND	188	94.1	200	7.38	
DRO >C10-C28*	<10.0	10.0	03/30/2023	ND	179	89.3	200	5.21	
EXT DRO >C28-C36	<10.0	10.0	03/30/2023	ND					

Surrogate: 1-Chlorooctane *72.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *75.0 %* *49.1-148*

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Analytical Results For:

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

Received:	03/28/2023	Sampling Date:	03/27/2023
Reported:	03/30/2023	Sampling Type:	Soil
Project Name:	MYOX 5 STATE COM #022H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03004	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO, NEW MEXICO		

Sample ID: AH - 23 - 3 (0-1') (H231410-03)

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	03/29/2023	ND	1.89	94.4	2.00	3.90	
Toluene*	<0.050	0.050	03/29/2023	ND	1.86	93.2	2.00	4.02	
Ethylbenzene*	<0.050	0.050	03/29/2023	ND	1.74	87.0	2.00	2.28	
Total Xylenes*	<0.150	0.150	03/29/2023	ND	5.05	84.1	6.00	1.83	
Total BTEX	<0.300	0.300	03/29/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *82.5 %* *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	**368**	16.0	03/30/2023	ND	448	112	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	03/29/2023	ND	188	94.1	200	7.38	
DRO >C10-C28*	<10.0	10.0	03/29/2023	ND	179	89.3	200	5.21	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane *84.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *90.6 %* *49.1-148*

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Analytical Results For:

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

Received:	03/28/2023	Sampling Date:	03/27/2023
Reported:	03/30/2023	Sampling Type:	Soil
Project Name:	MYOX 5 STATE COM #022H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03004	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO, NEW MEXICO		

Sample ID: AH - 23 - 4 (0-1') (H231410-04)

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	03/29/2023	ND	1.89	94.4	2.00	3.90	
Toluene*	<0.050	0.050	03/29/2023	ND	1.86	93.2	2.00	4.02	
Ethylbenzene*	<0.050	0.050	03/29/2023	ND	1.74	87.0	2.00	2.28	
Total Xylenes*	<0.150	0.150	03/29/2023	ND	5.05	84.1	6.00	1.83	
Total BTEX	<0.300	0.300	03/29/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *89.7 %* *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	03/30/2023	ND	448	112	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	03/29/2023	ND	188	94.1	200	7.38	
DRO >C10-C28*	<10.0	10.0	03/29/2023	ND	179	89.3	200	5.21	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

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

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

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Analytical Results For:

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

Received:	03/28/2023	Sampling Date:	03/27/2023
Reported:	03/30/2023	Sampling Type:	Soil
Project Name:	MYOX 5 STATE COM #022H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03004	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO, NEW MEXICO		

Sample ID: AH - 23 - 5 (0-1') (H231410-05)

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	03/29/2023	ND	1.89	94.4	2.00	3.90	
Toluene*	<0.050	0.050	03/29/2023	ND	1.86	93.2	2.00	4.02	
Ethylbenzene*	<0.050	0.050	03/29/2023	ND	1.74	87.0	2.00	2.28	
Total Xylenes*	<0.150	0.150	03/29/2023	ND	5.05	84.1	6.00	1.83	
Total BTEX	<0.300	0.300	03/29/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *84.2 %* *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	**672**	16.0	03/30/2023	ND	448	112	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	03/29/2023	ND	188	94.1	200	7.38	
DRO >C10-C28*	<10.0	10.0	03/29/2023	ND	179	89.3	200	5.21	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane *91.9 %* *48.2-134*

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

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Analytical Results For:

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

Received:	03/28/2023	Sampling Date:	03/27/2023
Reported:	03/30/2023	Sampling Type:	Soil
Project Name:	MYOX 5 STATE COM #022H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03004	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO, NEW MEXICO		

Sample ID: AH - 23 - 5 (1'-2') (H231410-06)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/29/2023	ND	1.89	94.4	2.00	3.90	
Toluene*	<0.050	0.050	03/29/2023	ND	1.86	93.2	2.00	4.02	
Ethylbenzene*	<0.050	0.050	03/29/2023	ND	1.74	87.0	2.00	2.28	
Total Xylenes*	<0.150	0.150	03/29/2023	ND	5.05	84.1	6.00	1.83	
Total BTEX	<0.300	0.300	03/29/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *85.9 %* *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	**464**	16.0	03/30/2023	ND	448	112	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	03/29/2023	ND	188	94.1	200	7.38	
DRO >C10-C28*	<10.0	10.0	03/29/2023	ND	179	89.3	200	5.21	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane *86.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *96.1 %* *49.1-148*

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Analytical Results For:

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SAM ABBOTT
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MIDLAND TX, 79701
Fax To: (432) 682-3946

Received:	03/28/2023	Sampling Date:	03/27/2023
Reported:	03/30/2023	Sampling Type:	Soil
Project Name:	MYOX 5 STATE COM #022H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03004	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO, NEW MEXICO		

Sample ID: AH - 23 - 6 (0-1') (H231410-07)

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	03/29/2023	ND	1.89	94.4	2.00	3.90	
Toluene*	<0.050	0.050	03/29/2023	ND	1.86	93.2	2.00	4.02	
Ethylbenzene*	<0.050	0.050	03/29/2023	ND	1.74	87.0	2.00	2.28	
Total Xylenes*	<0.150	0.150	03/29/2023	ND	5.05	84.1	6.00	1.83	
Total BTEX	<0.300	0.300	03/29/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *88.9 %* *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	**480**	16.0	03/30/2023	ND	448	112	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	03/29/2023	ND	188	94.1	200	7.38	
DRO >C10-C28*	<10.0	10.0	03/29/2023	ND	179	89.3	200	5.21	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane *84.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *93.3 %* *49.1-148*

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Analytical Results For:

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

Received:	03/28/2023	Sampling Date:	03/27/2023
Reported:	03/30/2023	Sampling Type:	Soil
Project Name:	MYOX 5 STATE COM #022H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03004	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO, NEW MEXICO		

Sample ID: AH - 23 - 6 (1'-2') (H231410-08)

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	03/29/2023	ND	1.89	94.4	2.00	3.90	
Toluene*	<0.050	0.050	03/29/2023	ND	1.86	93.2	2.00	4.02	
Ethylbenzene*	<0.050	0.050	03/29/2023	ND	1.74	87.0	2.00	2.28	
Total Xylenes*	<0.150	0.150	03/29/2023	ND	5.05	84.1	6.00	1.83	
Total BTEX	<0.300	0.300	03/29/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *83.8 %* *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	**480**	16.0	03/30/2023	ND	448	112	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	03/29/2023	ND	188	94.1	200	7.38	
DRO >C10-C28*	<10.0	10.0	03/29/2023	ND	179	89.3	200	5.21	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane *77.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *85.8 %* *49.1-148*

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Analytical Results For:

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

Received:	03/28/2023	Sampling Date:	03/27/2023
Reported:	03/30/2023	Sampling Type:	Soil
Project Name:	MYOX 5 STATE COM #022H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03004	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO, NEW MEXICO		

Sample ID: AH - 23 - 7 (0-1') (H231410-09)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/30/2023	ND	1.89	94.4	2.00	3.90	
Toluene*	<0.050	0.050	03/30/2023	ND	1.86	93.2	2.00	4.02	
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	1.74	87.0	2.00	2.28	
Total Xylenes*	<0.150	0.150	03/30/2023	ND	5.05	84.1	6.00	1.83	
Total BTEX	<0.300	0.300	03/30/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *89.1 %* *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	**480**	16.0	03/30/2023	ND	448	112	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	03/29/2023	ND	188	94.1	200	7.38	
DRO >C10-C28*	<10.0	10.0	03/29/2023	ND	179	89.3	200	5.21	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane *106 %* *48.2-134*

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

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Analytical Results For:

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

Received:	03/28/2023	Sampling Date:	03/27/2023
Reported:	03/30/2023	Sampling Type:	Soil
Project Name:	MYOX 5 STATE COM #022H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03004	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO, NEW MEXICO		

Sample ID: AH - 23 - 7 (1'-2') (H231410-10)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/30/2023	ND	1.89	94.4	2.00	3.90	
Toluene*	<0.050	0.050	03/30/2023	ND	1.86	93.2	2.00	4.02	
Ethylbenzene*	<0.050	0.050	03/30/2023	ND	1.74	87.0	2.00	2.28	
Total Xylenes*	<0.150	0.150	03/30/2023	ND	5.05	84.1	6.00	1.83	
Total BTEX	<0.300	0.300	03/30/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *85.1 %* *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	**480**	16.0	03/30/2023	ND	448	112	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	03/29/2023	ND	164	82.1	200	0.555	
DRO >C10-C28*	<10.0	10.0	03/29/2023	ND	176	88.0	200	4.06	
EXT DRO >C28-C36	<10.0	10.0	03/29/2023	ND					

Surrogate: 1-Chlorooctane *89.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *97.6 %* *49.1-148*

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Notes and Definitions

BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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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: Sam Abbott		P.O. #:	
Address: 8911 Capital o Texas Hwy, Suite 2310		Company: Tetra Tech	
City: Austin	State: TX Zip:	Attn: Sam Abbott	
Phone #: (512)565-0190	Fax #:	Address: EMAIL	
Project #: 212C-MD-03004	Project Owner: ConocoPhillips	City:	
Project Name: Myox 5 State Com #022H		State: Zip:	
Project Location: Eddy 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 SM4500Cl-B
H231410																	
1	AH-23-1 (0-1')	G	1			X					X		3/27/2023		X	X	X
2	AH-23-2 (0-1')	G	1			X					X		3/27/2023		X	X	X
3	AH-23-3 (0-1')	G	1			X					X		3/27/2023		X	X	X
4	AH-23-4 (0-1')	G	1			X					X		3/27/2023		X	X	X
5	AH-23-5 (0-1')	G	1			X					X		3/27/2023		X	X	X
6	AH-23-5 (1'-2')	G	1			X					X		3/27/2023		X	X	X
7	AH-23-6 (0-1')	G	1			X					X		3/27/2023		X	X	X
8	AH-23-6 (1'-2')	G	1			X					X		3/27/2023		X	X	X
9	AH-23-7 (0-1')	G	1			X					X		3/27/2023		X	X	X
10	AH-23-7 (1'-2')	G	1			X					X		3/27/2023		X	X	X

Relinquished By: Colton Bickerstaff	Date: 3/28/23 Time: 1450	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address: Sam.Abbott@tetratech.com
Relinquished By:	Date: Time:	Received By:	REMARKS:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 2.9 Corrected Temp. °C 2.3	Sample Condition Cool: Yes / No Intact: Yes / No	CHECKED BY: (Initials) TO

Turnaround Time: Standard ☒ Bacteria (only) Sample Condition
Rush: N/A, Standard TAT ☐ Cool Intact Observed Temp. °C
Thermometer ID #113
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

CARDINAL Laboratories

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

May 02, 2023

SAM ABBOTT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: MYOX 5 STATE COM #022H

Enclosed are the results of analyses for samples received by the laboratory on 04/25/23 16:00.

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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 901 WEST WALL STREET , STE 100 MIDLAND TX, 79701	Project: MYOX 5 STATE COM #022H Project Number: 212C-MD-03004 Project Manager: SAM ABBOTT Fax To: (432) 682-3946	Reported: 02-May-23 18:25

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AH - 23 - 9 (0-1')	H232005-01	Soil	24-Apr-23 00:00	25-Apr-23 16:00
AH - 23 - 8 (0-1')	H232005-02	Soil	24-Apr-23 00:00	25-Apr-23 16:00

05/02/23 - Client changed the sample ID on -02 (see COC). This is the revised report and will replace the one sent on 04/28/23.

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

TETRA TECH 901 WEST WALL STREET , STE 100 MIDLAND TX, 79701	Project: MYOX 5 STATE COM #022H Project Number: 212C-MD-03004 Project Manager: SAM ABBOTT Fax To: (432) 682-3946	Reported: 02-May-23 18:25

AH - 23 - 9 (0-1')

H232005-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**16.0**		16.0	mg/kg	4	3042633	AC	26-Apr-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	3042601	JH	26-Apr-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3042601	JH	26-Apr-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3042601	JH	26-Apr-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3042601	JH	26-Apr-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3042601	JH	26-Apr-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*106 %*	*71.5-134*		*3042601*	JH	*26-Apr-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	3042605	MS	26-Apr-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3042605	MS	26-Apr-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3042605	MS	26-Apr-23	8015B	
Surrogate: 1-Chlorooctane			*92.7 %*	*48.2-134*		*3042605*	MS	*26-Apr-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*99.0 %*	*49.1-148*		*3042605*	MS	*26-Apr-23*	*8015B*	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

TETRA TECH 901 WEST WALL STREET , STE 100 MIDLAND TX, 79701	Project: MYOX 5 STATE COM #022H Project Number: 212C-MD-03004 Project Manager: SAM ABBOTT Fax To: (432) 682-3946	Reported: 02-May-23 18:25

AH - 23 - 8 (0-1')

H232005-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	<16.0		16.0	mg/kg	4	3042633	AC	26-Apr-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	3042601	JH	26-Apr-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3042601	JH	26-Apr-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3042601	JH	26-Apr-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3042601	JH	26-Apr-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3042601	JH	26-Apr-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*102 %*	*71.5-134*		*3042601*	JH	*26-Apr-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	3042605	MS	26-Apr-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3042605	MS	26-Apr-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3042605	MS	26-Apr-23	8015B	
Surrogate: 1-Chlorooctane			*96.7 %*	*48.2-134*		*3042605*	MS	*26-Apr-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*105 %*	*49.1-148*		*3042605*	MS	*26-Apr-23*	*8015B*	

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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 901 WEST WALL STREET , STE 100 MIDLAND TX, 79701	Project: MYOX 5 STATE COM #022H Project Number: 212C-MD-03004 Project Manager: SAM ABBOTT Fax To: (432) 682-3946	Reported: 02-May-23 18:25

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3042633 - 1:4 DI Water										
Blank (3042633-BLK1)				Prepared & Analyzed: 26-Apr-23						
Chloride	ND	16.0	mg/kg							
LCS (3042633-BS1)				Prepared & Analyzed: 26-Apr-23						
Chloride	432	16.0	mg/kg	400		108	80-120			
LCS Dup (3042633-BSD1)				Prepared & Analyzed: 26-Apr-23						
Chloride	432	16.0	mg/kg	400		108	80-120	0.00	20	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

TETRA TECH 901 WEST WALL STREET , STE 100 MIDLAND TX, 79701	Project: MYOX 5 STATE COM #022H Project Number: 212C-MD-03004 Project Manager: SAM ABBOTT Fax To: (432) 682-3946	Reported: 02-May-23 18:25

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3042601 - Volatiles										
Blank (3042601-BLK1)				Prepared & Analyzed: 26-Apr-23						
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	*0.0522*		mg/kg	*0.0500*		*104*	*71.5-134*			
LCS (3042601-BS1)				Prepared & Analyzed: 26-Apr-23						
Benzene	1.97	0.050	mg/kg	2.00		98.4	81.4-118			
Toluene	1.97	0.050	mg/kg	2.00		98.5	88.7-121			
Ethylbenzene	2.02	0.050	mg/kg	2.00		101	86.1-120			
m,p-Xylene	4.20	0.100	mg/kg	4.00		105	88.2-124			
o-Xylene	2.04	0.050	mg/kg	2.00		102	84.9-118			
Total Xylenes	6.24	0.150	mg/kg	6.00		104	87.3-122			
Surrogate: 4-Bromofluorobenzene (PID)	*0.0497*		mg/kg	*0.0500*		*99.4*	*71.5-134*			
LCS Dup (3042601-BSD1)				Prepared & Analyzed: 26-Apr-23						
Benzene	2.01	0.050	mg/kg	2.00		100	81.4-118	2.13	15.8	
Toluene	2.03	0.050	mg/kg	2.00		101	88.7-121	2.81	15.9	
Ethylbenzene	2.05	0.050	mg/kg	2.00		102	86.1-120	1.69	16	
m,p-Xylene	4.23	0.100	mg/kg	4.00		106	88.2-124	0.655	16.2	
o-Xylene	2.04	0.050	mg/kg	2.00		102	84.9-118	0.0507	16.7	
Total Xylenes	6.27	0.150	mg/kg	6.00		105	87.3-122	0.458	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	*0.0498*		mg/kg	*0.0500*		*99.6*	*71.5-134*			

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

TETRA TECH 901 WEST WALL STREET , STE 100 MIDLAND TX, 79701	Project: MYOX 5 STATE COM #022H Project Number: 212C-MD-03004 Project Manager: SAM ABBOTT Fax To: (432) 682-3946	Reported: 02-May-23 18:25

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3042605 - General Prep - Organics										
Blank (3042605-BLK1)				Prepared & Analyzed: 26-Apr-23						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*51.7*		mg/kg	*49.6*		*104*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*55.8*		mg/kg	*50.0*		*112*	*49.1-148*			
LCS (3042605-BS1)				Prepared & Analyzed: 26-Apr-23						
GRO C6-C10	206	10.0	mg/kg	200		103	78.5-124			
DRO >C10-C28	195	10.0	mg/kg	200		97.5	72.5-126			
Total TPH C6-C28	401	10.0	mg/kg	400		100	77.6-123			
Surrogate: 1-Chlorooctane	*52.7*		mg/kg	*49.6*		*106*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*52.3*		mg/kg	*50.0*		*105*	*49.1-148*			
LCS Dup (3042605-BSD1)				Prepared & Analyzed: 26-Apr-23						
GRO C6-C10	194	10.0	mg/kg	200		96.9	78.5-124	5.93	17.7	
DRO >C10-C28	187	10.0	mg/kg	200		93.4	72.5-126	4.31	21	
Total TPH C6-C28	381	10.0	mg/kg	400		95.2	77.6-123	5.14	18.5	
Surrogate: 1-Chlorooctane	*47.5*		mg/kg	*49.6*		*95.8*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*48.7*		mg/kg	*50.0*		*97.5*	*49.1-148*			

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Notes and Definitions

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

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: Sam Abbott			P.O. #:		
Address: 8911 Capital o Texas Hwy, Suite 2310			Company: Tetra Tech		
City: Austin	State: TX	Zip:	Attn: Sam Abbott		
Phone #: (512)565-0190	Fax #:		Address: EMAIL		
Project #: 212C-MD-03004	Project Owner:	ConocoPhillips	City:		
Project Name: Myox 5 State Com #022H			State:	Zip:	
Project Location: Eddy 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 SM4500Cl-B
H232005																	
1	AH-23-9 (0-1')	G	1			X					X		4/24/2023		X	X	X
✱ 2	AH-23-10 (0-1')	G	1			X					X		4/24/2023		X	X	X
	8																

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: 4/25/23 Time: 1600	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address: Sam.Abbott@tetratech.com
Relinquished By:	Date: Time:	Received By:	REMARKS: ✱ Customer requested ID changes. T.O. 5/2/23
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 2.1 Corrected Temp. °C 1.5	Sample Condition Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No	CHECKED BY: (Initials)

Turnaround Time: Standard ☒ Bacteria (only) Sample Condition
Rush: N/A, Standard TAT ☐ Cool Intact Observed Temp. °C
Thermometer ID #113 Correction Factor -0.5°C ☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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District I
1625 N. French Dr., Hobbs, NM 88240
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811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 214875

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 214875
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	Closure approved. Site must meet the requirements of 19.15.29.13 NMAC at time of plugging and abandonment or major deconstruction, whichever comes first.	6/6/2023