TETRA TECH

November 26, 2024

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

Re: REVISED Closure Report
ConocoPhillips
USP Fee #002H Release
Unit Letter D, Section 16, Township 23 South, Range 29 East
Eddy County, New Mexico
Incident ID# NAB1721651816

Ms. Maxwell:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips Company (ConocoPhillips) to assess a historical COG Operating, LLC (COG) release associated with the USP Fee #002 (API No. 30-015-34438). The release footprint is located in Public Land Survey System (PLSS) Unit Letter D, Section 16, Township 23 South, Range 29 East, in Eddy County, New Mexico (Site). The approximate release point occurred at coordinates 32.298937°, -103.973225°, as shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico Oil Conservation Division (NMOCD) C-141 Initial Report, the release occurred on July 10, 2017. The release occurred from a damaged flowline along the road and in the pasture away from the well location. Approximately fifteen (15) barrels (bbls) of produced water were released, of which 0 bbls were recovered. The approximate release extent is presented in Figure 3. The NMOCD approved the initial C-141 on August 4, 2017, and subsequently assigned the release the Incident ID NAB1721651816. The initial C-141 form is included in Appendix A.

This incident is included in an Agreed Compliance Order-Releases (ACO-R) between ConocoPhillips and the NMOCD signed on May 7 and 9, 2019, respectively.

LAND OWNERSHIP

According to the NMOCD Oil and Gas Map, the Site is located on Federal lands managed by the Bureau of Land Management (BLM). This Closure Report will be duly provided to the BLM for review and approval.

SITE CHARACTERIZATION

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

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According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there is one (1) water well within a 579-meter radius (approximately 0.39-miles) of the site that was installed to a depth of 400 feet (ft), however depth to water is not provided. According to the NMOSE, there is one well within 1.23 miles (1,979 meters) with a total well depth of 58 ft below ground surface (bgs) and a depth to water of 54 ft bgs. The site characterization data are presented in Appendix B.

REGULATORY FRAMEWORK

Based upon the release footprint and in accordance with Subsection E of 19.15.29.12 NMAC, per 19.15.29.11 NMAC, the initial 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 previous site characterization, localized depth to groundwater, and in accordance with Table I of 19.15.29.12 NMAC, the previously established RRALs for the Site were as follows:

Constituent	Site RRALs
Chloride	600 mg/kg
TPH	100 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

2017 WORK PLAN - COG

On August 24, 2017, COG personnel were onsite to evaluate and conduct assessment activities in the release area. One (1) trench (T-1) was installed within the release area to a depth of 12 ft bgs. One (1) background trench (T-2 BG) was installed to a depth of 14 ft approximately 75 ft south of the release area. No other trenches were installed in the west portion of the release area due to safety concerns related to the pipeline right of way. The trench locations from the August 2017 sampling event are presented in Figure 3.

A total of nineteen (19) samples were collected and submitted to Xenco Laboratories located in Midland, Texas to be analyzed for TPH by method SW80158 Mod, BTEX by method EPA 8021B, and chloride by method EPA 300/300.1. The laboratory analytical results from the August 2017 sampling event are summarized in Table 1. The analytical results from T-1 exceeded the Site RRALs for chloride to 6 ft bgs. The analytical results for the background trench (T-2 BG) had chloride concentrations which increased with depth, the highest concentration of chloride was 1,450 mg/kg at 10 ft bgs.

A Work Plan dated September 25, 2017, was prepared by Tetra Tech on behalf of COG Operating, LLC. The Work Plan stated that based on the location of the release in relation to the nearby Salt Lake (located approximately 800 ft southwest of the site), the chloride concentrations detected at T-2 BG appeared to be natural to the area. The Work Plan proposed to install two additional background trenches to the north and south of the release extent to verify the background chloride concentrations prior to the proposed excavation. Tetra Tech, on behalf of COG, proposed to remove the soils with chloride concentrations that are above the background chloride concentrations in the area of T-1 to a depth of between 2 and 4 ft bgs.

On October 3, 2017, Mike Bratcher of the NMOCD, approved the proposed remedial actions via email with the following comments:

- *"COG's proposal for additional investigation and proposed remedial actions based on results is approved.*
- *Federal sites will require like approval from BLM. Please advise once remedial activities have been scheduled."*

A copy of the October 3, 2017, email correspondence is located in Appendix C.

2019 REMEDIATION SUMMARY AND DEFERRAL REQUEST - TRC

On November 1, 2018, TRC Environmental Corporation (TRC) installed two (2) additional soil investigation trenches outside of the release area on behalf of COG. One trench (North Vertical) was installed north of the release footprint to 10 ft bgs and the second trench (South Vertical) south of the release footprint to 12 ft bgs. A total of seventeen (17) samples were collected and submitted to Cardinal Laboratories in Hobbs, New Mexico, to be analyzed for chloride using method SM 4500Cl-B. The trench locations for the November 2018 sampling event are presented in Figure 4.

The laboratory analytical results from the November 2018 sampling event are summarized in Table 2. Analytical results from the additional background trenches exceeded the proposed site RRALs for chloride from 3 ft bgs to 10 ft bgs at the North Vertical trench and from 2 ft to 12 ft bgs at the South Vertical trench.

On November 16, 2018, TRC excavated impacted soils within the release area to approximately 2 ft bgs. A Remediation Summary and Deferral Request was prepared by TRC dated April 11, 2019. The report noted that the excavated area did not match the footprint of the impacted area as indicated by the NMOCD approved Work Plan, as the existing pipeline infrastructure of the right of way impeded a full excavation. In the deferral request TRC stated that soil samples indicated that soil is not affected above background chloride concentrations, which have been established in the right of way topographically above the Salt Lake lithology, deeper than 4 ft bgs. The report requests remediation, restoration and reclamation be deferred until equipment is removed during other operations and/or at time of abandonment, whichever occurs first, due to infrastructure and potential risk.

Due to the regulations at the time, no confirmation samples were collected during the remedial activities. The Remediation Summary and Deferral Request report was submitted to the NMOCD. On May 5, 2023, the NMOCD rejected the report with the following comments:

- *"A deferral cannot be granted on a release if the depth to water is <50' depth to groundwater. At that point, a hydrovac/shovel would need to be used to safely remove the contaminated soil around equipment and pipelines. The release will need to be remediated to the strictest closure criteria limits (600 mg/kg, Chlorides, 100 mg/kg TPH, etc.). If you feel the depth to groundwater is >50', a shallow borehole can be drilled to 51' allowing for verification of the depth. If water is not visible after reaching bottom-hole and waiting 72 hours, the OCD will accept this as evidence. We would just need a copy of the driller's log.*
- *Horizontal delineation submitted was incomplete and did not meet the requirements of 19.15.29.11 NMAC.*
- *Submit a work plan via the OCD permitting portal by 8/11/2023."*

A copy of the Remediation Summary and Deferral Request report is available in the NMOCD online incident files. Photographs of the remedial activities conducted by TRC are found in Appendix D.

2024 ADDITIONAL SITE ASSESSMENT - TETRA TECH

Based on the NMOCD rejection, on July 3, 2024, Tetra Tech conducted additional soil sampling at the Site to assess the current soil concentration levels within the reported release footprint/previously remediated area. Additional assessment activities included installing seven (7) hand auger borings (AH-1 through AH-7) in the release area to a total depth ranging from 1-2 ft below surrounding grade (bgs). Auger refusal was met at roughly 2 ft bgs due to a dense subsurface lithology (caprock) beneath the footprint. Four (4) hand auger borings (AH-8 through AH-11) were installed along the perimeter of the release extent to 1-foot bgs. Photographic documentation of the Site is included in Appendix D.

A total of fourteen (14) samples were collected and submitted to Cardinal to be analyzed for chloride via Method SM4500, TPH via EPA Method 8015M, and BTEX via EPA Method 8261B. A copy of the laboratory

analytical reports and chain-of-custody documentation are included in Appendix E. The laboratory analytical results from the July 2024 additional assessment are summarized in Table 3.

The laboratory analytical results from the July 2024 assessment are summarized in Table 3. The analytical results associated with the collected samples indicated exceedances above the proposed Site RRALs for chlorides at 1-2 ft bgs at locations AH-3 and AH-5 (within the release extent). Analytical results associated with AH-11 exceeded the Site RRAL for chlorides at 0-1 ft bgs. Vertical and horizontal delineation was not achieved during this mobilization, however, previously collected data from COG had vertically delineated the chloride concentrations at 8 ft bgs.

Based on the July 2024 sampling event results, Tetra Tech remobilized to the Site on August 14, 2024, to conduct additional sampling to horizontally delineate the footprint and install a trench outside the release area. The purpose of the additional trench was to collect background data associated with native chloride in the area. One additional hand auger boring (AH-12) was installed to the east of the release to 1-foot bgs to complete the horizontal delineation of the release footprint. The trench (BG T-1) was installed approximately 58 ft north of the release area in an area undisturbed by oil and gas activities and uphill from the release area. BG T-1 was installed to 12 ft bgs, and samples were collected in 1-foot intervals, per NMOCD guidance. Sample locations from the July and August 2024 sampling event are presented in Figure 5.

A total of thirteen (13) soil samples were collected from both the hand auger boring and the background trench. The sample from the hand auger boring was submitted to Cardinal to be analyzed for chloride via Method SM4500, TPH via EPA Method 8015M, and BTEX via EPA Method 8261B. The samples from the background trench were submitted for chloride analysis via Method SM4500. A copy of the laboratory analytical reports and chain-of-custody documentation are included in Appendix E.

The laboratory analytical results from the August 2024 additional assessment are summarized in Table 3 and the collected background results are summarized in Table 4. Horizontal delineation of the release was achieved.

SUMMARY OF ADDITIONAL BACKGROUND SAMPLING

Chloride concentrations at the 2024 background trench location were variable, but every interval sampled in BG T-1 exceeded the proposed chloride RRAL for the Site (600 mg/kg). The soil interval at 2-3 ft bgs exhibited a maximum concentration of 2,000 mg/kg chloride. Chloride concentrations at depth were relatively consistent from 3 to 12 ft bgs, ranging from 1,410 mg/kg to 1,780 mg/kg. The 2024 trench data corroborates the results from the previous background data collected and confirms that chloride concentrations do indeed vary considerably in native, unimpacted soils in this area.

Based on the Site location (adjacent to the Salt Lake and virtually surrounded by salt mining operations), the soil chloride concentrations observed in the additional assessment appear to reflect natural background concentrations rather than a result of the reported release. In comparison, the soil at the 1-2 bgs interval inside the release footprint exhibits a lower chloride concentration than the corresponding depth interval in the background trench outside of the release footprint. As such, the soils (within the footprint) in the 1–2-foot bgs sample interval from borings AH-3 and AH-5, with chloride concentration of 848 and 1,250 mg/kg, respectively, are presumed native and are proposed to be left in place. As for AH-11 (collected outside the release footprint as a horizontal), the collected data also corresponds with the background trench results from 0-1 bgs and reflects the natural chloride in soil for this area.

Furthermore, this release footprint is in close proximity to a previous incident with the same name, the USP Fee #002 Release (NJMW1324847819). This incident is located approximately 1.5 miles northwest of the 2017 USP Fee #002H (NAB1721651816) incident. The USP Fee #002 Release (NJMW1324847819) REVISED Closure Request was approved by the NMOCD in 2023. Background data was also collected as a portion of that work, and a Site RRAL of 7,383 mg/kg for chloride was approved by the NMOCD, based on site conditions and native chloride for the area.

VARIANCE REQUEST

In accordance with 19.15.29.14 NMAC, ConocoPhillips requests a variance to establish an alternate remediation limit for chlorides at this Site based on documented natural chloride concentrations in the area. This historical release footprint has been delineated to 600 mg/kg for chlorides. Based on the abundance of background data collected in 2017 by COG, 2018 by TRC and in 2024 by Tetra Tech, it can be concluded that naturally occurring chlorides are prevalent in this area, and within the release footprint.

The average chloride concentration from the analytical results from Tetra Tech's background trench BG T-1 is 1,572 mg/kg, and the lowest chloride concentration was 1,410 mg/kg. The subsurface concentrations in AH-3 and AH-5 are below either of those concentrations. Based on photos from TRC's Remediation Summary and Deferral Request Report, remedial action in the footprint was completed to approximately 2 ft bgs. Sample locations AH-4, AH-7, AH-9 and AH-10 collected within the release area can be used to demonstrate remedial activities did occur and surface soils are currently below 600 mg/kg for chlorides.

The release impact is fully delineated, and the Site is in an area with naturally occurring variations of mineral salts in the soils, as evidenced by the collected data. The concentrations observed in the data are natural variations of chloride at depth. Based on the background sampling, the alternate proposed RRALs for the Site are as follows:

Constituent	Site RRALs
Chloride	1,410 mg/kg
TPH	100 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

Based on this new proposed RRAL for chloride, the release was appropriately remediated by TRC. Any additional remediation could lead to pursuing natural chlorides within the release area footprint. Furthermore, during site assessment, vegetation was observed in the release area (Appendix D), as such, it appears this historical release has not interfered with vegetation regrowth.

2024 NMOCD REJECTION

Tetra Tech submitted a Closure Request on September 27, 2024. The NMOCD rejected the Closure Request on September 30, 2024, with the following comments:

- *"Remediation and reclamation closure denied.*
- *Operator failed to provide proper Sampling Notification pursuant to 19.15.29.12.D.(1).(a) NMAC. Failure to provide proper sampling notice is a compliance issue and OCD may pursue compliance actions pursuant to 19.15.5 NMAC.*
- *Operator shall ensure future compliance with 19.15.29.12.D.(1).(a) NMAC There is no record of a C-141N, sampling notification, was submitted for samples collected in 2024.*
- *Submit report via the OCD permitting portal by October 31, 2024."*

A copy of the Closure Report is available in the NMOCD online incident files. A copy of the rejection is included in Appendix C.

On October 7, 2024, a Microsoft Teams meeting was held with Tetra Tech and Ms. Ashley Maxwell of the NMOCD to clarify the September 30, 2024, rejection comments. During this call, Ms. Maxwell stated this rejection was based on a technicality as a C-141N confirmation sampling notification was not submitted prior the July 7, 2024**.** A C-141N was required **for** the samples collected on July 7, 2024, as the samples were being used to request closure. Ms. Maxwell recommended an additional sampling event, with a C-141N submitted prior to the collection of samples.

A 30-day extension was requested by Tetra Tech on October 31, 2024, and approved by the NMOCD. A copy of the extension request is included in Appendix C.

2024 CONFIRMATION SAMPLING RESULTS

A variance request to sample at a frequency of every 400 square ft for the subject line was requested via email on October 17, 2024. The variance was approved on October 17, 2024, via email. A copy of the variance request is included in Appendix C.

Prior to the confirmation sampling event, in accordance with Subsection D of 19.15.29.12 NMAC, the NMOCD was notified via the OCD portal on October 23, 2024. Documentation of the C-141N notification is included in Appendix C. On October 28, 2024, Tetra Tech personnel mobilized to complete confirmation sampling. Seven (7) confirmation samples (CS-1 through CS-7) were collected to 0-1 ft bgs within and around the release footprint to ensure compliance with 19.15.29.12.D.(1).(a) NMAC. The sample locations are presented in Figure 6.

A total of seven (7) samples were collected and sent to Cardinal to be analyzed for chloride via Method SM4500, TPH via EPA Method 8015M, and BTEX via EPA Method 8261B. A copy of the laboratory analytical reports and chain-of-custody documentation are included in Appendix E.

The laboratory analytical results from the October 2024 confirmation sampling event are summarized in Table 5. The analytical results were all below reclamation requirements.

CONCLUSION

ConocoPhillips respectfully requests closure of the release incident based on the confirmation sampling results. The final C-141 forms are enclosed in Appendix A. If you have any questions concerning this report, please call me at (512) 596-8201.

Sincerely,
Tetra Tech, Inc.

Lisbeth Chavira
Project Manager

Christian M. Llull, P.G.
Program Manager

cc:
Mr. Moises Cantu Garcia, PBU – ConocoPhillips

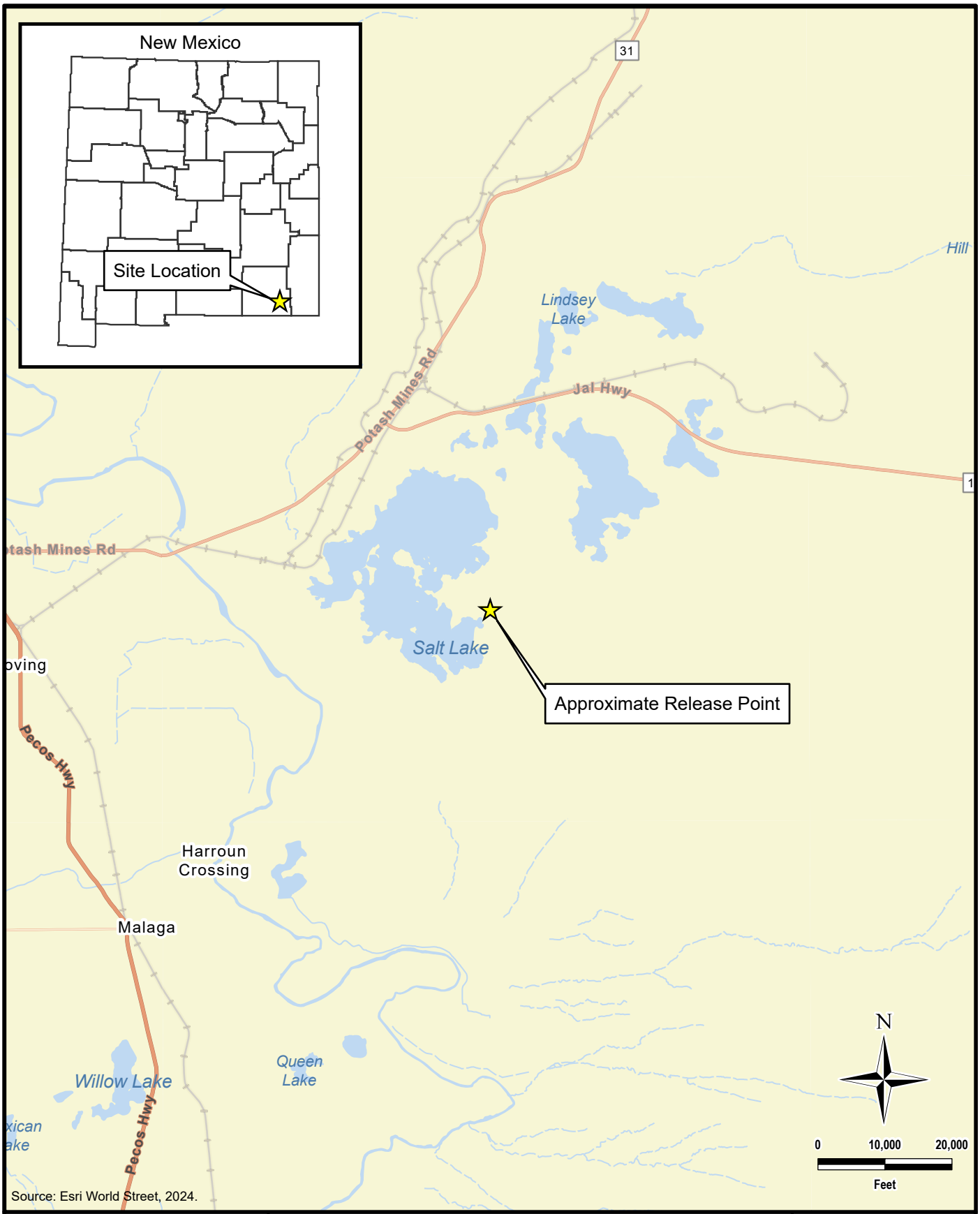
LIST OF ATTACHMENTS

Figures:

Tables:

Appendices:

FIGURES



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CONOCOPHILLIPS

NAB1721651816
(32.298952°, -103.973298°)
EDDY COUNTY, NEW MEXICO

USP FEE #002H RELEASE OVERVIEW MAP

PROJECT NO.:	212C-MD-03545
DATE:	AUGUST 27, 2024
DESIGNED BY:	LMV

Figure No.

1

Source: Esri USGS Topo.

DOCUMENT PATH: Y:\CONOCOPHILLIPS\USP_FEE_2H\USP_FEE_2H.APRX

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CONOCOPHILLIPS

NAB1721651816
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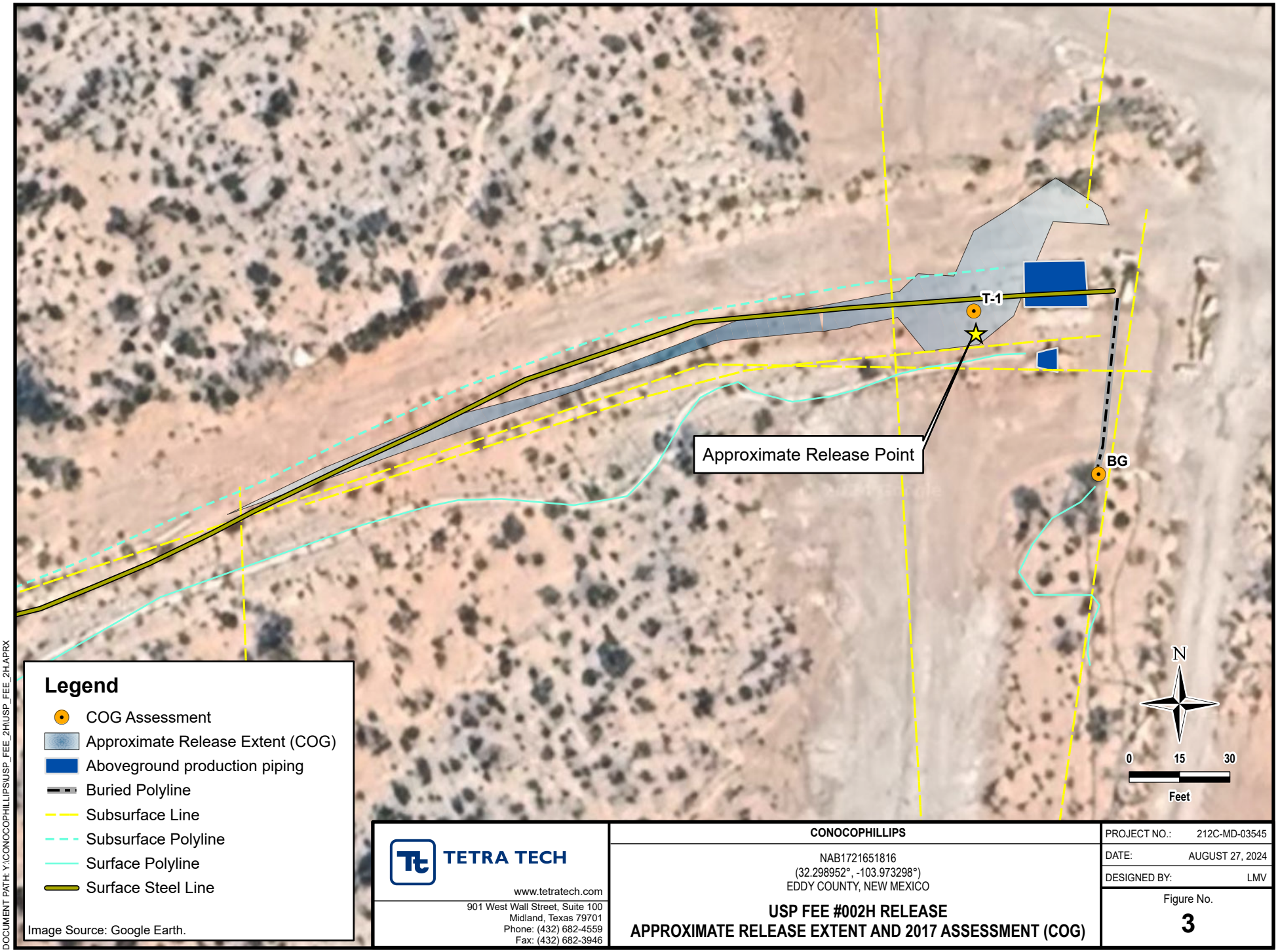
EDDY COUNTY, NEW MEXICO

USP FEE #002H RELEASE
TOPOGRAPHIC MAP

PROJECT NO.:	212C-MD-0XXX
DATE:	AUGUST 27, 2024
DESIGNED BY:	LMV

Figure No.
2



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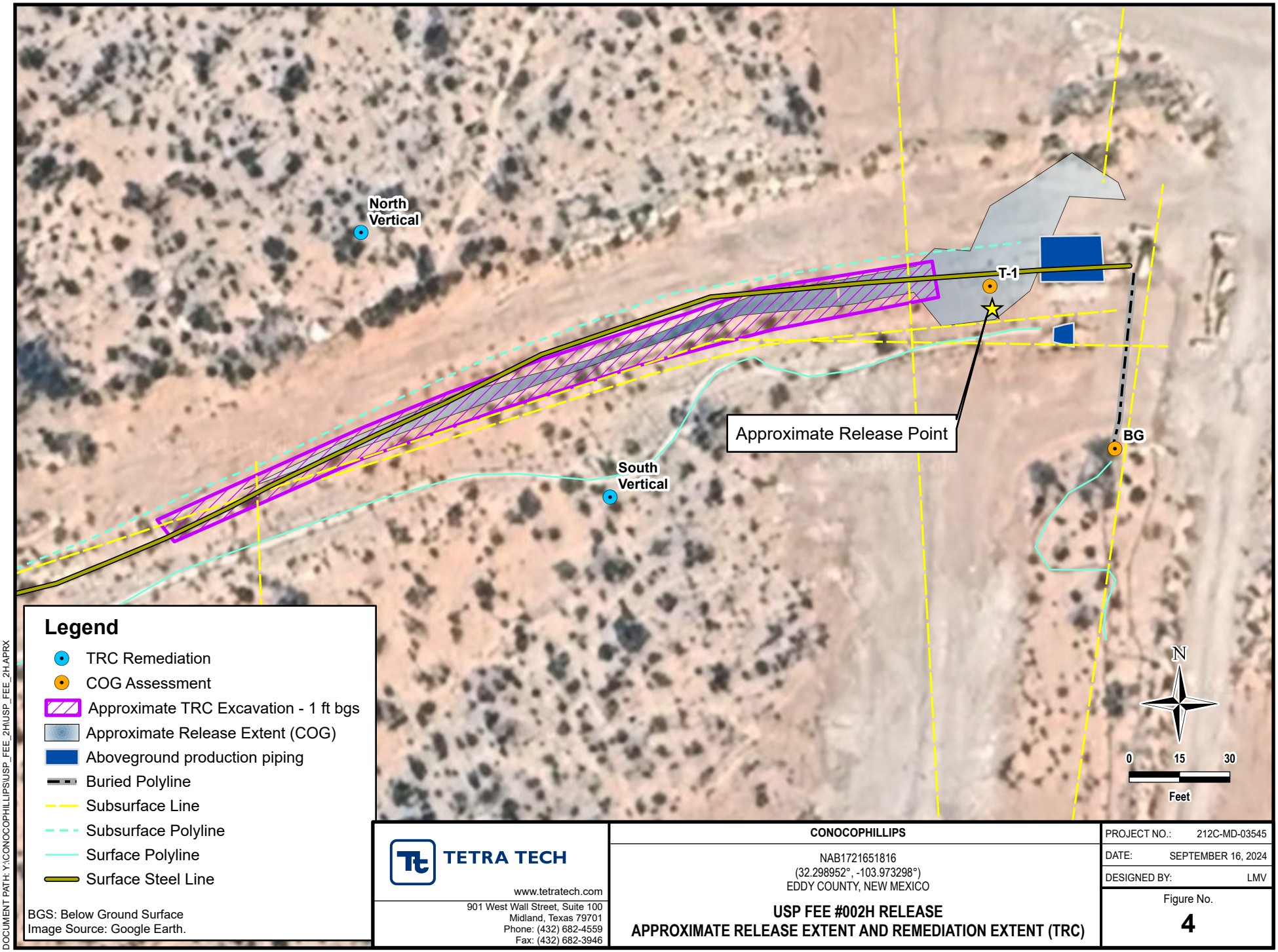
CONOCOPHILLIPS

NAB1721651816
(32.298952°, -103.973298°)
EDDY COUNTY, NEW MEXICO

USP FEE #002H RELEASE
APPROXIMATE RELEASE EXTENT AND 2017 ASSESSMENT (COG)

PROJECT NO.:	212C-MD-03545
DATE:	AUGUST 27, 2024
DESIGNED BY:	LMV

Figure No.
3



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CONOCOPHILLIPS

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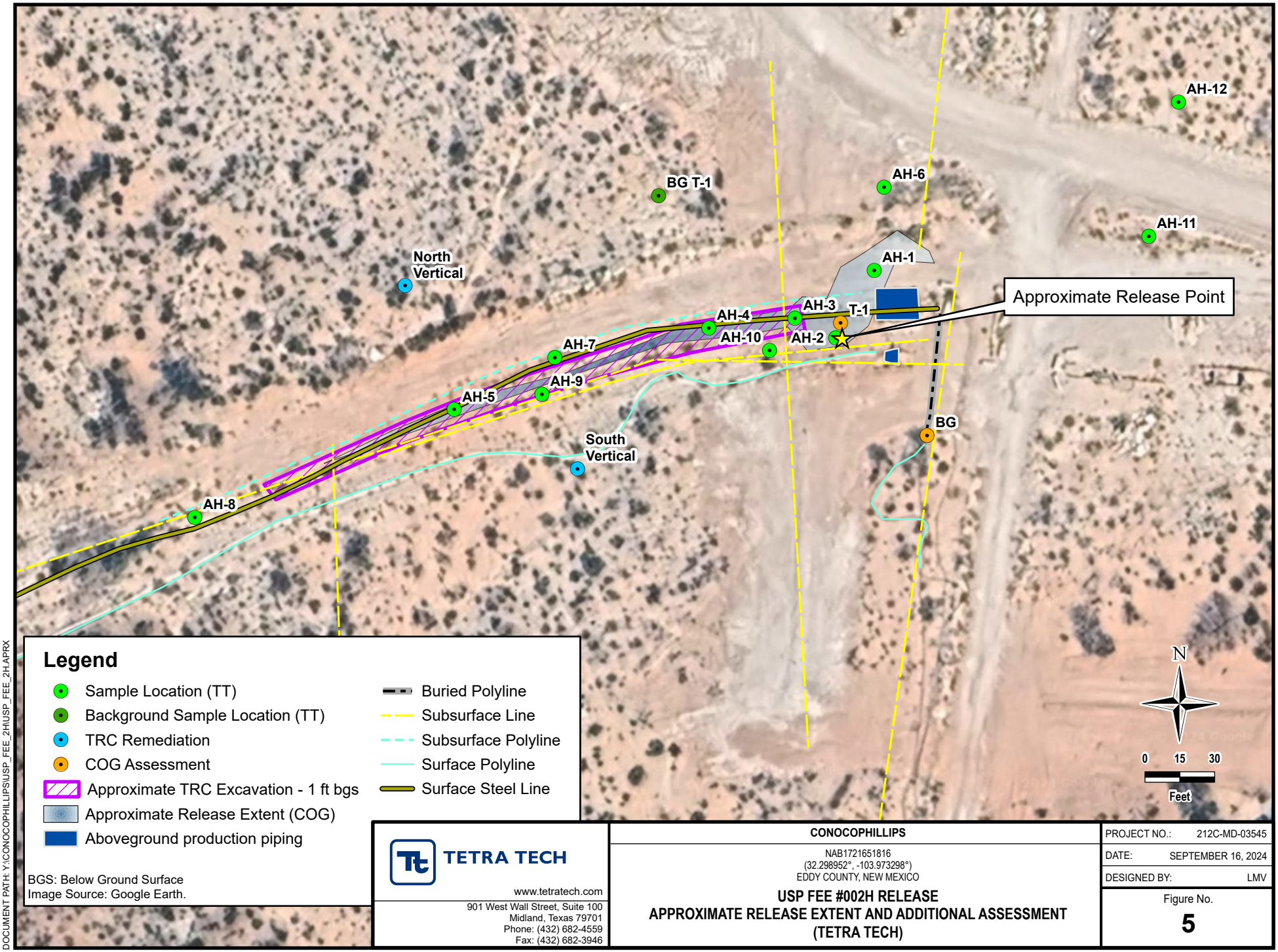
EDDY COUNTY, NEW MEXICO

USP FEE #002H RELEASE
APPROXIMATE RELEASE EXTENT AND REMEDIATION EXTENT (TRC)

PROJECT NO.:	212C-MD-03545
DATE:	SEPTEMBER 16, 2024
DESIGNED BY:	LMV

Figure No.
4



Legend

- Sample Location (TT)
- Background Sample Location (TT)
- TRC Remediation
- COG Assessment
- Approximate TRC Excavation - 1 ft bgs
- Approximate Release Extent (COG)
- Aboveground production piping
- Buried Polyline
- Subsurface Line
- Subsurface Polyline
- Surface Polyline
- Surface Steel Line

BGS: Below Ground Surface
Image Source: Google Earth.

DOCUMENT PATH: Y:\CONOCOPHILLIPS\USP_FEE_2H\USP_FEE_2H.APRX

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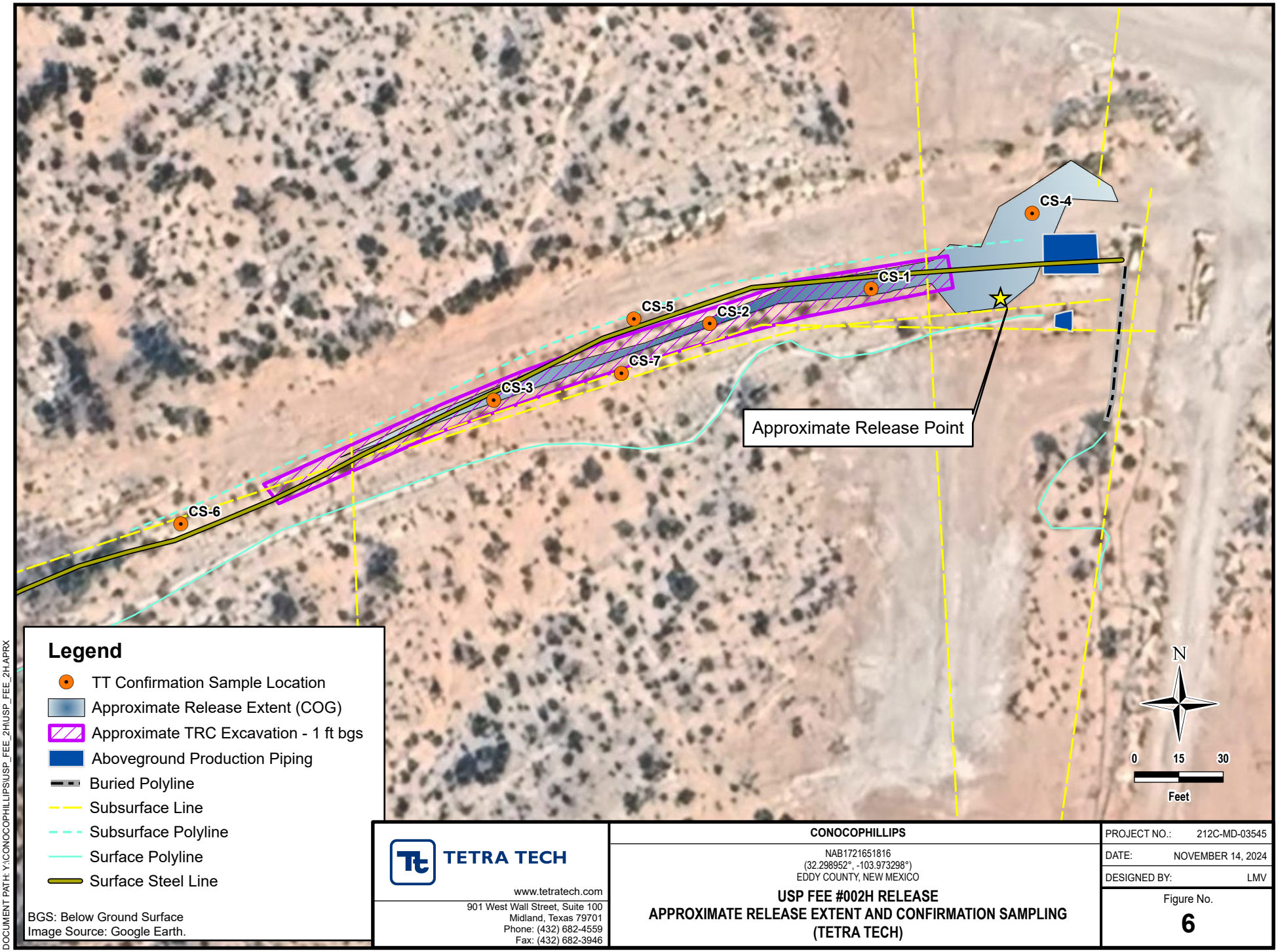
CONOCOPHILLIPS

NAB1721651816
(32.298952°, -103.973298°)
EDDY COUNTY, NEW MEXICO

USP FEE #002H RELEASE
APPROXIMATE RELEASE EXTENT AND ADDITIONAL ASSESSMENT
(TETRA TECH)

PROJECT NO.:	212C-MD-03545
DATE:	SEPTEMBER 16, 2024
DESIGNED BY:	LMV

Figure No.
5



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EDDY COUNTY, NEW MEXICO

USP FEE #002H RELEASE
APPROXIMATE RELEASE EXTENT AND CONFIRMATION SAMPLING
(TETRA TECH)

PROJECT NO.:	212C-MD-03545
DATE:	NOVEMBER 14, 2024
DESIGNED BY:	LMV

Figure No.
6

TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
2017 COG SOIL ASSESSMENT - 2RP-4317
CONOCOPHILLIPS
USP Fee #002
EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Soil Status		Chloride[1]		BTEX[2]										TPH[3]							
			In-Situ	Removed			Benzene		Toluene		Ethylbenzene		Xylene		Total BTEX		C6-C10		C10-C28		C28-C35		Total TPH	
		ft. bgs	ppm		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	
T-1	8/24/2017	Surface	X		41.7		<0.00199		<0.00199		<0.00199		<0.00199		<0.00199		<15.0		<15.0		<15.0		<15.0	
		1	X		240		<0.00345		<0.00345		<0.00345		<0.00345		<0.00345		<15.0		<15.0		<15.0		<15.0	
		2	X		***6,030***		<0.00201		<0.00201		<0.00201		<0.00201		<0.00201		<15.0		<15.0		<15.0		<15.0	
		3	X		***5,680***		-		-		-		-		-		-		-		-		-	
		4	X		***8,380***		-		-		-		-		-		-		-		-		-	
		6	X		***952***		-		-		-		-		-		-		-		-		-	
		8	X		<5.00		-		-		-		-		-		-		-		-		-	
		10	X		494		-		-		-		-		-		-		-		-		-	
		12	X		262		-		-		-		-		-		-		-		-		-	
T-2 BG	8/24/2017	Surface	X		9.89		<0.00201		<0.00201		<0.00201		<0.00201		<0.00201		<15.0		<15.0		<15.0		<15.0	
		1	X		<4.99		<0.00202		<0.00202		<0.00202		<0.00202		<0.00202		<14.9		<14.9		<14.9		<14.9	
		2	X		5.62		<0.00345		<0.00345		<0.00345		<0.00345		<0.00345		<15.0		<15.0		<15.0		<15.0	
		3	X		205		-		-		-		-		-		-		-		-		-	
		4	X		447		-		-		-		-		-		-		-		-		-	
		6	X		***1,350***		-		-		-		-		-		-		-		-		-	
		8	X		***705***		-		-		-		-		-		-		-		-		-	
		10	X		***1,450***		-		-		-		-		-		-		-		-		-	
		12	X		***1,010***		-		-		-		-		-		-		-		-		-	
		14	X		***812***		-		-		-		-		-		-		-		-		-	

NOTES:

ft.	Feet
bgs	Below ground surface
mg/kg	Milligrams per kilogram
TPH	Total Petroleum Hydrocarbons
GRO	Gasoline range organics
DRO	Diesel range organics
MRO	Motor Oil range organics
NS	Sample not analyzed for parameter
1	EPA Method 300.0
2	EPA Method 8021B
3	Method SW8015 Mod

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

Shaded rows indicate intervals proposed for excavation.

(-) Not Analyzed

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
2018 TRC SOIL ASSESSMENT- 2RP-4317
CONOCOPHILLIPS
USP FEE #002H
EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Soil Status		Chloride		BTEX[2]										TPH[3]							
			In-Situ	Removed			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH
			ppm														C_6 - C_{10}		> C_{10} - C_{28}		> C_{28} - C_{36}		(GRO+DRO+EXT DRO)
		ft. bgs			mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
		Closure Criteria			*600 mg/kg*		*< 10 mg/kg*		--		--		--		*< 50 mg/kg*		--		--		--		100 mg/kg
North Vertical	11/1/2018	Surface	X		32		-		-		-		-		-		-		-		-		-
		1	X		32		-		-		-		-		-		-		-		-		-
		2	X		176		-		-		-		-		-		-		-		-		-
		3	X		***1,360***		-		-		-		-		-		-		-		-		-
		4	X		***720***		-		-		-		-		-		-		-		-		-
		6	X		***1,920***		-		-		-		-		-		-		-		-		-
		8	X		***1,390***		-		-		-		-		-		-		-		-		-
		10	X		***1,440***		-		-		-		-		-		-		-		-		-
South Vertical	11/1/2018	Surface	X		64		-		-		-		-		-		-		-		-		-
		1	X		208		-		-		-		-		-		-		-		-		-
		2	X		***1,630***		-		-		-		-		-		-		-		-		-
		3	X		***1,520***		-		-		-		-		-		-		-		-		-
		4	X		***1,280***		-		-		-		-		-		-		-		-		-
		6	X		***1,700***		-		-		-		-		-		-		-		-		-
		8	X		***2,160***		-		-		-		-		-		-		-		-		-
		10	X		***2,640***		-		-		-		-		-		-		-		-		-
		12	X		***2,840***		-		-		-		-		-		-		-		-		-

NOTES:

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

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

TABLE 3
SUMMARY OF ANALYTICAL RESULTS
SOIL ASSESSMENT- NAB1721651816
CONOCOPHILLIPS
USP FEE #002H RELEASE
EDDY COUNTY, NEW MEXICO

19.15.29.12 NMAC Closure Criteria for Soils Impacted by a Release (≤ 50 ft):			Chlorides[1]		BTEX[2]										TPH[3]						
			< 600 mg/kg		< 10 mg/kg								< 50 mg/kg		GRO		DRO		EXT DRO		< 100 mg/kg
Sample ID	Sample Date	Sample Depth Interval	Field Screening Results		Chloride		Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		C_6 - C_{10}		> C_{10} - C_{28}		> C_{28} - C_{36}		Total TPH (GRO+DRO+EXT DRO)
			Chlorides	PID																	
		ft. bgs	ppm		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
AH-1	7/3/2024	0-1	1,020		80.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-2	7/3/2024	0-1	554		64.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-3	7/3/2024	0-1	218		48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
		1-2	1,170		***848***		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-4	7/3/2024	0-1	92.2		32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-5	7/3/2024	0-1	67.7		32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
		1-2	2,450		***1,250***		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-6	7/3/2024	0-1	304		48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-7	7/3/2024	0-1	92.1		80.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-8	7/3/2024	0-1	107		32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-9	7/3/2024	0-1	122		80.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-10	7/3/2024	0-1	513		240		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-11	7/3/2024	0-1	584		***624***		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
AH-12	8/14/2024	0-1	800		64.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-

NOTES:

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

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

Shaded rows indicate intervals proposed for excavation.

QUALIFIERS:

TABLE 4
SUMMARY OF ANALYTICAL RESULTS
2024 SOIL BACKGROUND ASSESSMENT
nAB1721651816
CONOCOPHILLIPS
USP FEE #002H
EDDY COUNTY, NM

19.15.29.12 NMAC Closure Criteria for Soils Impacted by a Release (≤ 50 ft):				Chlorides[1] < 600 mg/kg	
Sample ID	Sample Date	Sample Depth Interval	Field Screening Results Chlorides	Chloride	
		ft. bgs	ppm	mg/kg	Q
BG T-1	8/14/2024	0-1	1,350	***1,120***	
		1-2	2,700	***1,570***	
		2-3	-	***2,000***	
		3-4	3,600	***1,700***	
		4-5	2,650	***1,570***	
		5-6	2,100	***1,300***	
		6-7	-	***1,570***	
		7-8	1,650	***1,780***	
		8-9	-	***1,520***	
		9-10	-	***1,410***	
		10-11	1,900	***1,780***	
		11-12	2,200	***1,540***	

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

1 Method SM4500Cl-B

TABLE 5
SUMMARY OF ANALYTICAL RESULTS
CONFIRMATION SAMPLING - nAB1721651816
CONOCOPHILLIPS
USP FEE #002H
EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride[1]		BTEX[2]								TPH[3]						
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH
															C_6 - C_{10}		> C_{10} - C_{28}		> C_{28} - C_{36}		(GRO+DRO+EXT DRO)
		ft. bgs	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
CS-1	10/28/2024	0-1	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
CS-2	10/28/2024	0-1	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		14.1		14.1
CS-3	10/28/2024	0-1	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
CS-4	10/28/2024	0-1	64		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
CS-5	10/28/2024	0-1	32		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
CS-6	10/28/2024	0-1	48		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-
CS-7	10/28/2024	0-1	16		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

1 Method SM4500Cl-B

2 Method 8021B

3 Method 8015M

APPENDIX A
C-141 Forms

NM OIL CONSERVATION
ARTESIA DISTRICT
JUL 17 2017
RECEIVED

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

nAB1721651816

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: COG Operating LLC OGRID # 229137		Contact:	Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701		Telephone No.	432-683-7443
Facility Name: USP Fee #002		Facility Type: Tank Battery	

Surface Owner: Federal	Mineral Owner: Federal	API No. 30-015-34438

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	16	23S	29E	319	North	946	West	Eddy

Latitude 32.298937 **Longitude** -103.973225

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: 15 bbls	Volume Recovered: 0 bbls
Source of Release: Flowline	Date and Hour of Occurrence: July 10, 2017 10:00 AM	Date and Hour of Discovery: July 10, 2017 10:30 AM
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

The release occurred from a damaged flowline. The damaged portion of the flowline was removed and replaced.

Describe Area Affected and Cleanup Action Taken.*

This release occurred in the along the road and in the pasture away from the well location. Concho will have the spill area evaluated for any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.

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

Signature: Dakota Neel	OIL CONSERVATION DIVISION
Printed Name: Dakota Neel	Approved by Environmental Specialist: Crystal Walker
Title: HSE Coordinator	Approval Date: 8/4/17 Expiration Date: N/A
E-mail Address: dneel2@concho.com	Conditions of Approval: See attached Attached ☐
Date: July 17, 2017 Phone: 575-746-2010	

* Attach Additional Sheets If Necessary

2RP-4317

7/31/17 AB

Operator/Responsible Party,

The OCD has received the form C-141 you provided on **7/17/17** regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4317 has been assigned. **Please refer to this case number in all future correspondence.**

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

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

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District II office in Artesia on or before 8/16/17. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

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

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

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

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

- Composite sampling is not generally allowed.

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

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

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

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

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

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

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

Incident ID	NAB1721651816
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	54 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☑ Yes ☐ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☑ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☑ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☑ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☑ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☑ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☑ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☑ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☑ No

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAB1721651816
District RP	
Facility ID	
Application ID	

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

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

Signature: Moises H Cantu Date: 9/23/2024

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

OCD Only

Received by: _____ Date: _____

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NAB1721651816
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☑ Description of remediation activities

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

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

Signature: Moises H Cantu Date: 9/23/2024

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

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

☐ Description of remediation activities

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

Printed Name: _____ Title: _____

Signature: Moises H Cantu Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

APPENDIX B
Site Characterization Data

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

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

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

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

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02715	CUB	ED	4	1	3	15	23S	29E	596221	3574411*	579	400		
C 02716	CUB	ED	4	4	4	16	23S	29E	595818	3574002*	846	400		
C 02717	CUB	ED	4	2	4	16	23S	29E	595817	3574407*	924	400		
C 02797	CUB	ED		2	3	22	23S	29E	596540	3572895*	1148	200		
C 02718	CUB	ED	4	4	2	16	23S	29E	595816	3574812*	1148	400		
C 01217 S	CUB	ED	4	1	4	16	23S	29E	595413	3574403*	1303	350		
C 02794	CUB	ED		4	3	10	23S	29E	596518	3575731*	1700	100		
C 02795	CUB	ED		4	3	10	23S	29E	596518	3575731*	1700	200		
C 02720	CUB	ED		2	1	21	23S	29E	594911	3573690*	1787	150		
C 02808	CUB	ED		2	3	16	23S	29E	594909	3574501*	1815	100		
C 02809	CUB	ED		2	3	16	23S	29E	594909	3574501*	1815	100		
C 04326 POD14	CUB	ED	4	2	3	23	23S	29E	598191	3572765	1986	58	54	4

Average Depth to Water: **54 feet**

Minimum Depth: **54 feet**

Maximum Depth: **54 feet**

Record Count: 12

UTMNAD83 Radius Search (in meters):

Easting (X): 596664 **Northing (Y):** 3574037 **Radius:** 2000

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

National Flood Hazard Layer FIRMette

FEMA

103°58'43"W 32°18'11"N

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

1:6,000

103°58'5"W 32°17'41"N

Basemap Imagery Source: USGS National Map 2023

Legend

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

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

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

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

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

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

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

N

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/2/2024 at 12:41 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

OCD Induced Seismicity

7/2/2024, 11:35:04 AM

Seismic Response 3.0 to 3.4

10 mi.

1:144,448

0 1 2 4 mi

0 1.5 3 6 km

Oil Conservation Division (OCD), Energy, Minerals and Natural Resources Department (EMNRD), Esri, HERE, Garmin, Earthstar Geographics

New Mexico Oil Conservation Division

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

OCD Karst Areas

7/2/2024, 11:31:19 AM

Karst Occurrence Potential

Medium

1:9,028

0 0.05 0.1 0.2 mi

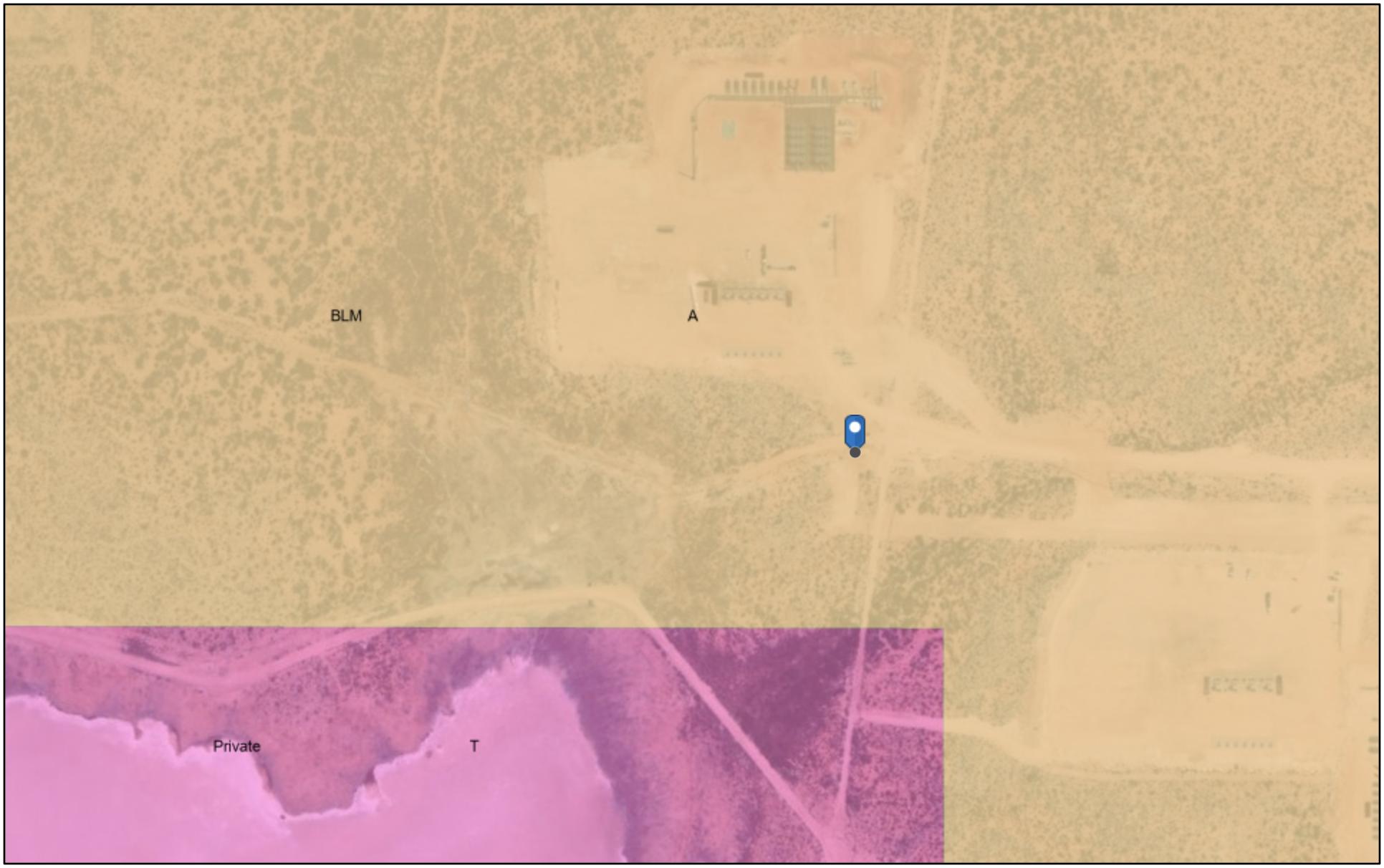
0 0.1 0.2 0.4 km

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

New Mexico Oil Conservation Division

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

OCD Land Ownership



7/2/2024, 11:25:42 AM

1:4,514

0 0.03 0.07 0.13 mi

0 0.05 0.1 0.2 km

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

Mineral Ownership

A-All minerals are owned by U.S.

T-Other minerals are owned by the U.S.

Land Ownership

BLM

P

New Mexico Oil Conservation Division

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

OCD Waterbodies

7/2/2024, 11:28:01 AM

OSW Water Bodys

OSE Streams

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

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

New Mexico Oil Conservation Division

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

APPENDIX C
Regulatory Correspondence

Bratcher, Mike, EMNRD

From: Bratcher, Mike, EMNRD
Sent: Tuesday, October 3, 2017 9:47 AM
To: Gonzales, Clair; hprice@blm.gov; Tucker, Shelly
Cc: Tavarez, Ike; Rebecca Haskell; Dakota Neel; Aaron Lieb; Robert McNeill; slhitchcock@concho.com; Weaver, Crystal, EMNRD
Subject: RE: COG USP Fee #2 Work Plan Approval Request (2RP-4317)

RE: COG * USP FEE 2 * **2RP-4317** * DOR: 7/10/17

COG's proposal for additional investigation and proposed remedial actions based on results is approved. Federal sites will require like approval from BLM. Please advise once remedial activities have been scheduled.

Also, 2RP-4280 remains open associated with this site.

Thank you,

Mike Bratcher
NMOCD District 2
811 South First Street
Artesia, NM 88210
575-748-1283 Ext 108

From: Gonzales, Clair [mailto:Clair.Gonzales@tetratech.com]
Sent: Monday, October 2, 2017 11:23 AM
To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; hprice@blm.gov; Tucker, Shelly <stucker@blm.gov>
Cc: Tavarez, Ike <Ike.Tavarez@tetratech.com>; Rebecca Haskell <RHaskell@concho.com>; Dakota Neel <DNeel2@concho.com>; Aaron Lieb <ALieb@concho.com>; Robert McNeill <RMcNeill@concho.com>; slhitchcock@concho.com
Subject: COG USP Fee #2 Work Plan Approval Request (2RP-4317)

Good Afternoon,

Attached is the work plan for the above referenced site located in Eddy County, New Mexico. Once approved, COG will implement the proposed work plan. Let me know if you have any questions or concerns.

Thank you,

Clair Gonzales

Clair Gonzales | **Geologist III**
Phone: 432.687.8123| Mobile 432.260.8634 | Fax:432.682.3946
clair.gonzales@tetratech.com

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4000 N. Big Spring | Midland, TX 79705 | www.tetratech.com

OCD Permitting

[IM-SD] Incident File Support Doc (ENV) (IM-BNF) Application

Submission Information

Submission ID:	205125	**Districts:**	Artesia
Operator:	[229137] COG OPERATING LLC	**Counties:**	Eddy
Description:	COG OPERATING LLC [229137] , nAB1721651816		
Status:	REJECTED		
Status Date:	05/05/2023		
References (2):	30-015-34438, nAB1721651816		

Forms

Attachments: Support Doc

Support Doc

Questions

This submission type does not have questions, at this time.

Acknowledgments

This submission type does not have acknowledgments, at this time.

Comments

No comments found for this submission.

Conditions

No conditions found for this submission.

Reasons

Summary: *amaxwell (5/5/2023),* A deferral cannot be granted on a release if the depth to water is <50' depth to groundwater. At that point, a hydrovac/shovel would need to be used to safely remove the contaminated soil around equipment and pipelines. The release will need to be remediated to the strictest closure criteria limits (600 mg/kg, Chlorides, 100 mg/kg TPH, etc.). If you feel the depth to groundwater is >50', a shallow borehole can be drilled to 51' allowing for verification of the depth. If water is not visible after reaching bottom-hole and waiting 72 hours, the OCD will accept this as evidence. We would just need a copy of the driller's log.

Chavira, Lisbeth

From: OCDOnline@state.nm.us
Sent: Monday, September 30, 2024 10:10 AM
To: Llull, Christian
Subject: The Oil Conservation Division (OCD) has rejected the application, Application ID: 387965

To whom it may concern (c/o Christian Llull for COG OPERATING LLC),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAB1721651816,
for the following reasons:

- **Remediation and reclamation closure denied.**
- **Operator failed to provide proper Sampling Notification pursuant to 19.15.29.12.D.(1).(a) NMAC. Failure to provide proper sampling notice is a compliance issue and OCD may pursue compliance actions pursuant to 19.15.5 NMAC. Operator shall ensure future compliance with 19.15.29.12.D.(1).(a) NMAC**
- **There is no record of a C-141N, sampling notification, was submitted for samples collected in 2024.**
- **Submit report via the OCD permitting portal by October 31, 2024.**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 387965.
Please review and make the required correction(s) prior to resubmitting.
If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,
Ashley Maxwell
Projects Environmental Specialist - A
505-635-5000
Ashley.Maxwell@emnrd.nm.gov

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

Chavira, Lisbeth

From: Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Sent: Thursday, October 17, 2024 10:36 AM
To: Chavira, Lisbeth
Cc: Llull, Christian
Subject: RE: [EXTERNAL] Variance Request - USP FEE #002H Release (NAB1721651816)

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

Good Morning,

Your variance request to sample every 400 square feet is approved. Please attach this correspondence in subsequent report submittals.

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

Please be advised that the new Digital C-141 is live as of December 1, 2023. Please review the new Digital C-141 submission Dec 1, 2023 Guidance document posted on the EMRND Website prior to submitting any C-141s. The guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: Chavira, Lisbeth <LISBETH.CHAVIRA@tetratech.com>
Sent: Thursday, October 17, 2024 9:34 AM
To: Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Cc: Llull, Christian <Christian.Llull@tetratech.com>
Subject: [EXTERNAL] Variance Request - USP FEE #002H Release (NAB1721651816)

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

Ashley,

This correspondence recaps our previous discussion in the call (10/7) between TT and NMOCD regarding the USP Fee #002H (NAB1721651816) Closure Report Rejection.
As discussed, the closure request was rejected for this incident. The rationale was that a C-141N sampling notification was not submitted for the most recent assessment samples collected in 2024.
In our call, it was established that the report was satisfactory, however, the report had to be rejected based on the lack of sampling notification.
Also in the call, a variance was discussed for the upcoming additional confirmation sampling.

Thus, Tetra Tech, on behalf of ConocoPhillips, would like to request a variance to collect confirmation samples at a frequency of every 400 square feet for the subject line incident.
The square footage to be sampled is approximately 2,463 sq. ft., and Tetra Tech proposes to collect a total of 7 confirmation samples, at 0-1 ft below ground surface.

Please let us know if you approve of this variance and if you have any questions or comments.

Thank you in advance.

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

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

Chavira, Lisbeth

From: OCDOnline@state.nm.us
Sent: Wednesday, October 23, 2024 8:41 AM
To: Llull, Christian
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 394892

To whom it may concern (c/o Christian Llull for COG OPERATING LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAB1721651816.

The sampling event is expected to take place:

When: 10/28/2024 @ 10:00
Where: D-16-23S-29E 319 FNL 946 FWL (32.3115883,-103.9951782)

Additional Information: pls contact Lisbeth Chavira at Mobile +1 (512) 596-8201 |

Additional Instructions: Approximate Release Point: 32.298952°, -103.973298°

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

Chavira, Lisbeth

From: Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Sent: Thursday, October 31, 2024 2:37 PM
To: Chavira, Lisbeth
Cc: Llull, Christian
Subject: RE: [EXTERNAL] Extension Request - USP FEE #002H Release (NAB1721651816)

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

Good Afternoon,

Your extension request of November 30, 2024, is approved. Please include this email in all subsequent reports submitted.

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

Please be advised that the new Digital C-141 is live as of December 1, 2023. Please review the new Digital C-141 submission Dec 1, 2023 Guidance document posted on the EMRND Website prior to submitting any C-141s. The guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: Chavira, Lisbeth <LISBETH.CHAVIRA@tetratech.com>
Sent: Thursday, October 31, 2024 1:20 PM
To: Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Cc: Llull, Christian <Christian.Llull@tetratech.com>
Subject: [EXTERNAL] Extension Request - USP FEE #002H Release (NAB1721651816)

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 30-day extension (until November 30, 2024) to complete associated closure reporting for the USP FEE #002H Release site (**NAB1721651816**).
A closure report was submitted to the NMOCD for this incident on September 30, 2024.
The remediation and reclamation closure was denied. Tetra Tech and NMOCD held a joint conference call to discuss the rejection on October 7, 2024.
The basis of the rejection was that the Operator failed to provide proper Sampling Notification pursuant to 19.15.29.12.D.(1).(a) NMAC.
Additionally, a variance request to sample every 400 square feet was submitted and approved by OCD.
To be compliant, a C-141N application [394892] was assigned to this incident on 10/23/2024.
Based on the rejection, Tetra Tech then mobilized to the subject site on October 28, 2024, to complete the confirmation sampling with the C-141N in place.

As of today, the analytical results for the additional sampling completed on October 28, 2024, have not yet been received.
Tetra Tech and ConocoPhillips need additional time to complete evaluation of the additional confirmation data and the subsequent reporting.
A complete report will be submitted to the NMOCD within the requested timeframe.

Thank you in advance.

Lisbeth

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

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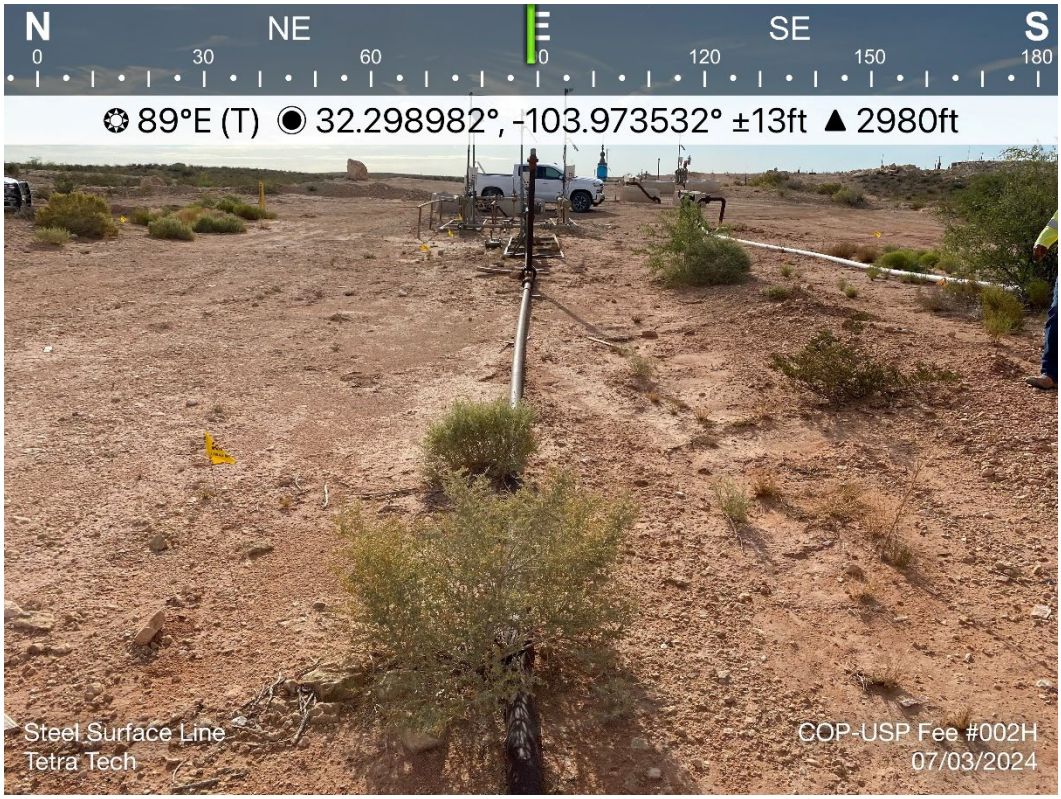
APPENDIX D
Photographic Documentation

TETRA TECH, INC. PROJECT NO. 212C-MD-03545	DESCRIPTION	View west. View of excavated activities completed by TRC in 2018.	1
	SITE NAME	USP FEE #002H Release	11/16/2018

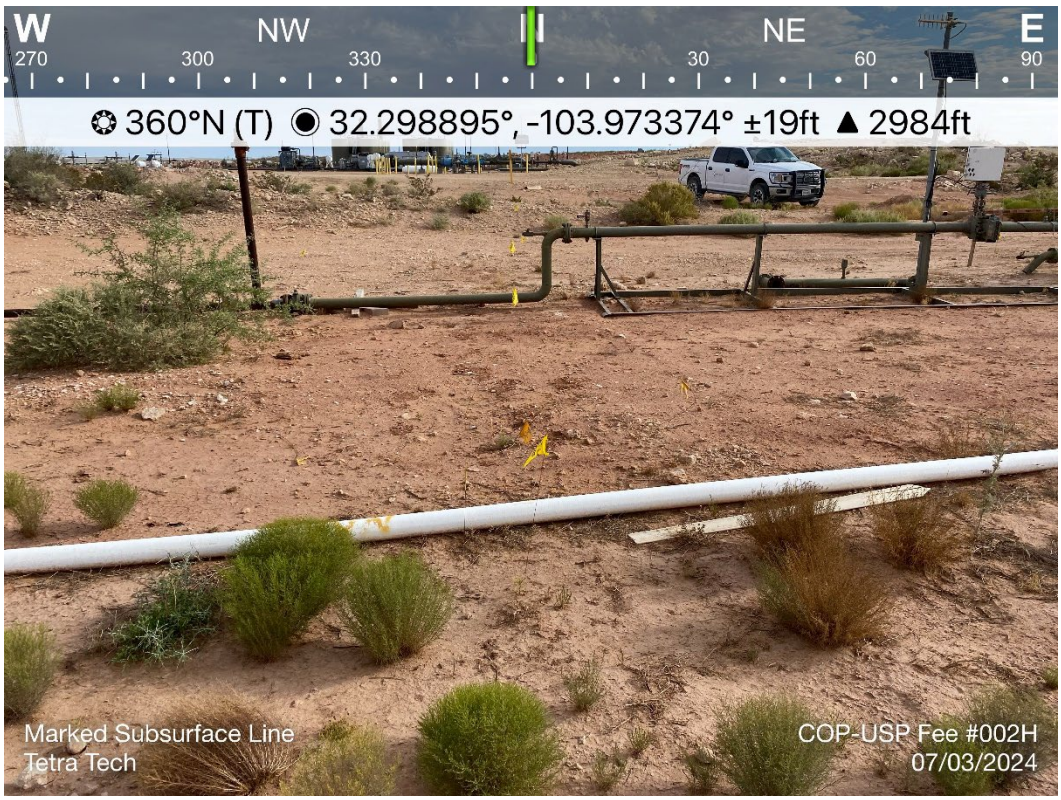
TETRA TECH, INC. PROJECT NO. 212C-MD-03545	DESCRIPTION	View west. View of excavated activities completed by TRC in 2018.	2
	SITE NAME	USP FEE #002H Release	11/16/2018

TETRA TECH, INC. PROJECT NO. 212C-MD-03545	DESCRIPTION	View west. View of backfilled excavation completed by TRC in 2018.	3
	SITE NAME	USP FEE #002H Release	11/21/2018

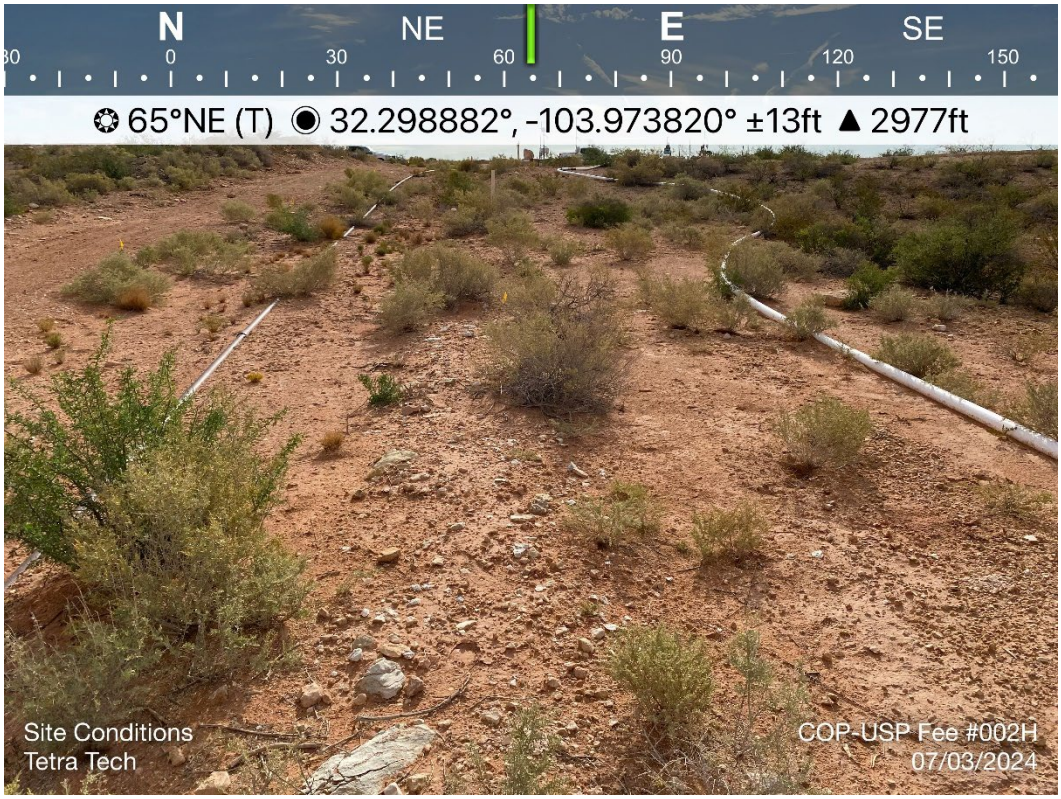
TETRA TECH, INC. PROJECT NO. 212C-MD-03545	DESCRIPTION	View west. View of backfilled excavation completed by TRC in 2018.	4
	SITE NAME	USP FEE #002H Release	11/21/2018



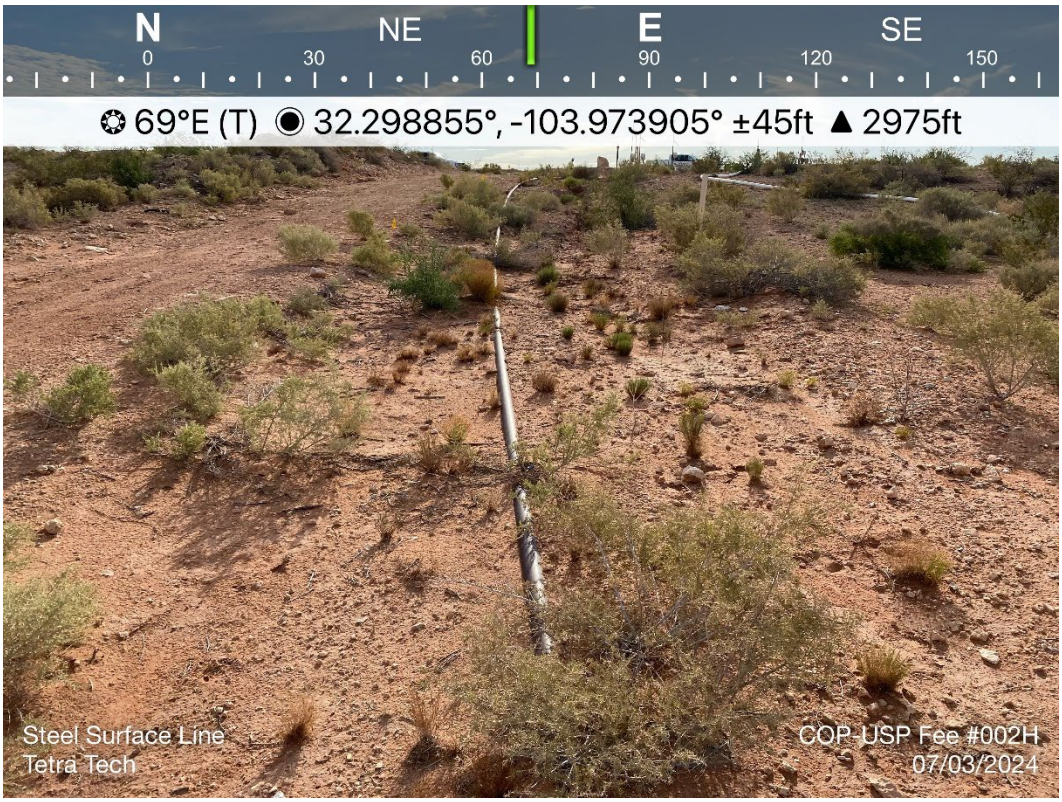
TETRA TECH, INC. PROJECT NO. 212C-MD-03545	DESCRIPTION	View east. View of release area and production equipment. Vegetation observed.	5
	SITE NAME	USP FEE #002H Release	7/3/2024



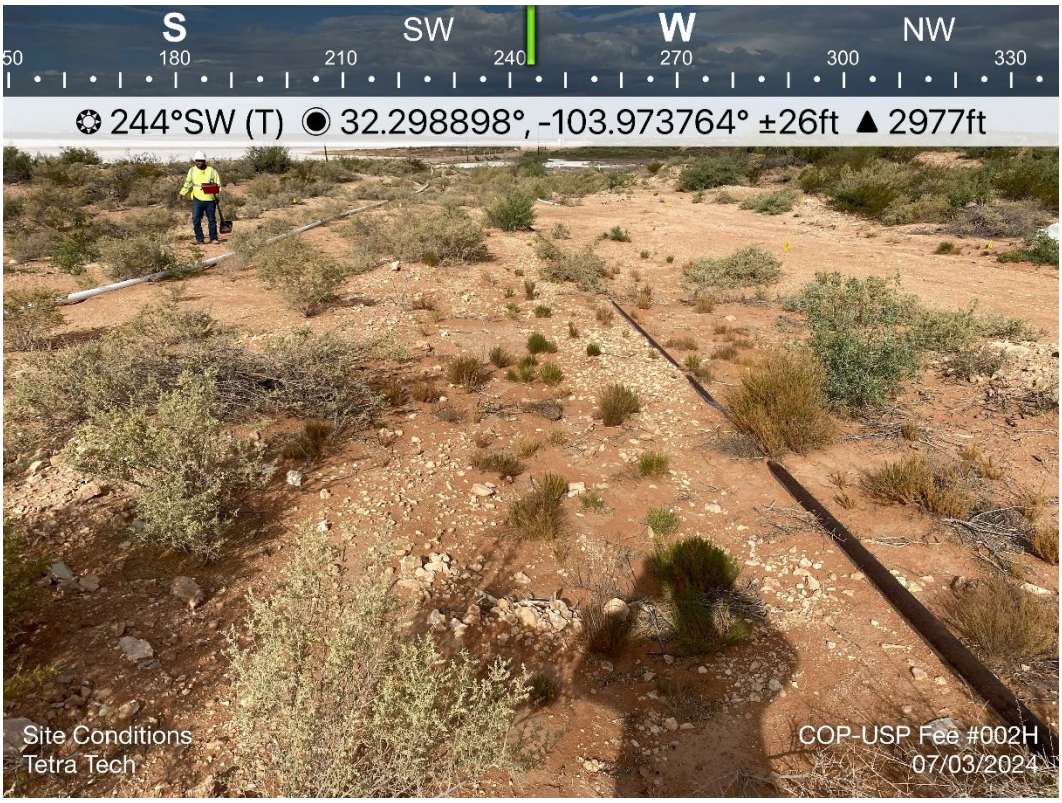
TETRA TECH, INC. PROJECT NO. 212C-MD-03545	DESCRIPTION	View north. View of production equipment. View of release area, vegetation present.	6
	SITE NAME	USP FEE #002H Release	7/3/2024



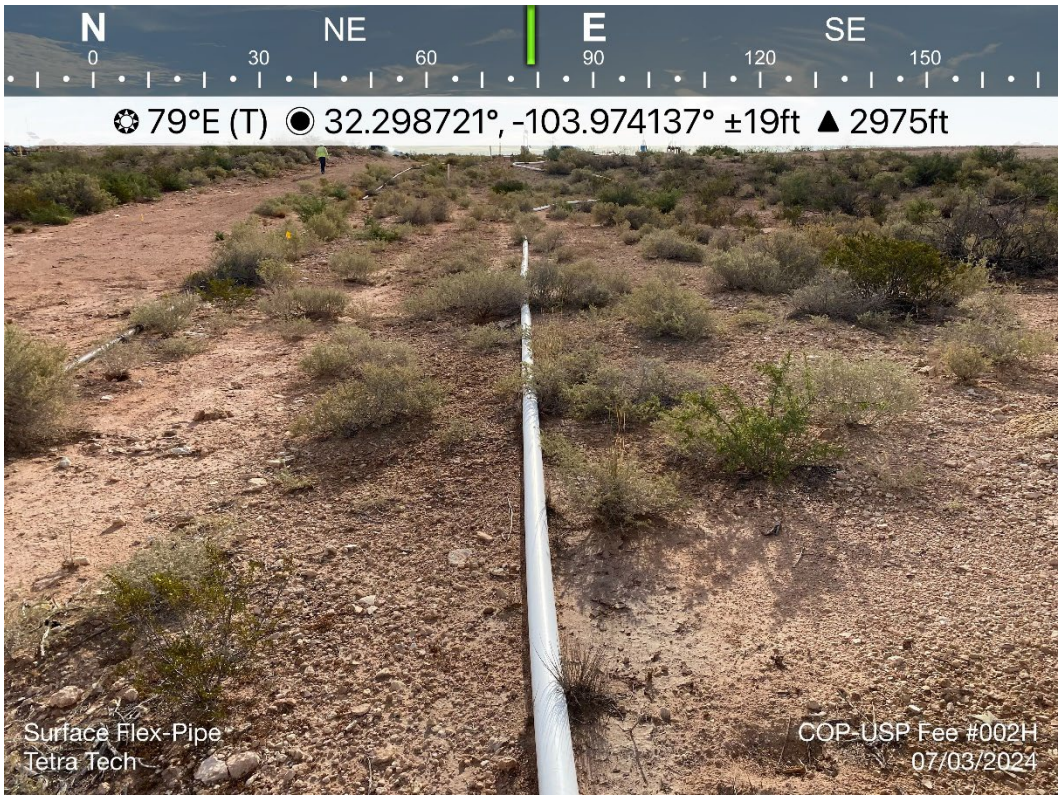
TETRA TECH, INC. PROJECT NO. 212C-MD-03545	DESCRIPTION	View northeast. View of release area. Vegetation present.	7
	SITE NAME	USP FEE #002H Release	7/3/2024



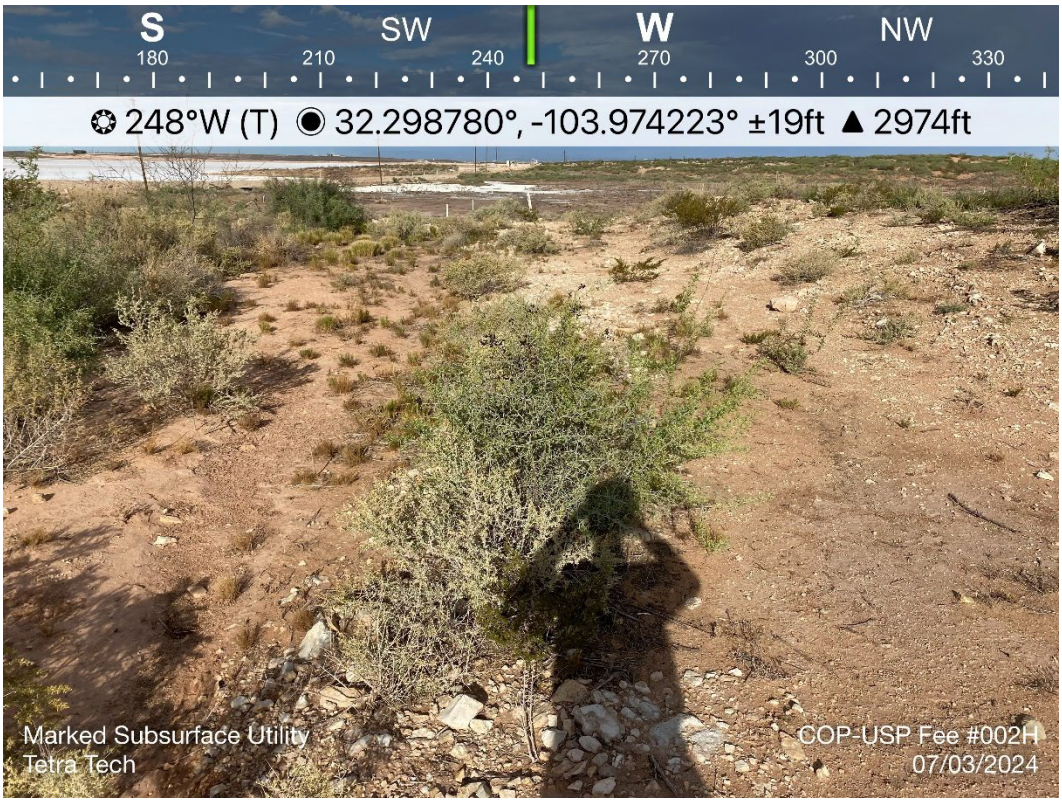
TETRA TECH, INC. PROJECT NO. 212C-MD-02832	DESCRIPTION	View northeast. View of release area and steel line. Highly vegetated area observed.	8
	SITE NAME	USP FEE #002H Release	7/3/2024



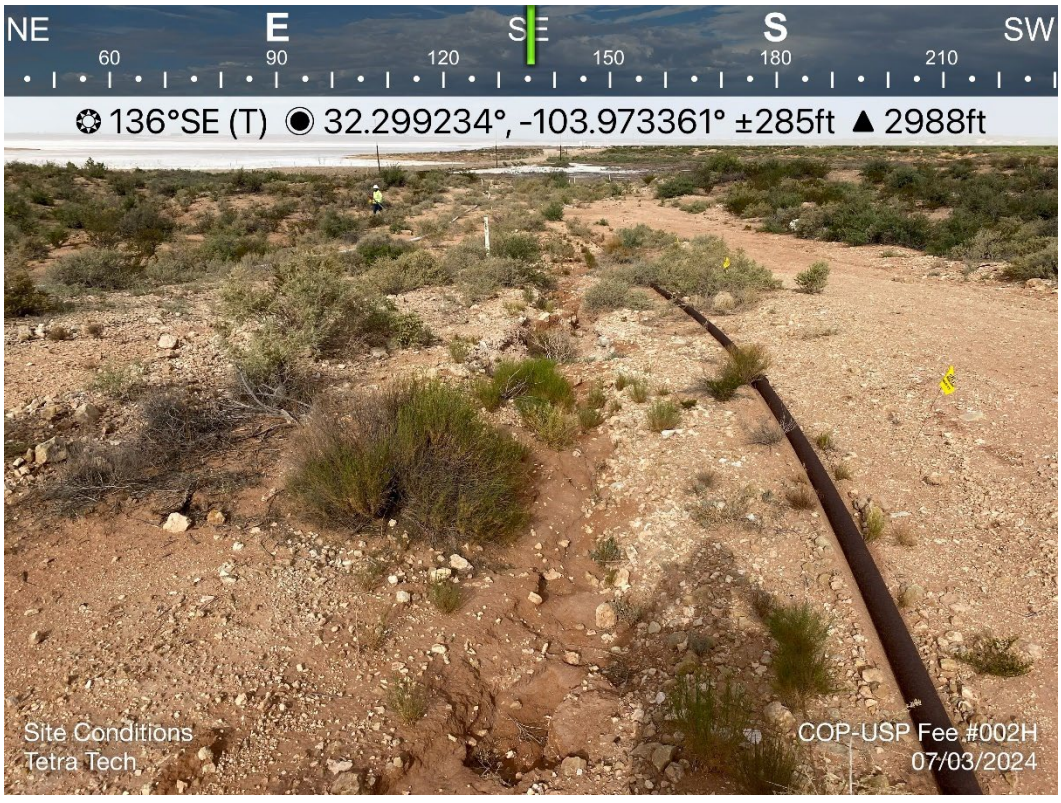
TETRA TECH, INC. PROJECT NO. 212C-MD-03545	DESCRIPTION	View southwest. View of release area. Vegetation present.	9
	SITE NAME	USP FEE #002H Release	7/3/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-03545	DESCRIPTION	View east. View of release area. Vegetation present.	10
	SITE NAME	USP FEE #002H Release	7/3/2024

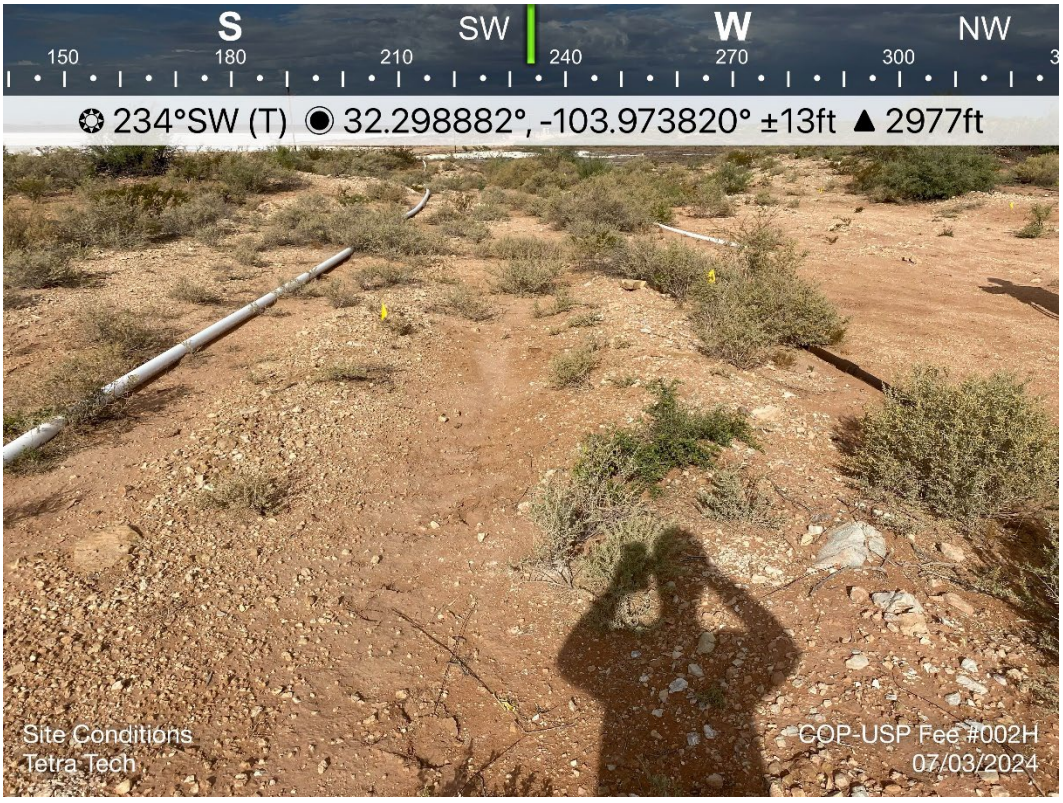


TETRA TECH, INC. PROJECT NO. 212C-MD-03545	DESCRIPTION	View southwest. View of salt lake.	11
	SITE NAME	USP FEE #002H Release	7/3/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-03545	DESCRIPTION	View southeast. View of release area. Vegetation present.	12
	SITE NAME	USP FEE #002H Release	7/3/2024

TETRA TECH, INC. PROJECT NO. 212C-MD-03545	DESCRIPTION	View northeast. View of release area and steel line. Vegetation present.	13
	SITE NAME	USP FEE #002H Release	7/3/2024



TETRA TECH, INC. PROJECT NO. 212C-MD-03545	DESCRIPTION	View southwest. View of release area. Vegetation present. Steel and surface polyline present.	14
	SITE NAME	USP FEE #002H Release	7/3/2024

APPENDIX E
Laboratory Analytical Data

Certificate of Analysis Summary 561418

COG Operating LLC, Artesia, NM

Project Name: USP Fee #2H

Project Id:

Contact: Aaron Lieb

Project Location: USP Fee #2H

Date Received in Lab: Sat Aug-26-17 02:00 pm

Report Date: 11-SEP-17

Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	561418-001		561418-002		561418-003		561418-004		561418-005		561418-006	
	Field Id:	T2 BG		T2 BG		T2 BG		T2 BG		T2 BG		T2 BG	
	Depth:			1- ft		2- ft		3- ft		4- ft		6- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-24-17 12:00		Aug-24-17 12:00		Aug-24-17 12:00		Aug-24-17 12:00		Aug-24-17 12:00		Aug-24-17 12:00	
BTEX by EPA 8021B	***Extracted:***	Aug-30-17 16:50		Aug-30-17 16:50		Aug-31-17 16:40							
	Analyzed:	Aug-31-17 10:59		Aug-31-17 14:08		Sep-01-17 03:58							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Benzene		<0.00201	0.00201	<0.00202	0.00202	<0.00345	0.00345						
Toluene		<0.00201	0.00201	<0.00202	0.00202	<0.00345	0.00345						
Ethylbenzene		<0.00201	0.00201	<0.00202	0.00202	<0.00345	0.00345						
m,p-Xylenes		<0.00402	0.00402	<0.00404	0.00404	<0.00690	0.00690						
o-Xylene		<0.00201	0.00201	<0.00202	0.00202	<0.00345	0.00345						
Total Xylenes		<0.00201	0.00201	<0.00202	0.00202	<0.00345	0.00345						
Total BTEX		<0.00201	0.00201	<0.00202	0.00202	<0.00345	0.00345						
Inorganic Anions by EPA 300/300.1	***Extracted:***	Sep-06-17 15:25		Sep-06-17 15:25		Sep-06-17 15:25		Sep-06-17 15:25		Sep-06-17 15:25		Sep-06-17 15:25	
	Analyzed:	Sep-06-17 22:47		Sep-06-17 22:56		Sep-06-17 23:04		Sep-06-17 23:28		Sep-06-17 23:37		Sep-07-17 00:01	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		9.89	4.94	<4.99	4.99	5.62	4.94	205	4.90	447	5.00	1350	25.0
TPH By SW8015 Mod	***Extracted:***	Aug-29-17 16:00		Aug-29-17 16:00		Aug-29-17 16:00							
	Analyzed:	Aug-30-17 01:13		Aug-30-17 01:35		Aug-30-17 01:56							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0						
Diesel Range Organics (DRO)		<15.0	15.0	<14.9	14.9	<15.0	15.0						
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<14.9	14.9	<15.0	15.0						
Total TPH		<15.0	15.0	<14.9	14.9	<15.0	15.0						

Kelsey Brooks
Project Manager

Final 1.000

Certificate of Analysis Summary 561418

COG Operating LLC, Artesia, NM

Project Name: USP Fee #2H

Project Id:

Contact: Aaron Lieb

Project Location: USP Fee #2H

Date Received in Lab: Sat Aug-26-17 02:00 pm

Report Date: 11-SEP-17

Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	561418-007		561418-008		561418-009		561418-010					
	Field Id:	T2 BG		T2 BG		T2 BG		T2 BG					
	Depth:	8- ft		10- ft		12- ft		14- ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Aug-24-17 12:00		Aug-24-17 12:00		Aug-24-17 12:00		Aug-24-17 12:00					
Inorganic Anions by EPA 300/300.1	***Extracted:***	Sep-06-17 15:25		Sep-06-17 15:25		Sep-06-17 15:25		Sep-06-17 15:25					
	Analyzed:	Sep-07-17 00:09		Sep-07-17 00:17		Sep-07-17 00:26		Sep-07-17 00:34					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		705	49.3	1450	24.6	1010	24.5	812	49.8				

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Kelsey Brooks
Project Manager

Final 1.000

Analytical Report 561418

for

COG Operating LLC

Project Manager: Aaron Lieb

USP Fee #2H

11-SEP-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)
Xenco-San Antonio: Texas (T104704534)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

11-SEP-17

Project Manager: **Aaron Lieb**
COG Operating LLC
2407 Pecos Avenue
Artesia, NM 88210

Reference: XENCO Report No(s): **561418**
USP Fee #2H
Project Address: USP Fee #2H

Aaron Lieb:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 561418. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 561418 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 561418

COG Operating LLC, Artesia, NM

USP Fee #2H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
T2 BG	S	08-24-17 12:00		561418-001
T2 BG	S	08-24-17 12:00	1 ft	561418-002
T2 BG	S	08-24-17 12:00	2 ft	561418-003
T2 BG	S	08-24-17 12:00	3 ft	561418-004
T2 BG	S	08-24-17 12:00	4 ft	561418-005
T2 BG	S	08-24-17 12:00	6 ft	561418-006
T2 BG	S	08-24-17 12:00	8 ft	561418-007
T2 BG	S	08-24-17 12:00	10 ft	561418-008
T2 BG	S	08-24-17 12:00	12 ft	561418-009
T2 BG	S	08-24-17 12:00	14 ft	561418-010

CASE NARRATIVE

Client Name: COG Operating LLC

Project Name: USP Fee #2H

Project ID:
Work Order Number(s): *561418*

Report Date: *11-SEP-17*
Date Received: *08/26/2017*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3026349 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3026428 BTEX by EPA 8021B
Lab Sample ID 561418-003 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 561418-003.
The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3026948 Inorganic Anions by EPA 300/300.1
Lab Sample ID 561418-003 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 561418-001, -002, -003, -004, -005, -006, -007, -008, -009, -010.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analytical Results 561418

COG Operating LLC, Artesia, NM

USP Fee #2H

Sample Id:	**T2 BG**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561418-001	Date Collected:	08.24.17 12.00		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 15.25	Basis:	Wet Weight
Seq Number:	3026948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**9.89**	4.94	mg/kg	09.06.17 22.47		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.29.17 16.00	Basis:	Wet Weight
Seq Number:	3026605				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.30.17 01.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.30.17 01.13	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.30.17 01.13	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.30.17 01.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	08.30.17 01.13	
o-Terphenyl	84-15-1	111	%	70-135	08.30.17 01.13	

Certificate of Analytical Results 561418

COG Operating LLC, Artesia, NM

USP Fee #2H

Sample Id:	**T2 BG**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561418-001	Date Collected:	08.24.17 12.00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.30.17 16.50	Basis:	Wet Weight
Seq Number:	3026349				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.31.17 10.59	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.31.17 10.59	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.31.17 10.59	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.31.17 10.59	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.31.17 10.59	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.31.17 10.59	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.31.17 10.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	85	%	80-120	08.31.17 10.59	
1,4-Difluorobenzene	540-36-3	93	%	80-120	08.31.17 10.59	

Certificate of Analytical Results 561418

COG Operating LLC, Artesia, NM

USP Fee #2H

Sample Id:	**T2 BG**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561418-002	Date Collected:	08.24.17 12.00	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 15.25	Basis:	Wet Weight
Seq Number:	3026948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	09.06.17 22.56	U	1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.29.17 16.00	Basis:	Wet Weight
Seq Number:	3026605				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	08.30.17 01.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	08.30.17 01.35	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9	mg/kg	08.30.17 01.35	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	08.30.17 01.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	08.30.17 01.35	
o-Terphenyl	84-15-1	95	%	70-135	08.30.17 01.35	

Certificate of Analytical Results 561418

COG Operating LLC, Artesia, NM

USP Fee #2H

Sample Id:	**T2 BG**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561418-002	Date Collected:	08.24.17 12.00	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.30.17 16.50	Basis:	Wet Weight
Seq Number:	3026349				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	08.31.17 14.08	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	08.31.17 14.08	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	08.31.17 14.08	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	08.31.17 14.08	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	08.31.17 14.08	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	08.31.17 14.08	U	1
Total BTEX		<0.00202	0.00202	mg/kg	08.31.17 14.08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	84	%	80-120	08.31.17 14.08	
1,4-Difluorobenzene	540-36-3	94	%	80-120	08.31.17 14.08	

Certificate of Analytical Results 561418

COG Operating LLC, Artesia, NM

USP Fee #2H

Sample Id:	**T2 BG**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561418-003	Date Collected:	08.24.17 12.00	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 15.25	Basis:	Wet Weight
Seq Number:	3026948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5.62**	4.94	mg/kg	09.06.17 23.04		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.29.17 16.00	Basis:	Wet Weight
Seq Number:	3026605				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.30.17 01.56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.30.17 01.56	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.30.17 01.56	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.30.17 01.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	08.30.17 01.56	
o-Terphenyl	84-15-1	101	%	70-135	08.30.17 01.56	

Certificate of Analytical Results 561418

COG Operating LLC, Artesia, NM

USP Fee #2H

Sample Id:	**T2 BG**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561418-003	Date Collected:	08.24.17 12.00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	08.31.17 16.40	Basis:	Wet Weight
Seq Number:	3026428				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00345	0.00345	mg/kg	09.01.17 03.58	U	1
Toluene	108-88-3	<0.00345	0.00345	mg/kg	09.01.17 03.58	U	1
Ethylbenzene	100-41-4	<0.00345	0.00345	mg/kg	09.01.17 03.58	U	1
m,p-Xylenes	179601-23-1	<0.00690	0.00690	mg/kg	09.01.17 03.58	U	1
o-Xylene	95-47-6	<0.00345	0.00345	mg/kg	09.01.17 03.58	U	1
Total Xylenes	1330-20-7	<0.00345	0.00345	mg/kg	09.01.17 03.58	U	1
Total BTEX		<0.00345	0.00345	mg/kg	09.01.17 03.58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	86	%	80-120	09.01.17 03.58	
4-Bromofluorobenzene	460-00-4	87	%	80-120	09.01.17 03.58	

Certificate of Analytical Results 561418

COG Operating LLC, Artesia, NM

USP Fee #2H

Sample Id:	**T2 BG**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561418-004	Date Collected:	08.24.17 12.00	Sample Depth:	3 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 15.25	Basis:	Wet Weight
Seq Number:	3026948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**205**	4.90	mg/kg	09.06.17 23.28		1

Certificate of Analytical Results 561418

COG Operating LLC, Artesia, NM

USP Fee #2H

Sample Id:	**T2 BG**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561418-005	Date Collected:	08.24.17 12.00	Sample Depth:	4 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 15.25	Basis:	Wet Weight
Seq Number:	3026948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**447**	5.00	mg/kg	09.06.17 23.37		1

Certificate of Analytical Results 561418

COG Operating LLC, Artesia, NM

USP Fee #2H

Sample Id:	**T2 BG**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561418-006	Date Collected:	08.24.17 12.00	Sample Depth:	6 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 15.25	Basis:	Wet Weight
Seq Number:	3026948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1350**	25.0	mg/kg	09.07.17 00.01		5

Certificate of Analytical Results 561418

COG Operating LLC, Artesia, NM

USP Fee #2H

Sample Id:	**T2 BG**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561418-007	Date Collected:	08.24.17 12.00	Sample Depth:	8 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 15.25	Basis:	Wet Weight
Seq Number:	3026948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**705**	49.3	mg/kg	09.07.17 00.09		10

Certificate of Analytical Results 561418

COG Operating LLC, Artesia, NM

USP Fee #2H

Sample Id:	**T2 BG**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561418-008	Date Collected:	08.24.17 12.00	Sample Depth:	10 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 15.25	Basis:	Wet Weight
Seq Number:	3026948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1450**	24.6	mg/kg	09.07.17 00.17		5

Certificate of Analytical Results 561418

COG Operating LLC, Artesia, NM

USP Fee #2H

Sample Id:	**T2 BG**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561418-009	Date Collected:	08.24.17 12.00	Sample Depth:	12 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 15.25	Basis:	Wet Weight
Seq Number:	3026948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1010**	24.5	mg/kg	09.07.17 00.26		5

Certificate of Analytical Results 561418

COG Operating LLC, Artesia, NM

USP Fee #2H

Sample Id:	**T2 BG**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561418-010	Date Collected:	08.24.17 12.00	Sample Depth:	14 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 15.25	Basis:	Wet Weight
Seq Number:	3026948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**812**	49.8	mg/kg	09.07.17 00.34		10

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 561418

COG Operating LLC

USP Fee #2H

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 3026948 Matrix: Solid Date Prep: 09.06.17
MB Sample Id: 730456-1-BLK LCS Sample Id: 730456-1-BKS LCSD Sample Id: 730456-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	264	106	264	106	90-110	0	20	mg/kg	09.06.17 10:18	

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 3026948 Matrix: Soil Date Prep: 09.06.17
Parent Sample Id: 561417-001 MS Sample Id: 561417-001 S MSD Sample Id: 561417-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	77.8	248	355	112	354	111	90-110	0	20	mg/kg	09.06.17 21:17	X

Analytical Method: **Inorganic Anions by EPA 300/300.1** Prep Method: E300P
Seq Number: 3026948 Matrix: Soil Date Prep: 09.06.17
Parent Sample Id: 561418-003 MS Sample Id: 561418-003 S MSD Sample Id: 561418-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5.62	247	292	116	293	116	90-110	0	20	mg/kg	09.06.17 23:12	X

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3026605 Matrix: Solid Date Prep: 08.29.17
MB Sample Id: 730143-1-BLK LCS Sample Id: 730143-1-BKS LCSD Sample Id: 730143-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	904	90	851	85	70-135	6	35	mg/kg	09.05.17 09:32	
Diesel Range Organics (DRO)	<15.0	1000	1140	114	1030	103	70-135	10	35	mg/kg	09.05.17 09:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		120		97		70-135	%	09.05.17 09:32
o-Terphenyl	109		108		100		70-135	%	09.05.17 09:32

QC Summary 561418

COG Operating LLC

USP Fee #2H

Analytical Method: TPH By SW8015 Mod | Prep Method: TX1005P
Seq Number: 3026605 | Matrix: Soil | Date Prep: 08.29.17
Parent Sample Id: 561417-006 | MS Sample Id: 561417-006 S | MSD Sample Id: 561417-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	999	889	89	886	89	70-135	0	35	mg/kg	09.05.17 09:32	
Diesel Range Organics (DRO)	<15.0	999	1100	110	1100	110	70-135	0	35	mg/kg	09.05.17 09:32	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		117		70-135	%	09.05.17 09:32
o-Terphenyl	103		107		70-135	%	09.05.17 09:32

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3026349 | Matrix: Solid | Date Prep: 08.30.17
MB Sample Id: 730163-1-BLK | LCS Sample Id: 730163-1-BKS | LCSD Sample Id: 730163-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.116	116	0.114	114	70-130	2	35	mg/kg	08.30.17 10:00	
Toluene	<0.00200	0.0998	0.114	114	0.112	112	70-130	2	35	mg/kg	08.30.17 10:00	
Ethylbenzene	<0.00200	0.0998	0.115	115	0.113	113	71-129	2	35	mg/kg	08.30.17 10:00	
m,p-Xylenes	<0.00399	0.200	0.225	113	0.221	110	70-135	2	35	mg/kg	08.30.17 10:00	
o-Xylene	<0.00200	0.0998	0.109	109	0.107	107	71-133	2	35	mg/kg	08.30.17 10:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		91		84		80-120	%	08.30.17 10:00
4-Bromofluorobenzene	84		87		80		80-120	%	08.30.17 10:00

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3026428 | Matrix: Solid | Date Prep: 08.31.17
MB Sample Id: 730213-1-BLK | LCS Sample Id: 730213-1-BKS | LCSD Sample Id: 730213-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.115	115	0.110	110	70-130	4	35	mg/kg	09.01.17 02:04	
Toluene	<0.00201	0.100	0.115	115	0.108	108	70-130	6	35	mg/kg	09.01.17 02:04	
Ethylbenzene	<0.00201	0.100	0.117	117	0.110	110	71-129	6	35	mg/kg	09.01.17 02:04	
m,p-Xylenes	<0.00402	0.201	0.227	113	0.213	107	70-135	6	35	mg/kg	09.01.17 02:04	
o-Xylene	<0.00201	0.100	0.111	111	0.105	105	71-133	6	35	mg/kg	09.01.17 02:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	82		93		93		80-120	%	09.01.17 02:04
4-Bromofluorobenzene	86		110		104		80-120	%	09.01.17 02:04

QC Summary 561418

COG Operating LLC

USP Fee #2H

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3026349 Matrix: Soil Date Prep: 08.30.17

Parent Sample Id: 561417-003 MS Sample Id: 561417-003 S MSD Sample Id: 561417-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0991	98	0.0908	91	70-130	9	35	mg/kg	08.30.17 20:43	
Toluene	<0.00202	0.101	0.0940	93	0.0842	84	70-130	11	35	mg/kg	08.30.17 20:43	
Ethylbenzene	<0.00202	0.101	0.0858	85	0.0740	74	71-129	15	35	mg/kg	08.30.17 20:43	
m,p-Xylenes	<0.00404	0.202	0.166	82	0.142	71	70-135	16	35	mg/kg	08.30.17 20:43	
o-Xylene	<0.00202	0.101	0.0831	82	0.0719	72	71-133	14	35	mg/kg	08.30.17 20:43	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		102		80-120	%	08.30.17 20:43
4-Bromofluorobenzene	93		98		80-120	%	08.30.17 20:43

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5030B

Seq Number: 3026428 Matrix: Soil Date Prep: 08.31.17

Parent Sample Id: 561418-003 MS Sample Id: 561418-003 S MSD Sample Id: 561418-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00353	0.177	0.0453	26	0.0419	24	70-130	8	35	mg/kg	09.01.17 02:42	X
Toluene	<0.00353	0.177	0.0705	40	0.0647	37	70-130	9	35	mg/kg	09.01.17 02:42	X
Ethylbenzene	<0.00353	0.177	0.101	57	0.0940	54	71-129	7	35	mg/kg	09.01.17 02:42	X
m,p-Xylenes	<0.00707	0.353	0.202	57	0.187	54	70-135	8	35	mg/kg	09.01.17 02:42	X
o-Xylene	<0.00353	0.177	0.116	66	0.109	63	71-133	6	35	mg/kg	09.01.17 02:42	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		92		80-120	%	09.01.17 02:42
4-Bromofluorobenzene	107		91		80-120	%	09.01.17 02:42

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Setting the Standard since 1990

Stafford,Texas (281-240-4200)
Dallas Texas (214-902-0300)
San Antonio, Texas (210-509-3334)
Midland, Texas (432-704-5251)
Phoenix, Arizona (480-355-0900)
www.xenco.com

CHAIN OF CUSTODY

Page 2 / Of 2

Xenco Quote # | Xenco Job # 561418

Client / Reporting Information

Company Name / Branch: COG Operating LLC
Company Address: 2407 PECOS Avenue Artesia NM 88210
Email: alieb@concho.com dneel2@concho.com rhaskell@concho.com
Phone No: 575-748-1553
Project Contact: Aaron Lieb
Samplers's Name- Aaron Lieb

Project Information

Project Name/Number: USP Fee #2H
Project Location: USP Fee #2H
Invoice To: COG Operating LLC
Attn: Robert Mcneill
600 W. Illinois
Midland TX 79701
PO Number:

Analytical Information

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
WI = Wipe
O = Oil
WW= Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	TPH/ EXTENDED	BTEX	Chloride	Field Comments
1	TZ BG	SURF	8-24-17	12:00PM											X	X	X	
2	TZ BG	1'													X	X	X	
3	TZ BG	2'													X	X	X	
4	TZ BG	3'															X	
5	TZ BG	4'															X	
6	TZ BG	6'															X	
7	TZ BG	8'															X	
8	TZ BG	10'															X	
9	TZ BG	12'															X	
10	TZ BG	14'	↓	↓													X	

Turnaround Time (Business days)

- Same Day TAT
- 5 Day TAT
- Next Day EMERGENCY
- 7 Day TAT
- 2 Day EMERGENCY
- Contract TAT
- 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- Level II Std QC
- Level IV (Full Data Pkg /raw data)
- Level III Std QC+ Forms
- TRRP Level IV
- Level 3 (CLP Forms)
- UST / RG -411
- TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1			1	2		2
3	Relinquished by:	Date Time: 8-25-17 1330	Received By: Sid Butler 8-25-17 1330	Relinquished By: Sid Butler 8-25-17 2:45p	Date Time:	Received By: 4
5	Relinquished by: ACCESIO	Date Time: 8-26-17 14:00	Received By: 5	Custody Seal #	Preserved where applicable	On Ice ✓ Cooler Temp. 8.6° Thermo. Corr. Factor

Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

CHAIN OF CUSTODY

Page 2 / Of 2

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Dallas Texas (214-902-0300) | Midland, Texas (432-704-5251)

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Xenco Quote # | Xenco Job # 561418

Client / Reporting Information

Company Name / Branch: COG Operating LLC

Company Address: 2407 PECOS Avenue Artesia NM 88210

Email: alieb@concho.com dneel2@concho.com rhaskell@concho.com | Phone No: 575-748-1553

Project Contact: Aaron Lieb

Samplers's Name- Aaron Lieb

Project Information

Project Name/Number: USP Fee #2H

Project Location: USP Fee #2H

Invoice To: COG Operating LLC
Attn: Robert Mcneill
600 W. Illinois
Midland TX 79701

PO Number:

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
WI = Wipe
O = Oil
WW= Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Preserved: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Analytical: TPH/ EXTENDED	Analytical: BTEX	Analytical: Chloride	Field Comments
1	TZ BG	SURF	8-24-17	12:00PM											X	X	X	
2	TZ BG	1'													X	X	X	
3	TZ BG	2'													X	X	X	
4	TZ BG	3'															X	
5	TZ BG	4'															X	
6	TZ BG	6'															X	
7	TZ BG	8'															X	
8	TZ BG	10'															X	
9	TZ BG	12'															X	
10	TZ BG	14'	↓	↓													X	

Turnaround Time (Business days) | Data Deliverable Information | Notes

- ☐ Same Day TAT
- ☐ 5 Day TAT
- ☐ Next Day EMERGENCY
- ☐ 7 Day TAT
- ☐ 2 Day EMERGENCY
- ☐ Contract TAT
- ☐ 3 Day EMERGENCY
- ☐ Level II Std QC
- ☐ Level IV (Full Data Pkg /raw data)
- ☐ Level III Std QC+ Forms
- ☐ TRRP Level IV
- ☐ Level 3 (CLP Forms)
- ☐ UST / RG -411
- ☐ TRRP Checklist

Temp: 2.8 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 2.6

TAT Starts Day received by Lab, if received by 5:00 pm

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1			1	2		2
3	Relinquished by:	Date Time: 8-25-17 12:30PM	Received By: Sid Butler 8-25-17 1230p	Relinquished By: Sid Butler 8-25-17 2:45p	Date Time:	Received By: 4
5	Relinquished by: ATLESIO	Date Time: 8-26-17 14:00	Received By: 5	Custody Seal #	Preserved where applicable	On Ice ✓ Cooler Temp. 8.6° Thermo. Corr. Factor

Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for losses or expenses incurred by the Client if such loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: COG Operating LLC

Date/ Time Received: 08/26/2017 02:00:00 PM

Work Order #: 561418

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.6
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seal present on shipping container/ cooler?	**N/A**
#5 *Custody Seals intact on shipping container/ cooler?	**N/A**
#6 Custody Seals intact on sample bottles?	**N/A**
#7 *Custody Seals Signed and dated?	**N/A**
#8 *Chain of Custody present?	**Yes**
#9 Sample instructions complete on Chain of Custody?	**Yes**
#10 Any missing/extra samples?	**No**
#11 Chain of Custody signed when relinquished/ received?	**Yes**
#12 Chain of Custody agrees with sample label(s)?	**Yes**
#13 Container label(s) legible and intact?	**Yes**
#14 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#15 Samples in proper container/ bottle?	**Yes**
#16 Samples properly preserved?	**Yes**
#17 Sample container(s) intact?	**Yes**
#18 Sufficient sample amount for indicated test(s)?	**Yes**
#19 All samples received within hold time?	**Yes**
#20 Subcontract of sample(s)?	**No**
#21 VOC samples have zero headspace?	**N/A**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:

PH Device/Lot#:

Checklist completed by: Shawnee Smith Date: 08/29/2017

Shawnee Smith

Checklist reviewed by: Kelsey Brooks Date: 08/29/2017

Kelsey Brooks

Certificate of Analysis Summary 561430

COG Operating LLC, Artesia, NM

Project Name: USP FEE #2 H

Project Id:
Contact: Aaron Lieb
Project Location: USP Fee #2 H

Date Received in Lab: Sat Aug-26-17 02:00 pm
Report Date: 11-SEP-17
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	561430-001		561430-002		561430-003		561430-004		561430-005		561430-006	
	Field Id:	T1		T1		T1		T1		T1		T1	
	Depth:			1- ft		2- ft		3- ft		4- ft		6- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Aug-24-17 10:00		Aug-24-17 10:00		Aug-24-17 10:00		Aug-24-17 10:00		Aug-24-17 10:00		Aug-24-17 10:00	
BTEX by EPA 8021B	***Extracted:***	Sep-05-17 08:30		Sep-06-17 08:00		Sep-05-17 08:30							
	Analyzed:	Sep-05-17 16:23		Sep-06-17 10:50		Sep-05-17 16:23							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Benzene		<0.00199	0.00199	<0.00345	0.00345	<0.00201	0.00201						
Toluene		<0.00199	0.00199	<0.00345	0.00345	<0.00201	0.00201						
Ethylbenzene		<0.00199	0.00199	<0.00345	0.00345	<0.00201	0.00201						
m,p-Xylenes		<0.00398	0.00398	<0.00690	0.00690	<0.00402	0.00402						
o-Xylene		<0.00199	0.00199	<0.00345	0.00345	<0.00201	0.00201						
Total Xylenes		<0.00199	0.00199	<0.00345	0.00345	<0.00201	0.00201						
Total BTEX		<0.00199	0.00199	<0.00345	0.00345	<0.00201	0.00201						
Inorganic Anions by EPA 300/300.1	***Extracted:***	Sep-06-17 11:05		Sep-06-17 11:05		Sep-06-17 11:05		Sep-06-17 11:05		Sep-06-17 11:05		Sep-06-17 11:05	
	Analyzed:	Sep-06-17 12:06		Sep-06-17 12:21		Sep-06-17 12:14		Sep-06-17 12:44		Sep-06-17 12:52		Sep-06-17 13:15	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		41.7	4.92	240	4.97	6030	49.4	5680	49.6	8380	50.1	952	5.00
TPH By SW8015 Mod	***Extracted:***	Aug-29-17 16:00		Aug-29-17 16:00		Aug-29-17 16:00							
	Analyzed:	Aug-30-17 06:29		Aug-30-17 06:50		Aug-30-17 07:11							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0						
Diesel Range Organics (DRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0						
Oil Range Hydrocarbons (ORO)		<15.0	15.0	<15.0	15.0	<15.0	15.0						
Total TPH		<15.0	15.0	<15.0	15.0	<15.0	15.0						

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 561430

COG Operating LLC, Artesia, NM

Project Name: USP FEE #2 H

Project Id:

Contact: Aaron Lieb

Project Location: USP Fee #2 H

Date Received in Lab: Sat Aug-26-17 02:00 pm

Report Date: 11-SEP-17

Project Manager: Kelsey Brooks

Analysis Requested											
	Lab Id:	561430-007		561430-008		561430-009					
	Field Id:	T1		T1		T1					
	Depth:	8- ft		12- ft		12- ft					
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Aug-24-17 10:00		Aug-24-17 10:00		Aug-24-17 10:00					
Inorganic Anions by EPA 300/300.1	***Extracted:***	Sep-06-17 11:05		Sep-06-17 15:25		Sep-06-17 15:25					
	Analyzed:	Sep-06-17 13:23		Sep-07-17 00:42		Sep-07-17 00:50					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		<5.00	5.00	494	4.97	262	4.99				

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Kelsey Brooks
Project Manager

Final 1.000

Analytical Report 561430

for

COG Operating LLC

Project Manager: Aaron Lieb

USP FEE #2 H

11-SEP-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
Oklahoma (9218)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400)
Xenco-San Antonio: Texas (T104704534)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

11-SEP-17

Project Manager: **Aaron Lieb**
COG Operating LLC
2407 Pecos Avenue
Artesia, NM 88210

Reference: XENCO Report No(s): **561430**
USP FEE #2 H
Project Address: USP Fee #2 H

Aaron Lieb:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 561430. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 561430 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

Sample Cross Reference 561430

COG Operating LLC, Artesia, NM

USP FEE #2 H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
T1	S	08-24-17 10:00		561430-001
T1	S	08-24-17 10:00	1 ft	561430-002
T1	S	08-24-17 10:00	2 ft	561430-003
T1	S	08-24-17 10:00	3 ft	561430-004
T1	S	08-24-17 10:00	4 ft	561430-005
T1	S	08-24-17 10:00	6 ft	561430-006
T1	S	08-24-17 10:00	8 ft	561430-007
T1	S	08-24-17 10:00	12 ft	561430-008
T1	S	08-24-17 10:00	12 ft	561430-009

CASE NARRATIVE

Client Name: COG Operating LLC
Project Name: USP FEE #2 H

Project ID:
Work Order Number(s): *561430*

Report Date: *11-SEP-17*
Date Received: *08/26/2017*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3026700 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3026877 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 561430

COG Operating LLC, Artesia, NM

USP FEE #2 H

Sample Id:	**T1**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561430-001	Date Collected:	08.24.17 10.00		

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 11.05	Basis:	Wet Weight
Seq Number:	3027144				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**41.7**	4.92	mg/kg	09.06.17 12.06		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.29.17 16.00	Basis:	Wet Weight
Seq Number:	3026605				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.30.17 06.29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.30.17 06.29	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.30.17 06.29	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.30.17 06.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	08.30.17 06.29	
o-Terphenyl	84-15-1	95	%	70-135	08.30.17 06.29	

Certificate of Analytical Results 561430

COG Operating LLC, Artesia, NM

USP FEE #2 H

Sample Id:	**T1**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561430-001	Date Collected:	08.24.17 10.00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.05.17 08.30	Basis:	Wet Weight
Seq Number:	3026700				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	09.05.17 16.23	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	09.05.17 16.23	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	09.05.17 16.23	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	09.05.17 16.23	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	09.05.17 16.23	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	09.05.17 16.23	U	1
Total BTEX		<0.00199	0.00199	mg/kg	09.05.17 16.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	91	%	80-120	09.05.17 16.23	
4-Bromofluorobenzene	460-00-4	102	%	80-120	09.05.17 16.23	

Certificate of Analytical Results 561430

COG Operating LLC, Artesia, NM

USP FEE #2 H

Sample Id:	**T1**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561430-002	Date Collected:	08.24.17 10.00	Sample Depth:	1 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 11.05	Basis:	Wet Weight
Seq Number:	3027144				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**240**	4.97	mg/kg	09.06.17 12.21		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.29.17 16.00	Basis:	Wet Weight
Seq Number:	3026605				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.30.17 06.50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.30.17 06.50	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.30.17 06.50	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.30.17 06.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-135	08.30.17 06.50	
o-Terphenyl	84-15-1	107	%	70-135	08.30.17 06.50	

Certificate of Analytical Results 561430

COG Operating LLC, Artesia, NM

USP FEE #2 H

Sample Id:	**T1**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561430-002	Date Collected:	08.24.17 10.00	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.06.17 08.00	Basis:	Wet Weight
Seq Number:	3026877				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00345	0.00345	mg/kg	09.06.17 10.50	U	1
Toluene	108-88-3	<0.00345	0.00345	mg/kg	09.06.17 10.50	U	1
Ethylbenzene	100-41-4	<0.00345	0.00345	mg/kg	09.06.17 10.50	U	1
m,p-Xylenes	179601-23-1	<0.00690	0.00690	mg/kg	09.06.17 10.50	U	1
o-Xylene	95-47-6	<0.00345	0.00345	mg/kg	09.06.17 10.50	U	1
Total Xylenes	1330-20-7	<0.00345	0.00345	mg/kg	09.06.17 10.50	U	1
Total BTEX		<0.00345	0.00345	mg/kg	09.06.17 10.50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	80-120	09.06.17 10.50	
1,4-Difluorobenzene	540-36-3	91	%	80-120	09.06.17 10.50	

Certificate of Analytical Results 561430

COG Operating LLC, Artesia, NM

USP FEE #2 H

Sample Id:	**T1**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561430-003	Date Collected:	08.24.17 10.00	Sample Depth:	2 ft

Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 11.05	Basis:	Wet Weight
Seq Number:	3027144				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6030**	49.4	mg/kg	09.06.17 12.14		10

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	08.29.17 16.00	Basis:	Wet Weight
Seq Number:	3026605				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	08.30.17 07.11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	08.30.17 07.11	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	08.30.17 07.11	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	08.30.17 07.11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	08.30.17 07.11	
o-Terphenyl	84-15-1	106	%	70-135	08.30.17 07.11	

Certificate of Analytical Results 561430

COG Operating LLC, Artesia, NM

USP FEE #2 H

Sample Id:	**T1**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561430-003	Date Collected:	08.24.17 10.00	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	09.05.17 08.30	Basis:	Wet Weight
Seq Number:	3026700				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	09.05.17 16.23	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	09.05.17 16.23	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	09.05.17 16.23	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	09.05.17 16.23	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	09.05.17 16.23	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	09.05.17 16.23	U	1
Total BTEX		<0.00201	0.00201	mg/kg	09.05.17 16.23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	91	%	80-120	09.05.17 16.23	
4-Bromofluorobenzene	460-00-4	87	%	80-120	09.05.17 16.23	

Certificate of Analytical Results 561430

COG Operating LLC, Artesia, NM

USP FEE #2 H

Sample Id:	**T1**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561430-004	Date Collected:	08.24.17 10.00	Sample Depth:	3 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 11.05	Basis:	Wet Weight
Seq Number:	3027144				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**5680**	49.6	mg/kg	09.06.17 12.44		10

Certificate of Analytical Results 561430

COG Operating LLC, Artesia, NM

USP FEE #2 H

Sample Id:	**T1**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561430-005	Date Collected:	08.24.17 10.00	Sample Depth:	4 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 11.05	Basis:	Wet Weight
Seq Number:	3027144				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8380**	50.1	mg/kg	09.06.17 12.52		10

Certificate of Analytical Results 561430

COG Operating LLC, Artesia, NM

USP FEE #2 H

Sample Id:	**T1**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561430-006	Date Collected:	08.24.17 10.00	Sample Depth:	6 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 11.05	Basis:	Wet Weight
Seq Number:	3027144				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**952**	5.00	mg/kg	09.06.17 13.15		1

Certificate of Analytical Results 561430

COG Operating LLC, Artesia, NM

USP FEE #2 H

Sample Id:	**T1**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561430-007	Date Collected:	08.24.17 10.00	Sample Depth:	8 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 11.05	Basis:	Wet Weight
Seq Number:	3027144				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	09.06.17 13.23	U	1

Certificate of Analytical Results 561430

COG Operating LLC, Artesia, NM

USP FEE #2 H

Sample Id:	**T1**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561430-008	Date Collected:	08.24.17 10.00	Sample Depth:	12 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 15.25	Basis:	Wet Weight
Seq Number:	3026948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**494**	4.97	mg/kg	09.07.17 00.42		1

Certificate of Analytical Results 561430

COG Operating LLC, Artesia, NM

USP FEE #2 H

Sample Id:	**T1**	Matrix:	Soil	Date Received:	08.26.17 14.00
Lab Sample Id:	561430-009	Date Collected:	08.24.17 10.00	Sample Depth:	12 ft
Analytical Method:	Inorganic Anions by EPA 300/300.1			Prep Method:	E300P
Tech:	MNV			% Moisture:	
Analyst:	MNV	Date Prep:	09.06.17 15.25	Basis:	Wet Weight
Seq Number:	3026948				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**262**	4.99	mg/kg	09.07.17 00.50		1

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 561430

COG Operating LLC

USP FEE #2 H

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Seq Number: 3027144 Matrix: Solid Date Prep: 09.06.17
MB Sample Id: 730453-1-BLK LCS Sample Id: 730453-1-BKS LCSD Sample Id: 730453-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	264	106	264	106	90-110	0	20	mg/kg	09.06.17 10:18	

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Seq Number: 3026948 Matrix: Solid Date Prep: 09.06.17
MB Sample Id: 730456-1-BLK LCS Sample Id: 730456-1-BKS LCSD Sample Id: 730456-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	264	106	264	106	90-110	0	20	mg/kg	09.06.17 10:18	

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Seq Number: 3027144 Matrix: Soil Date Prep: 09.06.17
Parent Sample Id: 561430-002 MS Sample Id: 561430-002 S MSD Sample Id: 561430-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	240	249	489	100	499	104	90-110	2	20	mg/kg	09.06.17 12:29	

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Seq Number: 3027144 Matrix: Soil Date Prep: 09.06.17
Parent Sample Id: 561470-001 MS Sample Id: 561470-001 S MSD Sample Id: 561470-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	30.9	100	140	109	135	104	90-110	4	20	mg/kg	09.06.17 10:41	

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Seq Number: 3026948 Matrix: Soil Date Prep: 09.06.17
Parent Sample Id: 561417-001 MS Sample Id: 561417-001 S MSD Sample Id: 561417-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	77.8	248	355	112	354	111	90-110	0	20	mg/kg	09.06.17 21:17	X

Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P
Seq Number: 3026948 Matrix: Soil Date Prep: 09.06.17
Parent Sample Id: 561418-003 MS Sample Id: 561418-003 S MSD Sample Id: 561418-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	5.62	247	292	116	293	116	90-110	0	20	mg/kg	09.06.17 23:12	X

QC Summary 561430

COG Operating LLC

USP FEE #2 H

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 3026605 — Matrix: Solid — Date Prep: 08.29.17
MB Sample Id: 730143-1-BLK — LCS Sample Id: 730143-1-BKS — LCSD Sample Id: 730143-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	904	90	851	85	70-135	6	35	mg/kg	09.05.17 09:32	
Diesel Range Organics (DRO)	<15.0	1000	1140	114	1030	103	70-135	10	35	mg/kg	09.05.17 09:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		120		97		70-135	%	09.05.17 09:32
o-Terphenyl	109		108		100		70-135	%	09.05.17 09:32

Analytical Method: TPH By SW8015 Mod — Prep Method: TX1005P
Seq Number: 3026605 — Matrix: Soil — Date Prep: 08.29.17
Parent Sample Id: 561417-006 — MS Sample Id: 561417-006 S — MSD Sample Id: 561417-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	999	889	89	886	89	70-135	0	35	mg/kg	09.05.17 09:32	
Diesel Range Organics (DRO)	<15.0	999	1100	110	1100	110	70-135	0	35	mg/kg	09.05.17 09:32	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		117		70-135	%	09.05.17 09:32
o-Terphenyl	103		107		70-135	%	09.05.17 09:32

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3026700 — Matrix: Solid — Date Prep: 09.05.17
MB Sample Id: 730377-1-BLK — LCS Sample Id: 730377-1-BKS — LCSD Sample Id: 730377-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.104	104	0.103	103	70-130	1	35	mg/kg	09.05.17 07:57	
Toluene	<0.00200	0.100	0.102	102	0.101	101	70-130	1	35	mg/kg	09.05.17 07:57	
Ethylbenzene	<0.00200	0.100	0.101	101	0.100	100	71-129	1	35	mg/kg	09.05.17 07:57	
m,p-Xylenes	<0.00401	0.200	0.198	99	0.196	98	70-135	1	35	mg/kg	09.05.17 07:57	
o-Xylene	<0.00200	0.100	0.0952	95	0.0945	95	71-133	1	35	mg/kg	09.05.17 07:57	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		97		96		80-120	%	09.05.17 07:57
4-Bromofluorobenzene	99		105		103		80-120	%	09.05.17 07:57

QC Summary 561430

COG Operating LLC

USP FEE #2 H

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3026877 | Matrix: Solid | Date Prep: 09.06.17
MB Sample Id: 730477-1-BLK | LCS Sample Id: 730477-1-BKS | LCSD Sample Id: 730477-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.117	117	0.115	114	70-130	2	35	mg/kg	09.06.17 12:28	
Toluene	<0.00200	0.100	0.113	113	0.111	110	70-130	2	35	mg/kg	09.06.17 12:28	
Ethylbenzene	<0.00200	0.100	0.112	112	0.110	109	71-129	2	35	mg/kg	09.06.17 12:28	
m,p-Xylenes	<0.00401	0.200	0.219	110	0.214	106	70-135	2	35	mg/kg	09.06.17 12:28	
o-Xylene	<0.00200	0.100	0.105	105	0.103	102	71-133	2	35	mg/kg	09.06.17 12:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		98		95		80-120	%	09.06.17 12:28
4-Bromofluorobenzene	94		102		99		80-120	%	09.06.17 12:28

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3026700 | Matrix: Soil | Date Prep: 09.05.17
Parent Sample Id: 561383-008 | MS Sample Id: 561383-008 S | MSD Sample Id: 561383-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.103	103	0.104	104	70-130	1	35	mg/kg	09.05.17 16:23	
Toluene	<0.00200	0.0998	0.100	100	0.101	101	70-130	1	35	mg/kg	09.05.17 16:23	
Ethylbenzene	<0.00200	0.0998	0.0969	97	0.0982	98	71-129	1	35	mg/kg	09.05.17 16:23	
m,p-Xylenes	<0.00399	0.200	0.189	95	0.191	96	70-135	1	35	mg/kg	09.05.17 16:23	
o-Xylene	<0.00200	0.0998	0.0918	92	0.0932	93	71-133	2	35	mg/kg	09.05.17 16:23	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		106		80-120	%	09.05.17 16:23
4-Bromofluorobenzene	114		116		80-120	%	09.05.17 16:23

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3026877 | Matrix: Soil | Date Prep: 09.06.17
Parent Sample Id: 561742-001 | MS Sample Id: 561742-001 S | MSD Sample Id: 561742-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0756	75	0.0923	92	70-130	20	35	mg/kg	09.06.17 08:37	
Toluene	<0.00202	0.101	0.0635	63	0.0781	78	70-130	21	35	mg/kg	09.06.17 08:37	X
Ethylbenzene	<0.00202	0.101	0.0612	61	0.0761	76	71-129	22	35	mg/kg	09.06.17 08:37	X
m,p-Xylenes	<0.00403	0.202	0.116	57	0.144	72	70-135	22	35	mg/kg	09.06.17 08:37	X
o-Xylene	<0.00202	0.101	0.0594	59	0.0726	73	71-133	20	35	mg/kg	09.06.17 08:37	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		96		80-120	%	09.06.17 08:37
4-Bromofluorobenzene	114		104		80-120	%	09.06.17 08:37

CHAIN OF CUSTODY

Page 1 Of 21

XENCO LABORATORIES

Setting the Standard since 1990

Stafford,Texas (281-240-4200)
Dallas Texas (214-902-0300)
San Antonio, Texas (210-509-3334)
Midland, Texas (432-704-5251)
Phoenix, Arizona (480-355-0900)
www.xenco.com

Xenco Quote #
Xenco Job # 561430

Client / Reporting Information

Company Name / Branch: COG Operating LLC
Company Address: 2407 PECOS Avenue Artesia NM 88210
Email: alieb@concho.com dneel2@concho.com rhaskell@concho.com
Phone No: 575-748-1553
Project Contact: Aaron Lieb
Samplers's Name- Aaron Lieb

Project Information

Project Name/Number: USP Fee #2H
Project Location: USP Fee #2H
Invoice To: COG Operating LLC
Attn: Robert Mcneill
600 W. Illinois
Midland TX 79701
PO Number:

Analytical Information

Matrix Codes

W = Water
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
OW =Ocean/Sea Water
WI = Wipe
O = Oil
WW= Waste Water
A = Air

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	TPH/ EXTENDED	BTEX	Chloride	Field Comments
1	T1	SURF	8-24-17	10:00AM											X	X	X	
2	T1	1'	8-24-17	10:00AM											X	X	X	
3	T1	2'	"	"											X	X	X	
4	T1	3'	"	"													X	
5	T1	4'	"	"													X	
6	T1	6'	"	"													X	
7	T1	8'	"	"													X	
8	T1	10'	"	"													X	
9	T1	12'	"	"													X	
10																	X	

Turnaround Time (Business days)

- [ ] Same Day TAT
- [ ] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 5:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

Temp: 2.8 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 2.6

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1						
2	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		8-25-17 12:30PM	Sid Butler 8-25-17 12:30p	Sid Butler 8-25-17 2:45p		
4	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp. / Thermo. Corr. Factor
5	ARCESIO	8-26-17				✓ 8.6°C

Notice: Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for losses or expenses incurred by the Client if such loses are due to circumstances beyond the control of Xenco. A minimum charge of $75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at $5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: COG Operating LLC

Date/ Time Received: 08/26/2017 02:00:00 PM

Work Order #: 561430

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.6
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seal present on shipping container/ cooler?	**N/A**
#5 *Custody Seals intact on shipping container/ cooler?	**N/A**
#6 Custody Seals intact on sample bottles?	**N/A**
#7 *Custody Seals Signed and dated?	**N/A**
#8 *Chain of Custody present?	**Yes**
#9 Sample instructions complete on Chain of Custody?	**Yes**
#10 Any missing/extra samples?	**No**
#11 Chain of Custody signed when relinquished/ received?	**Yes**
#12 Chain of Custody agrees with sample label(s)?	**Yes**
#13 Container label(s) legible and intact?	**Yes**
#14 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#15 Samples in proper container/ bottle?	**Yes**
#16 Samples properly preserved?	**Yes**
#17 Sample container(s) intact?	**Yes**
#18 Sufficient sample amount for indicated test(s)?	**Yes**
#19 All samples received within hold time?	**Yes**
#20 Subcontract of sample(s)?	**No**
#21 VOC samples have zero headspace?	**N/A**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Shawnee Smith Date: 08/29/2017
Shawnee Smith

Checklist reviewed by: Kelsey Brooks Date: 08/29/2017
Kelsey Brooks

CARDINAL Laboratories

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

November 02, 2018

ZACH CONDER

TRC

10 DESTA DR. SUITE 150 E

MIDLAND, TX 79705

RE: USP FEE #002

Enclosed are the results of analyses for samples received by the laboratory on 11/01/18 14:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

TRC
ZACH CONDER
10 DESTA DR. SUITE 150 E
MIDLAND TX, 79705
Fax To:

Received:	11/01/2018	Sampling Date:	11/01/2018
Reported:	11/02/2018	Sampling Type:	Soil
Project Name:	USP FEE #002	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: NORTH VERTICAL @ SURFACE (H803137-01)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/02/2018	ND	416	104	400	3.77	

Sample ID: NORTH VERTICAL @ 1' (H803137-02)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/02/2018	ND	416	104	400	3.77	

Sample ID: NORTH VERTICAL @ 2' (H803137-03)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	11/02/2018	ND	416	104	400	3.77	

Sample ID: NORTH VERTICAL @ 3' (H803137-04)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1360**	16.0	11/02/2018	ND	416	104	400	3.77	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

TRC
ZACH CONDER
10 DESTA DR. SUITE 150 E
MIDLAND TX, 79705
Fax To:

Received:	11/01/2018	Sampling Date:	11/01/2018
Reported:	11/02/2018	Sampling Type:	Soil
Project Name:	USP FEE #002	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: NORTH VERTICAL @ 4' (H803137-05)

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	11/02/2018	ND	416	104	400	3.77	

Sample ID: NORTH VERTICAL @ 6' (H803137-06)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1920**	16.0	11/02/2018	ND	416	104	400	3.77	

Sample ID: NORTH VERTICAL @ 8' (H803137-07)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1390**	16.0	11/02/2018	ND	416	104	400	3.77	

Sample ID: NORTH VERTICAL @ 10' (H803137-08)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1440**	16.0	11/02/2018	ND	416	104	400	3.77	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

Rush

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	TRC	**BILL TO**	
Project Manager:	Zack Conder	P.O. #:	
Address:	10 Desta Dr Suite 150E	Company:	COG
City:	Midland State: TX Zip: 79	Attn:	
Phone #:	Fax #:	Address:	
Project #:	Project Owner:	City:	
Project Name:	USP Fee #002	State:	Zip:
Project Location:		Phone #:	
Sampler Name:	Kyle Schmaidt	Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST											
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	C1-											
H803137																										
1	North Vert @ Surface	G	1			X					X		11-1-18	12:00	X											
2	North Vert @ 1'	G	1			X					X			12:05	X											
3	North Vert @ 2'	G	1			X					X			12:10	X											
4	North Vert @ 3'	G	1			X					X			12:15	X											
5	North Vert @ 4'	G	1			X					X			12:20	X											
6	North Vert @ 6'	G	1			X					X			12:25	X											
7	North Vert @ 8'	G	1			X					X			12:30	X											
8	North Vert @ 10'	G	1			X					X			12:35	X											

Relinquished By:	Date: 11-1-18	Received By:	Tamara Oldaker
	Time: 14:50		
Relinquished By:	Date:	Received By:	
	Time:		

Delivered By: (Circle One)
Sampler - UPS - Bus - Other: 1.9c #97

Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No

CHECKED BY: (Initials) TO

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:

REMARKS:
zconder@trcsolutions.com
bcooper@trcsolutions.com
kschmaidt@trcsolutions.com

+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

CARDINAL Laboratories

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

November 02, 2018

ZACH CONDER

TRC

10 DESTA DR. SUITE 150 E

MIDLAND, TX 79705

RE: USP FEE #002

Enclosed are the results of analyses for samples received by the laboratory on 11/01/18 14:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

TRC
ZACH CONDER
10 DESTA DR. SUITE 150 E
MIDLAND TX, 79705
Fax To:

Received:	11/01/2018	Sampling Date:	11/01/2018
Reported:	11/02/2018	Sampling Type:	Soil
Project Name:	USP FEE #002	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SOUTH VERTICAL @ SURFACE (H803138-01)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	11/02/2018	ND	416	104	400	3.77	

Sample ID: SOUTH VERTICAL @ 1' (H803138-02)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**208**	16.0	11/02/2018	ND	416	104	400	3.77	

Sample ID: SOUTH VERTICAL @ 2' (H803138-03)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1630**	16.0	11/02/2018	ND	416	104	400	3.77	

Sample ID: SOUTH VERTICAL @ 3' (H803138-04)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1520**	16.0	11/02/2018	ND	432	108	400	0.00	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

TRC
ZACH CONDER
10 DESTA DR. SUITE 150 E
MIDLAND TX, 79705
Fax To:

Received:	11/01/2018	Sampling Date:	11/01/2018
Reported:	11/02/2018	Sampling Type:	Soil
Project Name:	USP FEE #002	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SOUTH VERTICAL @ 4' (H803138-05)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1280**	16.0	11/02/2018	ND	432	108	400	0.00	

Sample ID: SOUTH VERTICAL @ 6' (H803138-06)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1700**	16.0	11/02/2018	ND	432	108	400	0.00	

Sample ID: SOUTH VERTICAL @ 8' (H803138-07)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2160**	16.0	11/02/2018	ND	432	108	400	0.00	

Sample ID: SOUTH VERTICAL @ 10' (H803138-08)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2640**	16.0	11/02/2018	ND	432	108	400	0.00	

Sample ID: SOUTH VERTICAL @ 12' (H803138-09)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2840**	16.0	11/02/2018	ND	432	108	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

Rush

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: TRC		**BILL TO**	
Project Manager: Zack Conder		P.O. #:	
Address: 10 Desta Dr. Suite 150E		Company: COG	
City: Midland	State: TX Zip:	Attn:	
Phone #:	Fax #:	Address:	
Project #:	Project Owner:	City:	
Project Name: USP Fee #002		State: Zip:	
Project Location:		Phone #:	
Sampler Name: Kyle Schmidt		Fax #:	

FOR LAB USE ONLY				MATRIX							PRESERV.			SAMPLING		ANALYSIS REQUEST
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	Cl-
H803138															
1	South Vert @ Surf	G	1			X					X		11-1-18	1:00	X
2	South Vert @ 1'	G	1			X					X			1:05	X
3	South Vert @ 2'	G	1			X					X			1:10	X
4	South Vert @ 3'	G	1			X					X			1:15	X
5	South Vert @ 4'	G	1			X					X			1:20	X
6	South Vert @ 6'	G	1			X					X			1:25	X
7	South Vert @ 8'	G	1			X					X			1:30	X
8	South Vert @ 10'	G	1			X					X			1:35	X
9	South Vert @ 12'	G	1			X					X			1:40	X

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

Relinquished By:	Date: 11-1-18	Received By: Tamara Oldaker	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 14:50		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: zconder@trcsolutions.com bcooper@trcsolutions.com kschmidt@trcsolutions.com
	Time:		

Delivered By: (Circle One)
Sampler - UPS - Bus - Other: 1.9°c #97

Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No

CHECKED BY: (Initials) TO

+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

CARDINAL Laboratories

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

July 10, 2024

LISBETH CHAVIRA

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: USP FEE #002H RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 07/03/24 13:09.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/03/2024	Sampling Date:	07/03/2024
Reported:	07/10/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 1 (0-1') (H244007-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2024	ND	2.01	101	2.00	0.310	
Toluene*	<0.050	0.050	07/09/2024	ND	2.00	100	2.00	0.395	
Ethylbenzene*	<0.050	0.050	07/09/2024	ND	2.12	106	2.00	0.763	
Total Xylenes*	<0.150	0.150	07/09/2024	ND	6.26	104	6.00	0.976	
Total BTEX	<0.300	0.300	07/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.2 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	07/09/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2024	ND	102	102	100	2.73	
DRO >C10-C28*	<10.0	10.0	07/09/2024	ND	91.8	91.8	100	5.66	
EXT DRO >C28-C36	<10.0	10.0	07/09/2024	ND					

Surrogate: 1-Chlorooctane *97.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *89.5 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/03/2024	Sampling Date:	07/03/2024
Reported:	07/10/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 2 (0-1') (H244007-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2024	ND	2.01	101	2.00	0.310	
Toluene*	<0.050	0.050	07/09/2024	ND	2.00	100	2.00	0.395	
Ethylbenzene*	<0.050	0.050	07/09/2024	ND	2.12	106	2.00	0.763	
Total Xylenes*	<0.150	0.150	07/09/2024	ND	6.26	104	6.00	0.976	
Total BTEX	<0.300	0.300	07/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.3 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	07/09/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2024	ND	102	102	100	2.73	
DRO >C10-C28*	<10.0	10.0	07/09/2024	ND	91.8	91.8	100	5.66	
EXT DRO >C28-C36	<10.0	10.0	07/09/2024	ND					

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

Surrogate: 1-Chlorooctadecane *95.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/03/2024	Sampling Date:	07/03/2024
Reported:	07/10/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 3 (0-1') (H244007-03)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2024	ND	2.01	101	2.00	0.310	
Toluene*	<0.050	0.050	07/09/2024	ND	2.00	100	2.00	0.395	
Ethylbenzene*	<0.050	0.050	07/09/2024	ND	2.12	106	2.00	0.763	
Total Xylenes*	<0.150	0.150	07/09/2024	ND	6.26	104	6.00	0.976	
Total BTEX	<0.300	0.300	07/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.8 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	07/09/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2024	ND	102	102	100	2.73	
DRO >C10-C28*	<10.0	10.0	07/09/2024	ND	91.8	91.8	100	5.66	
EXT DRO >C28-C36	<10.0	10.0	07/09/2024	ND					

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

Surrogate: 1-Chlorooctadecane *112 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/03/2024	Sampling Date:	07/03/2024
Reported:	07/10/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 3 (1'-2') (H244007-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2024	ND	2.01	101	2.00	0.310	
Toluene*	<0.050	0.050	07/09/2024	ND	2.00	100	2.00	0.395	
Ethylbenzene*	<0.050	0.050	07/09/2024	ND	2.12	106	2.00	0.763	
Total Xylenes*	<0.150	0.150	07/09/2024	ND	6.26	104	6.00	0.976	
Total BTEX	<0.300	0.300	07/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.1 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**848**	16.0	07/09/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2024	ND	102	102	100	2.73	
DRO >C10-C28*	<10.0	10.0	07/09/2024	ND	91.8	91.8	100	5.66	
EXT DRO >C28-C36	<10.0	10.0	07/09/2024	ND					

Surrogate: 1-Chlorooctane *108 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *110 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/03/2024	Sampling Date:	07/03/2024
Reported:	07/10/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 4 (0-1') (H244007-05)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2024	ND	2.01	101	2.00	0.310	
Toluene*	<0.050	0.050	07/09/2024	ND	2.00	100	2.00	0.395	
Ethylbenzene*	<0.050	0.050	07/09/2024	ND	2.12	106	2.00	0.763	
Total Xylenes*	<0.150	0.150	07/09/2024	ND	6.26	104	6.00	0.976	
Total BTEX	<0.300	0.300	07/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.0 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/09/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2024	ND	102	102	100	2.73	
DRO >C10-C28*	<10.0	10.0	07/09/2024	ND	91.8	91.8	100	5.66	
EXT DRO >C28-C36	<10.0	10.0	07/09/2024	ND					

Surrogate: 1-Chlorooctane *110 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *110 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/03/2024	Sampling Date:	07/03/2024
Reported:	07/10/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 5 (0-1') (H244007-06)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2024	ND	2.01	101	2.00	0.310	
Toluene*	<0.050	0.050	07/09/2024	ND	2.00	100	2.00	0.395	
Ethylbenzene*	<0.050	0.050	07/09/2024	ND	2.12	106	2.00	0.763	
Total Xylenes*	<0.150	0.150	07/09/2024	ND	6.26	104	6.00	0.976	
Total BTEX	<0.300	0.300	07/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.7 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/09/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2024	ND	102	102	100	2.73	
DRO >C10-C28*	<10.0	10.0	07/09/2024	ND	91.8	91.8	100	5.66	
EXT DRO >C28-C36	<10.0	10.0	07/09/2024	ND					

Surrogate: 1-Chlorooctane *110 %* *48.2-134*

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/03/2024	Sampling Date:	07/03/2024
Reported:	07/10/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 5 (1'-2') (H244007-07)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2024	ND	2.01	101	2.00	0.310	
Toluene*	<0.050	0.050	07/09/2024	ND	2.00	100	2.00	0.395	
Ethylbenzene*	<0.050	0.050	07/09/2024	ND	2.12	106	2.00	0.763	
Total Xylenes*	<0.150	0.150	07/09/2024	ND	6.26	104	6.00	0.976	
Total BTEX	<0.300	0.300	07/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.5 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1250**	16.0	07/09/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2024	ND	102	102	100	2.73	
DRO >C10-C28*	<10.0	10.0	07/09/2024	ND	91.8	91.8	100	5.66	
EXT DRO >C28-C36	<10.0	10.0	07/09/2024	ND					

Surrogate: 1-Chlorooctane *89.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.9 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/03/2024	Sampling Date:	07/03/2024
Reported:	07/10/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 6 (0-1') (H244007-08)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2024	ND	2.01	101	2.00	0.310	
Toluene*	<0.050	0.050	07/09/2024	ND	2.00	100	2.00	0.395	
Ethylbenzene*	<0.050	0.050	07/09/2024	ND	2.12	106	2.00	0.763	
Total Xylenes*	<0.150	0.150	07/09/2024	ND	6.26	104	6.00	0.976	
Total BTEX	<0.300	0.300	07/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.1 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	07/09/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2024	ND	102	102	100	2.73	
DRO >C10-C28*	<10.0	10.0	07/09/2024	ND	91.8	91.8	100	5.66	
EXT DRO >C28-C36	<10.0	10.0	07/09/2024	ND					

Surrogate: 1-Chlorooctane *87.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *88.1 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/03/2024	Sampling Date:	07/03/2024
Reported:	07/10/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 7 (0-1') (H244007-09)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2024	ND	2.01	101	2.00	0.310	
Toluene*	<0.050	0.050	07/09/2024	ND	2.00	100	2.00	0.395	
Ethylbenzene*	<0.050	0.050	07/09/2024	ND	2.12	106	2.00	0.763	
Total Xylenes*	<0.150	0.150	07/09/2024	ND	6.26	104	6.00	0.976	
Total BTEX	<0.300	0.300	07/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.8 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	07/09/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2024	ND	102	102	100	2.73	
DRO >C10-C28*	<10.0	10.0	07/09/2024	ND	91.8	91.8	100	5.66	
EXT DRO >C28-C36	<10.0	10.0	07/09/2024	ND					

Surrogate: 1-Chlorooctane *108 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *107 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/03/2024	Sampling Date:	07/03/2024
Reported:	07/10/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 8 (0-1') (H244007-10)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2024	ND	2.01	101	2.00	0.310	
Toluene*	<0.050	0.050	07/09/2024	ND	2.00	100	2.00	0.395	
Ethylbenzene*	<0.050	0.050	07/09/2024	ND	2.12	106	2.00	0.763	
Total Xylenes*	<0.150	0.150	07/09/2024	ND	6.26	104	6.00	0.976	
Total BTEX	<0.300	0.300	07/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.8 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/09/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2024	ND	102	102	100	2.73	
DRO >C10-C28*	<10.0	10.0	07/09/2024	ND	91.8	91.8	100	5.66	
EXT DRO >C28-C36	<10.0	10.0	07/09/2024	ND					

Surrogate: 1-Chlorooctane *98.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *107 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/03/2024	Sampling Date:	07/03/2024
Reported:	07/10/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 9 (0-1') (H244007-11)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2024	ND	2.01	101	2.00	0.310	
Toluene*	<0.050	0.050	07/09/2024	ND	2.00	100	2.00	0.395	
Ethylbenzene*	<0.050	0.050	07/09/2024	ND	2.12	106	2.00	0.763	
Total Xylenes*	<0.150	0.150	07/09/2024	ND	6.26	104	6.00	0.976	
Total BTEX	<0.300	0.300	07/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.5 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	07/09/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2024	ND	102	102	100	2.73	
DRO >C10-C28*	<10.0	10.0	07/09/2024	ND	91.8	91.8	100	5.66	
EXT DRO >C28-C36	<10.0	10.0	07/09/2024	ND					

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

Surrogate: 1-Chlorooctadecane *103 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/03/2024	Sampling Date:	07/03/2024
Reported:	07/10/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 10 (0-1') (H244007-12)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2024	ND	2.01	101	2.00	0.310	
Toluene*	<0.050	0.050	07/09/2024	ND	2.00	100	2.00	0.395	
Ethylbenzene*	<0.050	0.050	07/09/2024	ND	2.12	106	2.00	0.763	
Total Xylenes*	<0.150	0.150	07/09/2024	ND	6.26	104	6.00	0.976	
Total BTEX	<0.300	0.300	07/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.0 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**240**	16.0	07/09/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2024	ND	102	102	100	2.73	
DRO >C10-C28*	<10.0	10.0	07/09/2024	ND	91.8	91.8	100	5.66	
EXT DRO >C28-C36	<10.0	10.0	07/09/2024	ND					

Surrogate: 1-Chlorooctane *102 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *103 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/03/2024	Sampling Date:	07/03/2024
Reported:	07/10/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: AH - 11 (0-1') (H244007-13)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/09/2024	ND	2.01	101	2.00	0.310	
Toluene*	<0.050	0.050	07/09/2024	ND	2.00	100	2.00	0.395	
Ethylbenzene*	<0.050	0.050	07/09/2024	ND	2.12	106	2.00	0.763	
Total Xylenes*	<0.150	0.150	07/09/2024	ND	6.26	104	6.00	0.976	
Total BTEX	<0.300	0.300	07/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.6 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**624**	16.0	07/09/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/09/2024	ND	102	102	100	2.73	
DRO >C10-C28*	<10.0	10.0	07/09/2024	ND	91.8	91.8	100	5.66	
EXT DRO >C28-C36	<10.0	10.0	07/09/2024	ND					

Surrogate: 1-Chlorooctane *93.5 %* *48.2-134*

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Tetra Tech		**BILL TO**	
Project Manager: Lisbeth Chavira		P.O. #:	
Address: 8911 Capital Of Texas Hwy, Suite 2310		Company: Tetra Tech	
City: Austin	State: TX Zip:	Attn: Lisbeth Chavira	
Phone #: (512) 565-0190	Fax #:	Address: EMAIL	
Project #: 212C-MD-03545	Project Owner: ConocoPhillips	City:	
Project Name: USP Fee #002H Release		State: Zip:	
Project Location: Eddy County, New Mexico		Phone #:	
Sampler Name: Colton Bickerstaff		Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: TPH 8015M	BTEX 8021B	Chloride SM4500Cl-B
H241007 1	AH-1 (0-1')	C	1			X					X		7/3/2024		X	X	X
2	AH-2 (0-1')	C	1			X					X		7/3/2024		X	X	X
3	AH-3 (0-1')	C	1			X					X		7/3/2024		X	X	X
4	AH-3 (1'-2')	C	1			X					X		7/3/2024		X	X	X
5	AH-4 (0-1')	C	1			X					X		7/3/2024		X	X	X
6	AH-5 (0-1')	C	1			X					X		7/3/2024		X	X	X
7	AH-5 (1'-2')	C	1			X					X		7/3/2024		X	X	X
8	AH-6 (0-1')	C	1			X					X		7/3/2024		X	X	X
9	AH-7 (0-1')	C	1			X					X		7/3/2024		X	X	X
10	AH-8 (0-1')	C	1			X					X		7/3/2024		X	X	X

Relinquished By: Colton Bickerstaff	Date: 07/03/24 Time: 1359	Received By:	Verbal Result: ☐ Yes ☐ No — Add'l Phone #: All Results are emailed. Please provide Email address: Lisbeth.Chavira@tetratech.com
Relinquished By:	Date: Time:	Received By:	REMARKS:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 4.9 Corrected Temp. °C 4.9	Sample Condition Cool: Yes Intact: Yes	CHECKED BY: (Initials) T.O.

Turnaround Time: Standard ✖ Bacteria (only) Sample Condition
Rush: NO ☐ Cool Intact Observed Temp. °C
Thermometer ID #140
Correction Factor 0°C
☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Tetra Tech		**BILL TO**	
Project Manager: Lisbeth Chavira		P.O. #:	
Address: 8911 Capital Of Texas Hwy, Suite 2310		Company: Tetra Tech	
City: Austin	State: TX Zip:	Attn: Lisbeth Chavira	
Phone #: (512) 565-0190	Fax #:	Address: EMAIL	
Project #: 212C-MD-03545	Project Owner: ConocoPhillips	City:	
Project Name: USP Fee #002H Release		State: Zip:	
Project Location: Eddy County, New Mexico		Phone #:	
Sampler Name: Colton Bickerstaff		Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	TPH 8015M	BTEX 8021B	Chloride SM4500Cl-B
H244007																	
11	AH-9 (0-1')	C	1			X					X		7/3/2024		X	X	X
12	AH-10 (0-1')	C	1			X					X		7/3/2024		X	X	X
13	AH-11 (0-1')	C	1			X					X		7/3/2024		X	X	X

Relinquished By: Colton Bickerstaff	Date: 07/03/24	Received By:	Verbal Result: ☐ Yes ☐ No / Add'l Phone #:
	Time: 1309		All Results are emailed. Please provide Email address: Lisbeth.Chavira@tetratech.com
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 49 Corrected Temp. °C 49	Sample Condition Cool: Yes Intact: Yes / No No	CHECKED BY: (Initials)	Turnaround Time: Standard ✖ Bacteria (only) Sample Condition Rush: NO ☐ Cool Intact Observed Temp. °C Thermometer ID #140 Correction Factor 0°C ☐Yes ☐Yes ☐No ☐No Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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

CARDINAL Laboratories

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

August 20, 2024

SAM ABBOTT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: USP FEE #002

Enclosed are the results of analyses for samples received by the laboratory on 08/14/24 15:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	08/14/2024	Sampling Date:	08/14/2024
Reported:	08/20/2024	Sampling Type:	Soil
Project Name:	USP FEE #002	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Alyssa Parras
Project Location:	LEA CO NM		

Sample ID: T 1 (0-1) (H244933-01)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: CT**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1120**	16.0	08/16/2024	ND	432	108	400	3.77	

Sample ID: T 1 (1-2) (H244933-02)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: CT**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1570**	16.0	08/16/2024	ND	432	108	400	3.77	

Sample ID: T 1 (2-3) (H244933-03)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: CT**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2000**	16.0	08/16/2024	ND	432	108	400	3.77	

Sample ID: T 1 (3-4) (H244933-04)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1700**	16.0	08/16/2024	ND	432	108	400	3.77	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	08/14/2024	Sampling Date:	08/14/2024
Reported:	08/20/2024	Sampling Type:	Soil
Project Name:	USP FEE #002	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Alyssa Parras
Project Location:	LEA CO NM		

Sample ID: T 1 (4-5) (H244933-05)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1570**	16.0	08/16/2024	ND	432	108	400	3.77	

Sample ID: T 1 (5-6) (H244933-06)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1300**	16.0	08/16/2024	ND	432	108	400	3.77	

Sample ID: T 1 (6-7) (H244933-07)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1570**	16.0	08/16/2024	ND	432	108	400	3.77	

Sample ID: T 1 (7-8) (H244933-08)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1780**	16.0	08/16/2024	ND	432	108	400	3.77	

Sample ID: T 1 (8-9) (H244933-09)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1520**	16.0	08/16/2024	ND	432	108	400	3.77	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	08/14/2024	Sampling Date:	08/14/2024
Reported:	08/20/2024	Sampling Type:	Soil
Project Name:	USP FEE #002	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Alyssa Parras
Project Location:	LEA CO NM		

Sample ID: T 1 (9-10) (H244933-10)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1410**	16.0	08/16/2024	ND	432	108	400	3.77	

Sample ID: T 1 (10-11) (H244933-11)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1780**	16.0	08/16/2024	ND	432	108	400	3.77	

Sample ID: T 1 (11-12) (H244933-12)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1540**	16.0	08/16/2024	ND	432	108	400	3.77	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	08/14/2024	Sampling Date:	08/14/2024
Reported:	08/20/2024	Sampling Type:	Soil
Project Name:	USP FEE #002	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Alyssa Parras
Project Location:	LEA CO NM		

Sample ID: AH 12 (0-1) (H244933-13)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/16/2024	ND	2.28	114	2.00	1.86	
Toluene*	<0.050	0.050	08/16/2024	ND	2.22	111	2.00	0.286	
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.28	114	2.00	0.567	
Total Xylenes*	<0.150	0.150	08/16/2024	ND	6.78	113	6.00	1.31	
Total BTEX	<0.300	0.300	08/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *116 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	08/16/2024	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	198	99.2	200	2.03	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	207	104	200	2.86	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane *91.5 %* *48.2-134*

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	TetraTech	**BILL TO**	
Project Manager:	Christian Llull	P.O. #:	
Address:		Company:	TetraTech
City:	State: Zip:	Attn:	Christian Llull
Phone #:	Fax #:	Address:	
Project #:	212C-MD-03545 Project Owner:	City:	
Project Name:	USP Fee #002	State: Zip:	
Project Location:	Lea, Co. NM	Phone #:	
Sampler Name:	AG	Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST		
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides	BTEX	TPH
H244933																	
1	T1 (0-1)		1			X					X		8/14	8:00	X		
2	T1 (1-2)													8:30	X		
3	T1 (2-3)													9:00	X		
4	T1 (3-4)													9:30	X		
5	T1 (4-5)													9:45	X		
6	T1 (5-6)													10:00	X		
7	T1 (6-7)													10:15	X		
8	T1 (7-8)													10:30	X		
9	T1 (8-9)													10:45	X		
10	T1 (9-10)													11:00	X		

Relinquished By:	Date: 8/14/24	Received By:	Verbal Result: ☐ Yes ☐ No	Add'l Phone #:	
	Time: 1540		All Results are emailed. Please provide Email address:		
Relinquished By:	Date:	Received By:	REMARKS: Christian.llull@tetratech.com		
	Time:				
Delivered By: (Circle One)	Observed Temp. °C 5.5	Sample Condition	CHECKED BY:	Turnaround Time:	Standard ☒ Rush ☐
Sampler - UPS - Bus - Other:	Corrected Temp. °C 4.9	Cool: Yes ☑ No ☐ Intact: Yes ☑ No ☐	(Initials) AD	Thermometer ID #140 Correction Factor 0°C	Bacteria (only) Sample Condition: Cool Yes ☐ No ☐ Intact Yes ☐ No ☐ Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.4 07/11/23

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

CARDINAL Laboratories

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(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Tetratech	**BILL TO** P.O. #:	
Project Manager:	Christian Llull	Company:	TetraTech
Address:		Attn:	Christian Llull
City:	State: Zip:	Address:	
Phone #:	Fax #:	City:	
Project #:	212C-MD-03545 Project Owner:	State:	Zip:
Project Name:	USP Fee #002	Phone #:	
Project Location:	Lea, Co. NM	Fax #:	
Sampler Name:	AG		

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chlorides	BTEX	TPH
H244933																	
11	T1(10-11)		1			X					X		8/14	12:30	X		
12	T1(11-12)		1			X					X		8/14	1:00	X		
13	AH 12(0-1)		1			X					X		8/14	1:30	X	X	X

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

Relinquished By:	Date: 8/14/24	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 1540		All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	REMARKS: Christian.llull@tetratech.com
	Time:		

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 5.5C Corrected Temp. °C 4.9	Sample Condition Cool Intact ☑ Yes ☑ Yes ☐ No ☐ No	CHECKED BY: (Initials) AP	Turnaround Time: Standard ☑ Rush ☐ Thermometer ID #140 Correction Factor 0°C

Bacteria (only) Sample Condition: Cool Intact ☐ Yes ☐ Yes ☐ No ☐ No — Observed Temp. °C — Corrected Temp. °C

FORM-006 R 3.4 07/11/23

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CARDINAL Laboratories

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

November 04, 2024

LISBETH CHAVIRA

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: USP FEE #002H RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 10/29/24 10:56.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	10/29/2024	Sampling Date:	10/28/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: CS - 1 (0-1') (H246560-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/30/2024	ND	2.17	108	2.00	0.317	
Toluene*	<0.050	0.050	10/30/2024	ND	2.21	110	2.00	8.16	
Ethylbenzene*	<0.050	0.050	10/30/2024	ND	2.47	124	2.00	10.4	
Total Xylenes*	<0.150	0.150	10/30/2024	ND	7.59	126	6.00	11.2	
Total BTEX	<0.300	0.300	10/30/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/30/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/30/2024	ND	222	111	200	13.4	
DRO >C10-C28*	<10.0	10.0	10/30/2024	ND	217	109	200	10.9	
EXT DRO >C28-C36	<10.0	10.0	10/30/2024	ND					

Surrogate: 1-Chlorooctane *116 %* *48.2-134*

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	10/29/2024	Sampling Date:	10/28/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: CS - 2 (0-1') (H246560-02)

BTEX 8021B mg/kg **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/30/2024	ND	2.17	108	2.00	0.317	
Toluene*	<0.050	0.050	10/30/2024	ND	2.21	110	2.00	8.16	
Ethylbenzene*	<0.050	0.050	10/30/2024	ND	2.47	124	2.00	10.4	
Total Xylenes*	<0.150	0.150	10/30/2024	ND	7.59	126	6.00	11.2	
Total BTEX	<0.300	0.300	10/30/2024	ND					

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

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	10/30/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/30/2024	ND	222	111	200	13.4	
DRO >C10-C28*	<10.0	10.0	10/30/2024	ND	217	109	200	10.9	
EXT DRO >C28-C36	**14.1**	10.0	10/30/2024	ND					

Surrogate: 1-Chlorooctane *111 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *110 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	10/29/2024	Sampling Date:	10/28/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: CS - 3 (0-1') (H246560-03)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/30/2024	ND	2.17	108	2.00	0.317	
Toluene*	<0.050	0.050	10/30/2024	ND	2.21	110	2.00	8.16	
Ethylbenzene*	<0.050	0.050	10/30/2024	ND	2.47	124	2.00	10.4	
Total Xylenes*	<0.150	0.150	10/30/2024	ND	7.59	126	6.00	11.2	
Total BTEX	<0.300	0.300	10/30/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *120 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/30/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/30/2024	ND	222	111	200	13.4	
DRO >C10-C28*	<10.0	10.0	10/30/2024	ND	217	109	200	10.9	
EXT DRO >C28-C36	<10.0	10.0	10/30/2024	ND					

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

Surrogate: 1-Chlorooctadecane *104 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	10/29/2024	Sampling Date:	10/28/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: CS - 4 (0-1') (H246560-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/30/2024	ND	2.17	108	2.00	0.317	
Toluene*	<0.050	0.050	10/30/2024	ND	2.21	110	2.00	8.16	
Ethylbenzene*	<0.050	0.050	10/30/2024	ND	2.47	124	2.00	10.4	
Total Xylenes*	<0.150	0.150	10/30/2024	ND	7.59	126	6.00	11.2	
Total BTEX	<0.300	0.300	10/30/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	10/30/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/30/2024	ND	222	111	200	13.4	
DRO >C10-C28*	<10.0	10.0	10/30/2024	ND	217	109	200	10.9	
EXT DRO >C28-C36	<10.0	10.0	10/30/2024	ND					

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

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	10/29/2024	Sampling Date:	10/28/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: CS - 5 (0-1') (H246560-05)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2024	ND	2.17	108	2.00	0.317	
Toluene*	<0.050	0.050	10/31/2024	ND	2.21	110	2.00	8.16	
Ethylbenzene*	<0.050	0.050	10/31/2024	ND	2.47	124	2.00	10.4	
Total Xylenes*	<0.150	0.150	10/31/2024	ND	7.59	126	6.00	11.2	
Total BTEX	<0.300	0.300	10/31/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *121 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	10/30/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/30/2024	ND	222	111	200	13.4	
DRO >C10-C28*	<10.0	10.0	10/30/2024	ND	217	109	200	10.9	
EXT DRO >C28-C36	<10.0	10.0	10/30/2024	ND					

Surrogate: 1-Chlorooctane *114 %* *48.2-134*

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	10/29/2024	Sampling Date:	10/28/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: CS - 6 (0-1') (H246560-06)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2024	ND	2.17	108	2.00	0.317	
Toluene*	<0.050	0.050	10/31/2024	ND	2.21	110	2.00	8.16	
Ethylbenzene*	<0.050	0.050	10/31/2024	ND	2.47	124	2.00	10.4	
Total Xylenes*	<0.150	0.150	10/31/2024	ND	7.59	126	6.00	11.2	
Total BTEX	<0.300	0.300	10/31/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *125 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	10/30/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/30/2024	ND	222	111	200	13.4	
DRO >C10-C28*	<10.0	10.0	10/30/2024	ND	217	109	200	10.9	
EXT DRO >C28-C36	<10.0	10.0	10/30/2024	ND					

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

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	10/29/2024	Sampling Date:	10/28/2024
Reported:	11/04/2024	Sampling Type:	Soil
Project Name:	USP FEE #002H RELEASE	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 03545	Sample Received By:	Tamara Oldaker
Project Location:	COP - EDDY CO NM		

Sample ID: CS - 7 (0-1') (H246560-07)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/31/2024	ND	2.17	108	2.00	0.317	
Toluene*	<0.050	0.050	10/31/2024	ND	2.21	110	2.00	8.16	
Ethylbenzene*	<0.050	0.050	10/31/2024	ND	2.47	124	2.00	10.4	
Total Xylenes*	<0.150	0.150	10/31/2024	ND	7.59	126	6.00	11.2	
Total BTEX	<0.300	0.300	10/31/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *110 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	10/30/2024	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/30/2024	ND	222	111	200	13.4	
DRO >C10-C28*	<10.0	10.0	10/30/2024	ND	217	109	200	10.9	
EXT DRO >C28-C36	<10.0	10.0	10/30/2024	ND					

Surrogate: 1-Chlorooctane *80.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *79.9 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

QR-04	The RPD for the BS/BSD was outside of historical limits.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Tetra Tech	**BILL TO**
Project Manager: Lisbeth Chavira	P.O. #:
Address: 8911 Capital Of Texas Hwy, Suite 2310	Company: Tetra Tech
City: Austin State: TX Zip:	Attn: Lisbeth Chavira
Phone #: (512) 565-0190 Fax #:	Address: EMAIL
Project #: 212C-MD-03545 Project Owner: ConocoPhillips	City:
Project Name: USP Fee #002H Release	State: Zip:
Project Location: Eddy County, New Mexico	Phone #:
Sampler Name: Colton Bickerstaff	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: TPH 8015M	BTEX 8021B	Chloride SM4500CI-B
H246560 1	CS-1 (0-1')	G	1			X					X		10/28/2024	10:00	X	X	X
2	CS-2 (0-1')	G	1			X					X		10/28/2024	10:15	X	X	X
3	CS-3 (0-1')	G	1			X					X		10/28/2024	10:30	X	X	X
4	CS-4 (0-1')	G	1			X					X		10/28/2024	10:45	X	X	X
5	CS-5 (0-1')	G	1			X					X		10/28/2024	11:00	X	X	X
6	CS-6 (0-1')	G	1			X					X		10/28/2024	11:15	X	X	X
7	CS-7 (0-1')	G	1			X					X		10/28/2024	11:30	X	X	X

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

Relinquished By: Colton Bickerstaff	Date: 10/29/24 Time: 1056	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
			All Results are emailed. Please provide Email address: Lisbeth.Chavira@tetratech.com
Relinquished By:	Date: Time:	Received By:	REMARKS:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 4.2 Corrected Temp. °C 3.6	Sample Condition Cool Intact ☐ Yes ☑ Yes ☐ No ☐ No	CHECKED BY: (Initials) TO.

Turnaround Time: Standard ✱ Bacteria (only) Sample Condition
Rush: NO ☐ Cool Intact Observed Temp. °C
Thermometer ID #140
Correction Factor -0.6°C
☐ Yes ☐ Yes ☐ No ☐ No Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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

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

QUESTIONS

Action 406703

QUESTIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 406703
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAB1721651816**
Incident Name	**NAB1721651816 USP FEE #002 @ 30-015-34438**
Incident Type	**Produced Water Release**
Incident Status	**Reclamation Report Received**
Incident Well	**[30-015-34438] USP FEE #002**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	USP FEE #002
Date Release Discovered	07/10/2017
Surface Owner	Private

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Other | Flow Line - Production | Produced Water | Released: 15 BBL | Recovered: 0 BBL | Lost: 15 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

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QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 406703
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

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

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

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

I hereby agree and sign off to the above statement	Name: Christian LLuLL Title: Project Manager Email: christian.llull@tetratech.com Date: 11/26/2024

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QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 406703
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 300 and 500 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 500 and 1000 (ft.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Between 1 and 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Between 500 and 1000 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	8380
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	11/16/2018
On what date will (or did) the final sampling or liner inspection occur	11/20/2018
On what date will (or was) the remediation complete(d)	11/20/2018
What is the estimated surface area (in square feet) that will be reclaimed	2463
What is the estimated volume (in cubic yards) that will be reclaimed	91
What is the estimated surface area (in square feet) that will be remediated	2463
What is the estimated volume (in cubic yards) that will be remediated	91
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 406703
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	HALFWAY DISPOSAL AND LANDFILL [fEEM0112334510]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Christian LLuLL Title: Project Manager Email: christian.llull@tetratech.com Date: 11/26/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 406703
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Deferral Requests Only *Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.*	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 406703
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**394892**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**10/28/2024**
What was the (estimated) number of samples that were to be gathered	**7**
What was the sampling surface area in square feet	**2463**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	**Yes**
Was this release entirely contained within a lined containment area	**No**
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	2463
What was the total volume (cubic yards) remediated	91
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	2463
What was the total volume (in cubic yards) reclaimed	91
Summarize any additional remediation activities not included by answers (above)	On November 16, 2018, TRC excavated impacted soils within the release area to approximately 2 ft bgs. A Remediation Summary and Deferral Request was prepared by TRC dated April 11, 2019. The report noted that the excavated area did not match the footprint of the impacted area as indicated by the NMOCD approved Work Plan, as the existing pipeline infrastructure of the right of way impeded a full excavation. In the deferral request TRC stated that soil samples indicated that soil is not affected above background chloride concentrations, which have been established in the right of way topographically above the Salt Lake lithology, deeper than 4 ft bgs

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

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

I hereby agree and sign off to the above statement	Name: Christian LLuLL Title: Project Manager Email: christian.llull@tetratech.com Date: 11/26/2024

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QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 406703
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	2463
What was the total volume of replacement material (in cubic yards) for this site	91
Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.	
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeding commence(d)	11/20/2018
Summarize any additional reclamation activities not included by answers (above)	During site assessment, vegetation consistent with local vegetation desnsity was observed within the former release extent. See Appendix D.
The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeding plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.	
I hereby agree and sign off to the above statement	Name: Christian LLuLL Title: Project Manager Email: christian.llull@tetratech.com Date: 11/26/2024

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QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 406703
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Revegetation Report	
Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.	
Requesting a restoration complete approval with this submission	No
Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.	

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CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 406703
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	The reclamation report has been approved pursuant to 19.15.29.13 E. NMAC. The acceptance of this report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment; or if the location fails to revegetate properly. In addition, the OCD approval does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.	12/3/2024
amaxwell	All revegetation activities will need to be documented and included in the revegetation report. The revegetation report will need to include: An executive summary of the revegetation activities including: Seed mix, Method of seeding, dates of when the release area was reseeded, information pertinent to inspections, information about any amendments added to the soil, information on how the vegetative cover established meets the life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds per 19.15.29.13 D.(3) NMAC, and any additional information; a scaled Site Map including area that was revegetated in square feet; and pictures of the revegetated areas during reseeding activities, inspections, and final pictures when revegetation is achieved.	12/3/2024