



May 15, 2023

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

**Re: Revised Closure Report
ConocoPhillips
Heritage Concho
Gettysburg State Com #002H
Unit Letter C, Section 16, Township 23 South, Range 34 East
Lea County, New Mexico
Incident ID# nOY1726956579**

Ms. Maxwell:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips to assess a Heritage Concho release that occurred at the Gettysburg State Com #002H well (API No. 30-025-40874). The release footprint is located in Public Land Survey System (PLSS) Unit Letter C, Section 16, Township 23 South, Range 34 East, in Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.310400°, -103.476257° as shown on Figures 1 and 2.

BACKGROUND

According to the NMOCD C-141 Initial Report, the release occurred on September 23, 2017 and was caused by a hole that developed in the poly flowline along the lease road in the pasture. The release consisted of 20 barrels (bbls) of produced water, and no fluids were recovered. The NMOCD approved the initial C-141 on September 26, 2017 and subsequently assigned the release the Incident ID nOY1726956579. The initial/final C-141 form is included in Appendix A.

SITE CHARACTERIZATION

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

According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there are two (2) water wells within ½ mile (800 meters) of the Site. The minimum depth to groundwater is 200 feet below ground surface (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 site characterization data was used to determine recommended remedial action

Tetra Tech

901 West Wall St., Suite 100, Midland, TX 79701

Tel 432.682.4559 Fax 432.682.3946 www.tetrattech.com

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ConocoPhillips

levels (RRALs) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX), total petroleum hydrocarbons (TPH), and chlorides in soil.

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

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

INITIAL SITE ASSESSMENT AND SAMPLING RESULTS

On October 12, 2017 Concho conducted assessment soil sampling at the Site. Four test trenches (T-1 through T-4) were installed within the release extent to vertically define the extent. Four horizontal samples (N, E, S, and W) were collected from the perimeter of the release to horizontally delineate the extent. The sampling locations are presented in Figure 3. The analytical results from the soil sampling activities are summarized in Table 1.

Concho prepared a Work Plan dated January 17, 2018 summarizing the assessment sampling results and proposing remediation to 3 feet bgs in the area of T-1 and to 4 feet bgs in the area of T-2 and T-3. Concho additionally proposed to install a 20-mil reinforced liner at the base of the 4-foot excavation area.

The NMOCD approved the Work Plan on January 23, 2018 with the following conditions:

- *“Confirmation bottoms and sidewalls required for T-1 area.*
- *Confirmation sidewalls for the T-2 and T-3 area.”*

Concho prepared a Closure Report dated March 9, 2019 summarizing the approved remedial actions taken and the confirmation sampling results. The excavation extents and confirmation sample locations are presented in Figure 4. The analytical results from the confirmation soil sampling are presented in Table 2. All results were below the Site RRALs. A copy of the 2019 Concho Closure Report is available in the OCD online files.

The NMOCD rejected the 2019 Closure Report in an email dated December 8, 2022 with the following comments:

- *“Confirmation sidewall samples missing on walls parallel to the pipeline.*
- *Submit a closure report to the OCD by March 30, 2023.”*

The NMOCD approved a request for a 90-day extension to June 30, 2023 in an email dated April 3, 2023. A copy of regulatory correspondence is included as Appendix C.

ADDITIONAL SITE ASSESSMENT AND SAMPLING RESULTS

Based on the NMOCD rejection of the 2019 Closure Report, Tetra Tech conducted additional soil sampling at the Site on behalf of ConocoPhillips to collect the missing sidewall samples on the walls parallel to the pipeline. On April 27, 2023, Tetra Tech installed four (4) hand auger borings (SW-23-1 through SW-23-4) to 5 feet bgs in the missing sidewall locations, as shown on Figure 5. Photographic documentation from the 2023 confirmation sampling activities is summarized in Table 3.

A total of sixteen (16) soil samples were collected from the four borings and sent to Cardinal Laboratories in Midland, Texas to be analyzed for chloride via EPA Method 4500.0, TPH via EPA Method 8015M, and

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BTEX via EPA Method 8261B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix E.

Analytical results from the 2023 confirmation sampling activities are summarized in Table 3. All analytical results were below the applicable Site RRALs for all constituents.

CONCLUSION

As all analytical results associated with the 2023 confirmation sampling results were below the Site RRALs, no remediation of the release footprint is required. ConocoPhillips respectfully requests closure for this release. The final C-141 forms are enclosed in Appendix A. If you have any questions concerning the soil assessment activities for the Site, please call me at (512) 739-7874.

Sincerely,
Tetra Tech, Inc.



Samantha Abbott, P.G.
Project Manager



Christian M. Llull, P.G.
Program Manager

cc:
Mr. Moises Cantu Garcia, PBU – ConocoPhillips

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ConocoPhillips

LIST OF ATTACHMENTS

Figures:

- Figure 1 – Overview Map
- Figure 2 – Topographic Map
- Figure 3 – Approximate Release Extent Site Assessment (COG 2017)
- Figure 4 – Remediation Extent and Confirmation Sample Locations (COG 2018)
- Figure 5 – Remediation Extent and Sidewall Confirmation Sample Locations (Tetra Tech 2023)

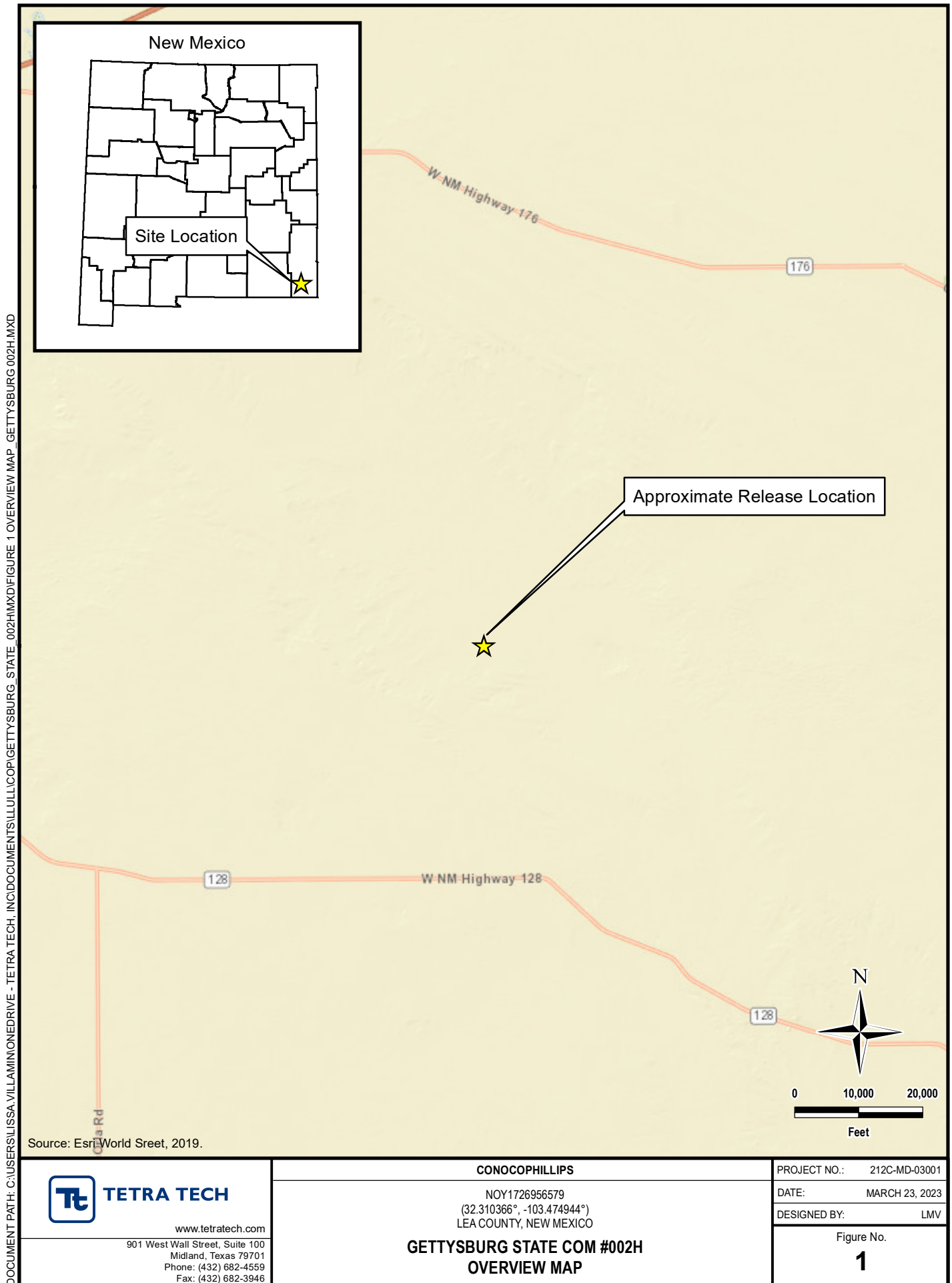
Tables:

- Table 1 – Summary of Analytical Results – Initial Soil Assessment (COG 2017)
- Table 2 – Summary of Analytical Results – 2019 Soil Remediation (COG)
- Table 3 – Summary of Analytical Results – 2023 Soil Confirmation Sampling (TT)

Appendices:

- Appendix A – C-141 Forms
- Appendix B – Site Characterization Data
- Appendix C – NMOCD Correspondence
- Appendix D – Photographic Documentation
- Appendix E – Laboratory Analytical Data

FIGURES



DOCUMENT PATH: C:\USERS\LISSA.VILLAMONEDRIVE - TETRA TECH, INC\DOCUMENTS\TULLCOP\GETTYSBURG STATE_002H.MXD
 GETTYSBURG STATE COM #002H.MXD

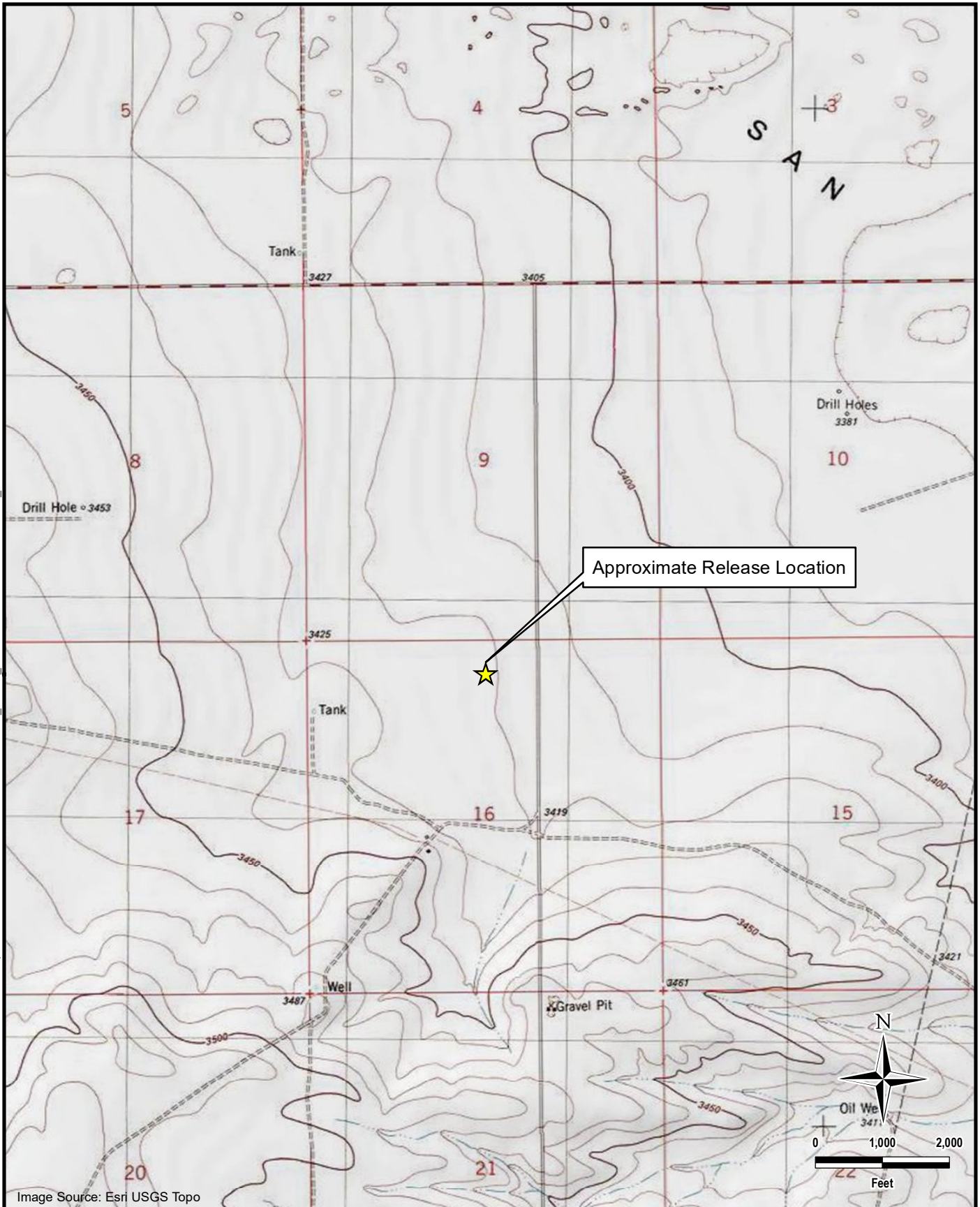


Image Source: Esri USGS Topo



TETRA TECH

www.tetrattech.com

901 West Wall Street, Suite 100
 Midland, Texas 79701
 Phone: (432) 682-4559
 Fax: (432) 682-3946

CONOCOPHILLIPS

NOY1726956579
 (32.310366°, -103.474944°)
 LEA COUNTY, NEW MEXICO

**GETTYSBURG STATE COM #002H
 TOPOGRAPHIC MAP**

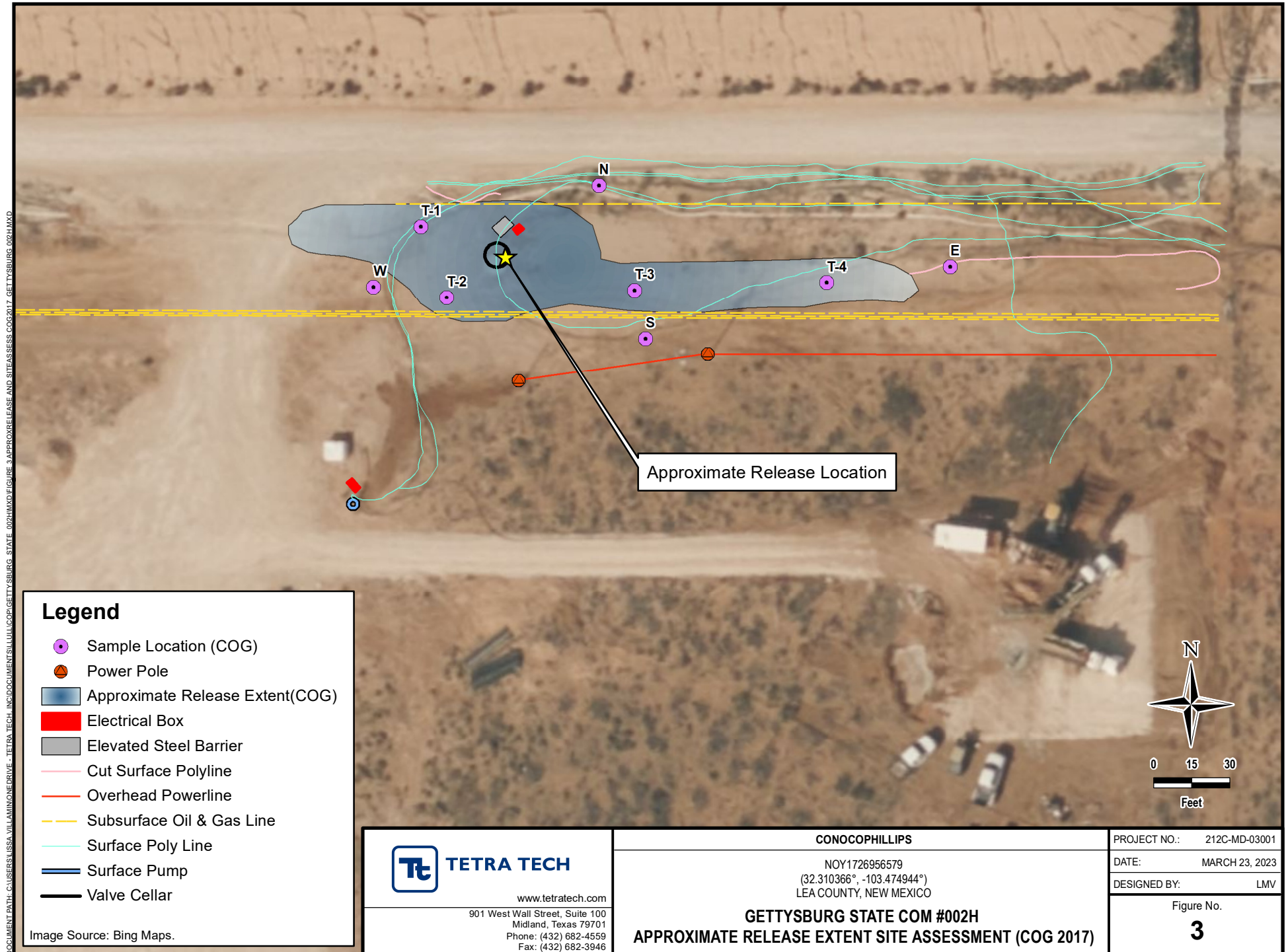
PROJECT NO.: 212C-MD-03001

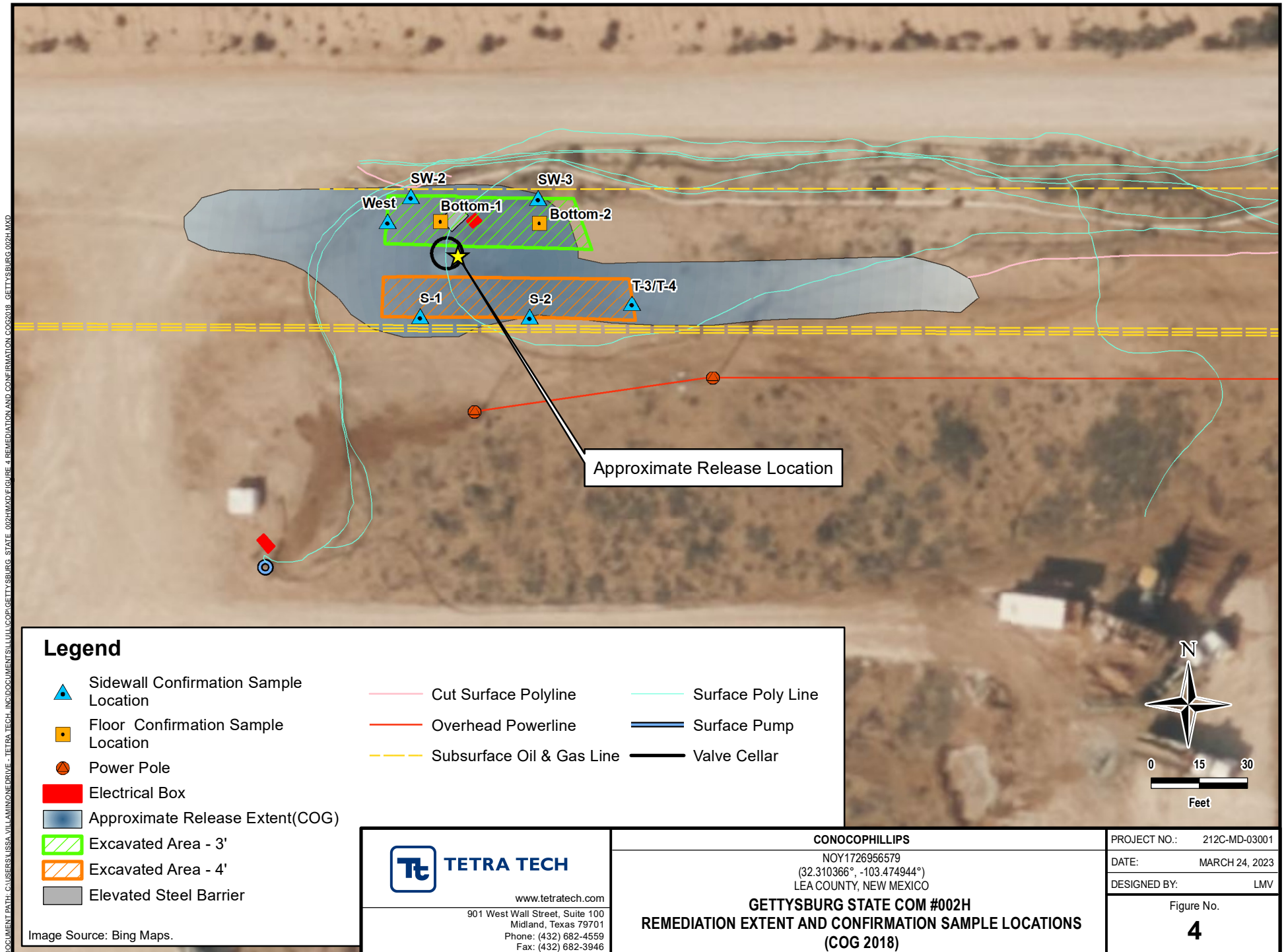
DATE: MARCH 23, 2023

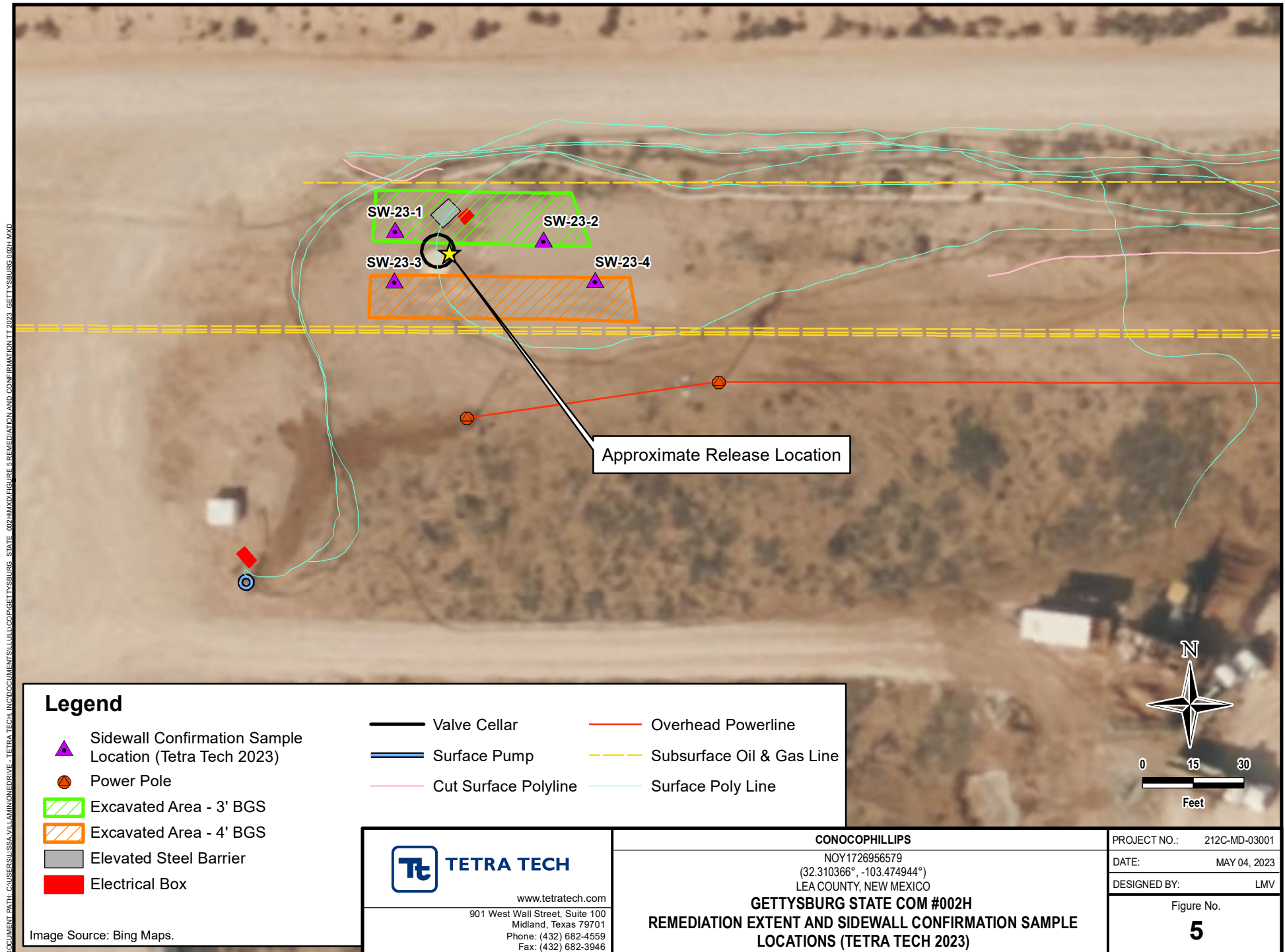
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Figure No.

2







TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
INITIAL SOIL ASSESSMENT - nOY1726956579
CONOCOPHILLIPS
GETTYSBURG STATE COM #002H
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride ¹		BTEX ²												TPH ³							
					Benzene		Toluene		Ethylbenzene		m,p-Xylenes		o-Xylene		Total Xylenes		Total BTEX		GRO		DRO		MRO	
		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	Q	mg/kg	Q
T-1	10/12/2017	Surface	1100		<0.00200		<0.00200		<0.00200		<0.00399		<0.00200		<0.00200		<0.00200		<25.0		<25.0		<25.0	
		1	998		<0.00201		<0.00201		<0.00201		<0.00402		<0.00201		<0.00201		<0.00201		<24.9		<24.9		<24.9	
		2	929		-		-		-		-		-		-		-		-		-		-	
		3	36.2		-		-		-		-		-		-		-		-		-		-	
		4	5.71		-		-		-		-		-		-		-		-		-		-	
		9	<4.96		-		-		-		-		-		-		-		-		-		-	
T-2	10/12/2017	Surface	23.4		<0.00202		<0.00202		<0.00202		<0.00404		<0.00202		<0.00202		<0.00202		<24.9		<24.9		<24.9	
		1	1430		<0.00201		<0.00201		<0.00201		<0.00402		<0.00201		<0.00201		<0.00201		<24.9		<24.9		<24.9	
		2	4480		-		-		-		-		-		-		-		-		-		-	
		3	4360		-		-		-		-		-		-		-		-		-		-	
		4	1250		-		-		-		-		-		-		-		-		-		-	
		5	1260		-		-		-		-		-		-		-		-		-		-	
		6	976		-		-		-		-		-		-		-		-		-		-	
		8	90.9		-		-		-		-		-		-		-		-		-		-	
13	19		-		-		-		-		-		-		-		-		-		-			
T-3	10/12/2017	Surface	7.62		<0.00341		<0.00341		<0.00341		<0.00683		<0.00341		<0.00341		<0.00341		<25.0		<25.0		<25.0	
		1	602		<0.00200		<0.00200		<0.00200		<0.00401		<0.00200		<0.00200		<0.00200		<25.0		<25.0		<25.0	
		2	4700		-		-		-		-		-		-		-		-		-		-	
		3	5760		-		-		-		-		-		-		-		-		-		-	
		4	5570		-		-		-		-		-		-		-		-		-		-	
		6	1760		-		-		-		-		-		-		-		-		-		-	
		8	780		-		-		-		-		-		-		-		-		-		-	
		10	1710		-		-		-		-		-		-		-		-		-		-	
		12	1040		-		-		-		-		-		-		-		-		-		-	
		14	1720		-		-		-		-		-		-		-		-		-		-	
16	133		-		-		-		-		-		-		-		-		-		-			
18	192		-		-		-		-		-		-		-		-		-		-			
T-4	10/12/2017	Surface	<5.00		<0.00202		<0.00202		<0.00202		<0.00404		<0.00202		<0.00202		<0.00202		<24.9		<24.9		<24.9	
		1	<4.96		<0.00202		<0.00202		<0.00202		<0.00404		<0.00202		<0.00202		<0.00202		<24.9		<24.9		<24.9	
		2	<4.90		-		-		-		-		-		-		-		-		-		-	
		3	12.7		-		-		-		-		-		-		-		-		-		-	
		4	<4.94		-		-		-		-		-		-		-		-		-		-	
		9	<4.95		-		-		-		-		-		-		-		-		-		-	
N.	10/12/2017	Surface	<4.94		-		-		-		-		-		-		-		-		-		-	
		1	-		-		-		-		-		-		-		-		-		-		-	
S.	10/12/2017	Surface	<4.95		-		-		-		-		-		-		-		-		-		-	
		1	-		-		-		-		-		-		-		-		-		-		-	
E.	10/12/2017	Surface	<4.91		-		-		-		-		-		-		-		-		-		-	
		1	-		-		-		-		-		-		-		-		-		-		-	
W.	10/12/2017	Surface	<4.93		-		-		-		-		-		-		-		-		-		-	
		1	-		-		-		-		-		-		-		-		-		-		-	

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.

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

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

Red line represents placement of 20-mil reinforced liner at the base of the excavation.

QUALIFIERS:

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
2019 SOIL REMEDIATION - nOY1726956579
CONOCOPHILLIPS
GETTYSBURG STATE COM #002H
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride ¹		BTEX ²										TPH ³							
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		MRO		Total TPH	
		ft. bgs	mg/kg	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	Q
BOTTOM-1	1/17/2019	3	384		NS		NS		NS		NS		NS		NS		NS		NS		NS	
BOTTOM-2	1/17/2019	3	16		NS		NS		NS		NS		NS		NS		NS		NS		NS	
SW-2	1/17/2019	-	336		NS		NS		NS		NS		NS		NS		NS		NS		NS	
SW-3	1/17/2019	-	<16.0		NS		NS		NS		NS		NS		NS		NS		NS		NS	
T-3/T-4	1/17/2019	-	400		NS		NS		NS		NS		NS		NS		NS		NS		NS	
S1	1/21/2019	-	256		<0.050		<0.050		<0.050		<0.150		<0.3		<10.0		<10.0		<10.0		<10.0	
S2	1/21/2019	-	112		<0.050		<0.050		<0.050		<0.150		<0.3		<10.0		<10.0		<10.0		<10.0	
WEST	1/21/2019	-	48		<0.050		<0.050		<0.050		<0.150		<0.3		<10.0		<10.0		<10.0		<10.0	
3' / 4'	1/23/2019	-	224		NS		NS		NS		NS		NS		NS		NS		NS		NS	

NOTES:

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

QUALIFIERS:

TABLE 3
SUMMARY OF ANALYTICAL RESULTS
2023 SOIL CONFIRMATION SAMPLING - nOY1726956579
CONOCOPHILLIPS
GETTYSBURG STATE COM #002H
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Field Screening Results	Chloride ¹		BTEx ²										TPH ³							
			Chloride			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEx		GRO		DRO		EXT DRO		Total TPH (GRO+DRO+EXT DRO)	
		ft. bgs		ppm	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg		Q
SW-23-1	4/27/2023	0-1	70.7	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
		2-3	224	96.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
		3-4	87.9	48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
		4-5	196	80.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
SW-23-2	4/27/2023	0-1	168	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
		2-3	559	48.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
		3-4	219	112		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
		4-5	228	128		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
SW-23-3	4/27/2023	0-1	81.5	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
		2-3	592	32.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
		3-4	184	112		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
		4-5	214	64.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
SW-23-4	4/27/2023	0-1	334	192		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
		2-3	189	80.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
		3-4	291	96.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	
		4-5	94.9	<16.0		<0.050		<0.050		<0.050		<0.150		<0.300		<10.0		<10.0		<10.0		-	

NOTES:

- ft. Feet
- bgs Below ground surface
- mg/kg Milligrams per kilogram
- TPH Total Petroleum Hydrocarbons
- GRO Gasoline range organics
- DRO Diesel range organics
- 1 Method SM4500CI-B
- 2 Method 8021B
- 3 Method 8015M

QUALIFIERS:

APPENDIX A C-141 Forms

District I
1625 N. French Dr., Hobbs, NM 88240
District II
311 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

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. 432-230-0077	
Facility Name: GETTYSBURG STATE COM #002H	Facility Type: Well	
Surface Owner: Private	Mineral Owner: State	API No. 30-025-40874

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	16	23S	34E	330'	North	1980'	West	Lea

Latitude 32.310400 Longitude - 103.476257

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: 20 bbls pw	Volume Recovered: 0 bbls pw
Source of Release: Flowline/Pipeline	Date and Hour of Occurrence: 9-23-2017 10:00 am	Date and Hour of Discovery: 9-23-2017 10:00 am
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

RECEIVED

By Olivia Yu at 1:24 pm, Sep 26, 2017



Describe Cause of Problem and Remedial Action Taken.*

The release occurred when a hole developed in the poly flowline. The damaged portion of the flowline has been removed and replaced.

Describe Area Affected and Cleanup Action Taken.*

The release occurred alongside the lease road in the pasture. The line was isolated until repaired. 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: 	OIL CONSERVATION DIVISION	
Printed Name: Dakota Neel	Approved by Environmental Specialist: 	
Title: HSE Coordinator	Approval Date: 9/26/2017	Expiration Date:
E-mail Address: dneel2@concho.com	Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>
Date: September 25, 2017 Phone: 575-746-2010		

Attach Additional Sheets If Necessary

1RP-4823

nOY1726956579

pOY1726957135

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _9/25/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-4823_ has been assigned. **Please refer to this case number in all future correspondence.**

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

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

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs__ on or before _10/26/2017_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

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

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

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

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

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

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

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

Jim Griswold

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

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: Moises H Cantu Garcia Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: _____ Title: _____

Signature: Moises H Cantu Garcia 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: Ashley Maxwell Date: _____

Printed Name: _____ Title: _____

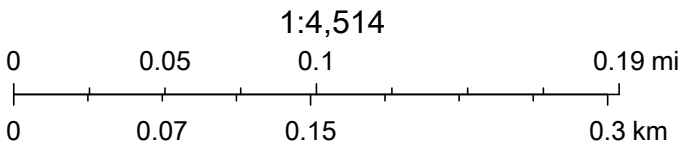
APPENDIX B

Site Characterization Data

OCD Waterbodies Map



2/8/2023, 3:02:00 PM



Esri, HERE, Garmin, IPC, Maxar, NM OSE

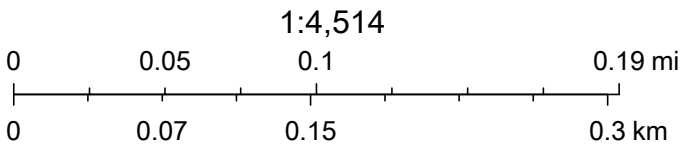
OCD Karst Potential Map



2/8/2023, 2:59:50 PM

Karst Occurrence Potential

Low



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



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01730 POD1	CP	LE		2	2	1	16	23S	34E	643549	3575824	33	594	200	394
CP 01760 POD1	CP	LE		3	1	2	16	23S	34E	643627	3575897	75	767	290	477

Average Depth to Water: **245 feet**

Minimum Depth: **200 feet**

Maximum Depth: **290 feet**

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 643566

Northing (Y): 3575853.89

Radius: 800

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

2/8/23 2:06 PM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER

APPENDIX C

Regulatory Correspondence

From: [Maxwell, Ashley, EMNRD](#)
To: [Abbott, Sam](#)
Subject: RE: [EXTERNAL] Extension Request - Application ID 165445 (nOY1726956579)
Date: Monday, April 3, 2023 2:38:22 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

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

Good Afternoon,

Your extension request for June 30, 2023, has been approved.

Thanks,
Ashley

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

From: Abbott, Sam <Sam.Abbott@tetrattech.com>
Sent: Monday, April 3, 2023 1:34 PM
To: Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Subject: [EXTERNAL] Extension Request - Application ID 165445 (nOY1726956579)

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

Ms. Maxwell:

On behalf of ConocoPhillips, Tetra Tech is requesting a 90-day extension (until June 30, 2023) to complete additional confirmation sampling and associated closure reporting for the Gettysburg State #002H Release site (**nOY1726956579**).

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

Given the difficulties inherent with available resource allocation for several projects with similar deadlines within a short period of time, this schedule is not currently practical. ConocoPhillips plans to conduct additional confirmation sampling in the coming month however, and once the confirmation sampling data is collected, tabulated, and evaluated, a closure report will be submitted to the OCD.

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

Sam

Samantha Abbott, PG | Project Manager

Direct Mobile **+1 (512) 739-7874** | Business **+1 (512) 338-1667** | Sam.Abbott@tetrattech.com

Tetra Tech, Inc. | *Leading with Science*[®] | OGA

8911 N Capital of Texas Hwy #2310 | Austin, TX 78759 | tetrattech.com

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



TETRA TECH

Abbott, Sam

From: OCDOnline@state.nm.us
Sent: Thursday, December 8, 2022 1:42 PM
To: Beauvais, Charles R
Subject: [EXTERNAL]The Oil Conservation Division (OCD) has rejected the application, Application ID: 165445

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

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

The OCD has rejected the submitted *Internal Manual Incident File Supporting Documentation (ENV)* (IM-BNF), for incident ID (n#) nOY1726956579, for the following reasons:

- **Confirmation sidewall samples missing on walls parallel to the pipeline.**
- **Submit a closure report to the OCD by March 30, 2023.**

The rejected IM-BNF can be found in the OCD Online: Permitting - Action Status, under the Application ID: 165445. Please review and make the required correction(s) prior to resubmitting.

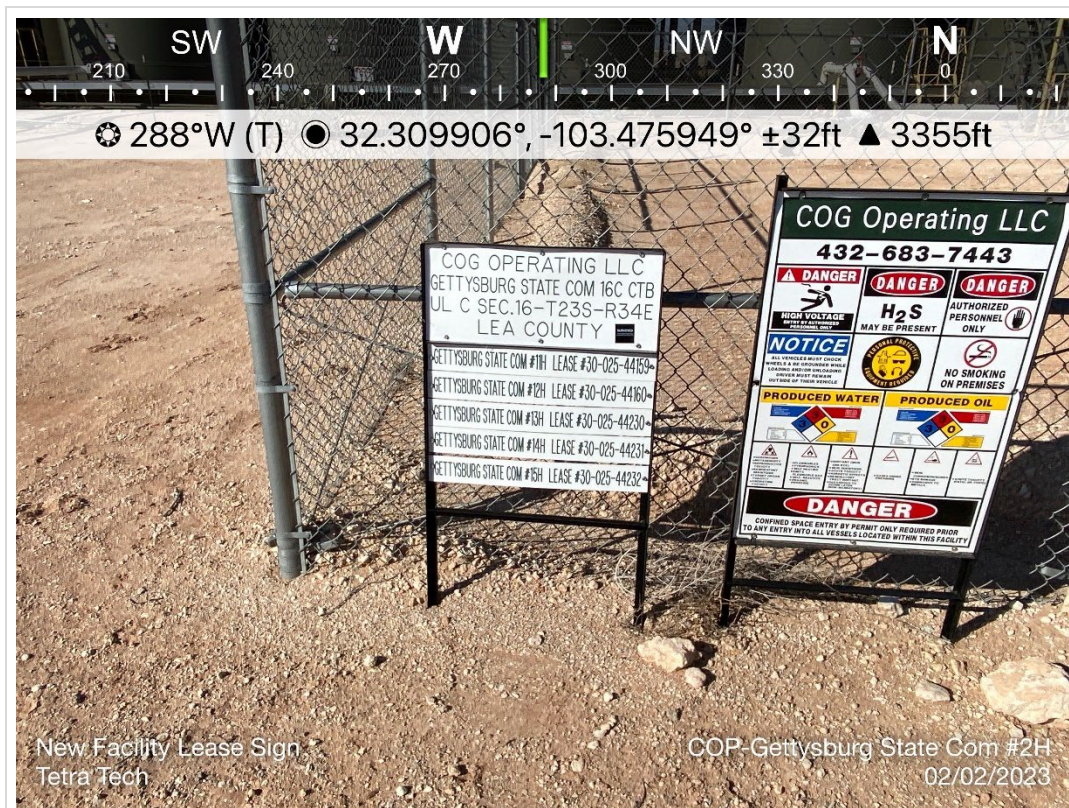
If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional IM-BNF.

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

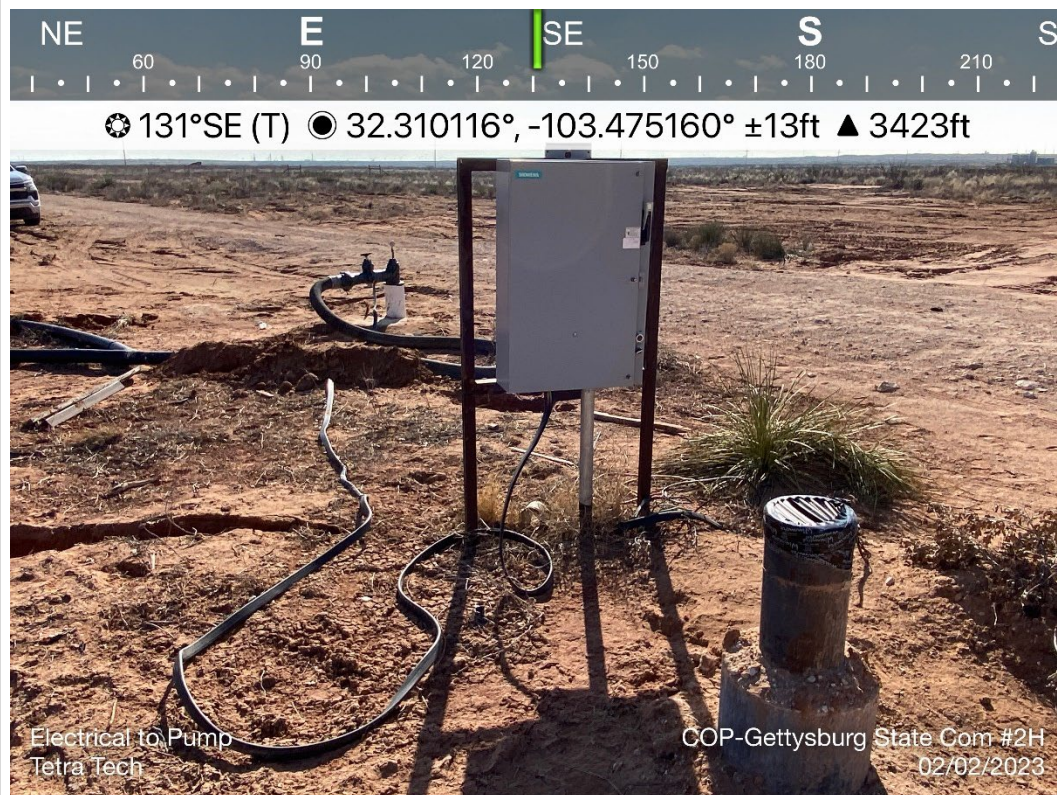
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

APPENDIX D

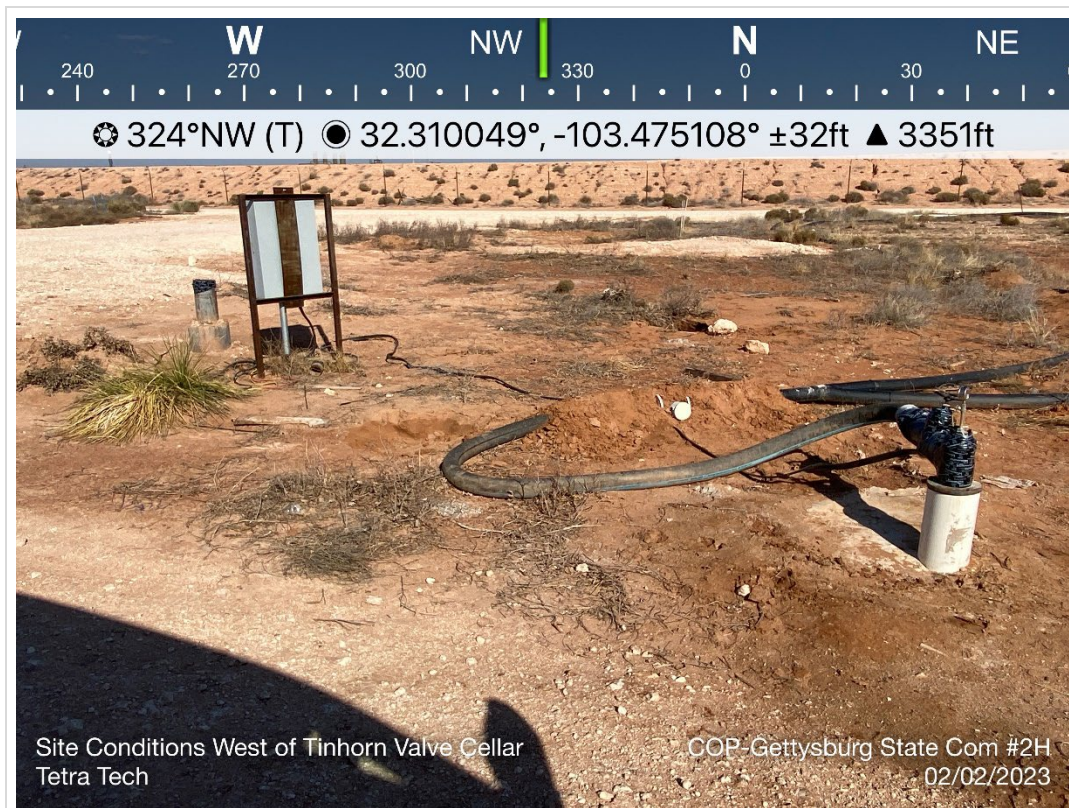
Photographic Documentation



TETRA TECH, INC. PROJECT NO. 212C-MD-03001	DESCRIPTION	View west-northwest of site signage.	1
	SITE NAME	Gettysburg State #002H	2/2/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03001	DESCRIPTION	View southeast of electrical panel leading to pump.	2
	SITE NAME	Gettysburg State #002H	2/2/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03001	DESCRIPTION	View northwest of site conditions. Pump and electrical panel rear view.	3
	SITE NAME	Gettysburg State #002H	2/2/2023



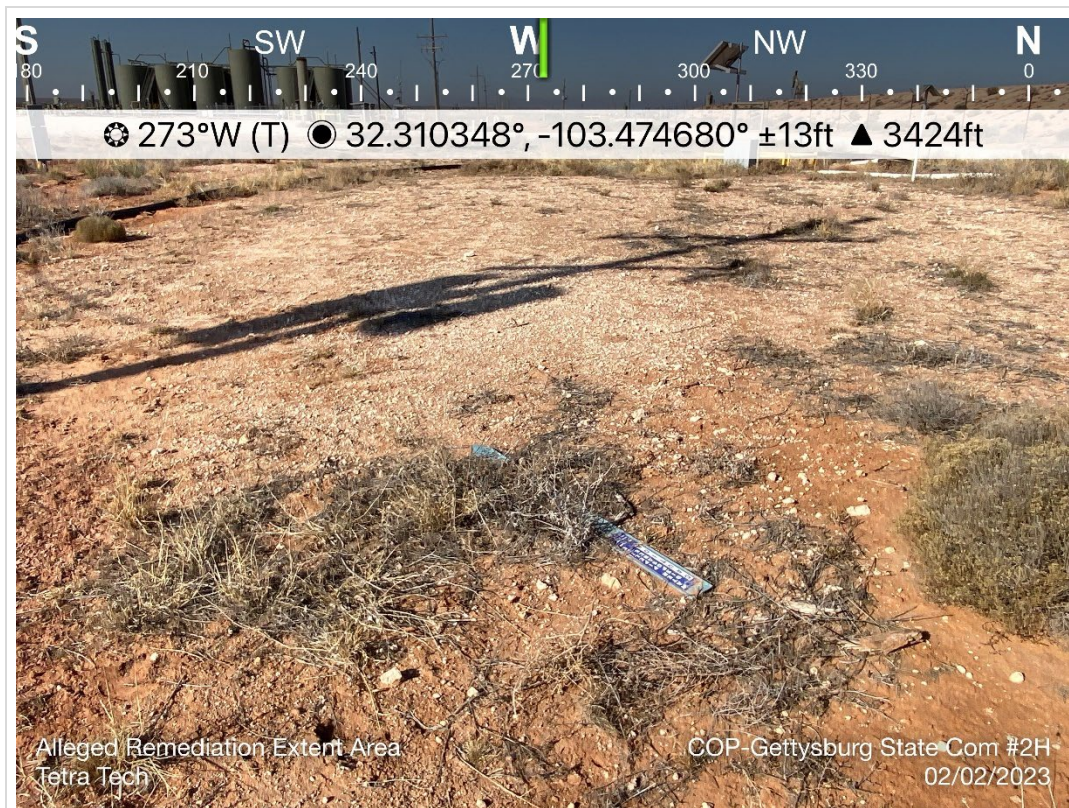
TETRA TECH, INC. PROJECT NO. 212C-MD-03001	DESCRIPTION	View east. Direct view of tin horn valve cellar.	4
	SITE NAME	Gettysburg State #002H	2/2/2023



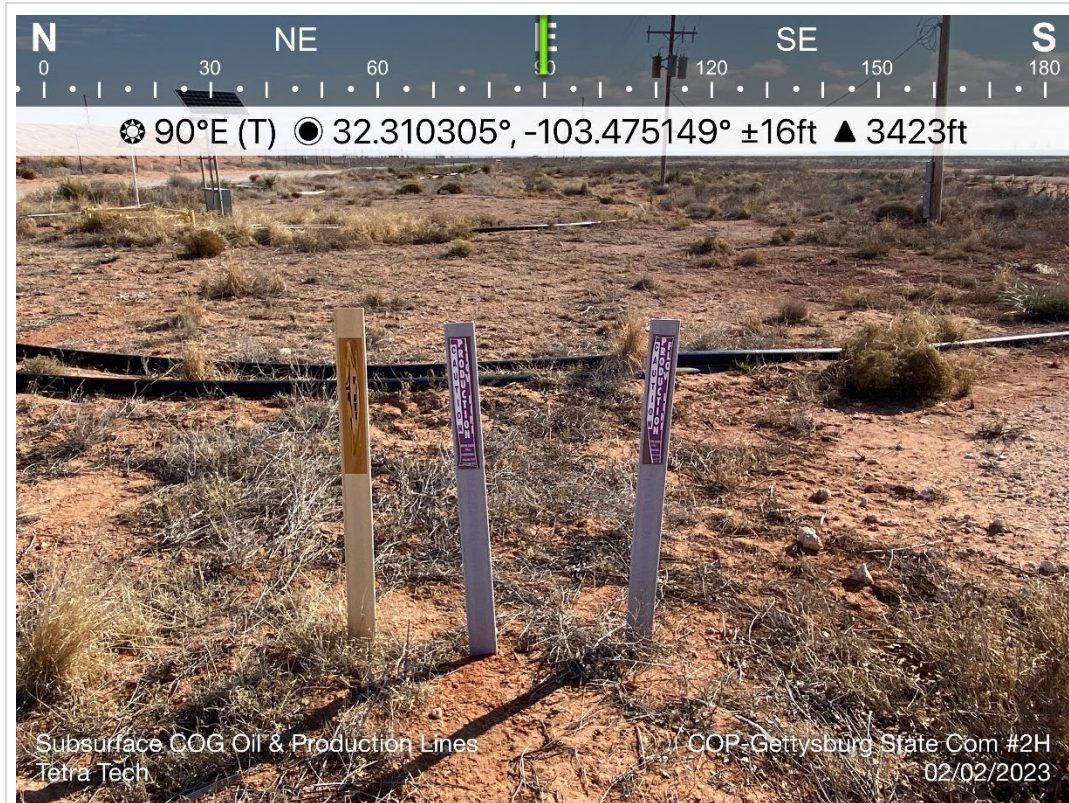
TETRA TECH, INC. PROJECT NO. 212C-MD-03001	DESCRIPTION	View east. COG signage for disposable water lines and surface poly lines present.	5
	SITE NAME	Gettysburg State #002H	2/2/2023



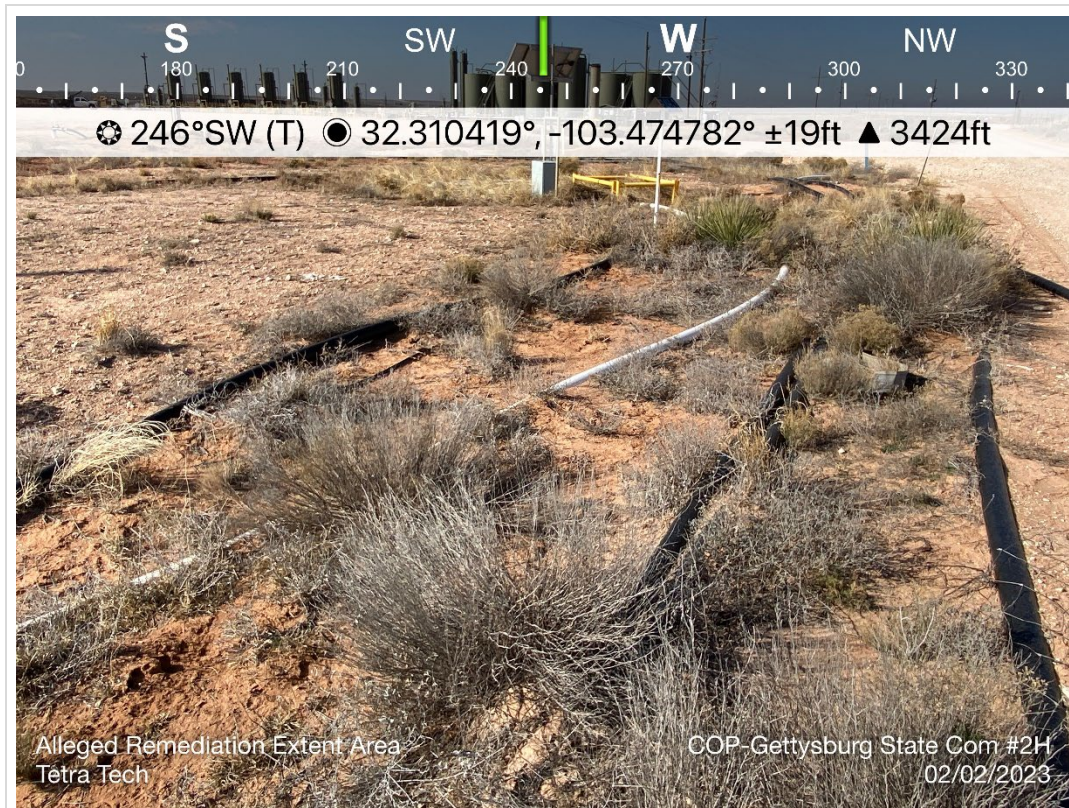
TETRA TECH, INC. PROJECT NO. 212C-MD-03001	DESCRIPTION	View east. Tin horn valve cellar and surrounding area.	6
	SITE NAME	Gettysburg State #002H	2/2/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03001	DESCRIPTION	View west of reported remediation extent.	7
	SITE NAME	Gettysburg State #002H	2/2/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03001	DESCRIPTION	View east. Subsurface COP O&P lines, surface poly lines, and overhead electrical lines present.	8
	SITE NAME	Gettysburg State #002H	2/2/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03001	DESCRIPTION	View west-southwest of alleged remediation extent.	9
	SITE NAME	Gettysburg State #002H	2/2/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03001	DESCRIPTION	View west of tin horn valve cellar and area between excavation extents.	10
	SITE NAME	Gettysburg State #002H	2/2/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03001	DESCRIPTION	View south	11
	SITE NAME	Gettysburg State #002H	4/27/2023



TETRA TECH, INC. PROJECT NO. 212C-MD-03001	DESCRIPTION	View east. View of Tin-horn and overhead powerlines.	12
	SITE NAME	Gettysburg State #002H	4/27/2023

APPENDIX E

Laboratory Analytical Data



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

May 02, 2023

SAM ABBOTT

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: GETTYSBURG STATE COM #002H

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

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	04/27/2023	Sampling Date:	04/27/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	GETTYSBURG STATE COM #002H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03001	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NEW MEXICO		

Sample ID: SW - 23 - 1 (0-1') (H232072-01)

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

Surrogate: 4-Bromofluorobenzene (PID) 128 % 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	04/28/2023	ND	432	108	400	3.77	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 127 % 48.2-134

Surrogate: 1-Chlorooctadecane 122 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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: 04/27/2023
 Reported: 05/02/2023
 Project Name: GETTYSBURG STATE COM #002H
 Project Number: 212C-MD-03001
 Project Location: COP - LEA COUNTY, NEW MEXICO

Sampling Date: 04/27/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SW - 23 - 1 (2'-3') (H232072-02)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/29/2023	ND	1.90	95.1	2.00	11.0		
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5		
Total BTX	<0.300	0.300	04/29/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 131 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	04/28/2023	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 125 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 04/27/2023
 Reported: 05/02/2023
 Project Name: GETTYSBURG STATE COM #002H
 Project Number: 212C-MD-03001
 Project Location: COP - LEA COUNTY, NEW MEXICO

Sampling Date: 04/27/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SW - 23 - 1 (3'-4') (H232072-03)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/29/2023	ND	1.90	95.1	2.00	11.0		
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5		
Total BTX	<0.300	0.300	04/29/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 134 % 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	04/28/2023	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 75.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 72.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 04/27/2023
 Reported: 05/02/2023
 Project Name: GETTYSBURG STATE COM #002H
 Project Number: 212C-MD-03001
 Project Location: COP - LEA COUNTY, NEW MEXICO

Sampling Date: 04/27/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SW - 23 - 1 (4'-5') (H232072-04)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/29/2023	ND	1.90	95.1	2.00	11.0		
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5		
Total BTX	<0.300	0.300	04/29/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 121 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	04/28/2023	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 88.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.3 % 49.1-148

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Analytical Results For:

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

Received: 04/27/2023
 Reported: 05/02/2023
 Project Name: GETTYSBURG STATE COM #002H
 Project Number: 212C-MD-03001
 Project Location: COP - LEA COUNTY, NEW MEXICO

Sampling Date: 04/27/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SW - 23 - 2 (0-1') (H232072-05)

BTX 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/29/2023	ND	1.90	95.1	2.00	11.0	
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6	
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7	
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5	
Total BTX	<0.300	0.300	04/29/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/28/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 132 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 04/27/2023
 Reported: 05/02/2023
 Project Name: GETTYSBURG STATE COM #002H
 Project Number: 212C-MD-03001
 Project Location: COP - LEA COUNTY, NEW MEXICO

Sampling Date: 04/27/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SW - 23 - 2 (2'-3') (H232072-06)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/29/2023	ND	1.90	95.1	2.00	11.0		
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5		
Total BTX	<0.300	0.300	04/29/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 131 % 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	04/28/2023	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	167	83.4	200	21.7	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	166	82.8	200	23.1	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 121 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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Analytical Results For:

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

Received: 04/27/2023
 Reported: 05/02/2023
 Project Name: GETTYSBURG STATE COM #002H
 Project Number: 212C-MD-03001
 Project Location: COP - LEA COUNTY, NEW MEXICO

Sampling Date: 04/27/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SW - 23 - 2 (3'-4') (H232072-07)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/29/2023	ND	1.90	95.1	2.00	11.0		
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5		
Total BTX	<0.300	0.300	04/29/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	04/28/2023	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	216	108	200	21.5	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	204	102	200	20.9	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 92.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.8 % 49.1-148

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Analytical Results For:

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

Received: 04/27/2023
 Reported: 05/02/2023
 Project Name: GETTYSBURG STATE COM #002H
 Project Number: 212C-MD-03001
 Project Location: COP - LEA COUNTY, NEW MEXICO

Sampling Date: 04/27/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SW - 23 - 2 (4'-5') (H232072-08)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/29/2023	ND	1.90	95.1	2.00	11.0		
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5		
Total BTX	<0.300	0.300	04/29/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	04/28/2023	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	216	108	200	21.5	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	204	102	200	20.9	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 89.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.8 % 49.1-148

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Analytical Results For:

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

Received: 04/27/2023
 Reported: 05/02/2023
 Project Name: GETTYSBURG STATE COM #002H
 Project Number: 212C-MD-03001
 Project Location: COP - LEA COUNTY, NEW MEXICO

Sampling Date: 04/27/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SW - 23 - 3 (0-1') (H232072-09)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/29/2023	ND	1.90	95.1	2.00	11.0		
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5		
Total BTX	<0.300	0.300	04/29/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 131 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	04/28/2023	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	216	108	200	21.5	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	204	102	200	20.9	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 91.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	04/27/2023	Sampling Date:	04/27/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	GETTYSBURG STATE COM #002H	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-03001	Sample Received By:	Tamara Oldaker
Project Location:	COP - LEA COUNTY, NEW MEXICO		

Sample ID: SW - 23 - 3 (2'-3') (H232072-10)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/29/2023	ND	1.90	95.1	2.00	11.0		
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5		
Total BTEX	<0.300	0.300	04/29/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 128 % 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	04/28/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	216	108	200	21.5	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	204	102	200	20.9	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 87.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 04/27/2023
 Reported: 05/02/2023
 Project Name: GETTYSBURG STATE COM #002H
 Project Number: 212C-MD-03001
 Project Location: COP - LEA COUNTY, NEW MEXICO

Sampling Date: 04/27/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SW - 23 - 3 (3'-4') (H232072-11)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/29/2023	ND	1.90	95.1	2.00	11.0		
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5		
Total BTX	<0.300	0.300	04/29/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 132 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	04/28/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	216	108	200	21.5	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	204	102	200	20.9	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 92.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 04/27/2023
 Reported: 05/02/2023
 Project Name: GETTYSBURG STATE COM #002H
 Project Number: 212C-MD-03001
 Project Location: COP - LEA COUNTY, NEW MEXICO

Sampling Date: 04/27/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SW - 23 - 3 (4'-5') (H232072-12)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/29/2023	ND	1.90	95.1	2.00	11.0		
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5		
Total BTX	<0.300	0.300	04/29/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	04/28/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	216	108	200	21.5	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	204	102	200	20.9	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 86.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 04/27/2023
 Reported: 05/02/2023
 Project Name: GETTYSBURG STATE COM #002H
 Project Number: 212C-MD-03001
 Project Location: COP - LEA COUNTY, NEW MEXICO

Sampling Date: 04/27/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SW - 23 - 4 (0-1') (H232072-13)

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

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	04/28/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	216	108	200	21.5	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	204	102	200	20.9	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 87.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 04/27/2023
 Reported: 05/02/2023
 Project Name: GETTYSBURG STATE COM #002H
 Project Number: 212C-MD-03001
 Project Location: COP - LEA COUNTY, NEW MEXICO

Sampling Date: 04/27/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SW - 23 - 4 (2'-3') (H232072-14)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/29/2023	ND	1.90	95.1	2.00	11.0		
Toluene*	<0.050	0.050	04/29/2023	ND	2.20	110	2.00	10.6		
Ethylbenzene*	<0.050	0.050	04/29/2023	ND	2.55	128	2.00	11.7		
Total Xylenes*	<0.150	0.150	04/29/2023	ND	7.77	129	6.00	11.5		
Total BTEX	<0.300	0.300	04/29/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 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	80.0	16.0	04/28/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	216	108	200	21.5	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	204	102	200	20.9	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 04/27/2023
 Reported: 05/02/2023
 Project Name: GETTYSBURG STATE COM #002H
 Project Number: 212C-MD-03001
 Project Location: COP - LEA COUNTY, NEW MEXICO

Sampling Date: 04/27/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SW - 23 - 4 (3'-4') (H232072-15)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/28/2023	ND	1.85	92.7	2.00	7.13		
Toluene*	<0.050	0.050	04/28/2023	ND	1.88	94.1	2.00	7.06		
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	1.90	95.1	2.00	7.06		
Total Xylenes*	<0.150	0.150	04/28/2023	ND	5.89	98.2	6.00	6.18		
Total BTX	<0.300	0.300	04/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	04/28/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	216	108	200	21.5	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	204	102	200	20.9	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 93.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 04/27/2023
 Reported: 05/02/2023
 Project Name: GETTYSBURG STATE COM #002H
 Project Number: 212C-MD-03001
 Project Location: COP - LEA COUNTY, NEW MEXICO

Sampling Date: 04/27/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SW - 23 - 4 (4'-5') (H232072-16)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/28/2023	ND	1.85	92.7	2.00	7.13		
Toluene*	<0.050	0.050	04/28/2023	ND	1.88	94.1	2.00	7.06		
Ethylbenzene*	<0.050	0.050	04/28/2023	ND	1.90	95.1	2.00	7.06		
Total Xylenes*	<0.150	0.150	04/28/2023	ND	5.89	98.2	6.00	6.18		
Total BTEX	<0.300	0.300	04/28/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	04/28/2023	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	216	108	200	21.5	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	204	102	200	20.9	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 89.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager

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Notes and Definitions

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

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

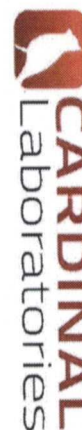
Celey D. Keene, Lab Director/Quality Manager



sh

FORM-006 R 3.2 10/07/21

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



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 216885

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 216885
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	5/19/2023