

September 1, 2023

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

Re: REVISED Release Characterization and Remediation Work Plan ConocoPhillips Myox 31 State Com #13H Release Unit Letter P, Section 31, Township 25 South, Range 28 East Eddy County, New Mexico. Incident ID# nAB1818441259

Ms. Maxwell:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips Company (COP) to assess and evaluate current conditions associated with a historical release that occurred from a tin horn (valve cellar) associated with the Myox 31 State Com #13H (API # 30-015-37497). The approximate release site coordinates are 32.079058°, -104.120966°, located in the Public Land Survey System (PLSS) Unit Letter P, Section 31, Township 25 South, Range 28 East, Eddy County, New Mexico (Site). The Site location is shown on Figures 1 and 2. The site is located on State Trust Lands.

BACKGROUND

According to the State of New Mexico Oil Conservation Division (NMOCD) C-141 Initial Report, the release was discovered on June 27, 2018. The release was caused by the check valve malfunctioning causing a release from the tin horn. The release consisted of approximately 36 bbls of produced water, of which 4 bbls of produced water were recovered during the initial response activities via vacuum truck. The release was in the pasture. The NMOCD approved the initial C-141 on June 29, 2018, and subsequently assigned the release the Incident ID nAB1818441259 and the remediation permit (RP) number 2RP-4837. The initial C-141 form is included in Appendix A.

LAND OWNERSHIP

According to the NMOCD Oil and Gas Map, the site is located on New Mexico State trust land. A review of the New Mexico State Land Office (NMSLO) Land Status Map was completed, and the site is within active oil and gas lease VB08140001. The active lease is under Concho Oil & Gas LLC/COG Operations LLC. Based on guidance provided by the NMSLO, as the release footprint is located on an active oil and gas lease and the footprint is wholly located within the boundaries of the active oil and gas lease, no Remediation Right of Entry (ROE) is required at the Site.

CULTURAL PROPERTIES PROTECTION

Tetra Tech, on behalf of COP, contracted SWCA Environmental Consultants (SWCA) to conduct an intensive pedestrian survey for the Myox 31 State Com #13H release covering 0.72 acres (0.29 ha) on the SLO-managed land Eddy County, New Mexico. On May 12, 2023, SWCA surveyed a 100-foot buffer from the inadvertent release location footprint, located entirely on SLO-managed land.

No archaeological sites, historic properties, or isolated occurrences were observed during the investigation. No additional investigation or treatment was recommended regarding the current undertaking. A copy of the NMCRIS Activity No. 152907 is included in Appendix B, Regulatory Correspondence.

SITE CHARACTERIZATION

A site characterization was performed and no watercourses, sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, playa lakes, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.29 NMAC. The Site is within a New Mexico oil and gas production area. The Site is in an area of high karst potential.

There are no water wells listed in the New Mexico Office of the State Engineer (NMOSE) database located within approximately 0.5 miles (800 meters) of the Site. The nearest well with recent groundwater data is located approximately 1.82 miles from the Site with a depth to water of 30 feet below ground surface (bgs). However, during the initial assessment conducted in 2019, several borings were drilled to greater than 50' bgs and were dry. The site characterization data are presented in Appendix C.

REGULATORY FRAMEWORK

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

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

Constituent	Site RRAL
Chloride	600 mg/kg
TPH (GRO+DRO+MRO)	100 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 ft bgs) outside of active oil and gas operations are as follows:

Constituent	Reclamation Requirements
Chloride	600 mg/kg
TPH (GRO+DRO+ORO)	100 mg/kg

INITIAL SITE ASSESSMENT AND 2019 WORK PLAN

On behalf of COP's predecessor-in interest ("COG"), Tetra Tech conducted assessment sampling activities between April 9 and April 11, 2019. Five (5) borings (BH-1 through BH-5) were installed with a truck-mounted air rotary rig within the release footprint to total depths ranging from 19-50 feet and 59-60 feet bgs. One (1) background borehole (Background) was installed in the adjacent pasture to a total depth of 50 feet bgs in order to evaluated native soils. Figure 3 shows the approximate release extent and sample locations from the initial assessment.

Analytical results associated with BH-1 through BH-5 exceeded the chloride RRAL of 600 mg/kg to a depth of 55 feet bgs. The background samples collected exceeded chloride concentrations and were noted to increase with depth. The results of the initial soil assessment are summarized in Table 1.

Tetra Tech submitted a Work Plan dated September 11, 2019, which described the initial site assessment activities and proposed a remedial action plan. The proposed remediation plan consisted of excavating the areas of BH-1 through BH-5 to 4 feet bgs or to the maximum extent practicable based on potential for wall cave-ins and safety concerns for personnel. In addition, Tetra Tech, on behalf of COG, requested a variance to install a 20-mil liner at 3-4 feet bgs in the areas of BH-1 through BH-5 to prevent vertical migration of chloride. This Work Plan proposed the removal and disposal of approximately 2,000 cubic yards of impacted material. A copy of the Work Plan is available on the NMOCD online database. The Work Plan was rejected by NMOCD on December 7, 2022, with the following comments:

- Work plan rejected. 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. Release is located in area of high karst.
- OCD agrees that naturally elevated chloride levels are present based on the initial background sample. However, OCD recommends addition background samples collected for chlorides at 1 foot intervals to approximately 20 feet below surface to better determine the range and/or level of chlorides surrounding the release area. Background sample locations should not be closer than 50 feet, and no farther than 100 feet, from the release area.
- Sampling variance request denied. OCD will accept a variance of sample collection every 400 square feet.
- Submit a work plan or closure report via the OCD permitting portal by March 10, 2023.

REGULATORY COMPLIANCE

On May 10, 2023, Tetra Tech requested a 90-day extension from the NMOCD to complete additional assessment activities. The extension was approved on May 12, 2023 via email, making the new deadline August 8, 2023.

As of December 1, 2022, the NMSLO Cultural Properties Protection (CPP) Rule is in effect. In tandem with this CPP rule, the NMSLO has begun enforcing application and permitting requirements per Rule 12 (19.2.12 NMAC) for Water/Soil Boring Exploration Permits. Any intrusive activities must be permitted through the Water Bureau, Oil, Gas, and Minerals Division, NMSLO. Tetra Tech and experienced a delay in scheduling additional assessment at the release Site while in the process of complying with these rules. A copy of the regulatory correspondence is included in Appendix B.

To comply with the requirements set by the Office of the State Engineer (OSE), a bore drilled at 30 feet bgs or greater requires a permit application. Tetra Tech submitted forms WR-07 *Application for Permit to Well with No Water Right* and WR-08 *Well Plugging Plan of Operations*. Tetra Tech received approval from the OSE on June 22, 2023. A copy of the approval and permits are included in Appendix B.

ADDITIONAL SITE ASSESSMENT AND SAMPLING RESULTS

On behalf of COP, Tetra Tech conducted additional soil sampling at the Site to assess the current soil concentration levels within the reported release footprint and collect background samples within NMOCD guidelines. On July 17, 2023, Tetra Tech installed ten (10) borings (BH-23-1 through BH-23-10) in and around the reported release extent. BH-23-1 and BH-23-2 were installed to 20 feet bgs within the release footprint. BH-23-3 through BH-23-10 were installed to 1-foot bgs around the release extent to complete horizontal delineation.

A total of twenty-two (22) soil samples were submitted to Cardinal Laboratories in Hobbs, New Mexico for analysis of chloride via Standard Method SM4500CI-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 D.

Analytical results from the 2023 additional assessment sampling activities are summarized in Table 2. Analytical results associated with sample locations BH-23-1 and BH-23-2 exceeded the chloride RRAL of

600 mg/kg to 20 feet and 15 feet, respectively. All other analytical results were below the Site RRALs for all constituents.

ADDITIONAL BACKGROUND SAMPLING

Tetra Tech installed three (3) background borings (BG-1 through BG-3) within 100 feet of the release area to a depth of 20 feet bgs. Boring locations are indicated in Figure 4. A total of sixty (60) soil samples were collected from these background borings and placed into laboratory-provided sample containers, transferred under chain-of-custody, and analyzed within appropriate holding times by Cardinal. The samples were analyzed for chloride by SM4500CI-B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix D

The results of the background sampling are presented in Table 3. Analytical results associated with all three background borings exceeded the chloride RRAL of 600 mg/kg in various depth intervals. Chloride exceedances appear to increase within deeper intervals with concentrations ranging from 1,070 mg/kg to 2,080 mg/kg at 19-20' ft bgs.

REMEDIATION WORK PLAN

Based on the analytical results from the assessment, as well as the verified naturally occurring chloride levels in subsurface soils, COP proposes to remove impacted material as depicted in Figure 5. Impacted soils will be excavated using heavy equipment (backhoes, hoe rams, and track hoes) to a maximum depth of 4 ft below surface grade or until a representative sample from the sidewall is below the reclamation requirement of 600 mg/kg chloride. Heavy equipment (backhoe and trackhoe) will be utilized to excavate areas outside the immediate vicinity of pressurized lines and will come no more than 4 feet from any pressurized lines. Impacted soils within the vicinity of the surface and subsurface lines will be removed to the maximum extent practicable using non-aggressive excavation methods.

Due to safety concerns related to two active subsurface lines running adjacent to the release extent on either side of the release extent, the impacted soils in the vicinity of the tin horn may not be feasible or practicable to be wholly removed to 4' bgs. COP will coordinate with the pipeline owners prior to remedial action. Prior to beginning remedial activities, the NMSLO office will be notified via email in accordance with NMSLO guidelines, and the Work Plan will be provided to the Environmental Compliance Office (ECO)

Excavated soils will be transported offsite and disposed of at an NMOCD-approved or permitted facility. Prior to confirmation sampling the NMOCD district office will be notified via email in accordance with Subsection D of 19.15.29.12 NMAC. Confirmation floor and sidewall samples will be collected for verification of remedial activities and analyzed for TPH, BTEX, and chloride. The estimated total volume of material to be remediated is approximately 1,487 cubic yards.

VARIANCE REQUEST

In accordance with 19.15.29.14(A) NMAC, COP requests a variance for the installation of a factory manufactured hydraulic barrier (i.e., reinforced composite laminate geosynthetic clay liner (GCL), or similar) within the observed impacted footprint areas of the release extent areas. The GCL liner will be installed at 4 feet below surface, along the excavation bottom, to inhibit the vertical migration of contaminants left in situ. Impacted soil below four feet exceeding the 600 mg/kg-chloride threshold is proposed to be left in place.

ALTERNATIVE CONFIRMATION SAMPLING PLAN

In accordance with 19.15.29.12(D)(1)(b) NMAC, COP proposes the following alternative confirmation sampling plan to adhere with NMOCD requirements. Twenty-five (25) confirmation floor samples and fifteen (15) confirmation sidewall samples are proposed for verification of remedial activities. The proposed excavation encompasses a surface area of approximately 10,035 square feet.

These confirmation sidewall and floor samples will be representative of no more than approximately 400 square feet of excavated area. Confirmation samples will be sent to an accredited analytical laboratory for

analysis of chloride, TPH, and BTEX. Once acceptable results are received, the excavation will then be backfilled with clean material to surface grade.

SITE RECLAMATION PLAN

Based on 19.15.29.13 NMAC, all areas disturbed by the remediation and closure will be reclaimed once confirmation sampling results below the reclamation requirements for soils above four feet bgs are received. Once acceptable confirmation sample results are received, the excavation will be backfilled with clean material to pre-release grade. The soil cover will include a top layer consisting of one foot of suitable material to establish vegetation at the site.

The backfilled areas in the pasture will be seeded following backfilling, to aid in revegetation. Based on the soils of the site, the NMSLO Loamy Sites Seed Mixture will be used for seeding and will be planted in the amount specified in the pounds pure live seed (PLS) per acre. The seed mixture will be spread by a drill equip with a depth regulator or a hand-held broadcaster and raked. If a hand-held broadcaster is used for dispersal, the pounds pure live seed per acre will be doubled.

Site inspections will be performed annually to assess the revegetation progress and evaluate the site for the presence of primary or secondary noxious weeds. If noxious weeds are identified, the NMSLO will be contacted to determine an effective method for eradication. If the site does not show revegetation after one growing season, the area will be reseeded as appropriate. The NMSLO seed mixture details in corresponding pounds per live seed per acre are included in Appendix F.

Reclamation activities will be implemented in consultation with the State Land Office in accordance with 19.2.100.67 NMAC for surface reclamations on State Oil and Gas Leases. COP will notify the NMSLO when reclamation and revegetation are complete.

CONCLUSION

ConocoPhillips proposes to begin remediation activities at the Site within 90 days of NMOCD and NMSLO plan approval. Upon completion of the proposed work, a final closure report detailing the remediation activities and the results of the confirmation sampling will be submitted to both NMOCD and NMSLO. If you have any questions concerning the soil assessment or the proposed remedial activities for the Site, please call me at (512) 560-9064 or Christian at (512) 338-2861.

Sincerely, Tetra Tech, Inc.

Lisbeth Chavira Staff Geoscientist

cc: Mr. Ike Tavarez, RMR – ConocoPhillips

Christian M. Llull, P.G. Program Manager

LIST OF ATTACHMENTS

Figures:

- Figure 1 Overview Map
- Figure 2 Site Location/Topographic Map
- Figure 3 Approximate Release Extent and Site Assessment (Tetra Tech 2019)
- Figure 4 Approximate Release Extent and Additional Assessment (Tetra Tech 2023)
- Figure 5 Approximate Release Extent and Proposed Remediation Extent

Tables:

- Table 1 Summary of Analytical Results 2019 Soil Assessment
- Table 2 Summary of Analytical Results 2023 Soil Assessment
- Table 3 Summary of Analytical Results 2023 Background Assessment

Appendices:

Appendix A – C-141 Forms

- Appendix B Regulatory Correspondence
- Appendix C Site Characterization Data
- Appendix D Laboratory Analytical Data
- Appendix E Photographic Documentation
- Appendix F NMSLO Seed Mix

ConocoPhillips

FIGURES





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TABLES

Received by OCD: 9/1/2023 3:18:56 PM

									BTEX ²								TPH ³	3	
Sample ID	Sample Date	Sample Depth	Chloride ¹		Benzene	Toluene		Ethylbenzene	m,p-Xylenes	o-Xylene	Total Xylenes		Total BTEX	GRO		DRO		MRO	Total TPH
		ft. bgs	mg/kg	Q	mg/kg Q	mg/kg	Q	mg/kg Q	mg/kg (Q mg/kg	Q mg/kg	Q	mg/kg Q	mg/kg	Q m	g/kg	Q	mg/kg	Q mg/kg C
		0-1	6.79		-	-		-	-	-	-		-	-		-		-	-
		2-3	23.5		-	-		-	-	-	-		-	-		-		-	-
		4-5	776	_	-	-		-	-		-		-	-		-		-	-
		6-7 9-10	<i>912</i> 1,640			-	$\left \right $	-	-	-	-		-	-		-		-	-
		9-10	1,640		-	-		-	-	-			-	-		-		-	-
BG	4/9/2019	19-20	1,510	-		-		-	-	-	-		-	-		-	+	-	-
		24-25	1,290		-	-		-	-	-	-		-	-		-	+	-	-
		29-30	864		-	-		<u> </u>	-		-		-	-		-		-	-
		34-35	249		-	-		-	-	-	-		-	-		-		-	-
		39-40	147		-	-		-	-	-	-		-	-		-	\square	-	-
		44-45	221	К	-	-		-	-	-	-		-	-		-		-	-
	-	49-50	169	К	-	-		-	-	-	-		-	-		-		-	-
		0-1	11,100		<0.00199	<0.00199		<0.00199	<0.0398	<0.00199	<0.00199		<0.00199	<15.0		.5.0		<15.0	<15.0
		2-3	11,100		<0.00200	<0.00200		<0.00200	<0.0401	<0.00200	<0.00200		<0.00200	<14.9	<1	.4.9		<14.9	<14.9
		4-5	11,000		-	-		-	-	-	-		-	-		-		-	-
		6-7 9-10	15,600 11,200		-	-		-	-	-	-			-		-		-	-
		14-15	5,530		-	-		-	-	-	-		-	-		-		-	-
		19-20	4,090			-		-			-			-		-			
BH-1	4/9/2019	24-25	2,190		-	-		-		-	-		-	-		-		-	
		29-30	1,990		-	-		-	-	-	-		-	-		-		-	-
		34-35	1,780		-	-		-	-	-	-		-	-		-		-	-
		39-40	999		-	-		-	-	-	-		-	-		-		-	-
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		0-1	17,600		<0.00198	<0.00198		<0.00198	<0.00397	<0.00198	<0.00198		<0.00198	<14.9		.4.9		<14.9	<14.9
		2-3	14,100		<0.00201	<0.00201		<0.00201	<0.00402	<0.00201	<0.00201		<0.00201	<15.0	<1	.5.0		<15.0	<15.0
		4-5	9,810		-	-		-	-	-	-		-	-		-		-	-
		6-7	8,750		-	-		-	-	-	-		-	-		-		-	-
		9-10 14-15	2,040 2,860	_	-	-		-	-	-	-		-	-		-		-	-
BH-2	4/9/2019	14-15	2,860 3,100		-	-		-	-	-	-		-	-		-		-	-
011-2	7, 5, 2013	24-25	1,860		-	-		-	-		-		-	-		-		-	
		29-30	2,090	+	-	-		-	-	-	-		-	-		-		-	-
		34-35	2,090		-	-		-	-	-	-		-	-		-		-	-
		39-40	1,940		-	-		-	-	-	-		-	-		-		-	-
		44-45	931	К	-	-		-	-	-	-		-	-		-		-	-
		49-50	888		-	-		-	-	-	-		-	<15.0	<1	.5.0		<15.0	<15.0
		0-1	14,000		<0.00198	<0.00198		<0.00198	<0.00396	<0.00198	<0.00198		<0.00198	<15.0	<1	.5.0		<15.0	<15.0
		2-3	13,200		<0.00199	<0.00199		<0.00199	<0.0398	<0.00199	<0.00199		<0.00199	<15.0	<1	.5.0		<15.0	<15.0
		4-5	9,040		-	-		-	-	-	-		-	-		-		-	-
		6-7	11,500		-	-		-	-	-	-		-	-		-		-	-
		9-10	2,850	_	-	-		-	-	-	-		-	-		-		-	-
011.2	4/0/2010	14-15	2,040	_	-	-	$\left - \right $	-	-	-	-		-	-		-		-	-
BH-3	4/9/2019	19-20 24-25	1,820 1,990			-	$\left - \right $	-	-	-	-		-	-		-	+	-	-
		29-30	2,340	+	-	-			-		-		-	-		-	+	-	-
		34-35	2,340		-	-		-	-	- 1	-		-	-		-	+	-	-
		39-40	1,780		-	-		-	-	-	-		-	-		-		-	-
		44-45	1,120	к	-	-		-	-	-	-		-	-		-		-	-
		49-50	1,810		-	-		-	-	-	-		-	<15.0	<1	.5.0	_	<15.0	<15.0
		0-1	9,530		<0.00200	<0.00200		<0.00200	<0.0401	<0.00200	<0.00200	_	<0.00200	<15.0	<1	.5.0		<15.0	<15.0
		2-3	10,300		<0.00200	<0.00200		<0.00200	<0.0400	<0.00200	<0.00200		<0.00200	<14.9		.4.9		<14.9	<14.9
		4-5	11,200		-	-		-	-	-	-		-	-		-		-	-
		6-7	5,090		-	-		-	-	-	-		-	-		-		-	-
		9-10	1,940		-	-		-	-	-	-		-	-		-		-	-
511.4	4/0/0000	14-15	2,950	_	-	-		-	-		-		-	-		-		-	-
BH-4	4/9/2019	19-20	3,220	_	-	-	$\left - \right $	-	-	-	-		-	-		-		-	-
		24-25	2,790	_		-	$\left \right $	-	-	-			-	-		-		-	
		29-30 34-35	2,500 2,320		-	-	$\left - \right $	-	-	-	-		-	-		-		-	-
		34-35	2,320		-	-	$\left - \right $	-	-	-	-		-	-		-		-	-
		44-45	1,330	к		-		-	-	-	-		-	-		-		-	-
		49-50	1,080	к	-	-		-	-	-	-		-	-		-		-	-
<u> </u>	-	0-1	1,870		<0.00201	<0.00201		<0.00201	<0.0399	<0.00201	<0.00201		<0.00200	<15.0		0.5		<15.0	40.5
		2-3	1,960		<0.00201	<0.00201		<0.00201	<0.0400	<0.00201	<0.00201		<0.00200	<15.0		9.6		<15.0	29.6
		4-5	10,600	+	-	-		-	-	-	-		-	-		-		-	-
		6-7	8,470		-	-		-	-	-	-		-	-		-		-	-
		9-10	785		-	-		-	-	-	-		-	-		-		-	-
		14-15	1,570		-	-		-		-	-		-	-		-		-	-
BH-5	4/9/2019	19-20	1,470		-	-		-	-	-	-		-	-		-		-	-
		24-25	1,790		-	-		-	-	-	-		-	-		-		-	-
		29-30	1,270		-	-		-	-	-	-		-	-		-		-	-
		34-35	2,070		-	-		-	-	-	-		-	-		-		-	-
		39-40	1,140		-	-		-	-	-	-		-	-		-		-	-
		44-45	939	К	-	-		-	-	-	-		-	-		-		-	-
NOTES		49-50	642	К	-	-		-	-	-	-		-	-		-		-	-
<u>NOTES:</u> ft. Feet																			

ft. Feet

It.FeetbgsBelow ground surfacemg/kgMilligrams per kilogramTPHTotal Petroleum HydrocarbonsGROGasoline range organicsDRODiesel range organicsMROMotor Oil range organicsNSSample pot applyzed for parameter

NS Sample not analyzed for parameter 1 EPA Method 300.0

2 EPA Method 8021B
 3 Method SW8015 Mod

TABLE 1 SUMMARY OF ANALYTICAL RESULTS SOIL ASSESSMENT - nAB1818441259 CONOCOPHILLIPS MYOX 31 STATE COM #13H EDDY COUNTY, NM

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

QUALIFIERS: K Sample analyzed outside of recommended hold time.

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TABLE 2 SUMMARY OF ANALYTICAL RESULTS 2023 SOIL ASSESSMENT - nAB1818441259 CONOCOPHILLIPS MYOX 31 STATE COM #13H RELEASE EDDY COUNTY, NM

				uiua Deculto				BTEX ² TPH						PH ³																		
Sample ID	Sample ID Sample Date Field Screening Res		ning Results	Chloride ¹		Chloride ¹		Chloride ¹		Chloride ¹		Chloride ¹		Chloride ¹		Benze	20	Toluei		Ethylber	2020	Total Xyl	0000	Total B	TEV	GRO	1	DRC		EXT D	RO	Total TPH
Sample ID	Sample Date		Chloride	Titration			Delize	ne	Toluei	le	Ethylben	zene	ΤΟτάΓλγι	enes	TOLATE		C ₆ - C ₁	10	> C ₁₀ -	C ₂₈	> C ₂₈ -	C ₃₆	(GRO+DRO+EXT DRO)									
		ft. bgs	p	pm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg									
		0-1'	-	-	10,200		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
		2-3'	-	-	4,320		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
		4-5'	-	-	5,440	QM-07	<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
BH-23-1	7/20/2023	6-7'	-	-	6,400		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		12.1		<10.0		12.1									
		9-10'	-	1,000	3,360		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
		14-15'	-	650	2,400		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
		19-20'	-	400	2,600		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
		0-1'	-	-	7,840		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
		2-3'	-	-	4,320		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
		4-5'	-	-	4,160		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
BH-23-2	7/20/2023	6-7'	-	-	5,600		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
		9-10'	-	900	3,280		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
		14-15'	-	440	1,960		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
		19-20'	-	400	544		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
BH-23-3	7/20/2023	0-1'	301	-	48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
BH-23-4	7/20/2023	0-1'	242	-	16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
BH-23-5	7/20/2023	0-1'	369	-	288		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
BH-23-6	7/20/2023	0-1'	323	-	160		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
BH-23-7	7/20/2023	0-1'	275	-	208		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
BH-23-8	7/20/2023	0-1'	284	-	32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
BH-23-9	7/20/2023	0-1'	312	-	32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-									
BH-10	7/20/2023	0-1'	337	-	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

Total Petroleum Hydrocarbons TPH

GRO Gasoline range organics

DRO Diesel range organics

Method SM4500Cl-B 1

Method 8021B 2

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

QUALIFIERS:

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

•

TABLE 3

SUMMARY OF ANALYTICAL RESULTS 2023 SOIL BACKGROUND ASSESSMENT- nAB1818441259 CONOCOPHILLIPS MYOX 31 STATE COM #13H RELEASE EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chlorie	de ¹
		ft. bgs	mg/kg	Q
		0-1	16.0	
		1-2	48.0	
		2-3	16.0	
		3-4	48.0	
		4-5	48.0	
		5-6	32.0	
		6-7	64.0	
		7-8	32.0	
		8-9	32.0	
BG-1	7/17/2023	9-10	96.0	
		10-11	288	
		11-12	640	
		12-13	784	
		13-14	960	
		14-15	512	-
		15-16	896	-
		16-17	416	
		17-18	1,070	
		18-19	1,040	-
		19-20	1,330	1
		0-1	32.0	
		1-2	48.0	
		2-3	48.0	
		3-4	128	
		4-5	272	-
		5-6	1,070	
		6-7	1,280	
		7-8	1,680	
		8-9	1,710	
BG-2	7/17/2023	9-10	688	
		10-11	1,570	
		11-12	1,040	
		12-13 13-14	2,120 976	
		13-14	2,160	
		15-16	2,160	
		16-17	944	
		17-18	2,000	
		18-19	2,360	
		19-20	2,080	QM-07
		0-1	48.0 32.0	
		2-3	32.0	
		3-4	32.0 16.0	
		4-5	96.0	
		5-6	208	
		6-7	320	
		7-8	560	
		8-9	512	
		9-10	480	
BG-3	7/17/2023	10-11	624	
		11-12	624	
		12-13	720	
		13-14	784	
		14-15	992	
		15-16	160	
		16-17	1,170	
		17-18	1,180	
			,	1
		18-19	1,200	

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

1 Method SM4500Cl-B

Bold and italicized values indicate exceedance of proposed RRALs and Reclamation Requirer QUALIFIERS:

 $\mathsf{QM-07}$ $\;$ The spike recovery was outside acceptance limits for the MS and/or MSD.

The batch was accepted based on acceptable LCS recovery.

APPENDIX A C-141 Forms

Received by	OCD:	9/1/2023	3:18:56 PM
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RECEIVED

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<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 811 S. First St., Artesia, NM 88210		f New Mexico and Natural Resource		Revised April 3, 2017
District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	1220 Sout	h St. Francis Dr.	STRICTSILLARTES	Age Gpp opriate District Office in accordance with 19.15.29 NMAC.
		Fe, NM 87505	Action	
NAB1818441259	lease Notificatio	-	_	
Name of Company: COG Operating, LLC	C (OGRID #229137)	OPERATOR Contact:	Robert McNeill	iitial Report 🔲 Final Report
Address: 600 West Illinois Avenue, Mid	land, TX 79701	Telephone No.	132-683-7443	
Facility Name: Myox 31 State Com #131	l Battery	Facility Type: Flowline		
Surface Owner: State	Mineral Owner:	State	API	No. 30-015-37497
	LOCATIO	N OF RELEASE		
Unit LetterSectionTownshipRangeP3125S28E		h/South Line Feet from	the East/West Lir	ne County Eddy
	Latitude 32.079052 L	ongitude -104.120589 N	AD83	
	NATURE	E OF RELEASE		· .
Type of Release Produced Water		Volume of Release 36 bbl.	Volun	ne Recovered 4 bbl.
Source of Release		Date and Hour of Occur	rrence Date a	nd Hour of Discovery
Flowline Was Immediate Notice Given?		June 27, 2018 12:15pm If YES, To Whom?	June 2	7, 2018 12:15pm
	🗌 No 🛄 Not Required		CD	
		Crystal Weaver – NMO	CD	
By Whom? DeAnn Grant		Ryan Mann - NMOCD Date and Hour June 28,	2018 9:31am	
Was a Watercourse Reached?		If YES, Volume Impact	ing the Watercourse	
☐ Yes				
If a Watercourse was Impacted, Describe Full	y.*			
Describe Cause of Problem and Remedial Act	ion Taken.*			
The release was caused by the check valv	e malfunctioning causir	g release from the tin ho	rn. Check valve is	being replaced.
Describe Area Affected and Cleanup Action T		<u>15</u>		oonig replaced.
The release was in the pasture. A vacuum truc	k was dispatched to remov	e all freestanding fluids. Co	ncho will have the	mill area compled to delineate any
possible impact from the release and we will p	resent a remediation work	plan to the NMOCD for ap	proval prior to any s	significant remediation activities
I hereby certify that the information given abo regulations all operators are required to report				
public health or the environment. The accepta	nce of a C-141 report by t	he NMOCD marked as "Fir	al Report" does not	relieve the operator of liability
should their operations have failed to adequate or the environment. In addition, NMOCD acc				
federal, state, or local laws and/or regulations.				
Signature: Delinn ()	reant	<u>UIL C</u>	ONSERVATIC	<u>IN DIVISION</u>
Printed Name: DeAnn Grant).	Approved by Environmen	B Specialist. 4	Sharendese-
Title: HSE Administrative	e Assistant	Approval Date: 424	Expirati	on Date: NIA
E-mail Address: agrant@concho.com	n	Conditions of Approval:		Attached De Loog
Date: June 28, 2018	Phone: (432) 253-4513	See	attached	2RP-4837

Date: June 28, 2018 * Attach Additional Sheets If Necessary

Operator/Responsible Party,

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 <u>division-approved corrective action</u> 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 <u>2</u> office in <u>ARTESIA</u> on or before <u>7/28/2018</u>. 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; C₆ thru C₃₆), 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; C₆ thru C₃₆), 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

Bratcher, Mike, EMNRD

From:	DeAnn Grant <agrant@concho.com></agrant@concho.com>
Sent:	Thursday, June 28, 2018 8:31 AM
То:	Bratcher, Mike, EMNRD; Mann, Ryan
Cc:	Weaver, Crystal, EMNRD; Sheldon Hitchcock; Dakota Neel; Rebecca Haskell; DeAnn Grant
Subject:	(Notification/C-141 Initial) Myox 31 State Com #13H Battery (30-015-37497) 06-27-2018
Attachments:	(Notification-C-141 Initial) Myox 31 State Com #13H Battery (30-015-37497) 06-27-2018.pdf

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 <u>agrant@concho.com</u> COG Operating LLC 600 W Illinois Avenue | Midland, TX 79701 Direct: 432-253-4513 | Main: 432.683.7443



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Oil Conservation Division

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District RP	
Facility ID	
Application ID	

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Site Assessment/Characterization

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

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

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

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

Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
Field data
Data table of soil contaminant concentration data
Depth to water determination
Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
Boring or excavation logs
Photographs including date and GIS information
Topographic/Aerial maps

Laboratory data including chain of custody

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

Received by OCD: 9/1/2023	3:18:56 PM State of New Mex	ina		Page 23 of 13
			Incident ID	
Page 4	Oil Conservation Div	vision	District RP	
			Facility ID	
			Application ID	
regulations all operators are r public health or the environm failed to adequately investiga	Ch T	lease notifications and perform t by the OCD does not relieve ose a threat to groundwater, su perator of responsibility for con	corrective actions for releases the operator of liability should rface water, human health or th apliance with any other federal,	which may endanger their operations have e environment. In , state, or local laws
email:		Telephone:		
OCD Only Received by:Shelly We	lls	Date: <u>9/1/</u>	/2023	

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Oil Conservation Division

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

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Remediation Plan

 Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation point Estimated volume of material to be remediated Closure criteria is to Table 1 specifications subject to 19.15.29.1 Proposed schedule for remediation (note if remediation plan times) 	2(C)(4) NMAC
Deferral Requests Only: Each of the following items must be con	firmed as part of any request for deferral of remediation.
	oduction equipment where remediation could cause a major facility
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 complet rules and regulations all operators are required to report and/or file c which may endanger public health or the environment. The acceptar liability should their operations have failed to adequately investigate surface water, human health or the environment. In addition, OCD a responsibility for compliance with any other federal, state, or local la Printed Name:	ertain release notifications and perform corrective actions for releases nee of a C-141 report by the OCD does not relieve the operator of and remediate contamination that pose a threat to groundwater, acceptance of a C-141 report does not relieve the operator of aws and/or regulations.
OCD Only	
Received by: Shelly Wells	Date: <u>9/1/2023</u>
Approved Approved with Attached Conditions of	Approval Denied Deferral Approved
Signature: Ashley Maxwell	Date:

APPENDIX B Regulatory Correspondence

Poole, Nicholas

From:	Llull, Christian
Sent:	Friday, May 12, 2023 9:05 AM
То:	Chavira, Lisbeth; Poole, Nicholas
Cc:	Abbott, Sam; Dickerson, Ryan
Subject:	FW: [EXTERNAL] Extension Request - Application ID: 164854 (Incident ID nAB1818441259)

REGULATORY CORRESPONDENCE

Christian

From: Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Sent: Friday, May 12, 2023 8:05 AM
To: Llull, Christian <Christian.Llull@tetratech.com>
Subject: RE: [EXTERNAL] Extension Request - Application ID: 164854 (Incident ID nAB1818441259)

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

Good Morning Christian,

Your request for a 90-day extension to August 8, 2023 has been approved.

Thanks, Ashley

Ashley Maxwell • Environmental Specialist Environmental Bureau Projects Group EMNRD - Oil Conservation Division 1000 Rio Brazos Road | Aztec, NM 87110 505.635.5000 | <u>Ashley.Maxwell@emnrd.nm.gov</u> http://www.emnrd.state.nm.us/OCD/

From: Llull, Christian <<u>Christian.Llull@tetratech.com</u>>
Sent: Wednesday, May 10, 2023 11:36 AM
To: Maxwell, Ashley, EMNRD <<u>Ashley.Maxwell@emnrd.nm.gov</u>>
Subject: [EXTERNAL] Extension Request - Application ID: 164854 (Incident ID nAB1818441259)

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

Ms. Maxwell:

On behalf of ConocoPhillips, Tetra Tech is requesting a 90-day extension (until June 10, 2023) to complete the additional assessment and associated reporting for the Myox 31 State Com #13H Release site (nAB1818441259).

NMOCD rejected the submitted Work Plan for incident ID (n#) nAB1818441259 for the following reasons:

• Work plan rejected. 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. Release is located in area of high karst.

- OCD agrees that naturally elevated chloride levels are present based on the initial background sample. However, OCD recommends addition background samples collected for chlorides at 1 foot intervals to approximately 20 feet below surface to better determine the range and/or level of chlorides surrounding the release area. Background sample locations should not be closer than 50 feet, and no farther than 100 feet, from the release area.
- Sampling variance request denied. OCD will accept a variance of sample collection every 400 square feet.
- Submit a work plan or closure report via the OCD permitting portal by March 10, 2023.

The release footprint is located on State Trust lands. As of December 1, 2022 New Mexico State Land Office's Cultural Properties Protection (CPP) Rule is in effect. In tandem with this CPP rule, the NMSLO has begun enforcing application and permitting requirements per Rule 12 (19.2.12 NMAC) for Water/Soil Boring Exploration Permits. Any intrusive activities (i.e. # soil borings to be drilled, sampling to be conducted, etc.) must be permitted through the Water Bureau, Oil, Gas, and Minerals Division, New Mexico State Land Office, even though groundwater is not expected to be encountered at this release site.

Tetra Tech is currently in the process of complying with these rules. The allocation of resources required to complete the cultural survey requirements and the Water/Soil Boring Exploration permit process are demanding and require additional time for coordination with not only regulatory personnel but additional archaeological subcontractors and cultural specialists. ConocoPhillips plans to conduct the assessment in the coming month, as soon as the cultural survey is completed, the archaeological report is submitted and approved by State Land Office Cultural Resources, and the permitting process is completed.

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

Thank you in advance.

Christian

Christian Llull, P.G. | Program Manager Direct +1 (512) 338-2861 | Business +1 (512) 338-1667 | Fax +1 (512) 338-1331 |

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Chama, Sam

From:	Knight, Tami C. <tknight@slo.state.nm.us></tknight@slo.state.nm.us>
Sent:	Wednesday, July 5, 2023 5:43 PM
То:	Chama, Sam; Poole, Nicholas
Cc:	Llull, Christian; SLO Surface ECO; Gonzales, Clair; Dickerson, Ryan
Subject:	RE: Myox 31 State Com #13H - DOR 6/27/2018 - nAB1818441259- Not Approved

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Sam,

Thank you for the complete summary, ECO appreciates the email summaries from Tetra Tech. We do use them as supplemental information to the written narrative workplans that are submitted. ECO recognizes this site is an active pipeline that has also impacted adjoining pasture land. We understand that remediation options are limited when it comes to active locations. Before working with Tetra Tech and deciding on a remediation path forward, ECO would like to see a written report that includes all the delineation information. I think it is best to have all the information in hand before deciding on a liner or other alternative.

Thank you,

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



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From: Chama, Sam <SAM.CHAMA@tetratech.com>
Sent: Wednesday, June 28, 2023 10:37 AM
To: Knight, Tami C. <tknight@slo.state.nm.us>; Poole, Nicholas <NICHOLAS.POOLE@tetratech.com>
Cc: Llull, Christian <Christian.Llull@tetratech.com>; SLO Surface ECO <SLOSurfaceECO@slo.state.nm.us>; Gonzales, Clair
<Clair.Gonzales@tetratech.com>; Dickerson, Ryan <Ryan.Dickerson@tetratech.com>
Subject: [EXTERNAL] RE: Myox 31 State Com #13H - DOR 6/27/2018 - nAB1818441259- Not Approved

Tami,

Thank you for speaking to me earlier. The question regarding utilizing a liner, what restrictions might go with it, and whether or not we'd be allowed to was regarding this site, and the SRO 18H.

We're seeking clarification of when and when not to propose the installation of a liner within a work plan. Through our conversation over the phone I've come to understand that a geosynthetic liner or clay liner are each acceptable. At this site, the liner was proposed to be installed at the bottom of the excavation, between 4-5 feet. Please confirm that a geosynthetic liner or clay liner is acceptable at this site, and in general where we should expect to be approved for the use of a liner after removing impacted material (seeking agreement between this site and the SRO 18H site).

As requested, below is our planned assessment. We plan to perform an assessment at the site with the following sampling plan:

- Install eight (8) soil borings with a hand auger to a maximum of 4 ft bgs, to complete horizontal delineation.
 - Samples will be collected on 2-foot centers to 4 feet bgs.
 - We plan to sample 0-1, 2-3, 3-4.
- Install three (3) boreholes (to collect background chloride sampling information) with mechanical rig to a depth of 20 ft bgs.
 - \circ Collect samples on 1-foot intervals.
- Install two (2) boreholes with mechanical rig to a maximum of 50 ft bgs inside footprint to complete vertical delineation.
 - Samples will be collected on typical intervals (rough 2-foot centers) to 10 feet bgs. 5-foot intervals between 10 feet bgs and 50 feet bgs
 - o sample 0-1, 2-3, 4-5, 6-7, 9-10, 14-15, and 5 foot intervals thereafter.
- Samples will be submitted to an accredited laboratory for laboratory analysis of chlorides, BTEX, and TPH.

Once the re-evaluation of impact at the site is complete, we will submit an updated alternative confirmation sampling plan.

Thank you,

Sam Chama, G.I.T. | Staff Geologist Mobile +1 (509) 768-2191 | Business +1 (512) 338-1667 | Fax +1 (512) 338-1331 | sam.chama@tetratech.com

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From: Knight, Tami C. <<u>tknight@slo.state.nm.us</u>>
Sent: Monday, June 26, 2023 8:36 AM
To: Poole, Nicholas <<u>NICHOLAS.POOLE@tetratech.com</u>>
Cc: Llull, Christian <<u>Christian.Llull@tetratech.com</u>>; Chama, Sam <<u>SAM.CHAMA@tetratech.com</u>>; SLO Surface ECO
<<u>SLOSurfaceECO@slo.state.nm.us</u>>; Gonzales, Clair <<u>Clair.Gonzales@tetratech.com</u>>; SLO Surface ECO
Subject: RE: Myox 31 State Com #13H - DOR 6/27/2018 - nAB1818441259- Not Approved

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Good Morning,

The reviewed workplan for Myox 31 State Com #13H proposes the installation of a liner as a remediation method. NMSLO-ECO is not approving plastic liners on State Trust Land as a method of remediation. Additionally, the remediation is taking place in a pasture and the workplan does not propose any reclamation once remediation has been completed.

Please provide a revised workplan with an alternative remediation method that does not include a plastic liner, reclamation information, and documentation of compliance with the CPP Rule.

Thank you,

Tami Knight, CHMM Environmental Specialist SLO Surface ECO Mobile: (505) 670-1638 tknight@slo.state.nm.us



From: Poole, Nicholas <<u>NICHOLAS.POOLE@tetratech.com</u>>
Sent: Thursday, May 18, 2023 2:29 PM
To: SLO Spills <<u>spills@slo.state.nm.us</u>>
Cc: Llull, Christian <<u>Christian.Llull@tetratech.com</u>>; Chama, Sam <<u>SAM.CHAMA@tetratech.com</u>>; Knight, Tami C.
<<u>tknight@slo.state.nm.us</u>>
Subject: [EXTERNAL] Myox 31 State Com #13H - DOR 6/27/2018 - nAB1818441259

Tami Knight,

Below are site details associated with Incident ID nAB1818441259, which is a release associated with the Myox 31 State Com #13H.

Incident ID nAB1818441259 Details:

- Site is in Eddy County, NM.
- Release Location: 32.079058°, -104.120966°
- Land Ownership: State
- The Site is in an area of high karst potential.
 - According to the C-141, it appears the release was discovered on 6/27/2018.
 - Tetra Tech conducted soil sampling of the release area on 9/11/2018.
 - A Work Plan was prepared by Tetra Tech on behalf of COG, dated September 11, 2019.
 - The Work Plan was rejected by the NMOCD on 12/7/2022 based on the following comments:
 - *"Work plan rejected. Horizontal delineation submitted was incomplete and did not meet the requirements of <u>19.15.29.11</u> 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. Release is located in area of high karst. OCD agrees that naturally elevated*

chloride levels are present based on the initial background sample. However, OCD recommends addition background samples collected for chlorides at 1 foot intervals to approximately 20 feet below surface to better determine the range and/or level of chlorides surrounding the release area. Background sample locations should not be closer than 50 feet, and no farther than 100 feet, from the release area. Sampling variance request denied. OCD will accept a variance of sample collection every 400 square feet. Submit a work plan or closure report via the OCD permitting portal by March 10, 2023."

Based on the NMOCD rejection of the Work Plan, Tetra Tech, on behalf of ConocoPhillips, proposes to install soil borings as shown in the attached .kmz file to complete delineation of the release area.

- Tetra Tech proposes a total of two boreholes within the extent to a maximum depth of 50 feet bgs.
- In addition, Tetra Tech proposes the installation of eight borings outside the release extent that are to be sampled in the upper four feet.

Based on the above site details and proposed boring locations, is Tetra Tech cleared to move forward with the release assessment?

Thanks,

Nicholas Poole | Project Scientist Mobile +1 (512) 560-9064 | <u>nicholas.poole@tetratech.com</u>

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NMCRIS Investigation Abstract Form (NIAF)

NMCRIS Activity No. 152907

Registration

Lead Agency: New Mexico State Land Office

 Performing Agency:
 SWCA Environmental Consultants

 Activity ID:
 81028

 Performing Agency Report No: 23-328

Report Recipient (Your Client): Tetra Tech, Inc.

Activity Types:	□ Research Design ✓ Archae	ological Survey/Inventory
	Architectural Survey/Inventory	Test Excavation Monitoring
	Collections/Non-Field Study	Compliance Decision
	Literature Review Overview	Excavation Ethnographic Study
	Resource/Property Visit	Historic Structures Report
	Other:	

Total Survey Acreage:	0.72
Total Tribal Acreage:	0.00
Total Resources Visited:	0

NMCRIS Investigation Abstract Form (NIAF)

NMCRIS Activity No. 152907

Associate/Register Resources

Prefix	Number	Field Site/Other Number	In GIS	Resource Type	Collections Made?	Revisit

NMCRIS Investigation Abstract Form (NIAF)

NMCRIS Activity No. 152907

NMCRIS Activ	vity No. 1529	07	Report Details
Lead Agency			
	Lead Agency:	New Me	exico State Land Office
Lead Agency Re	eport No.		
	Report Number:		
Title of Report			
	Title of Report: Authors:	Pipeline	Release Remediation Project in Eddy County, NM
Type of Report			
	Publication Type	e: Repo	rt, Monograph, or Book Negative
Description of U	Indertaking (what o	does the	project entail?)
	an i inac Description: mile New rem	intensive dvertent es) south w Mexico noving in	e cultural resources pedestrian survey in support of the Myox 31 State Com #13H pipeline release remediation project approximately 16.6 kilometers (km) (10.3 west of Malaga, New Mexico on a total of 0.72 acres (0.29 hectares [ha]) of 5 State Land office (SLO) managed land. The remediation process will require
Dates of Investig	gation		
	From: <u>12-MAY-2</u>	2 <u>023</u> To:	<u>12-MAY-2023</u>
Lead Agency Lead Agency: New Mexico State Land Office Lead Agency Report No. Report Number: Title of Report A Class III Cultural Resources Survey for the Myox 31 State Com #13H Inadvertent Pipeline Release Remediation Project in Eddy County, NM Authors: Lawrence Walker			
	Report Date: 25	5-MAY-20	023
Performing Age	ncy/Consultant		
	Name: Principal Investi	igator:	SWCA Environmental Consultants Alissa Healy

NMCRIS Investigation Abstract Form (NIAF)	
Millionio investigation Abstract i onni (u u au)	

NMCRIS Activity No.	152907		
Field Su	pervisor:	Jacob Borchardt	
Field Pe	rsonnel Names	s: N/A	
Historia	n/Other:	N/A	
		Report Details	
Performing Agency Repo	rt Number		
Report N	lumber: <u>23-328</u>	3	
Client/Customer (project	proponent)		
Name:	Tetra Tech, Ind	C	
Contact	Jayce Parkey		
Address	8911 North C Austin, TX 78	apital of Texas Highway, Bldg. 2, Suite 2310, 759	
Phone:	412-829-3600)	
Client/Customer Project N	lumber		

Project Number: 81028

NMCRIS	Activity No. 1	52907	Owners	hip & Locatior	`				
Land Own	ership Status (M	ust be indic	ated on Project Ma	-	•				
	Land Ow			·F)					
		d Owner/Man	ager Protocol	Acres Survey	ved A	cres in AP	F		
	NMS		Class III	0.72	0.72				
	Total Sur	vey Acreag	e: 0.72						
		al Acreage							
		ai / toi ougo	0.00						
Record Se	arch(es)								
	Date of H	PD/ARMS I	File Review: <u>3-</u>	MAY-2023					
	Date of O	ther Agenc	y File Review: 3-	MAY-2023					
Survey Dat	a								
	Source G	raphics:	NAD 83						
			✓ USGS 7.5' (1:	24,000) topo ma	p 🗌 O	ther Top	o Map Sc	ale:	
			 GPS Unit 						
			Aerial Photos		□ O	ther Sou	rce Graph	nic(s):	
	The follow	wing tables	(b,c,& e) are calc	ulated by the N	MCRIS Map	o Service	•		
JSGS 7.5' 1	Fopographic Mar	o(s)	County(ies)		L	.egal Des	scription		
Map Name	USGS Quad Co	de	County	FIPS	Ι Γ	Unplatted	Township (N/S)	Range (E/W)	Section
Red Bluff	32104-A1		Eddy				T25S	R28E	31
					ļ		T26S	R28E	06
					F	Projected	Legal De	scription	
.

NMCRIS Investigation Abstract Form (NIAF)

NMCRIS Activity No. 152907

GIS

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NMCRIS Activity No. 152907

Methodology

Survey Field Methods	
Intensity: 100% coverage	
Configuration: Block Survey Units Linear Survey Units (I x y) 	
Other Survey Units	
Scope: Non-Selective	
Coverage Method: ✓ Systematic Pedestrian Coverage Other Method:	
Survey Interval (m): 15 Crew Size: 2	
Fieldwork Dates: From: <u>12-MAY-2023</u> To: <u>12-MAY-2023</u>	
Survey Person Hours: 0.75 Recording Person Hours: 0	_
Additional Narrative: SWCA surveyed a 100-foot buffer from the inadvertent releas located entirely on SLO-managed land.	e location
Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.)	
The project area is within the Chihuahuan Deserts: Basins at ecoregion (Griffith et al. 2006). The physiography of the reg characterized by filled grabens that form rolling basins with eph draining into major rivers, such as the Pecos (Griffith et al. 2006). the project area is 926 meters (m) (3,039 feet [ft]) above r Vegetation in this ecoregion includes creostebush, tarbush, yu viscid acacia, tasajillo, Lechuguilla, and mesquite, with fou seepweed, pickleweed, and alkali sacaton around saline flats ar margins (Griffith et al. 2006; Whitehead and Flynn 2016). Plants the survey area were consistent with those described. Wildlife includes mule deer, coyote, bobcat, gopher, jackrabbit, va	gion is generally hemeral streams The elevation of mean sea level. accas, sandsage, urwing saltbush, nd alkaline playa s observed within

Environmental Setting: enviro

The geology of this area is comprised of the Rustler Formation (Upper Permian) made of siltstone, gypsum, sandstone, and dolomite (Natural Resource Conservation Service 2023). Soils observed in the project area are Reeves-Reagan loams consisting of silty sand with pervasive occurrences of calcium carbonate on the ground surface. These are not considered prime farmland.

The climate information for the survey area was compiled using the Carlsbad, New Mexico (291469), climate station data (period of record February 1, 1900, to June 10, 2016). Rainfall for the general project area is most abundant from May through October, averaging 4.14 centimeters (cm) (1.63 inches [in]), with heaviest precipitation in September. Snowfall can occur between November and April but is heaviest between December and January with an average of 3.10 cm

NMCRIS Activity No. 152907

(1.2 in). Total annual snowfall is 11.18 cm (4.4 inches). Temperatures range from the coldest in January at -2.33 degrees Celsius (°C) (27.8 degrees Fahrenheit [°F]), to the warmest in July at 35.33°C (95.6°F) (Western Regional Climate Center 2023).

Biota Information System of New Mexico

2023 Database Query for Lea County. Available at: http://www.bison-m.org/. Accessed May 2023.

Griffith, G. E., J. M. Omernik, M. M. McGraw, G. Z. Jacobi, C. M. Canavan, T. S. Schrader, D. Mercer, R. Hill, and B. C. Moran

2006 Ecoregions of New Mexico (color poster with map, descriptive text, summary tables, and photographs). Reston, Virginia: U.S. Geological Survey (map scale 1:1,400,000).

Natural Resources Conservation Service

2023 Web Soil Survey. USGS. Available at: http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed May 2023.

Western Regional Climate Center

2023 Člimate summary for Carlsbad, New Mexico (291469). Available at: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?nm1469. Accessed May 2023.

NMCRIS Activity No. 152907

Methodology

Percent Ground Visibility

Ground Visibility:	76-99%
Condition of Survey Area:	The project location is near current oil exploration facilities and within a gravel dirt access road. Visibility at the site was approximately 90%, with patchy vegetation mostly consisting of creosote and grasses primarily to the south.

Attachments (check all appropriate boxes)

- ✓ USGS 7.5 Topographic Map with sites, isolates, and survey area clearly drawn (required)
- ✓ Copy of NMCRIS Map Check (required)
- □ LA Site Forms new sites (with sketch map & topographic map) if applicable
- LA Site Forms (update) previously recorded & un0relocated sites (first 2 pages minimum)
- □ List and Description of Isolates, if applicable
- List and Description of Collections, if applicable

Other Attachments

- Photographs and Log
- ✓ Other attachments **Describe:** Tables and Figures considering the survey area.

NMCRIS Activity No. 152907

Cultural Resource Findings

Investigation Results Archaeological Sites Discovered and Registered: 0 Archaeological Sites Discovered and NOT Registered: 0 Previously Recorded Archaeological Sites Revisited (site update form required): 0 Previously Recorded Archaeological Sites Not Relocated (site update form required): 0 Total Archaeological Sites (visited & recorded): 0 Total Isolates Recorded: 0 Non-Selective Isolate Recording HCPI Properties Discovered and Registered: 0 HCPI Properties Discovered And NOT Registered: 0 Previously Recorded HCPI Properties Revisited: 0 Previously Recorded HCPI Properties NOT Relocated: 0 Total HCPI Properties (visited & recorded, including aceguias): 0 The survey area is small, and a large percentage was covered by the existing oil and gas infrastructure and a caliche road runs through the If no Cultural Resources Found, Discuss Why: survey area.

Management Summary

SWCA conducted an intensive pedestrian survey for the Myox 31 State Com #13H inadvertent pipeline release remediation project covering 0.72 acres (0.29 ha) on SLOmanaged land Eddy County, New Mexico. No archaeological sites, historic properties, or isolated occurrences were observed during the current investigation. No additional investigation or treatment is recommended regarding the current undertaking. If subsurface cultural materials are encountered during remediation, all work should cease, and the State Land Office should be notified immediately.

Summary:

SLO cultural resources preservation efforts requires that an archaeological survey be conducted to current standards for the APE pursuant to and in compliance with New Mexico Administrative Code (NMAC) 4.10.15 and 19.2.24 to ensure that cultural properties are not inadvertently excavated, harmed, or destroyed by any person.

NMCRIS Activity No. 152907

Attachments

Documents:

Attachment Type	Description	Name	File Type	Size	Upload Date	Upload By
Report/Manuscript	NIAF of NMCRIS 152907	NMCRIS_152907	PDF Document	1,352 KB	01-JUN-2023	Lawrence Walker

NMCRIS Activity No. 152907



Figure 1. Project vicinity map.

NMCRIS Activity No. 152907



Figure 2. Project location map.

NMCRIS Activity No. 152907



Figure 1. Project area overview, fence bisects project area and tanks visible in background, facing south (Frame T18-9159).



Figure 2. Project area overview with utility lines, facing south (Frame T18-7541).

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NMCRIS Activity No. 152907



Figure 3. Project area overview east of fence, whole area is disturbed, facing west (Frame T18-5505).



Figure 4. Road bisecting project area, facing south (Frame T18-3939).

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NMCRIS Activity No. 152907



Figure 5. Project area overview showing road and fence, facing south (Frame T18-1424).

NMCRIS No.	Performing Agency	Activity Start Date	Acres Surveyed	Resources Visited
125470	Lone Mountain Archaeological Services	7/9/2012	32,953.33	357
132233	Statistical Research, Inc.	7/8/2014	9,528.07	79
133790	Statistical Research, Inc.	6/19/2015	143.66	0
134111	Boone Archaeological Services of New Mexico	8/3/2015	117.59	7
132770	SWCA Environmental Consultants	10/21/2014	11,173.66	160
136342	Boone Archaeological Services of New Mexico	6/22/2016	3.08	1
136385	Boone Archaeological Services of New Mexico	6/22/2016	23.31	1
138487	Boone Archaeological Consultants, LLC.	7/10/2017	50.94	0
138382	Amaterra Environmental	6/30/2017	314.72	16

NMCRIS Activity No. 152907

NMCRIS No.	Performing Agency	Activity Start Date	Acres Surveyed	Resources Visited
139890	SWCA Environmental Consultants	1/26/2018	257.84	2
140263	APAC	2/26/2018	677.7	9
141484	APAC	7/31/2018	66.51	2
142867	Lone Mountain Archaeological Services	4/2/2019	18.98	0
143034	Lone Mountain Archaeological Services	2/16/2019	1,767.51	11
144319	Tetra Tech, Inc.	10/3/2019	0.8	0
144248	J. T. Rein Archaeology, LLC.	9/23/2019	4.76	0
145135	J. T. Rein Archaeology, LLC.	1/28/2020	15.35	1
145287	Goshawk Environmental Consulting	2/18/2020	2.09	0
145933	APAC	5/29/2020	11.23	1
146843	Boone Archaeological Consultants, LLC.	10/15/2020	6.84	1
146847	Boone Archaeological Consultants, LLC.	10/14/2020	7.94	1
125470	Lone Mountain Archaeological Services	7/9/2012	32,953.33	357

Table 2. Previously Recorded Sites within 1 km (0.62 mile) of the Survey Area.

LA No.	Site Type	Cultural Affiliation	Eligibility	Inside/Outside Project Area
174325	Artifact scatter with features	Multicomponent: Archaic (1000 B.C 300 A.D), Mogollon (200 A.D 1500 A.D.), Anglo (1880 A.D 1945 A.D.)	Eligible, D (9/22/2017 HPD Log No. 106196)	Outside
174326	Artifact scatter with features	Unknown Aboriginal (9500 B.C 1880 A.D.)	Not Evaluated	Outside
174367	Artifact scatter with features	Unknown Aboriginal (9500 B.C 1880 A.D.)	Not Evaluated	Outside

NMCRIS Activity No. 152907

LA No.	Site Type	Cultural Affiliation	Eligibility	Inside/Outside Project Area
174349	Artifact scatter with features	Unknown Aboriginal (9500 B.C 1880 A.D.)		Outside
		,	Not Evaluated	
180625	Artifact scatter with features	Unknown Aboriginal (9500 B.C 1880 A.D.)	Eligible, D (9/22/2017 HPD Log No. 106196)	Outside
181949	Artifact scatter	Anglo (1846 A.D 1920 A.D.)	Not Eligible (11/6/2015 SHPO HPD Log No. 102350)	Outside
189472	Artifact scatter with features	Multicomponent: Unknown Aboriginal (9500 B.C 1550 A.D.), Anglo (1846 A.D 1945 A.D.)	Not Eligible (1/26/2018 SHPO HPD Log No. 107125)	Outside
192317	Artifact scatter	Unknown Aboriginal (9500 B.C 1550 A.D.)	Not Eligible (11/29/2018 SHPO HPD Log No. 109124)	Outside
196139	Thermal feature	Unknown (9500 B.C 1550 A.D.)	Unevaluated (5/23/2022 SHPO No HPD Log No.)	Outside
196903	Not Available	Unknown	Not Evaluated	Outside
197665	Not Available	Not Available	Not Available	Outside

Poole, Nicholas

From:	Amber Murray <amber.murray@swca.com></amber.murray@swca.com>
Sent:	Wednesday, May 31, 2023 4:32 PM
То:	Llull, Christian; Trelles, Chris; Parkey, Jayce
Cc:	Alissa Healy; Ad Muniz
Subject:	SWCA 81028 NMCRIS 152907 Tetra Tech's Myox 31 State Come Inadvertent Release
Attachments:	NMCRIS_ 152907.pdf

Some people who received this message don't often get email from amber.murray@swca.com. Learn why this is important

🕂 CAUTION: This email originated from an external sender. Verify the source before opening links or attachments. <u>/</u>

Good afternoon Christian, Chris, and Jayce,

Please find attached SWCA's project number 81028, NMCRIS 152907, Tetra Tech's Myox 31 State Come Inadvertent Release Cultural Investigation Report. This report was submitted to NMCRIS and the NM SLO this afternoon. Let us know if you have any questions or need anything else.

Thanks,

Amber

Amber Murray | she, her, hers Project Archaeologist CR Permitting Coordinator SWCA Environmental Consultants

Upcoming Time Off: Thursday June 1st- Monday June 5th

New Mexico–Four Corners

7770 Jefferson Street NE, Suite 410 Albuquerque, New Mexico 87109 P: (505) 431-1849| C: 607-349-2571



Mike A. Hamman, P.E. State Engineer



Roswell Office 1900 WEST SECOND STREET ROSWELL, NM 88201

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STATE OF NEW MEXICO OFFICE OF THE STATE ENGINEER

Trn Nbr: 748013 File Nbr: C 04749

Jun. 22, 2023

CHRISTIAN LLULL TETRA TECH ON BEHALF OF CONOCO PHILLIPS 8911 N CAPITAL OF TX HWY #2310 AUSTIN, TX 78759

Greetings:

Your approved copy of the above numbered permit to drill a well for non-consumptive purposes is enclosed. You must obtain an additional permit if you intend to use the water. It is your responsibility to provide the contracted well driller with a copy of the permit that must be made available during well drilling activities.

Carefully review the attached conditions of approval for all specific permit requirements.

- * If use of this well is temporary in nature and the well will be plugged at the end of the well usage, the OSE must initially approve of the plugging. If plugging approval is not conditioned in this permit, the applicant must submit a Plugging Plan of Operations for approval prior to the well being plugged. The Plugging Record must be properly completed and submitted to the OSE within 30 days of the well plugging.
- * If the final intended purpose and condition requires a well ID tag and meter installation, the applicant must immediately send a completed meter report form to this office.
- * The well record and log must be submitted within 30 days of the completion of the well or if the attempt was a dry hole.
- * This permit expires and will be cancelled if no well is drilled and/or a well log is not received by the date set forth in the conditions of approval.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us.

Sincerely, en Cemil

Vanessa Clements (575)622-6521

Enclosure

explore

NEW	W MEXICO OFFICE OF THE STATE ENGINEER			OF THE STATE
STATE OF THE STATE	WR-07 APPLICATION FOR PERMIT TO DRILL			
Interstate Stream Commission		A WELL WITH NO WATER R	IGHT	
		(check applicable box):		
	Fo	r fees, see State Engineer website: http://www	v.ose.state.nm.us/	
Purpose:		Pollution Control And/Or Recovery	Ground Source Heat Pum	q
Exploratory Well*(Pump test)		Construction Site/Public Works Dewatering	Other(Describe):	
Monitoring Well		Mine Dewatering		
A separate permit will be required to appl	y water	to beneficial use regardless if use is consumptiv	e or nonconsumptive.	
*New Mexico Environment Department-Drinking Water Bureau (NMED-DWB) will be notified if a proposed exploratory well is used for public water supply.				
Temporary Request - Requested Start Date: 7/1/2023 Requested End Date: 7/1/2024				
Plugging Plan of Operations Submitted? 🔳 Yes 🗌 No				

1. APPLICANT(S)

Name: Tetra Tech on behalf of Conoco	Phillips	Name:	
Contact or Agent:	check here if Agent	Contact or Agent:	check here if Agent
Christian Llull			
Mailing Address:		Mailing Address:	
8911 N Capital of Texas Hwy #2	2310		
City:		City:	
Austin			
State:	Zip Code:	State:	Zip Code:
Texas	78759		
Phone: 512-338-1667	🗌 Home 🔳 Cell	Phone:	🗌 Home 🔲 Cell
Phone (Work):		Phone (Work):	
E-mail (optional):		E-mail (optional):	
Christian.Llull@tetratech.com			

OSE ON JUN 12 2023 PM3:20

FOR OSE INTERNAL USE	Application for	or Permit, Form WR-07	, Rev 07/12/22		
File No.: (- 4749	Trn. No.:	7480B	Receipt No.: 2-45845		
Trans Description (optional): MON					
Sub-Basin: CUB		PCW/LOG Due D	Date: 12-22-24		
			Page 1 of 3		

Received by OCD: 9/1/2023 3:18:56 PM

2. WELL(S) Describe the well(s) applicable to this application.

(Lat/Long - WGS84).			tate Plane (NAD 83), UTM (NAD 83), <u>or</u> Latitude/Longitude a PLSS location in addition to above.
 NM State Plane (NAD83) NM West Zone NM East Zone NM Central Zone 		JTM (NAD83) (Mete]Zone 12N]Zone 13N	ers) I Lat/Long (WGS84) (to the nearest 1/10 th of second)
Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (<i>Quarters or Halves , Section, Township, Range</i>) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
C-4749 Pod 1 BH-23-1	32.079019°	104.120596°	Unit Letter P, Section 31, Township 25S, Range 28E
C-4749 Poda BH-23-2	32.079013°	-104.120208°	Unit Letter P, Section 31, Township 25S, Range 28E
NOTE: If more well location Additional well descriptions	s need to be describ are attached:	oed, complete form Yes 🔳 No	WR-08 (Attachment 1 – POD Descriptions) If yes, how many
Other description relating well	to common landmark	ks, streets, or other:	
Well is on land owned by: Stat	e Land Office (Lease	with ConocoPhillips	S)
Well Information: NOTE: If n If yes, how many	nore than one (1) we	Il needs to be des	cribed, provide attachment. Attached? 🗌 Yes 🔳 No
Approximate depth of well (fee	et): 50	С	Dutside diameter of well casing (inches):
Driller Name: John Scarborou	gh	C	Oriller License Number: WD1188
3. ADDITIONAL STATEMENTS	OR EXPLANATION	s	

Drilling temporary soil borings to determine release	e impact.	
The soil borings will be installed on pad on land ow Lease ID VB08140001.	vned by the State Land Office, ho	wever, the land is leased by ConocoPhillips under
		OSE DIV JUN 12 2023 PM3:20
	FOR OSE INTERNAL USE	Application for Permit, Form WR-07 Version 07/12/22
•.	File No.: C-4749	Trn No:: 748013

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4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory:	Pollution Control and/or Recovery:	Construction	Mine De-Watering:
Is proposed	Include a plan for pollution	De-Watering:	Include a plan for pollution
well a future	control/recovery, that includes the	Include a description of the	control/recovery, that includes the following:
public water	following:	proposed dewatering	A description of the need for mine
	A description of the need for the	operation,	dewatering.
supply well?	pollution control or recovery operation.	The estimated duration of	The estimated maximum period of time
Yes NO	The estimated maximum period of	the operation,	for completion of the operation.
If Yes, an	time for completion of the operation.	The maximum amount of	The source(s) of the water to be diverted.
application must	The annual diversion amount.	water to be diverted,	The geohydrologic characteristics of the
be filed with	☐ The annual consumptive use	A description of the need	aquifer(s).
NMED-DWB,	amount.	for the dewatering operation,	The maximum amount of water to be
concurrently.	The maximum amount of water to be	and,	diverted per annum.
Include a	diverted and injected for the duration of	A description of how the diverted water will be disposed	☐ The maximum amount of water to be
description of	the operation. The method and place of discharge.	of.	diverted for the duration of the operation.
the requested	\square The method of measurement of	Ground Source Heat Pump:	The method of measurement of water
pump test if	water produced and discharged.	Include a description of the	diverted.
applicable.	The source of water to be injected.	geothermal heat exchange	The recharge of water to the aquifer.
	The method of measurement of	project,	Description of the estimated area of
Monitoring	water injected.	The number of boreholes	hydrologic effect of the project.
-	The characteristics of the aquifer.	for the completed project and	The method and place of discharge.
The reason	The method of determining the	required depths.	An estimation of the effects on surface
and duration	resulting annual consumptive use of	The time frame for	water rights and underground water rights
of the	water and depletion from any related	constructing the geothermal	from the mine dewatering project.
monitoring is	stream system.	heat exchange project, and,	A description of the methods employed to
required.	Proof of any permit required from the	The duration of the project.	estimate effects on surface water rights and
	New Mexico Environment Department.	Preliminary surveys, design	underground water rights.
	An access agreement if the	data, and additional	Information on existing wells, rivers,
	applicant is not the owner of the land on	information shall be included to	springs, and wetlands within the area of
	which the pollution plume control or	provide all essential facts	hydrologic effect.
	recovery well is to be located.	relating to the request.	
		KNOWLEDGEMENT	
I, We (name of a	$(\mathcal{H}\mathcal{R})$	STIAN LLULL	
i, we (name of a		int Name(s)	
		.000 53	
affirm that the fo	regoing statements are true to the best of (my, our) knowledge and belief.	
/ /	VAIM		
Applicant Signal		Applicant Signature	
Applicant Signal	ule	Applicant Signature	2
	ACTION	OF THE STATE ENGINEER	
		This application is:	
		This application is:	
		partially approved	denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the <u>attached</u> conditions of approval.

Witness my hand and seal this day of	June 20 2	3, for the State Engineer,
Mike A. Hamman	P.C., State Engineer	05E 017 JUN 12 2023 PM3:20
By: K-Parekh Signature	Ka	shyap Parekh
Title: Water Resources	Manager I	· ·
Print	FOR OSE INTERNAL USE	Application for Permit, Form WR-07 Version 07/12/22
	File No.: C-4749	Trn No.: 708013

Page 3 of 3

NEW MEXICO STATE ENGINEER OFFICE PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL

- 17-16 Construction of a water well by anyone without a valid New Mexico Well Driller License is illegal, and the landowner shall bear the cost of plugging the well by a licensed New Mexico well driller. This does not apply to driven wells, the casing of which does not exceed two and three-eighths inches outside diameter.
- 17-1A Depth of the well shall not exceed the thickness of the valley fill.
- 17-4 No water shall be appropriated and beneficially used under this permit.
- 17-6 The well authorized by this permit shall be pluqged completely using the following method per Rules and Regulations Governing Well Driller Licensing, Construction, Repair and Plugging of Wells; Subsection C of 19.27.4.30 NMAC unless an alternative plugging method is proposed by the well owner and approved by the State Engineer upon completion of the permitted use. All pumping appurtenance shall be removed from the well prior to plugging. To plug a well, the entire well shall be filled from the bottom upwards to ground surface using a tremie pipe. The bottom of the tremie shall remain submerged in the sealant throughout the entire sealing process; other placement methods may be acceptable and approved by the state engineer. The well shall be plugged with an office of the state engineer approved sealant for use in the plugging of non-artesian wells. The well driller shall cut the casing off at least four (4) feet below ground surface and fill the open hole with at least two vertical feet of approved sealant. The driller must fill or cover any open annulus with sealant. Once the sealant has cured, the well driller or well owner may cover the seal with soil. A Plugging Report for said well shall be filed with the Office of the State Engineer in a District Office within 30 days of completion of the plugging.

Trn Desc: C 04749 POD1-2

File	Number:	C 04749
Trn	Number:	748013

NEW MEXICO STATE ENGINEER OFFICE PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

- 17-7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.
- 17-B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with 72-12-12 NMSA 1978. A licensed driller shall not be required for the construction of a well driven without the use of a drill rig, provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter.
- 17-C The well driller must file the well record with the State Engineer and the applicant within 30 days after the well is drilled or driven. It is the well owner's responsibility to ensure that the well driller files the well record. The well driller may obtain the well record form from any District Office or the Office of the State Engineer website.
- 17-C2 No water shall be diverted from this well except for testing purposes which shall not exceed ten (10) cumulative days, and well shall be plugged or capped on or before, unless a permit to use water from this well is acquired from the Office of the State Engineer.
- 17-G If artesian water is encountered, the well driller shall comply with all rules and regulations pertaining to the drilling and casing of artesian wells.
- 17-P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between hydrogeologic zones.

Trn Desc: <u>C 04749 POD1-2</u>

File Number: <u>C 04749</u> Trn Number: <u>748013</u>

page: 2

NEW MEXICO STATE ENGINEER OFFICE PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

- 17-Q The State Engineer retains jurisdiction over this permit.
- 17-R Pursuant to section 72-8-1 NMSA 1978, the permittee shall allow the State Engineer and OSE representatives entry upon private property for the performance of their respective duties, including access to the ditch or acequia to measure flow and also to the well for meter reading and water level measurement.
- LOG The Point of Diversion C 04749 POD1 must be completed and the Well Log filed on or before 06/21/2024.
- LOG The Point of Diversion C 04749 POD2 must be completed and the Well Log filed on or before 06/21/2024.

IT IS THE PERMITEE'S RESPONSIBILITY TO OBTAIN ALL AUTHORIZATIONS AND PERMISSIONS TO DRILL ON PROPERTY OF OTHER OWNERSHIP BEFORE COMMENCING ACTIVITIES UNDER THIS PERMIT.

ACTION OF STATE ENGINEER

Notice of Intention Rcvd:Date Rcvd. Corrected:Formal Application Rcvd: 06/12/2023Pub. of Notice Ordered:Date Returned - Correction:Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 22 day of Jun A.D., 2023

Mike A. Hamman, P.E.____, State Engineer

K.Parek By: KASHYAP PAREKH

Trn Desc: <u>C 04749 POD1-2</u>

File Number: <u>C 04749</u> Trn Number: <u>748013</u>

page: 3

OFFICE OF THE STATE ENGINEER/INTERSTATE STREAM COMMISSION – ROSWELL OFFICE

OFFICIAL RECEIPT NUMBER: 2 - 45865	DATE:	4/12/2023	FILE NO.:
TOTAL: 10 00 RECEIVED:	Ten		DOLLARS CHECK NO.: 19-518051345 CHECK NO.: 19-54288 CASH:
PAYOR: Christian Clull	ADDRESS:		of CITY: Austin STATE: TX
ZIP: 78759 RECEIVED BY: TL		Tackas Hwy	

INSTRUCTIONS: Indicate the number of actions to the left of the appropriate type of filing. Complete the receipt information. **Original** to payor; **pink** copy to Program Support/ASD; and **yellow** copy for Water Rights. If a mistake is made, void the original and all copies and submit to Program Support/ASD as part of your daily deposit.

A. Ground Water Filing Fees

Released to Imaging: 9/25/2023 10:16:41 AM

A. C	IOI	and water riling rees		
	1. 2.	Change of Ownership of Water Right Application to Appropriate or Supplemen	\$	2.00
	2.	Domestic 72-12-1 Well		125.00
	3.	Application to Repair or Deepen 72-12-1 Well	\$	75.00
	4.	Application for Replacement 72-12-1 Well		
	5.	Application to Change Purpose of Use	\$	75.00
		72-12-1 Well	\$	75.00
	6.	Application for Stock Well/Temp. Use	\$	5.00
			_	
	7	Annitation to Announciety Toristics		
	7.	Application to Appropriate Irrigation,	÷	25.00
	0	Municipal, or Commercial Use	\$	25.00
	8.	Declaration of Water Right	\$	1.00
	9.	Application for Additional Point of Diversion Non 72-12-1 Per Well	¢	25.00
	10	Application to Change Place or	\$	25.00
	10.	Purpose of Use Non 72-12-1 Well	\$	25.00
	11	Application to Change Point of Diversion	φ	23.00
		and Place and/or Purpose of Use from		
		Surface Water to Ground Water	\$	50.00
	12.	Application to Change Point of Diversion	т	
		and Place and/or Purpose of Use from		
		Ground Water to Ground Water	\$	50.00
	13.	Application to Change Point of		
		Diversion of Non 72-12-1 Well	\$	25.00
	14.	Application to Repair or Deepen		
		Non 72-12-1 Well	\$	5.00

11	15.	Application for Test, Expl. Observ. Well	\$ 5.00	
	16.	Application for Extension of Time	25.00	
	17.	Proof of Application to Beneficial Use	\$ 25.00	
	18.	Notice of Intent to Appropriate	\$ 25.00	

B. Surface Water Filing Fees

D. 3	ull	ace water rinny rees	
	1.	Change of Ownership of a Water Right	\$ 5.00
	2.	Declaration of Water Right	\$ 10.00
	3.	Amended Declaration	\$ 25.00
	4.	Application to Change Point of Diversion	
		and Place and/or Purpose of Use from	
		Surface Water to Surface Water	\$ 200.00
	5.	Application to Change Point of Diversion	
		and Place and/or Purpose of Use from	
		Ground Water to Surface Water	\$ 200.00
	6.	Application to Change Point of	
		Diversion	\$ 100.00
	7.	Application to Change Place and/or	
		Purpose of Use	\$ 100.00
	8.	Application to Appropriate	\$ 25.00
	9.	Notice of Intent to Appropriate	\$ 25.00
	10.	Application for Extension of Time	\$ 50.00
	11.	Supplemental Well to a Surface Right	\$ 100.00
	12.	Return Flow Credit	\$ 100.00
	13.	Proof of Completion of Works	\$ 25.00
	14.	Proof of Application of Water to	
		Beneficial Use	\$ 25.00
	15.	Water Development Plan	\$ 100.00
	16.	Declaration of Livestock Water	
		Impoundment	\$ 10.00
	17.	Application for Livestock Water	
		Impoundment	\$ 10.00

C. Well Driller Fees

1. Application for Well Driller's License	\$ 50.00
 Application for Renewal of Well Driller's License 	\$ 50.00
3. Application to Amend Well Driller's License	\$ 50.00
D. Reproduction of Documents	
@ 0.25¢	\$
Map(s) @ \$3.00	\$
E. Certification	\$
F. Other	\$
G. Comments:	

All fees are non-refundable.



STATE OF NEW MEXICO OFFICE OF THE STATE ENGINEER ROSWELL

Mike A. Hamman, P.E. State Engineer

DISTRICT II 1900 West Second St. Roswell, New Mexico 88201 Phone: (575) 622-6521 Fax: (575) 623-8559

June 15, 2023

Tetra Tech on behalf of Conoco Phillips 8911 N. Capital of Texas Hwy # 2310 Austin, TX 78759

RE: Well Plugging Plan of Operations for well No. C-4749-POD1 and C-4749-POD2

Greetings:

Enclosed is your copy of the Well Plugging Plan of Operations for the above referenced well subject to the attached Conditions of Approval. The proposed method of operation is found to be acceptable and in accordance with the Rules and Regulations Governing Well Driller Licensing; Construction, Repair and Plugging of Wells 19.27.4 NMAC adopted June 30, 2017 by the State Engineer. subject to the attached Conditions of Approval.

Within 30 days after the well is plugged, the well driller is required to file a complete plugging record with the OSE and the permit holder.

Sincerely,

Kashyap Parekh Water Resources Manager I



STATE OF NEW MEXICO OFFICE OF THE STATE ENGINEER ROSWELL 1900 West Second St. Roswell, New Mexico 88201 Phone: (575) 622-6521 Fax: (575) 623- 8559

Applicant has identified a well, listed below, to be plugged. John Scarborough Drilling Inc. (WD-1188) will perform the plugging.

> Permittee: Tetra Tech Inc. on behalf of Conoco Philips NMOSE Permit Number: C-4749-POD1 and C-4749-POD2

NMOSE File	Casing diameter (inches)	Well depth (feet bgl)	Approximate static water level (feet bgl)	Latitude	Longitude
C-4749-POD1	2.0	50.0	Unknown	32.079019°	104.1205°
C-4749-POD2	2.0	50	Unknown	32.079013°	104.1202°

Specific Plugging Conditions of Approval for Well located in Eddy County.

- 1. Water well drilling and well drilling activities, including well plugging, are regulated under 19.27.4 NMAC, which requires any person engaged in the business of well drilling within New Mexico to obtain a Well Driller License issued by the New Mexico Office of the State Engineer (NMOSE). Therefore, the firm of a New Mexico licensed Well Driller shall perform the well plugging.
- 2. Theoretical volume of sealant required for abandonment is approximately 50.0 gallons. Total minimum volume of necessary sealant shall be calculated upon sounding the actual pluggable depth of well, which is estimated at 50 feet below ground surface (b.g.s.).
- 3. A Type I/II Portland cement mixed with 5.2 to 6.0 gallons of fresh water per 94-lb sack of cement is approved for the plugging the well.
- 4. Sealant shall be placed by pumping through a tremie pipe extended to near well bottom and kept below top of the slurry column as the well is plugged from bottom-upwards in a manner that displaces the standing water column upwards from below. Tremie pipe may be pulled as necessary to retain minimal submergence in the advancing column of sealant.
- 5. Should cement "shrinks-back" occur in the well, use of a tremie for topping off is required for cement placement deeper than 20 feet below land surface or if water is present in the casing. The approved sealant for topping off is identified in condition 3. of these Specific Conditions of Approval.

- 6. Any open annulus encountered surrounding the casing shall also be sealed by the placement of the approved sealant. When plugging shallow wells with no construction or environmental concerns, and if the well record on a well to be plugged shows a proper 20-foot annular seal, a plugging plan can propose the use of clean fill material to a nominal 30 feet bgs, then placing an OSE approved sealant to surface. Lacking that information, we would require an excavation of at least 2-feet which shall then be filled in its entirety with sealant to surface.
- 7. Should the NMED, or another regulatory agency sharing jurisdiction of the project authorize, or by regulation require a more stringent well plugging procedure than herein acknowledged, the more-stringent procedure should be followed. This, in part, includes provisions regarding pre-authorization to proceed, contaminant remediation, inspection, pulling/perforating of casing, or prohibition of free discharge of any fluid from the borehole during or related to the plugging process.
- 8. NMOSE witnessing the plugging of the non-artesian well will not be required.
- 9. Any deviation from this plan <u>must</u> obtain an approved variance from this office prior to implementation.
- 10. A Well Plugging Record itemizing actual abandonment process and materials used shall be filed with the State Engineer within 30 days after completion of well plugging. For the plugging record, please resurvey coordinate location for well and note coordinate system for GPS unit. Please attach a copy of these plugging conditions.

The NMOSE Well Plugging Plan of Operations is hereby approved with the aforesaid conditions applied.

Witness my hand and seal this 15th day of June 2023

Mike A. Hamman, P.E. State Engineer

K.Parch By:

Kashyap Parekh Water Resources Manager I

	weil Diligenic
office	
	WELL FLUUUINU
- Fr	PLAN OF OPERATIONS
	: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging. This form may be o plug a single well, or if you are plugging multiple monitoring wells on the same site using the same plugging methodology.
cgmn/ constr	Your well may be eligible to participate in the Aquifer Mapping Program (AMP)-NM Bureau of Geology geoinfo.nmt.edu/resources/water/ 'if within an area of interest and meets the minimum construction requirements, such as there is still water in your well, and the well cuction reflected in a well record and log is not compromised, contact AMP at 575-835-5038 or -6951, or by email nmbg-waterlevels@nmt.edu, to completing this prior form. Showing proof to the OSE that your well was accepted in this program, may delay the plugging of your well until • date.
<u>I. FI</u>	LING FEE: There is no filing fee for this form.
II. G	ENERAL / WELL OWNERSHIP: Check here if proposing one plan for multiple monitoring wells on the same site and attaching WD-
Exist	ting Office of the State Engineer POD Number (Well Number) for well to be plugged: <u>C-4749-P001</u>
Name	e of well owner: Tetra Tech Inc. on Behalf of ConocoPhillips
Maili	ng address: 8911 N Capital of Texas Hwy #2310County:
City:	Austin State: Texas Zip code ^{7,8759}
Phon	e number: 512-338-1667 E-mail: Christian.Llull@tetratech.com
	Driller contracted to provide plugging services: John Scarborough Drilling Inc. Mexico Well Driller License No.: WD1188 Expiration Date: 3/31/2024
<u>IV. v</u>	WELL INFORMATION: Check here if this plan describes method for plugging multiple monitoring wells on the same site and attach supplemental form WD-08m and skip to #2 in this section.
Note:	
1)	A copy of the existing Well Record for the well(s) to be plugged should be attached to this plan.
1)	A copy of the existing Well Record for the well(s) to be plugged should be attached to this plan. GPS Well Location: Latitude: <u>32.079019°</u> deg, <u>-104.12059</u> min,sec Longitude: <u>32.079013°</u> deg, <u>-104.12029</u> min,sec, NAD 83
1)	GPS Well Location: Latitude: <u>32.079019°</u> deg, <u>-104.1205</u> min, sec
2)	GPS Well Location: Latitude: <u>32.079019°</u> deg, <u>-104.1205</u> min, <u>sec</u> Longitude: <u>32.079013°</u> deg, <u>-104.1202</u> min, <u>sec</u>
	GPS Well Location: Latitude:32.079019° deg,104.1205@ min,sec sec Longitude:32.079013° deg,104.1202@ min,sec Sec, NAD 83 QGE DII JUN 12 2023 PM3:20
	GPS Well Location: Latitude: <u>32.079019°</u> deg, <u>-104.12058</u> min,sec Longitude: <u>32.079013°</u> deg, <u>-104.12028</u> min,sec, NAD 83 QGE DII JUN 12 2023 PMG: 20 Reason(s) for plugging well(s):
2)	GPS Well Location: Latitude: <u>32.079019° deg</u> , <u>-104.12058 min</u> ,sec Longitude: <u>32.079013° deg</u> , <u>-104.12028 min</u> ,sec, NAD 83 QCE DIL JUN 12 2023 PM3:20 Reason(s) for plugging well(s): Completion of soil boring monitoring period.
	GPS Well Location: Latitude: <u>32.079019°</u> deg, <u>-104.12058</u> min,sec Longitude: <u>32.079013°</u> deg, <u>-104.12028</u> min,sec, NAD 83 QGE DII JUN 12 2023 PMG: 20 Reason(s) for plugging well(s):
2)	GPS Well Location: Latitude: <u>32.079019° deg</u> , <u>-104.12059 min</u> , <u>sec</u> Longitude: <u>32.079013° deg</u> , <u>-104.12029 min</u> , <u>sec</u> , NAD 83 OGE DILJUN L2 2020 PM3:20 Reason(s) for plugging well(s): Completion of soil boring monitoring period. Was well used for any type of monitoring program? <u>Yes</u> If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality
2) 3)	GPS Well Location: Latitude: <u>32.079019°</u> deg, <u>-104.1205@</u> min,sec Longitude: <u>32.079013°</u> deg, <u>-104.1202@</u> min,sec, NAD 83 USE DIT JUN 12 2023 PMG/20 Reason(s) for plugging well(s): Completion of soil boring monitoring period. Was well used for any type of monitoring program? <u>Yes</u> If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.
2) 3)	GPS Well Location: Latitude:32.079019°deg,104.12059 min,sec, NAD 83 Longitude:32.079013°deg,104.12029 min,sec, NAD 83 OGE DILUEN 12 2023 № 8:20 Reason(s) for plugging well(s): Completion of soil boring monitoring period. Was well used for any type of monitoring program?Yes If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging. Does the well tap brackish, saline, or otherwise poor quality water? UNK If yes, provide additional detail,
2) 3) 4)	GPS Well Location: Latitude: <u>32.079019°</u> deg, <u>-104.1205@</u> min,sec, NAD 83 sec, NAD 83
2) 3) 4) 5)	GPS Well Location: Latitude:32.079019°deg,104.1205∰ min,sec, NAD 83
2) 3) 4) 5)	GPS Well Location: Latitude:32.079019° deg, -104.1205% min,sec, NAD 83 Longitude:32.079013° deg, -104.1202% min,sec, NAD 83 USE DIT JUN 12 2023 M3:20 Reason(s) for plugging well(s): Completion of soil boring monitoring period. Was well used for any type of monitoring program?Yes If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging. Does the well tap brackish, saline, or otherwise poor quality water? _UNK If yes, provide additional detail, including analytical results and/or laboratory report(s): Unknown Static water level: NK feet below land surface / feet above land surface (circle one) Depth of the well: 50 feet

•

recipe

7)	Inside diameter of innermost casing:2inches.
8)	Casing material: NA
9)	The well was constructed with: an open-hole production interval, state the open interval: a well screen or perforated pipe, state the screened interval(s): NA
10)	What annular interval surrounding the artesian casing of this well is cement-grouted?
11)	Was the well built with surface casing? <u>NA</u> If yes, is the annulus surrounding the surface casing grouted or otherwise sealed? <u>NA</u> If yes, please describe:
	Temporary soil borings.
12)	Has all pumping equipment and associated piping been removed from the well? <u>NA</u> If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.
V. DES	CRIPTION OF PLANNED WELL PLUGGING: If plugging method differs between multiple wells on same site, a separate form must be completed for each method.
diagram	this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such sical logs, that are necessary to adequately describe the proposal. Attach a copy of any signed OSE variance to this plugging plan.
Also, if th	is planned plugging plan requires a variance to 19.27.4 NMAC, attach a detailed variance request signed by the applicant.
1)	Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology
	proposed for the well:
	NA
2)	Will well head be cut-off below land surface after plugging? <u>NA Temporary</u>
<u>VI. PL</u>	UGGING AND SEALING MATERIALS:
	e plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant. Attach a copy of the batch mix cement company and/or product description for specialty cement mixes or any sealant that deviates from the list of OSE approved sealants.

- 1) For plugging intervals that employ cement grout, complete and attach Table A.
- 2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.
- 3) Theoretical volume of grout required to plug the well to land surface: 50 gallons
- 4) Type of Cement proposed: <u>NA</u>

. .

- 5) Proposed cement grout mix: <u>5</u> gallons of water per 94 pound sack of Portland cement.
- 6) Will the grout be: _____batch-mixed and delivered to the site
 - × mixed on site

052 DT JUN 12 2023 #3:21

WD-08 Well Plugging Plan Version: March 07, 2022 Page 2 of 5

7) Grout additives requested, and percent by dry weight relative to cement: N/A Additional notes and calculations: 8) N/A

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

N/A			

VIII. SIGNATURE: I, <u>CUMSTIAN LUVU</u>, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Well Plugging Plan of the statements in the Well Plugging Plan of the statement in the Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Signature of Applicant

Date

IX. ACTION OF THE STATE ENGINEER:

This Well Plugging Plan of Operations is:

Approved subject to the attached conditions. Not approved for the reasons provided on the attached letter. DSE DII JUN 12 2023 PKG: 7 (

Witness my hand and official seal this



Mike A. Hannay . E., New Mexico State Engineer By: K. Parek KASHMAP PAREKN W.R.M.I WD-08 Well Plugging Plan Version: March 07, 2022 Page 3 of 5

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LEASE NO: VB0814 0000

OIL AND GAS LEASE (Development Form)

THIS AGREEMENT, dated December 01, 2005, between the state of New Mexico, acting by and through its commissioner of public lands, hereinafter called the "lessor", and

MARBOB ENERGY CORP PO BOX 227 ARTESIA.NM 88211-0227

hereinafter called the "lessee",

WITNESSETH:

WHEREAS, the lessee has filed in the office of the commissioner of public lands an application for an oil and gas lease covering the lands hereinafter described and has tendered therewith the required first payment; and

WHEREAS, all of the requirements of law relative to the application and tender have been duly complied with;

THEREFORE, in consideration of the premises as well as the sum of TWO HUNDRED TWENTY THOUSAND and 00/100

dollars (\$220,000.00), the same being the amount of the tender above mentioned, and the further sum of \$30.00 filing fee, and of the covenants and agreements hereinafter contained, the lessor does hereby grant, demise, lease and let unto the said lessee, exclusively, for the sole and only purpose of exploration, development and production of oil or gas (including carbon dioxide and helium), or both thereon and therefrom with the right to own all oil and gas so produced and saved therefrom and not reserved as royalty by the lessor under the terms of this lease, together with rights-of-way, easements and servitudes for pipelines, telephone lines, tanks, power houses, stations, gasoline plants and fixtures for producing, treating and caring for such products, and housing and boarding employees, and any and all rights and privileges necessary, incident to or convenient for the economical operation of said land, for oil and gas, with right for such purposes to the free use of oil, gas, casing-head gas or water from said lands, but not from lessor's water wells, and with the rights of removing either during or after the term hereof, all and any improvements placed or erected on the premises by the lessee, including the right to pull all casing, subject, however, to the covenants and conditions hereinafter set out, the following described land situated in the count(y)(ies) of **Eddy**, state of New Mexico, and more particularly described as follows:

Subdivisions	Section	Twp	Rge	Acre	2S	Institution
E2	31	25S	28E	320.00	CS	

Said lands having been awarded to lessee and designated as Tract No.VB-O-0004 at public sale held by the commissioner of public lands on November 15,2005.

To have and to hold said land, and all the rights and privileges granted hereunder, to and unto the lessee for a primary term of five years from the date hereof, and as long thereafter as oil and gas, or either of them, is produced in paying quantities from said land by lessee, subject to all of the terms and conditions as hereinafter set forth.

In consideration of the premises the parties convenant and agree as follows:

1. Subject to the free use without royalty, as hereinbefore provided, the lessee shall pay the lessor as royalty three-sixteenth part of the oil produced and saved from the leased premises or the cash value thereof, at the option of the lessor, such value to be the price prevailing the day oil is run into a pipeline, if the oil be run into a pipeline, or into storage tanks, if the oil is stored.

2. Subject to the free use without royalty, as hereinbefore provided, at the option of the lessor at any time and from time to time, the lessee shall pay the lessor as royalty three-sixteenth part of the gas produced and saved from the leased premises, including casing-head gas. Unless said option is exercised by lessor, the lessee shall pay the lessor as royalty three-sixteenth of the cash value of the gas, including casing-head gas, produced and saved from the leased premises and marketed or utilized, such value to be equal to the net proceeds derived from the sale of such gas in the field; provided, however, the cash value for royalty purposes of carbon dioxide gas and of hydrocarbon gas delivered to a gasoline plant for extraction of liquid hydrocarbons shall be equal to the net proceeds derived from the sale of such gas, including any liquid hydrocarbons recovered therefrom.

Notwithstanding the foregoing provisions, the lessor may require the payment of royalty for all or any part of the gas produced and saved under this lease and marketed or utilized at a price per m.c.f. equal to the maximum price being paid for gas of like kind and quality and under like conditions in the same field or area



Application No:





or may reduce the royalty value of any such gas (to any amount not less than the net proceeds of sale thereof, in the field) if the commissioner of public lands shall determine such action to be necessary to the successful operation of the lands for oil or gas purposes or to encouragement of the greatest ultimate recovery of oil or gas or to the promotion of conservation of oil or gas or in the public interest.

This lease shall not expire at the end of the primary term hereof if there is a well capable of producing gas in paying quantities located upon some part of the lands embraced herein, or upon lands pooled or communitized herewith, where such well is shut-in due to the inability of the lessee to obtain a pipeline connection or to market the gas therefrom and if the lessee timely pays an annual royalty on or before the annual rental paying date next ensuing after the expiration of ninety days from the date said well was shut-in and on or before said rental date thereafter. The payment of said annual royalty shall be considered for all purposes the same as if gas were being produced in paying quantities and upon the commencement of marketing of gas from said well or wells the royalty paid for the lease year in which the gas is first marketed shall be credited upon the royalty payable hereunder to the lessor for such year. The provisions of this section shall also apply where gas is being marketed from said leasehold premises and through no fault of the lessee, the pipeline connection or market is lost or ceases, in which case this lease shall not expire so long as said annual royalty is paid as herein provided. The amount of any annual royalty payable under this section shall equal twice the annual royalty for any year beginning on or after ten years from the date hereof shall equal four times the annual rental due by the lessee under the terms of this lease but not less than two thousand dollars (\$2,000) per well per year, provided further that no annual royalty shall be payable under this section if equivalent amounts are timely paid pursuant to another lease issue by lessor and if such other lease includes lands communitized with lands granted hereunder for the purpose of prorationally sharing in the shut-in well. Notwithstanding the provisions of this section to the contrary, this lease shall not be continued after five years from the date hereof for any period of more than ten years by the payment of said ann

3. Lessee agrees to make full settlement on the twentieth day of each month for all royalties due to the lessor for the preceding month, under this lease, and to permit the lessor or its agents, at all reasonable hours, to examine lessee's books relating to the production and disposition of oil gas produced. Lessee further agrees to submit to lessor annually upon forms furnished by lessor, verified reports showing lessee's operations for the preceding year.

4. An annual rental at the rate of \$1.00 per acre shall become due and payable to the lessor by the lessee upon each acre of the land above described and then claimed by such lessee, and the same shall be due and payable in advance to the lessor on successive anniversary dates of this lease, but the annual rental on any assignment shall in no event be less than forty dollars (\$40.00).

In the event the lessee shall elect to surrender any or all of said acreage, he shall deliver to the lessor a duly executed release thereof and in event said lease has been recorded then he shall upon request furnish and deliver to the lessor a certified copy of a duly recorded release.

5. The lessee may at any time by paying to the lessor all amounts then due as provided herein and the further sum of forty dollars (\$40.00), surrender and cancel this lease insofar as the same covers all or any portion of the lands herein leased and be relieved from further obligations or liability hereunder, in the manner as hereinbefore provided. Provided, this surrender clause and the option herein reserved to the lessee shall cease and become absolutely inoperative immediately and concurrently with the institution of any suit in any court of law or equity by the lessee, lessor or any assignee, to enforce this lease, or any of its terms expressed or implied.

6. All payments due hereunder shall be made on or before the day such payment is due, at the office of the commissioner of public lands in Santa Fe, New Mexico.

7. The lessee with the consent of the lessor shall have the rights to assign this lease in whole or in part. Provided, however, than no assignment of an undivided interest in the lease or in any part thereof nor any assignment of less than a legal subdivision shall be recognized or approved by the lessor. Upon approval in writing by the lessor of an assignment, the assignor shall stand relieved from all obligations to the lessor with respect to the lands embraced in the assignment and the lessor shall likewise be relieved from all obligations to the assigner as to such tracts, and the assigner to the lessor as to such tracts.

8. In the event a well or wells producing oil or gas in paying quantities should be brought in on adjacent land which is draining the leased premises, lessee shall drill such offset well or wells as a reasonably prudent operator would drill under the same or similar circumstances, provided that no such offset well shall be required if compensatory royalties are paid pursuant to an agreement between the lessor and the lessee.

9. The lessee agrees to notify the lessor of the location of each well before commencing drilling thereon, to keep a complete and accurate log of each well drilled and to furnish a copy thereof, verified by some person having actual knowledge of the facts, to the lessor upon the completion of any well, and to furnish the log of any unfinished well at any time when requested to do so by the lessor.

If any lands embraced in this lease shall be included in any deed or contract of purchase outstanding and subsisting issued pursuant to any sale made of the surface of such lands prior to the date of this lease, it is agreed and understood that no drilling operation shall be commenced on any such lands so sold unless and until the lessee shall have filed a good and sufficient bond with the lessor as required by law, to secure the payment for such damage to the livestock, range, water, crops or tangible improvements on such lands as may be suffered by the purchaser holding such deed or contract of purchase, or his successors, by reason of the developments, use and occupation of such lands by such lessee. Provided, however, that no such bond shall be required if such purchaser shall waive the right to require such bond to be given in the manner provided by law.

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10. In drilling wells all water-bearing strata shall be noted in the log, and the lessor reserves the right to require that all or any part of the casing shall be left in any nonproductive well when lessor deems it to the interest of the beneficiaries of the lands granted hereunder to maintain said well or wells for water. For such casing so left in wells the lessor shall pay to the lessee the reasonable value thereof.

11. Lessee shall be liable and agree to pay of all damages to the range, livestock, growing crops or improvements caused by lessee's operations on said lands. When requested by the lessor the lessee shall bury pipelines below plow depth.

12. The lessee shall not remove any machinery or fixtures placed on said premises, nor draw the casing from any well unless and until all payments and obligations due the lessor under the terms of this agreement shall have been paid or satisfied. The lessee's right to remove the casing is subject to the provision of Paragraph 10 above.

13. Upon failure or default of the lessee to comply with any of the provisions or covenants hereof, the lessor is hereby authorized to cancel this lease and such cancellation shall extend to and include all rights hereunder as to the whole of the tract so claimed, or possessed by the lessee, but shall not extend to, nor affect the rights of any other lessee or assignee claiming any portion of the lands upon which no default has been made; provided, however, that before any such cancellation shall be made, the lessor shall mail to the lessee so defaulting, by registered or certified mail, addressed to the post-office address of such lessee as shown by the records of the state land office, a notice of intention of cancellation specifying the default for which cancellation is to be made, and if within thirty days from the date of mailing said notice the said lessee shall remedy the default specified in said notice, cancellation shall not be made.

14. If this lease shall have been maintained in accordance with the provisions hereof and if at the expiration of the primary term provided for herein oil or gas is not being produced on said land but lessee is then engaged in bona fide drilling or reworking operations thereon, this lease shall remain in full force and effect so long as such operations are diligently prosecuted and, if they result in the production of oil or gas, so long thereafter as oil and gas in paying quantities, or either of them, is produced from said land; provided, however, such operations extending beyond the primary term shall be approved by the lessor upon written application filed with the lessor on or before the expiration of said term, and a report of the status of all such operations shall be made by the lesser to the lessor every thirty days and a cessation of such operations for more than twenty consecutive days shall be considered as an abandonment of such operations and this lease shall thereupon terminate.

If during the drilling or reworking of any well under this section, lessee loses or junks the hole or well and after diligent efforts in good faith is unable to complete said operations, then within twenty days after the abandonment of said operations, lessee may commence another well within three hundred thirty feet of the lost or junked hole or well and drill the same with due diligence.

Operations commenced and continued as herein provided shall extend this lease as to all lands as to which the same is in full force and effect as of the time said drilling operations are commenced; provided, however, this lease shall be subject to cancellation in accordance with Paragraph 13 hereof for failure to pay rentals or file reports which may become due while operations are being conducted hereunder.

15. Should production of oil and gas or either of them in paying quantities be obtained while this lease is in force and effect and should thereafter cease from any cause after the expiration of five years from the date hereof this lease shall not terminate if lessee commences additional drilling or reworking operations within sixty days after the cessation of such production and shall remain in full force and effect so long as such operations are prosecuted in good faith with no cessation of more than twenty consecutive days, and if such operations result in the production of oil or gas in paying quantities, so long thereafter as oil or gas in paying quantities is produced from said land; provided, however, written notice of intention to commence such operations shall be filed with the lessor or gas in the cessation of such production, and a report of the status of such operations shall be made by the lessee to the lessor every thirty days, and the cessation of such operations for more than twenty consecutive days shall be considered as an abandonment of such operations and this lease shall thereupon terminate.

16. Lessee, including their heirs, assigns, agents and contractors shall at their own expense fully comply with all laws, regulations, rules, ordinances and requirements of the city, county, state, federal authorities and agencies, in all matters and things affecting the premises and operations thereon which may be enacted or promulgated under the governmental police powers pertaining to public health and welfare, including but not limited to conservation, sanitation, aesthetics, pollution, cultural properties, fire and ecology. Such agencies are not to be deemed third party beneficiaries hereunder, however, this clause is enforceable by the lessor in any manner provided in this lease or hy law.

17. Should lessor desire to exercise its rights to take in-kind its royalty share of oil, gas or associated substances or purchase all or any part of the oil, gas or associated substances produced from the lands covered by this lease, the lessee hereby irrevocably consents to the lessor exercising its right. Such consent is a consent to the termination of any supplier/purchaser relationship between the lessor and the lessee deemed to exist under federal regulations. Lessee further agrees that it will require any purchaser of oil, gas or associated substance to likewise waive any such rights.

18. Lessor reserves a continuing option to purchase at any time and from time to time, at the market price prevailing in the area on the date of purchase, all or any part of the minerals (oil and gas) that will be produced from the lands covered by this lease.

19. Lessor reserves the right to execute leases for geothermal resource development and operation thereon; the right to sell or dispose of the geothermal resources of such lands; and the right to grant rights-of-way and easements for these purposes.

20. All terms of this agreement shall extend to and bind the heirs, executors, administrator, successors and assigns of the parties hereto.





.

In witness whereof, the party of the first part has hereunto signed and caused its name to be signed by its commissioner of public lands thereunto duly authorized, with the seal of his office affixed, and the lessee has signed this agreement the day and year first above written.

By: DWCD H - Composed D Commissioner of Public Lands, Lessor		
MARBOB ENERGY CORPORATION		
Johany C. Gray, President (Seal)		
Lessee		
(PERSONAL ACKNOWLEDGMENT)		
STATE OF	SS.	
COUNTY OF	SS.	
The foregoing instrument was acknowledged before me this	day of, 2	20,by
My commission expires:	·	
	Notary Public	
(ACKNOWLEDGMENT BY ATTORNEY-IN-FACT)		
STATE OF	SS.	
COUNTY OF	SS.	
The foregoing instrument was acknowledged before me this		
The foregoing instrument was acknowledged before the this _	day of, 20	0,by
	day of, 2	
	as attorney-in-fact in b	
	as attorney-in-fact in b	
	as attorney-in-fact in b	
My commission expires:	as attorney-in-fact in b	
My commission expires:	as attorney-in-fact in b	
My commission expires:	as attorney-in-fact in b	ehalf of ,
My commission expires:	as attorney-in-fact in b Notary Public	ehalf of
My commission expires:	as attorney-in-fact in b Notary Public 	ehalf of
My commission expires:	as attorney-in-fact in b Notary Public 	ehalf of
My commission expires:	as attorney-in-fact in b Notary Public 	ehalf of
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My commission expires:	as attorney-in-fact in b Notary Public 	ehalf of

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APPENDIX C Site Characterization Data



(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)	· ·					2=NE 3 st to lar	3=SW 4= gest)		D83 UTM in me	eters)	()	In feet)	
	POD Sub-		Q	-	•	-	-		~	Y		-	•	Water
POD Number	Code basin Co	ounty 6	4 16	4	Sec	IWS	Rng		X	Y	Distance	weii	water	Column
<u>C 02478</u>	CUB E	ED	2	1	05	26S	28E	58384	48	3549325* 🌍	878	100		
C 03836 POD1	C F	ED 2	2 2	4	29	25S	28E	58468	32	3551934 🌍	2931	300	30	270
										Averag	ge Depth to	Water:	30	feet
	Minimum		Minimum	Depth:	30	feet								
											Maximum	Depth:	30	feet
Record Count: 2														

UTMNAD83 Radius Search (in meters):

Easting (X): 582995.15

Northing (Y): 3549536.35

Radius: 3000

*UTM location was derived from PLSS - see Help

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

10/27/22 9:46 AM

OCD Potential Karst Map





10/27/2022, 10:43:41 AM Karst Occurrence Potential



Medium Released to Imaging: 9/25/2023 10:16:41 AM

New Mexico Oil Conservation Division

OCD Waterbodies Map



10/27/2022, 10:39:36 AM

OSW Water Bodys



New Mexico Oil Conservation Division
OCD Land Ownership



8/23/2023, 10:17:35 AM

Mineral Ownership



N-No minerals are owned by the U.S.

Land Ownership

S



U.S. BLM, Maxar, Microsoft, Esri, HERE, Garmin, iPC

Received by OCD: 9/1/2023 3:18:56 PM National Flood Hazard Layer FIRMette



Legend

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Basemap Imagery Source: USGS National Map 2023

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APPENDIX D Analytical Laboratory Data



July 25, 2023

CHRISTIAN LLULL TETRA TECH 901 WEST WALL STREET , STE 100 MIDLAND, TX 79701

RE: MYOX 31 STATE COM #13H RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 07/19/23 12:00.

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	07/19/2023	Sampling Date:	07/17/2023
Reported:	07/25/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BG - 1 (0-1') (H233745-01)

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	07/24/2023	ND	432	108	400	3.64	

Sample ID: BG - 1 (1'-2') (H233745-02)

Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/24/2023	ND	432	108	400	3.64	

Sample ID: BG - 1 (2'-3') (H233745-03)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/24/2023	ND	432	108	400	3.64	

Sample ID: BG - 1 (3'-4') (H233745-04)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/24/2023	ND	432	108	400	3.64	

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

Received:	07/19/2023	Sampling Date:	07/17/2023
Reported:	07/25/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BG - 1 (4'-5') (H233745-05)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/24/2023	ND	432	108	400	3.64	

Sample ID: BG - 1 (5'-6') (H233745-06)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/24/2023	ND	432	108	400	3.64	

Sample ID: BG - 1 (6'-7') (H233745-07)

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	07/24/2023	ND	432	108	400	3.64	

Sample ID: BG - 1 (7'-8') (H233745-08)

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	07/24/2023	ND	432	108	400	3.64	

Sample ID: BG - 1 (8'-9') (H233745-09)

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	07/24/2023	ND	432	108	400	3.64	

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

Received:	07/19/2023	Sampling Date:	07/17/2023
Reported:	07/25/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BG - 1 (9'-10') (H233745-10)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/24/2023	ND	432	108	400	3.64	

Sample ID: BG - 1 (10'-11') (H233745-11)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	07/24/2023	ND	432	108	400	3.64	

Sample ID: BG - 1 (11'-12') (H233745-12)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	640	16.0	07/24/2023	ND	432	108	400	3.64	

Sample ID: BG - 1 (12'-13') (H233745-13)

Chloride, SM4500Cl-B	mg/kg			Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	784	16.0	07/24/2023	ND	432	108	400	3.64	

Sample ID: BG - 1 (13'-14') (H233745-14)

Chloride, SM4500Cl-B	mg	′kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	960	16.0	07/24/2023	ND	432	108	400	3.64	

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	07/19/2023	Sampling Date:	07/17/2023
Reported:	07/25/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BG - 1 (14'-15') (H233745-15)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	512	16.0	07/24/2023	ND	432	108	400	3.64	

Sample ID: BG - 1 (15'-16') (H233745-16)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	896	16.0	07/24/2023	ND	432	108	400	3.64	

Sample ID: BG - 1 (16'-17') (H233745-17)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	07/24/2023	ND	432	108	400	3.64	

Sample ID: BG - 1 (17'-18') (H233745-18)

Chloride, SM4500CI-B	mg/kg			Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1070	16.0	07/24/2023	ND	432	108	400	3.64	

Sample ID: BG - 1 (18'-19') (H233745-19)

Chloride, SM4500Cl-B	mg	′kg	Analyze	Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	07/24/2023	ND	432	108	400	3.64	

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Received:	07/19/2023	Sampling Date:	07/17/2023
Reported:	07/25/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BG - 1 (19'-20') (H233745-20)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1330	16.0	07/24/2023	ND	400	100	400	3.92	

Sample ID: BG - 2 (0-1') (H233745-21)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/24/2023	ND	400	100	400	3.92	

Sample ID: BG - 2 (1'-2') (H233745-22)

Chloride, SM4500Cl-B	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	07/24/2023	ND	400	100	400	3.92	

Sample ID: BG - 2 (2'-3') (H233745-23)

Chloride, SM4500Cl-B	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	07/24/2023	ND	400	100	400	3.92	

Sample ID: BG - 2 (3'-4') (H233745-24)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	07/24/2023	ND	400	100	400	3.92	

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Received:	07/19/2023	Sampling Date:	07/17/2023
Reported:	07/25/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BG - 2 (4'-5') (H233745-25)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC	AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	07/24/2023	ND	400	100	400	3.92	

Sample ID: BG - 2 (5'-6') (H233745-26)

Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1070	16.0	07/24/2023	ND	400	100	400	3.92	

Sample ID: BG - 2 (6'-7') (H233745-27)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1280	16.0	07/24/2023	ND	400	100	400	3.92	

Sample ID: BG - 2 (7'-8') (H233745-28)

Chloride, SM4500Cl-B	mg/kg			Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1680	16.0	07/24/2023	ND	400	100	400	3.92	

Sample ID: BG - 2 (8'-9') (H233745-29)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1710	16.0	07/24/2023	ND	400	100	400	3.92	

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Received:	07/19/2023	Sampling Date:	07/17/2023
Reported:	07/25/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BG - 2 (9'-10') (H233745-30)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	688	16.0	07/24/2023	ND	400	100	400	3.92	

Sample ID: BG - 2 (10'-11') (H233745-31)

Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1570	16.0	07/24/2023	ND	400	100	400	3.92	

Sample ID: BG - 2 (11'-12') (H233745-32)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	07/24/2023	ND	400	100	400	3.92	

Sample ID: BG - 2 (12'-13') (H233745-33)

Chloride, SM4500Cl-B	OCI-B mg/kg			Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2120	16.0	07/24/2023	ND	400	100	400	3.92	

Sample ID: BG - 2 (13'-14') (H233745-34)

Chloride, SM4500Cl-B	mg	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	976	16.0	07/24/2023	ND	400	100	400	3.92	

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Received:	07/19/2023	Sampling Date:	07/17/2023
Reported:	07/25/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BG - 2 (14'-15') (H233745-35)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2160	16.0	07/24/2023	ND	400	100	400	3.92	

Sample ID: BG - 2 (15'-16') (H233745-36)

Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2160	16.0	07/24/2023	ND	400	100	400	3.92	

Sample ID: BG - 2 (16'-17') (H233745-37)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	944	16.0	07/24/2023	ND	400	100	400	3.92	

Sample ID: BG - 2 (17'-18') (H233745-38)

Chloride, SM4500CI-B	CI-B mg/kg			Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2000	16.0	07/24/2023	ND	400	100	400	3.92	

Sample ID: BG - 2 (18'-19') (H233745-39)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2360	16.0	07/24/2023	ND	400	100	400	3.92	

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Received:	07/19/2023	Sampling Date:	07/17/2023
Reported:	07/25/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BG - 2 (19'-20') (H233745-40)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2080	16.0	07/24/2023	ND	416	104	400	0.00	QM-07

Sample ID: BG - 3 (0-1') (H233745-41)

Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/24/2023	ND	416	104	400	0.00	

Sample ID: BG - 3 (1'-2') (H233745-42)

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	07/24/2023	ND	416	104	400	0.00	

Sample ID: BG - 3 (2'-3') (H233745-43)

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	07/24/2023	ND	416	104	400	0.00	

Sample ID: BG - 3 (3'-4') (H233745-44)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/24/2023	ND	416	104	400	0.00	

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

Received:	07/19/2023	Sampling Date:	07/17/2023
Reported:	07/25/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BG - 3 (4'-5') (H233745-45)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/24/2023	ND	416	104	400	0.00	

Sample ID: BG - 3 (5'-6') (H233745-46)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	07/24/2023	ND	416	104	400	0.00	

Sample ID: BG - 3 (6'-7') (H233745-47)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	07/24/2023	ND	416	104	400	0.00	

Sample ID: BG - 3 (7'-8') (H233745-48)

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	07/24/2023	ND	416	104	400	0.00	

Sample ID: BG - 3 (8'-9') (H233745-49)

Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	512	16.0	07/24/2023	ND	416	104	400	0.00	

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

Received:	07/19/2023	Sampling Date:	07/17/2023
Reported:	07/25/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BG - 3 (9'-10') (H233745-50)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	07/24/2023	ND	416	104	400	0.00	

Sample ID: BG - 3 (10'-11') (H233745-51)

Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	07/24/2023	ND	416	104	400	0.00	

Sample ID: BG - 3 (11'-12') (H233745-52)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	07/24/2023	ND	416	104	400	0.00	

Sample ID: BG - 3 (12'-13') (H233745-53)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	720	16.0	07/24/2023	ND	416	104	400	0.00	

Sample ID: BG - 3 (13'-14') (H233745-54)

Chloride, SM4500Cl-B	mg/kg			Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	784	16.0	07/24/2023	ND	416	104	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	07/19/2023	Sampling Date:	07/17/2023
Reported:	07/25/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BG - 3 (14'-15') (H233745-55)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	992	16.0	07/24/2023	ND	416	104	400	0.00	

Sample ID: BG - 3 (15'-16') (H233745-56)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/24/2023	ND	416	104	400	0.00	

Sample ID: BG - 3 (16'-17') (H233745-57)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	ed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1170	16.0	07/24/2023	ND	416	104	400	0.00		

Sample ID: BG - 3 (17'-18') (H233745-58)

Chloride, SM4500CI-B	mg/kg			Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1180	16.0	07/24/2023	ND	416	104	400	0.00	

Sample ID: BG - 3 (18'-19') (H233745-59)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1200	16.0	07/24/2023	ND	416	104	400	0.00	

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

Received:	07/19/2023	Sampling Date:	07/17/2023
Reported:	07/25/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BG - 3 (19'-20') (H233745-60)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1070	16.0	07/24/2023	ND	432	108	400	0.00	QM-07

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Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Relinquished By:				Relinquished By: Colton Bickerstaff	afflades 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	PLEASE NOTE: Liability and Damages. Cardnait's liability and client's exclusive remedy for any daian analog whether based in contract or tort, shall be limited to the amound paid by the client for the amound paid	10 BG-1		8 BG-1		6 BG-1		4 BG-1	3 BG-1	2 BG-1	_	123:3745		DR LAB USE ONLY	Sampler Name: Colton Bickerstaff	Project Location: Eddy County, New Mexico	Project Name: Myox 31 State Com #13H Release	Project #: 212C-	Phone #: (512)5	City: Austin	Address: 8911 Capital o Texas Hwy, Suite 2310	Project Manager: Christian Llull	Company Name: Tetra Tech	
				n Bickerstaff	related to the performance of	rdinal's lisbility and client's excl al or consequental damages	BG-1 (9'-10')	BG-1 (8'-9')	BG-1 (7'-8')	BG-1 (6'-7')	BG-1 (5'-6')	BG-1 (4'-5')	BG-1 (3'-4')	BG-1 (2'-3')	BG-1 (1'-2')	BG-1 (0-1')	Sample I.D.			Bickerstaff	County, New Me	State Com #13H	212C-MD-02882 F	(512)565-0190		Texas Hwy, Sui	ian Llull	fech	101 East Ma (575) 393-2
Observed Temp. °C	Time:	Date:	Time:////	Date: 7/19/23	services hereunder by Cardin	dinal's liability and client's exclusive remedy for any claim arising whether al or consequental damages, including without limitation, business i											I.D.				xico	Release	Project Owner:	Fax #:	State:	te 2310			101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476
5.4	Necerver	Persived Rv		Received By	al, regardless of whether si	whether based in contract or siness interruptions, loss (G 1	G 1	G 1	G 1	G 1	G 1	G 1	G 1	G 1	G 1	(G)RAB OR (G # CONTAINE GROUNDWAT	RS	T				0		TX Zip:				33-2476
Sample Condition	uj.	Ry:	Change and	BA	uch claim is based upon an	tussed in contract or tort, shall be limited to the amount paid by the client for the landayses. As claims including urber or insyngence and any work worker minimers, Interruptions, loss of use, or loss of profits incurred by client, its subsidiaries,	X	X	X	X	X	X	X	X	X	X	WASTEWATE SOIL OIL SLUDGE	-	MATRIX				ConocoPhillips						
n CHECKED BY: (Initials)				141	y of the above stated reason	arred by client, its subsidiar	X	X	X	X	X	X	X	X	X	X	OTHER : ACID/BASE: ICE / COOL OTHER :		PRESERV.	Fax #:	Phone #:	State:		Address: EMAIL	Attn: Christian Llull	Company: Tetra Tech	P.O. #:	BII	
	\	REN	AN MAN	/ Vert	ns or otherwise.	analyses. vii ciams inci les,	7/17/2023	7/17/2023	7/17/2023	7/17/2023	7/17/2023	7/17/2023	7/17/2023	7/17/2023 #	7/17/2023	7/17/2023	DATE T		SAMPLING			Zip:			Llull	ra Tech		BILL TO	
Turnarov a Time: Stan		REMARKS:	tesuits are ciliai	Verbal Result:		unfafau in seru futor	dies three for motions										TPH 80)15N	1										
Cool Intact			ICU. FICAS	Ves		or any any our	and any other										BTEX 8	8021	B										
Bacteria (only) Sample Condition Observed Temp. °C			e provine Line	I No			44	X	X	X	X	X	X	×	X	×	Chlorid	e SI	14	500	CI	-B						ANA	
nple Condition				Add'l Phone #:			hall be deemed waived								F													ALYSIS REQUEST	
		100 million 100 million	0	Verbal Result: Verbal Result:			shall be deemed waived unless made in writing and received by Cardinal within 30 days after																					UEST	
				tech.com			nd received by Cardinal v																			-			
							vithin 30 days after o																				_		

FORM-006 R 3.2 10/07/21

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Page 16 of 21

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	nomiquisi	Relinguished Ry		Relinquishe	event shall Cardinal affiliates or success	PLEASE NOTE: Liab										H2337	Lab I.D.	FOR LABUSE ONLY	Sampler Na	Project Loc	Project Nan	Project #:	Phone #:	City: Austin	Address: 85	Project Man	Company Name: Tetra Tech	
S - Bus	u uy.	d Rv-		ed By: (be liable for ors arising o	Wand Dame	19	8	15	2			_	12	11	Ľ,			me: Co	ation: E	ne: Myo				11 Cap	ager: C	ame: T	
- Other:				Relinquished By: Colton Bickerstaff	evert shall Cardnal be lade for incidental or consequental damages, including without imitation, basiness interruptions, leas of use, or leas of profits incurred by client, its subsidiaries affiliates or successions arising out of or related to the performance of services hereunder by Cardnal, regardies of whether such claim is based upon any of the above stand reasons	v and Damages. Cardinal's liability and client's exclu-	BG-1 (18'-19')	BG-1 (17'-18')	BG-1 (16'-17')	BG-1 (15'-16')	BG-1 (14'-15')	BG-1 (13'-14")	BG-1 (12'-13')	BG-1 (11'-12')	BG-1 (10'-11')	Sample I.D.			Sampler Name: Colton Bickerstaff	Project Location: Eddy County, New Mexico	#13	212C-MD-02882 P	(512)565-0190 F		Address: 8911 Capital o Texas Hwy, Suite 2310	Project Manager: Christian Llull		101 East Mai (575) 393-2
Observed Temp. °C (Corrected Temp. °C (Time:	Date:	Timey 200	Date: 7/19/23	including without limitation, busine services hereunder by Cardinal, re	sive remedy for any claim arising whether										I.D.				xico	Release	Project Owner:	Fax #:	State: TX	e 2310			101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476
4.S		Rec	7	Rec	gardless of	G G	G	G	G	G	G	G	G	G	G	(G)RAB OR (C)OMP.							Zip				38240 -2476
		Received By:		Received By;	tions, loss whether s	1 contract o	1	1	1	1	1	1	1	1	1	# CONTAINER												
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Sam; ie Condition Cool Intern			R.		d upon a	ed to the ar	-	F	-	_			-	-		OIL SLUDGE		RIX				ConocoPhillips						
/ on			4		ny of the	mount paid										OTHER :			Fay	Ph		S City:	Ad	Att	Co	P.C		
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(Init			2		ted reaso	X Sient for the	×	X	X	X	~	X	Ň	~	X	ICE / COOL OTHER :		RV.					Address: EMAIL	ristiar	y: Te		BI	
(Initials)			Mar 1	1	aries, ions or otherwise.	X 7/17/2023 client for the analyses. All claims	7/17/2023	7/17/2023	7/17/2023	7/17/2023	7/17/2023	7/17/2023	7/17/2023	7/17/2023	7/17/2023	DATE		SAMPLING			Zip:		AL.	Attn: Christian Lluli	Company: Tetra Tech		BILL TO	
Turnaround Time: Rush: NO	×.	REMARKS:	All Results are emailed, Please provide Email address: Crinisuan.Liun@veraecvi.com	Verbal Result:		is including those for neglige										TIME		ING										
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Bacteria (only) Sample Condition served Temp. "C			le Email			alsoever shall																					ANALYSIS REQUEST	
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BILL TO P.O. #: Company: Tetra Tech Attn: Christian Llull Address: EMAIL City: State: Zip: Phone #: PRESERV. Sample State: Zip: State: Zip: Phone #: PRESERV. Sample
p: UII UII SAM

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			n Bickerstaff	al or consequental damages, increated to the performance of se	BG-2 (19'-20') more Cardnal's lability and cherr's exclusion	BG-2 (18'-19')	BG-2 (17'-18')	BG-2 (16'-17')	BG-2 (15'-16')	BG-2 (14'-15')	BG-2 (13'-14')	BG-2 (12'-13')	BG-2 (11'-12')	BG-2 (10'-11')	Sample I.D.		Bickerstaff	County, New Mexi	State Com #13H R	212C-MD-02882 Pro	(512)565-0190 Fa) Texas Hwy, Suite	tian Llull	Tech	(575) 393-23
Time:	Date:	Time:200	Date: 7/19/23	luding without limitation, business vices hereunder by Cardinal, regi	(-2 (19'-20') G 1 X										P			00	elease	Project Owner:	Fax #:	State: TX	2310			(575) 393-2326 FAX (575) 393-2476
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ANALYSIS REQUEST

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(5/5) 393-2	(575) 393-2326 FAX (575) 393-2476	3-2476				C MARKET SOL						
Company Name: Tetra Tech					BILL TO				ANAL	ALYSIS REQUEST	IEST	
Project Manager: Christian Llull				P.O. #:			_	-				
Address: 8911 Capital o Texas Hwy, Suite 2310	e 2310			Company: Tetra Tech	Tetra Tech		-				_	
City: Austin	State: TX	(Zip:		Attn: Christian Llull	tian Llull						-	
Phone #: (512)565-0190 F	Fax #:			Address: EMAIL	MAIL					-		
Project #: 212C-MD-02882 P	Project Owner:		ConocoPhillips	S City:				_				
Project Name: Myox 31 State Com #13H Release	Release			State:	Zip:			B				
Project Location: Eddy County, New Mexico	rico			Phone #:				CI-		_		
Sampler Name: Colton Bickerstaff				Fax #:				000				
OR LABUSE ONLY			MATRIX	PRESERV.	/. SAMPLING	LING						
Sample I.D.	ID.	OR (C)OMP. AINERS		SE:	:		8015M	X 8021H ride SM				
233745		# CONT	WASTEN SOIL DIL	OTHER ACID/BA	DATE	TIME						
57 BG-3 (10'-11')		-	Х	X			+	+				
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5 BG-3 (12'-13')		G 1	X	X	7/17/2023		_	Х				•
SY BG-3 (13'-14')		G 1	X	X	7/17/2023		_	X				
55 BG-3 (14'-15')		G 1	Х	X	7/17/2023		_	X				
SC BG-3 (15'-16')		G 1	X	X	7/17/2023		_	X				
S7 BG-3 (16'-17')		G 1	Х	X	7/17/2023		_	Х				
S BG-3 (17'-18')		G 1	Х	X	7/17/2023		_	Х				
S7 BG-3 (18'-19')		G 1	X	X	7/17/2023		_	Х				
60 BG-3 (19'-20')		G 1	X	X	7/17/2023		_	Х				
PERSENDER: Unable and Changes. Cardinals hall and cards excluse mendy for any dammer bases interruptione for and hall he interds to be more practically the defect to be analyses. All datients event what Cardinal he labels to incidental is consequential dations, including whether bases interruptione, lass of use, or loss of sub-labels historical bases, including whether bases interruptione. Here, or loss of uses, or loss of use in the sub-labels of the performance of services hereunder by Cardinal, regardense of whether such claims is based upon any of the above stated reasons or chemister.	ve remedy for any claim arising whei ncluding without limitation, busine ervices hereunder by Cardinal, re	her based in contract or to ss interruptions, loss of gardless of whether su	ort, shall be limited to the a f use, or loss of profits in ch claim is based upon a	mount paid by the client fo curred by client, its subt any of the above stated n	r the analyses, All clain sidiaries, asons or otherwise,	s including those for negligence and any other cause	egligence and		whatsoever shall	be deemed waived unle	is made in writing and i	shall be deemed vaived unless made in writing and received by Cardinal vathin 30 days after compi
Relinquished By: Colton Bickerstaff	Date: 7/19/23 Time:/200	Received By	V ADMA		all all	Verbal Result: All Results are	□ Yes emailed.	□ No Please provi	de Email a	Add'l Phone #: address: Christi	Nerbal Result: Verbal Result: Please provide Email address: Christian.Lluil@teratech.com	ch.com
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FORM-006 R 3.2 10/07/2

Sampler - Lips - Bus - Other:

Observed Temp. °C Corrected Temp. °C

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Corrected Temp. "C

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Sample Conditio Cool Intact

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July 26, 2023

CHRISTIAN LLULL TETRA TECH 901 WEST WALL STREET , STE 100 MIDLAND, TX 79701

RE: MYOX 31 STATE COM #13H RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 07/20/23 12:45.

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. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	07/20/2023	Sampling Date:	07/20/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 3 (0-1') (H233780-01)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.01	100	2.00	2.14	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	109	2.00	3.75	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.19	109	2.00	3.81	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.51	108	6.00	3.82	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	120 :	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/25/2023	ND	416	104	400	3.77	
TPH 8015M	mg/kg		Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	203	102	200	1.66	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	206	103	200	4.84	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	84.9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	89.1	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	07/20/2023	Sampling Date:	07/20/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 4 (0-1') (H233780-02)

BTEX 8021B	mg,	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.01	100	2.00	2.14	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	109	2.00	3.75	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.19	109	2.00	3.81	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.51	108	6.00	3.82	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/25/2023	ND	416	104	400	3.77	
TPH 8015M	mg,	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	203	102	200	1.66	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	206	103	200	4.84	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	89.2	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	91.6	% 49.1-14	8						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	07/20/2023	Sampling Date:	07/20/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 5 (0-1') (H233780-03)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.01	100	2.00	2.14	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	109	2.00	3.75	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.19	109	2.00	3.81	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.51	108	6.00	3.82	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	115 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	07/25/2023	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	203	102	200	1.66	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	206	103	200	4.84	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	74.9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	78.0	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	07/20/2023	Sampling Date:	07/20/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 6 (0-1') (H233780-04)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.01	100	2.00	2.14	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	109	2.00	3.75	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.19	109	2.00	3.81	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.51	108	6.00	3.82	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	114 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/25/2023	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	203	102	200	1.66	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	206	103	200	4.84	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	87.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	88.6	% 49.1-14	8						

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

Received:	07/20/2023	Sampling Date:	07/20/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 7 (0-1') (H233780-05)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.01	100	2.00	2.14	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	109	2.00	3.75	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.19	109	2.00	3.81	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.51	108	6.00	3.82	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	112 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	07/25/2023	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	203	102	200	1.66	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	206	103	200	4.84	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	87.9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	92.0	% 49.1-14	8						

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

Received:	07/20/2023	Sampling Date:	07/20/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 8 (0-1') (H233780-06)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.01	100	2.00	2.14	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	109	2.00	3.75	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.19	109	2.00	3.81	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.51	108	6.00	3.82	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	116 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/25/2023	ND	416	104	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	203	102	200	1.66	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	206	103	200	4.84	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	73.9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	77.1	% 49.1-14	8						

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

Received:	07/20/2023	Sampling Date:	07/20/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 9 (0-1') (H233780-07)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.01	100	2.00	2.14	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	109	2.00	3.75	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.19	109	2.00	3.81	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.51	108	6.00	3.82	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	116 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/25/2023	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	203	102	200	1.66	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	206	103	200	4.84	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	87.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	92.1	% 49.1-14	8						

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

Received:	07/20/2023	Sampling Date:	07/20/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 10 (0-1') (H233780-08)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.22	111	2.00	0.425	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	108	2.00	1.08	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.08	104	2.00	0.264	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.24	104	6.00	0.118	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	103	% 71.5-13	4						
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/25/2023	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	203	102	200	1.66	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	206	103	200	4.84	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	84.3	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	89.8	% 49.1-14	8						

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

Received:	07/20/2023	Sampling Date:	07/17/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 1 (0-1') (H233780-09)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.22	111	2.00	0.425	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	108	2.00	1.08	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.08	104	2.00	0.264	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.24	104	6.00	0.118	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10200	16.0	07/25/2023	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	203	102	200	1.66	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	206	103	200	4.84	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	87.9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	93.4	% 49.1-14	8						

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

Received:	07/20/2023	Sampling Date:	07/17/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 1 (2'-3') (H233780-10)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.22	111	2.00	0.425	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	108	2.00	1.08	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.08	104	2.00	0.264	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.24	104	6.00	0.118	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4320	16.0	07/25/2023	ND	416	104	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	203	102	200	1.66	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	206	103	200	4.84	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	88.5	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	94.1	% 49.1-14	8						

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

Received:	07/20/2023	Sampling Date:	07/17/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 1 (4'-5') (H233780-11)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.22	111	2.00	0.425	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	108	2.00	1.08	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.08	104	2.00	0.264	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.24	104	6.00	0.118	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5440	16.0	07/25/2023	ND	416	104	400	0.00	QM-07
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	203	102	200	1.66	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	206	103	200	4.84	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	98.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	105 9	% 49.1-14	8						

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

Received:	07/20/2023	Sampling Date:	07/17/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 1 (6'-7') (H233780-12)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.22	111	2.00	0.425	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	108	2.00	1.08	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.08	104	2.00	0.264	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.24	104	6.00	0.118	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 71.5-13	4						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6400	16.0	07/25/2023	ND	416	104	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/25/2023	ND	201	101	200	11.4	
DRO >C10-C28*	12.1	10.0	07/25/2023	ND	204	102	200	4.16	
EXT DRO >C28-C36	<10.0	10.0	07/25/2023	ND					
Surrogate: 1-Chlorooctane	94.6	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	98.8	% 49.1-14	8						

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

Received:	07/20/2023	Sampling Date:	07/17/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 1 (9'-10') (H233780-13)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.22	111	2.00	0.425	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	108	2.00	1.08	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.08	104	2.00	0.264	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.24	104	6.00	0.118	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3360	16.0	07/25/2023	ND	416	104	400	0.00	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/25/2023	ND	201	101	200	11.4	
DRO >C10-C28*	<10.0	10.0	07/25/2023	ND	204	102	200	4.16	
EXT DRO >C28-C36	<10.0	10.0	07/25/2023	ND					
Surrogate: 1-Chlorooctane	90.9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	95.4	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	07/20/2023	Sampling Date:	07/17/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 1 (14'-15') (H233780-14)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.22	111	2.00	0.425	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	108	2.00	1.08	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.08	104	2.00	0.264	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.24	104	6.00	0.118	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2400	16.0	07/25/2023	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/25/2023	ND	201	101	200	11.4	
DRO >C10-C28*	<10.0	10.0	07/25/2023	ND	204	102	200	4.16	
EXT DRO >C28-C36	<10.0	10.0	07/25/2023	ND					
Surrogate: 1-Chlorooctane	90.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	95.1	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	07/20/2023	Sampling Date:	07/17/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 1 (19'-20') (H233780-15)

BTEX 8021B	mg,	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.22	111	2.00	0.425	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	108	2.00	1.08	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.08	104	2.00	0.264	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.24	104	6.00	0.118	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2600	16.0	07/25/2023	ND	416	104	400	0.00	
TPH 8015M	mg,	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	194	96.8	200	12.3	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	208	104	200	2.86	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	79.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	81.5	% 49.1-14	8						

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

Received:	07/20/2023	Sampling Date:	07/17/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 2 (0-1') (H233780-16)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.22	111	2.00	0.425	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	108	2.00	1.08	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.08	104	2.00	0.264	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.24	104	6.00	0.118	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7840	16.0	07/25/2023	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	194	96.8	200	12.3	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	208	104	200	2.86	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	77.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	80.2	% 49.1-14	8						

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

Received:	07/20/2023	Sampling Date:	07/17/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 2 (2'-3') (H233780-17)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.22	111	2.00	0.425	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	108	2.00	1.08	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.08	104	2.00	0.264	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.24	104	6.00	0.118	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4320	16.0	07/25/2023	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	194	96.8	200	12.3	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	208	104	200	2.86	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	94.7	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	96.5	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	07/20/2023	Sampling Date:	07/17/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 2 (4'-5') (H233780-18)

BTEX 8021B	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.22	111	2.00	0.425	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	108	2.00	1.08	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.08	104	2.00	0.264	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.24	104	6.00	0.118	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4160	16.0	07/25/2023	ND	416	104	400	0.00	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	194	96.8	200	12.3	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	208	104	200	2.86	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	75.9	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	76.8	% 49.1-14	8						

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

Received:	07/20/2023	Sampling Date:	07/17/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 2 (6'-7') (H233780-19)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.22	111	2.00	0.425	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	108	2.00	1.08	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.08	104	2.00	0.264	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.24	104	6.00	0.118	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5600	16.0	07/25/2023	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	194	96.8	200	12.3	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	208	104	200	2.86	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	78.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	79.8	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	07/20/2023	Sampling Date:	07/17/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 2 (9'-10') (H233780-20)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.22	111	2.00	0.425	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	108	2.00	1.08	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.08	104	2.00	0.264	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.24	104	6.00	0.118	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 71.5-13	4						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3280	16.0	07/25/2023	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	194	96.8	200	12.3	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	208	104	200	2.86	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	77.1	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	80.7	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	07/20/2023	Sampling Date:	07/17/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 2 (14'-15') (H233780-21)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.22	111	2.00	0.425	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	108	2.00	1.08	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.08	104	2.00	0.264	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.24	104	6.00	0.118	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1960	16.0	07/25/2023	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	194	96.8	200	12.3	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	208	104	200	2.86	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	78.0	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	78.9	% 49.1-14	8						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	07/20/2023	Sampling Date:	07/17/2023
Reported:	07/26/2023	Sampling Type:	Soil
Project Name:	MYOX 31 STATE COM #13H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 02882	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: BH - 23 - 2 (19'-20') (H233780-22)

BTEX 8021B	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2023	ND	2.22	111	2.00	0.425	
Toluene*	<0.050	0.050	07/24/2023	ND	2.17	108	2.00	1.08	
Ethylbenzene*	<0.050	0.050	07/24/2023	ND	2.08	104	2.00	0.264	
Total Xylenes*	<0.150	0.150	07/24/2023	ND	6.24	104	6.00	0.118	
Total BTEX	<0.300	0.300	07/24/2023	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 9	% 71.5-13	4						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	07/25/2023	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/24/2023	ND	194	96.8	200	12.3	
DRO >C10-C28*	<10.0	10.0	07/24/2023	ND	208	104	200	2.86	
EXT DRO >C28-C36	<10.0	10.0	07/24/2023	ND					
Surrogate: 1-Chlorooctane	82.4	% 48.2-13	4						
Surrogate: 1-Chlorooctadecane	83.7	% 49.1-14	8						

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Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Tetra Tech		(575) 393-2326 FAX (575) 393-2476	3-2476							
Project Manager: Christian Llull	Christian Llull			PO #			MINALI			
Address: 8911 Ca	Address: 8911 Capital o Texas Hwy, Suite 2310	2310		Company: Tetra Tech						
City: Austin		State: T	TX Zip:	Attn: Christian Llull						
Phone #:	(512)565-0190 Fax #:	(#:		Address: EMAIL			_			_
Project #:	212C-MD-02882 Proj	Project Owner:	ConocoPhillips	DS City:			1			
roject Name: My	Project Name: Myox 31 State Com #13H Release	lease				B				
roject Location:	Project Location: Eddy County, New Mexico	0		*		I-J				
ampler Name: C	Sampler Name: Colton Bickerstaff			Fax #:		000				
OR LAB USE ONLY			MATRIX	PRESERV.	SAMPLING	450				
	Sample I.D.	.9	VATER		3015M	8021B de SM				
633780			# CONT GROUN WASTEV SOIL	SLUDGE OTHER ACID/BA CE / CC OTHER	TPH					
1	BH-23-3 (0-1')		X	X	4	+				-
s	BH-23-4 (0-1')		G 1 X		X	+				
w	BH-23-5 (0-1')		G 1 X	, X 7/20/2023	X	+				-
4	BH-23-6 (0-1')		1	X 7/20/2023	X	+				
5	BH-23-7 (0-1')		G 1 X	X 7/20/2023	X	+				
4	BH-23-8 (0-1')		G 1 X		X	+				
2	BH-23-9 (0-1')		G 1 X	X 7/20/2023	X	+				
8	BH-23-10 (0-1')				X	+				
9	BH-23-1 (0-1')		-	_	X	+				
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CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

APPENDIX E Photographic Documentation







APPENDIX F NMSLO Seed Mixture Info



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MAP I	EGEND	MAP INFORMATION
Area of Interest (AOI) Area of Interest (AOI)	Spoil AreaStony Spot	The soil surveys that comprise your AOI were mapped at 1:20,000.
	10	
 Sinkhole Slide or Slip Sodic Spot 		Date(s) aerial images were photographed: Nov 12, 2022—Dec 2, 2022 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.

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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
RM	Reeves-Reagan loams, 0 to 3 percent slopes	0.8	100.0%
Totals for Area of Interest		0.8	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.

Eddy Area, New Mexico

RM—Reeves-Reagan loams, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w5g Elevation: 1,100 to 4,400 feet Mean annual precipitation: 7 to 25 inches Mean annual air temperature: 57 to 70 degrees F Frost-free period: 200 to 240 days Farmland classification: Not prime farmland

Map Unit Composition

Reeves and similar soils: 50 percent Reagan and similar soils: 35 percent Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reeves

Setting

Landform: Ridges, plains, hills Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope Landform position (three-dimensional): Side slope, head slope, nose slope, crest Down-slope shape: Convex Across-slope shape: Linear Parent material: Residuum weathered from gypsum

Typical profile

H1 - 0 to 8 inches: loam H2 - 8 to 32 inches: clay loam H3 - 32 to 60 inches: gypsiferous material

Properties and qualities

Slope: 0 to 1 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): 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: 25 percent
Gypsum, maximum content: 80 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): 3s Land capability classification (nonirrigated): 7s Hydrologic Soil Group: B Ecological site: R070BC007NM - Loamy Hydric soil rating: No

Description of Reagan

Setting

Landform: Fan remnants, alluvial fans Landform position (three-dimensional): Rise Down-slope shape: Convex, linear Across-slope shape: Linear Parent material: Alluvium and/or eolian deposits

Typical profile

H1 - 0 to 8 inches: loam *H2 - 8 to 30 inches:* loam *H3 - 30 to 82 inches:* clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
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: 50 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 15.0
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 6e Hydrologic Soil Group: B Ecological site: R070BC007NM - Loamy Hydric soil rating: No

Minor Components

Gypsum land

Percent of map unit: 5 percent Hydric soil rating: No

Upton

Percent of map unit: 5 percent Ecological site: R070BC025NM - Shallow Hydric soil rating: No

Cottonwood

Percent of map unit: 5 percent Ecological site: R070BB006NM - Gyp Upland Hydric soil rating: No

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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
<u>Forbs:</u> Firewheel (<i>Gaillardia</i>)	VNS, Southern	1.0	D
Shrubs: Fourwing saltbush Common winterfat	Marana, Santa Rita VNS, Southern	1.0 0.5	D F
	Total PLS/acr		8

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

CONDITIONS

Operator:	OGRID:
COG OPERATING LLC	229137
600 W Illinois Ave	Action Number:
Midland, TX 79701	261463
	Action Type:
	[C-141] Release Corrective Action (C-141)
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CONDITIONS

Created By	Condition	Condition Date
amaxwell	Remediation plan approved. Submit a closure report via the OCD permitting portal by 1/29/2024.	9/25/2023

Action 261463