

February 15, 2022

Bradford Billings Hydrologist/E.Spec.A District 2 Artesia 1220 South St. Francis Drive Oil Conservation Division Santa Fe, NM 87505

Re: Release Characterization and Closure Request
ConocoPhillips
Heritage Concho
Moody 18 State Com #001H Release
Unit Letter D, Section 15, Township 25 South, Range 28 East
Eddy County, New Mexico
Incident ID# NJMW1308640545
2RP-1591

Mr. Billings,

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips to assess a Heritage Concho release and subsequent remedial actions taken at the Moody 18 State Com #001H release site (API No. 30-015-39585). The release footprint is located in Public Land Survey System (PLSS) Unit Letter D, Section 15, Township 25 South, Range 28 East, in Eddy County, New Mexico (Site). The approximate release point occurred at coordinates 32.136102°, -104.134456°, 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 was discovered on March 2, 2013. The C-141 reports that the cause of the release was caused by a storage tank overflowing at the Moody 18 State Com #001H lease pad. Approximately 20 barrels (bbls) of oil were released and approximately 10 bbls of oil were recovered. The NMOCD approved the initial C-141 on March 12, 2013 and subsequently assigned the release the Incident ID nJMW1308640545 and the remediation permit (RP) number 2RP-1591. The initial 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, playa lakes, stream bodies, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.29 New Mexico Administrative Code (NMAC). The Site is in an area of medium karst potential.

There are no water wells listed in the New Mexico Office of the State Engineer (NMOSE) database located within approximately ½ mile (800 meters) of the site. According to data from one (1) water well listed in the NMOSE database within approximately 0.75 miles (1,200 meters) of the site, the minimum depth to groundwater is 63 feet below ground surface (bgs). The site characterization data are presented in Appendix B.

Tetra Tech

#### **REGULATORY FRAMEWORK**

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

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

Constituent	Reclamation Requirements
Chloride	600 mg/kg
TPH	100 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

#### INITIAL RESPONSE ACTIVITIES AND INITIAL ASSESSMENT

Following the release, Concho dispatched vacuum trucks to recover standing fluid. A release extent was not provided by Concho, but according to the initial C-141 the release remained within the boundary of the lease pad. The approximate release point is presented in Figure 3. The frac tanks at the facility associated with the release have since been decommissioned, as seen in Figure 4. Although no documentation of remedial actions was provided by Concho, such actions were presumably taken at the time of the tank decommissioning.

On March 26, 2019, following the removal of the frac tanks, Concho was onsite to install two (2) hand auger borings (AH-1 and AH-2) at the former release location to total depths of 2 feet bgs to assess the release. The sampling locations are presented in Figure 4. A total of four (4) soil samples were collected from two (2) borings and sent to Xenco Laboratories in Midland, Texas to be analyzed for chlorides via EPA method 300, TPH via EPA Method 8015M and BTEX via EPA Method 8021B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix C.

Analytical results associated with samples collected during the March 2019 assessment activities are summarized in Table 1. All analytical results were below applicable Site RRALs and reclamation requirements for the Site.

#### SITE RECLAMATION AND RESTORATION PLAN

Tetra Tech conducted a visual inspection at the Site on September 21, 2021 to assess current site conditions. No evidence of surface staining or the release was observed during the visual inspection. Photographic documentation from the visual inspection is presented in Appendix D.

Based on the site characterization, the impacted surface area of the release on the production lease pad meets the remediation standards of Table I of 19.15.29.12 NMAC. As these areas are needed for production operations, final reclamation of any impact within the lease pad areas shall take place in accordance with 19.15.29.12 and 19.15.29.13 NMAC once the Site is no longer being used for oil and gas operations. Therefore, reclamation of the soils located within the confines of the Moody 18 State #001H lease pad will be delayed until the abandonment of the facility and the full pad reclamation.

#### **CONCLUSION**

Based on the results of the site assessment, ConocoPhillips considers the current release footprint to be fully delineated. All analytical results associated with the on-pad site assessment were below applicable

Release Characterization and Closure Request February 15, 2022

ConocoPhillips

Site RRALs following the initial response actions; therefore, no further remediation of the release footprint is necessary.

Based on the above, ConocoPhillips respectfully requests closure for this release. Final reclamation shall take place in accordance with 19.15.29.13 NMAC once the site is no longer being used for oil and gas operations. The final C-141 forms are enclosed in Appendix A. If you have any questions concerning the soil assessment activities for the Site, please call me at (512) 217-7254 or Christian at (512) 338-2861.

Sincerely,

Tetra Tech, Inc.

Samantha K. Abbott, P.G. Senior Staff Geologist

Christian M. Llull, P.G. Project Manager

CC:

Mr. Charles Beauvais, BU - ConocoPhillips

Release Characterization and Closure Request February 15, 2022

ConocoPhillips

#### **LIST OF ATTACHMENTS**

#### Figures:

Figure 1 – Overview Map

Figure 2 – Topographic Map

Figure 3 – Approximate Release Location Map

Figure 4 – Site Assessment Map

#### Tables:

Table 1 – Summary of Analytical Results

#### Appendices:

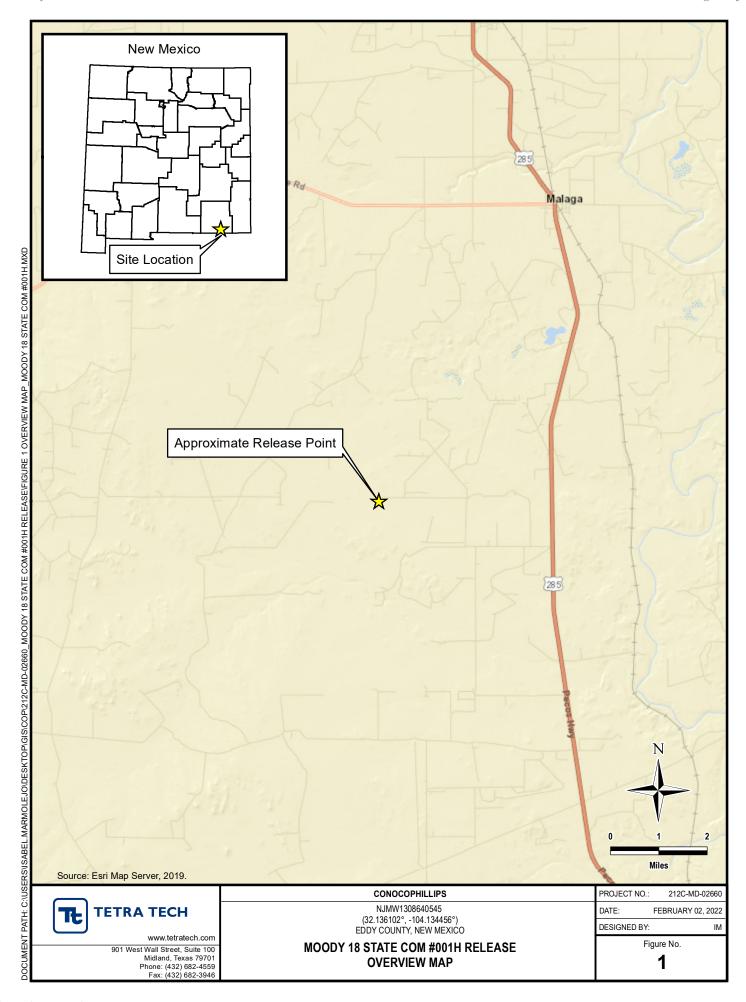
Appendix A – C-141 Forms

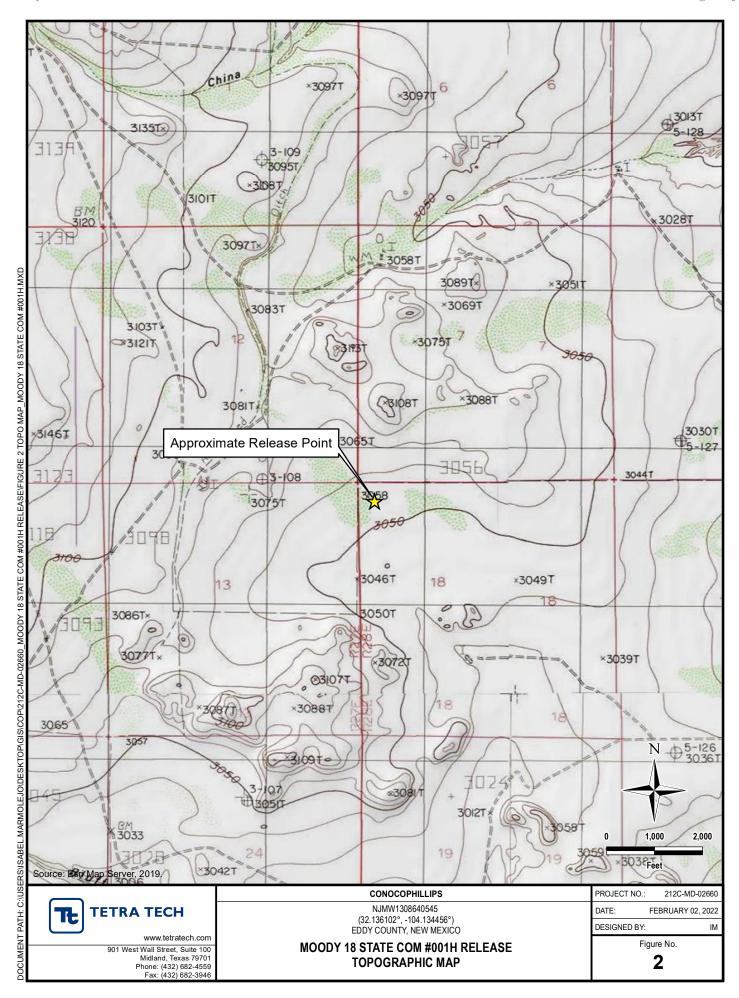
Appendix B – Site Characterization Data

Appendix C - Laboratory Analytical Data

Appendix D – Photographic Documentation

# **FIGURES**









# **TABLE**

# TABLE 1 SUMMARY OF ANALYTICAL RESULTS 2019 SOIL ASSESSMENT- NJMW1308640545 HERITAGE CONCHO MOODY 18 STATE COM #001H EDDY COUNTY, NM

						BTEX <sup>1</sup>								TPH <sup>2</sup>						
ç.	Sample ID Sample I	Sample Date	Sample Depth	mple Depth Chloride <sup>1</sup>		Ronzor	Panzono Toluor		uene Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO Total		Total TPH	
Sample ID Sample Date					Benzene Toluene		Ethylbenzene		Total Aylenes		TOTAL BIEN		C <sub>6</sub> - C <sub>10</sub>		> C <sub>10</sub> - C <sub>28</sub>		(GRO+DRO)			
			ft. bgs	mg/kg	Q	mg/kg	Q	mg/kg	ď	mg/kg	ď	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
	AH-1	3/26/2019	0 - 1	222		< 0.002		< 0.002		< 0.002		< 0.002		< 0.002		< 15.0		< 15.0		< 15.0
	AH-2	3/26/2019	0 - 1	202		< 0.002		< 0.002		< 0.002		< 0.002		< 0.002		23.9		< 15.0		23.9

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 8021B

2 Method 8015M

# **APPENDIX A C-141 Forms**

District !
1625 N. French Dr., Hobbs, NM 88240
District !!
1301 W. Grand Avenue, Artesia, NM 88210
District !!!
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 RECEIVED

MAR **1 9** 2013

Form C-141 Revised October 10, 2003

NMOCD ARTHER Copies to appropriate District-Office in accordance

iet-Office in accordance with Rule 116 on back side of form

/			Rele	ease Notifica	ation	and Co	rrective A	ction	· •			
nTMW!	308	6405	45		(	OPERAT	OR			l Report	□ F	inal Report
Name of Co				G LLC 2291:	37 C	Contact	Pa	at Ellis				
Address				idland, TX 7970		elephone N		230-00				
Facility Nan	ne M	OODY 18 S	TATE C	OM #001H	F	acility Typ	e TANK	BATT	ERY	<del></del>		
Surface Own	ner STA	re .		Mineral O	wner		1		Lease N	o. (API#)	30-015-	39585
						OF REI	LEASE					
Unit Letter D	Section 15	Township 25S	Range 28E	Feet from the	North/S	South Line	Feet from the	e East/West Line		County	EDDY	
				Latitude 32.13	647	Longi	tude 104.13432					
				NAT	URE (	OF RELI	EASE ·					
Type of Relea						Volume of	Release 20bbls		Volume R	lecovered	10bbls	
Source of Re	lease Stora	ge Tank				Date and F 03-02-201	Iour of Occurrenc	e		Hour of Dis 13 4:00pm		
Was Immedia	ate Notice (		Yes 🔀	No ⊠ Not Re	quired	If YES, To	Whom?					
By Whom?						Date and I-	lour	~~				
Was a Water	course Read	ched?	Yes ∑	] No			olume Impacting t	he Wat	ercourse.			
If a Watercou	irse was Im	pacted, Descri	ibe Fully.	*			,					
Describe Cau	se of Probl	cm and Reme	dial Actio	n Taken.*								
A storage tan	k over flow	ved on the Mo	ody 18 St	ate Com #001H. M	leasure t	he storage ta	nks prior to unlo	ading ar	ny fluids int	o tank.		
Describe Are	a Affected	and Cleanup A	Action Ta	ken.*								
fluids have b	een recover	ed. The entire	spill was	to a storage tank th contained on the le to the NMOCD f	ocation.	Tetra Tech v	will sample the sp	ill site a	rea to delin	ls with a valeate any po	icuum tru ossible co	ck. All free ntamination
regulations a public health should their of or the enviro	Il operators or the envi operations h nment. In a	are required to ronment. The nave failed to a	o report a acceptan adequately OCD accep	e is true and compled is true and complend/or file certain rece of a C-141 reposition of the certain receipt and response of a C-141 receipt and response of a C-141 receipt and response of a C-141 receipt and r	elease no rt by the emediate	otifications a NMOCD m contaminat	nd perform correct larked as "Final Ricon that pose a three tree the operator of	etive act eport" of eat to g respons	ions for rel does not rel round wate libility for c	eases which ieve the ope r, surface w ompliance	n may end erator of l rater, hum with any	langer iability an health
		7 _	<del></del>				OIL CON	SERV	ATION	DIVISI	<u>ON</u>	
Signature:			(							J. / ./	, <sub>.</sub>	
Printed Nam	e:	Josh	Russo			Approved by	District Supervis	or: S	igned By_	11/14	R) KA	mese_
Title:		Senior Enviro	nmental (	Coordinator		Approval <b>MA</b>	R: 2 7 2013		Expiration	Date:		
E-mail Addr	ess:	jrusso@o	concho.co	om	(	Conditions o	f Approval:			Attache	d 🔲	
Date: 03-12	-2013	1	Phone:	432-212-2399	9			•				
Attach Add	tional She	ets If Necess	ary		_	Remed	iation per OC	D Řul	e &	7-	77	150
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State of New Mexico Incident ID NIMW1308

Incident ID	NJMW1308640545
District RP	2RP-1591
Facility ID	
Application ID	

Page 14 of 40

## Site Assessment/Characterization

 $This information \ must \ be \ provided \ to \ the \ appropriate \ district \ of fice \ no \ later \ than \ 90 \ days \ after \ the \ release \ discovery \ date.$ 

What is the shallowest depth to groundwater beneath the area affected by the release?	63 (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 <b>not</b> 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 ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	rtical extents of soil
Characterization Report Checklist: Each of the following items must be included in the report.	
<ul> <li>✓ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring well Field data</li> <li>✓ Data table of soil contaminant concentration data</li> <li>✓ Depth to water determination</li> <li>✓ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release</li> <li>☐ Boring or excavation logs</li> <li>✓ Photographs including date and GIS information</li> <li>✓ Topographic/Aerial maps</li> </ul>	ls.
☐ Laboratory data including chain of custody	

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

Received by OCD: 2/16/2022 8:13:10 AM
State of New Mexico
Page 4
Oil Conservation Division

	Page 15 of 4	F
Incident ID	NJMW1308640545	
District RP	2RP-1591	
Facility ID		

Application ID

Page 16 of 40

Incident ID	NJMW1308640545
District RP	2RP-1591
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 iter	ms 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 must be notified 2 days prior to liner inspection)	f the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: appropriate ODC I	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 and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of a should their operations have failed to adequately investigate and reme human health or the environment. In addition, OCD acceptance of a compliance with any other federal, state, or local laws and/or regulation restore, reclaim, and re-vegetate the impacted surface area to the conductor accordance with 19.15.29.13 NMAC including notification to the OCI Printed Name: Charles R. Beauvais II	C-141 report by the OCD does not relieve the operator of liability ediate contamination that pose a threat to groundwater, surface water, C-141 report does not relieve the operator of responsibility for ons. The responsible party acknowledges they must substantially litions that existed prior to the release or their final land use in D when reclamation and re-vegetation are complete.
	Date: 2/15/2022
email: charles.r.beauvais@conocophillips.com	Telephone: <u>575-988-2043</u>
OCD Only	
Received by:	Date:
	Fliability should their operations have failed to adequately investigate and ater, human health, or the environment nor does not relieve the responsible regulations.
Closure Approved by: Bradford Billings	Date:03/02/2022
Printed Name: Bradford Billings	Title:Envi.Spec.A

# **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

(quarters are smallest to largest) closed)

(NAD83 UTM in meters)

(In feet)

**POD** 

Sub-

Q Q Q

Code basin County 64 16 4 Sec Tws Rng 4 2 3 18 25S 28E

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

X Y 582266 3554864

Water DistanceDepthWellDepthWater Column

1169 91

Average Depth to Water:

63 feet

Minimum Depth: 63 feet

Maximum Depth: 63 feet

**Record Count:** 1

**POD Number** 

C 03861 POD1

**UTMNAD83 Radius Search (in meters):** 

**Easting (X):** 581636

**Northing (Y):** 3555850

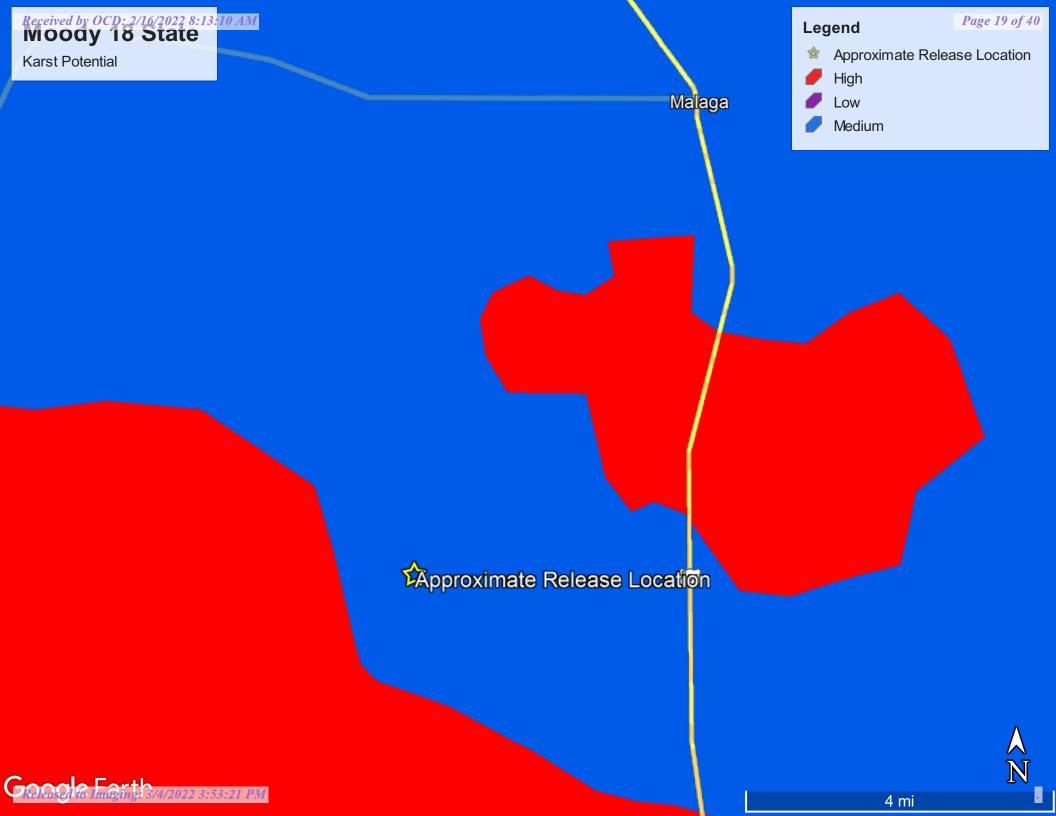
Radius: 1200

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.

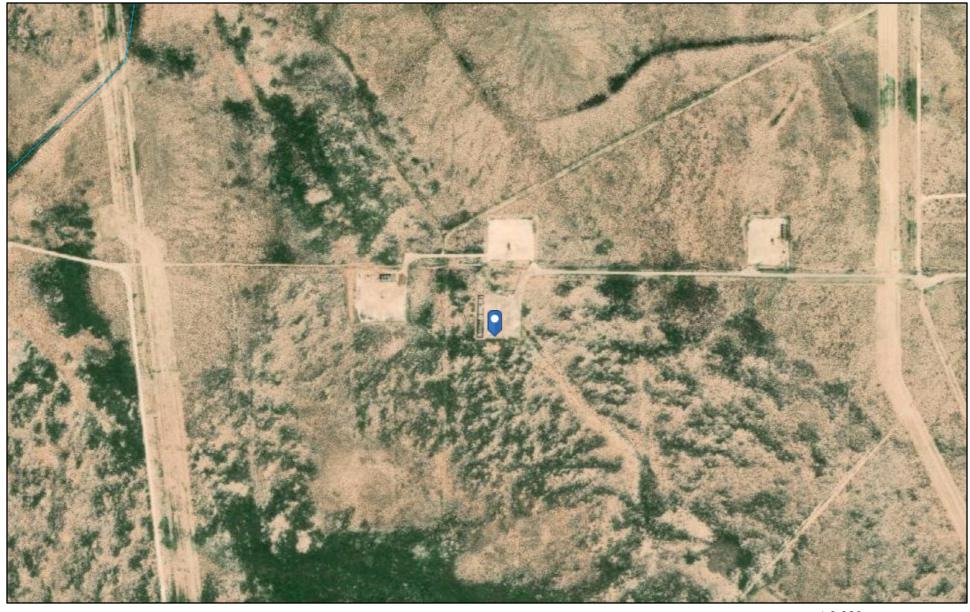
2/1/22 3:00 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Released to Imaging: 3/4/2022 3:53:21 PM



# **OCD Water Bodies**



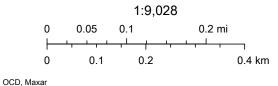
2/1/2022, 4:02:21 PM

OCD District Offices

**OSE Water-bodies** 

**OSE Streams** 

PLJV Probable Playas



# APPENDIX C Laboratory Analytical Data



**Project Id:** 

# **Certificate of Analysis Summary 619641**

COG Operating LLC, Artesia, NM

Project Name: Moody 18 St Com #001H (3-2-13) 2RP-1591

**Date Received in Lab:** Mon Apr-01-19 03:53 pm

**Report Date:** 04-APR-19 **Project Manager:** Kalei Stout



Contact: Ike Tavarez

Project Location: Eddy County, NM

	Lab Id:	619641-0	001	619641-0	002		
Analysis Requested	Field Id:	AH-1 0-1' (Re	efusal)	AH-2 0-1' (R	efusal)		
Analysis Requesieu	Depth:	0-1 ft		0-1 ft			
	Matrix:	SOIL		SOIL			
	Sampled:	Mar-26-19 (	00:00	Mar-26-19	00:00		
BTEX by EPA 8021B	Extracted:	Apr-03-19	15:45	Apr-03-19	15:45		
	Analyzed:	Apr-03-19	17:51	Apr-03-19	18:10		
	Units/RL:	mg/kg	RL	mg/kg	RL		
Benzene		< 0.00200	0.00200	< 0.00200	0.00200		
Toluene		< 0.00200	0.00200	< 0.00200	0.00200		
Ethylbenzene		< 0.00200	0.00200	< 0.00200	0.00200		
m,p-Xylenes		< 0.00399	0.00399	< 0.00400	0.00400		
o-Xylene		< 0.00200	0.00200	< 0.00200	0.00200		
Total Xylenes		< 0.00200	0.00200	< 0.00200	0.00200		
Total BTEX		< 0.00200	0.00200	< 0.00200	0.00200		
Chloride by EPA 300	Extracted:	Apr-01-19	16:00	Apr-01-19 16:00			
	Analyzed:	Apr-02-19 (	09:33	Apr-02-19 00:08			
	Units/RL:	mg/kg	RL	mg/kg	RL		
Chloride		222	5.00	202	50.0		
TPH By SW8015 Mod	Extracted:	Apr-02-19	16:00	Apr-02-19	16:00		
	Analyzed:	Apr-03-19 (	00:00	Apr-03-19 (	00:19		
	Units/RL:	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons		<15.0	15.0	23.9	15.0		
Diesel Range Organics		<15.0	15.0	<15.0	15.0		
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0		
Total TPH		<15.0	15.0	23.9	15.0		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Kalei Stout

# **Analytical Report 619641**

# for COG Operating LLC

Project Manager: Ike Tavarez

Moody 18 St Com #001H (3-2-13) 2RP-1591

04-APR-19

Collected By: Client





#### 1211 W. Florida Ave Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco-Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429), North Carolina (483) Xenco-Lakeland: Florida (E84098)





04-APR-19

Project Manager: **Ike Tavarez COG Operating LLC**2407 Pecos Avenue
Artesia, NM 88210

Reference: XENCO Report No(s): 619641

Moody 18 St Com #001H (3-2-13) 2RP-1591

Project Address: Eddy County, NM

#### Ike Tavarez:

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) 619641. 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. 619641 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,

Kalei Stout

Midland Laboratory Director

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 619641**



## COG Operating LLC, Artesia, NM

Moody 18 St Com #001H (3-2-13) 2RP-1591

Sample Id	Matrix	<b>Date Collected</b>	Sample Depth	Lab Sample Id
AH-1 0-1' (Refusal)	S	03-26-19 00:00	0 - 1 ft	619641-001
AH-2 0-1' (Refusal)	S	03-26-19 00:00	0 - 1 ft	619641-002

#### **CASE NARRATIVE**

Client Name: COG Operating LLC

Project Name: Moody 18 St Com #001H (3-2-13) 2RP-1591

Project ID: Report Date: 04-APR-19 Work Order Number(s): 619641 Date Received: 04/01/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3084502 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 619641-001.



## **Certificate of Analytical Results 619641**



#### COG Operating LLC, Artesia, NM

Moody 18 St Com #001H (3-2-13) 2RP-1591

04.01.19 16.00

Sample Id: AH-1 0-1' (Refusal)

Matrix: Soil

Date Received:04.01.19 15.53

Lab Sample Id: 619641-001

Date Collected: 03.26.19 00.00

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

•

% Moisture:

Analyst: SPC

Date Prep:

Basis:

Wet Weight

Seq Number: 3084174

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	222	5.00	mg/kg	04.02.19 09.33		1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

% Moisture:

Tech: Analyst: ARM ARM

Date Prep: 04.02.19 16.00

Basis:

Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0		mg/kg	04.03.19 00.00	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0		mg/kg	04.03.19 00.00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0		mg/kg	04.03.19 00.00	U	1
Total TPH	PHC635	<15.0	15.0		mg/kg	04.03.19 00.00	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	89	%	70-135	04.03.19 00.00		
o-Terphenyl		84-15-1	87	%	70-135	04.03.19 00.00		



Lab Sample Id: 619641-001

Analytical Method: BTEX by EPA 8021B

# **Certificate of Analytical Results 619641**



## COG Operating LLC, Artesia, NM

Moody 18 St Com #001H (3-2-13) 2RP-1591

Sample Id: Matrix: Soil AH-1 0-1' (Refusal)

> Date Collected: 03.26.19 00.00 Sample Depth: 0 - 1 ft

Prep Method: SW5030B

Date Received:04.01.19 15.53

% Moisture:

Tech: SCMSCM Analyst: 04.03.19 15.45 Basis: Wet Weight Date Prep:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	04.03.19 17.51	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	04.03.19 17.51	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	04.03.19 17.51	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399		mg/kg	04.03.19 17.51	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	04.03.19 17.51	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	04.03.19 17.51	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	04.03.19 17.51	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	102	%	70-130	04.03.19 17.51		
4-Bromofluorobenzene		460-00-4	132	%	70-130	04.03.19 17.51	**	



# **Certificate of Analytical Results 619641**



#### COG Operating LLC, Artesia, NM

Moody 18 St Com #001H (3-2-13) 2RP-1591

Sample Id: AH-2 0-1' (Refusal)

Matrix: Soil

Date Received:04.01.19 15.53

Lab Sample Id: 619641-002

Date Collected: 03.26.19 00.00

Sample Depth: 0 - 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech:

SPC

% Moisture:

Analyst: SPC

Date Prep:

04.01.19 16.00 Basis:

Wet Weight

Seq Number: 3084174

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	202	50.0	mg/kg	04.02.19 00.08		10

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

Tech:

ARM

% Moisture:

Analyst: ARM

Date Prep: 04.02.19 16.00

Basis: Wet Weight

Parameter	Cas Number	Result	$\mathbf{RL}$		Units	<b>Analysis Date</b>	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	23.9	15.0		mg/kg	04.03.19 00.19		1
Diesel Range Organics	C10C28DRO	<15.0	15.0		mg/kg	04.03.19 00.19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0		mg/kg	04.03.19 00.19	U	1
Total TPH	PHC635	23.9	15.0		mg/kg	04.03.19 00.19		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	82	%	70-135	04.03.19 00.19		
o-Terphenyl		84-15-1	77	%	70-135	04.03.19 00.19		



## **Certificate of Analytical Results 619641**



## COG Operating LLC, Artesia, NM

Moody 18 St Com #001H (3-2-13) 2RP-1591

Sample Id: AH-2 0-1' (Refusal)

Matrix: Soil

Date Received:04.01.19 15.53

Lab Sample Id: 619641-002

Date Collected: 03.26.19 00.00

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

Date Prep: 04.03.19 15.45

% Moisture:

Analyst:

SCM

Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	04.03.19 18.10	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	04.03.19 18.10	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	04.03.19 18.10	U	1
m,p-Xylenes	179601-23-1	< 0.00400	0.00400		mg/kg	04.03.19 18.10	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	04.03.19 18.10	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	04.03.19 18.10	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	04.03.19 18.10	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	101	%	70-130	04.03.19 18.10		
1,4-Difluorobenzene		540-36-3	109	%	70-130	04.03.19 18.10		



# 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.

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

SMP Client Sample BLK Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample BKSD/LCSD Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate MS Matrix Spike MSD: Matrix Spike Duplicate

- + NELAC certification not offered for this compound.
- \* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

<sup>\*\*</sup> Surrogate recovered outside laboratory control limit.

Flag



Seq Number:

#### **QC Summary** 619641

#### **COG Operating LLC**

Moody 18 St Com #001H (3-2-13) 2RP-1591

Analytical Method: Chloride by EPA 300

3084174 Matrix: Solid

LCS Sample Id: 7674829-1-BKS MB Sample Id: 7674829-1-BLK

MR

E300P Prep Method:

Date Prep: 04.01.19

LCSD Sample Id: 7674829-1-BSD

Spike LCS LCS Limits %RPD RPD Limit Units LCSD LCSD Analysis Flag **Parameter** Result Amount Result %Rec Date %Rec Result

04.01.19 20:03 Chloride < 0.858 250 258 103 259 104 90-110 0 20 mg/kg

Analytical Method: Chloride by EPA 300

E300P Prep Method: Seq Number: 3084174 Matrix: Soil Date Prep: 04.01.19

Parent Sample Id: 619466-008 MS Sample Id: 619466-008 S MSD Sample Id: 619466-008 SD

Spike MS MS %RPD RPD Limit Units Parent **MSD MSD** Limits Analysis Flag **Parameter** Result Date Result Amount %Rec Result %Rec

Chloride 492 250 722 92 724 93 90-110 0 20 mg/kg 04.01.19 20:33

Analytical Method: Chloride by EPA 300

Prep Method: E300P 3084174 Matrix: Soil 04.01.19 Seq Number: Date Prep:

MS Sample Id: 619487-001 S MSD Sample Id: 619487-001 SD 619487-001 Parent Sample Id:

MS %RPD RPD Limit Units Parent Spike MS **MSD MSD** Limits Analysis Flag **Parameter** Result Date Result %Rec Amount Result %Rec Chloride 519 250 748 92 749 92 90-110 0 20 04.01.19 22:50 mg/kg

Analytical Method: TPH By SW8015 Mod

TX1005P Prep Method: Seq Number: 3084425 Matrix: Solid 04.02.19 Date Prep:

LCSD Sample Id: 7674881-1-BSD LCS Sample Id: 7674881-1-BKS MB Sample Id: 7674881-1-BLK

LCS %RPD RPD Limit Units MB Spike LCS LCSD Limits Analysis LCSD **Parameter** Result %Rec Date Result Amount Result %Rec 04.02.19 22:22 1020 102 70-135 12 20 Gasoline Range Hydrocarbons < 8.00 1000 1150 115 mg/kg 04.02.19 22:22 70-135 7 20 Diesel Range Organics 1000 1130 113 1210 < 8.13 121 mg/kg

LCS LCS LCSD MB MB LCSD Limits Units Analysis **Surrogate** %Rec Flag %Rec Flag Flag Date %Rec 04.02.19 22:22 1-Chlorooctane 93 118 98 70-135 % 04.02.19 22:22 o-Terphenyl 95 112 128 70-135 %

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100\*(C-A) / BRPD = 200\* | (C-E) / (C+E) |[D] = 100 \* (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample

A = Parent Result = MS/LCS Result

= MSD/LCSD Result

MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

Flag



Parent Sample Id:

#### **QC Summary** 619641

#### **COG Operating LLC**

Moody 18 St Com #001H (3-2-13) 2RP-1591

Analytical Method: TPH By SW8015 Mod

619640-001

Matrix: Soil

Prep Method: TX1005P

Seq Number: 3084425 Date Prep: 04.02.19 MS Sample Id: 619640-001 S MSD Sample Id: 619640-001 SD

Spike MS MS Limits %RPD RPD Limit Units Parent **MSD MSD** Analysis Flag **Parameter** Result Amount Result Date %Rec %Rec Result 04.02.19 23:21 Gasoline Range Hydrocarbons 8.61 996 990 99 1120 70-135 12 20 mg/kg 111 1070 20 04.02.19 23:21 Diesel Range Organics 10.7 996 106 1140 70-135 113 6 mg/kg

MS MS **MSD MSD** Limits Units Analysis **Surrogate** Flag %Rec %Rec Flag Date 1-Chlorooctane 116 129 70-135 % 04.02.19 23:21 o-Terphenyl 109 107 70-135 % 04.02.19 23:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B Seq Number: 3084502 Matrix: Solid Date Prep: 04.03.19 LCS Sample Id: 7674976-1-BKS LCSD Sample Id: 7674976-1-BSD MB Sample Id: 7674976-1-BLK

%RPD RPD Limit Units LCS LCS MB Spike Limits Analysis **LCSD LCSD Parameter** Amount Result Result %Rec Date Result %Rec 102 0.0974 04.03.19 15:39 Benzene < 0.00200 0.0998 0.102 98 70-130 5 35 mg/kg Toluene < 0.00200 0.0998 0.0955 0.0916 92 70-130 35 04.03.19 15:39 96 4 mg/kg 0.0998 97 0.0925 93 70-130 35 04.03.19 15:39 Ethylbenzene < 0.00200 0.0966 4 mg/kg m,p-Xylenes < 0.00101 0.200 0.190 95 0.182 92 70-130 4 35 mg/kg 04.03.19 15:39 0.0998 0.0955 0.0916 92 70-130 35 04.03.19 15:39 o-Xylene < 0.00200 96 mg/kg

LCSD MB MB LCS LCS LCSD Limits Units Analysis **Surrogate** %Rec %Rec Flag Flag Flag Date %Rec 1.4-Difluorobenzene 105 102 102 70-130 % 04.03.19 15:39 04.03.19 15:39 4-Bromofluorobenzene 92 94 70-130 % 94

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B Seq Number: 3084502 Matrix: Soil 04.03.19 Date Prep: MS Sample Id: 619640-001 S MSD Sample Id: 619640-001 SD Parent Sample Id: 619640-001

MS %RPD RPD Limit Units Parent Spike MS MSD MSD Limits Analysis Flag **Parameter** %Rec Result Amount Result %Rec Date Result < 0.000387 04.03.19 16:17 72 70-130 Benzene 0.101 0.0728 0.0669 67 8 35 mg/kg X Toluene < 0.000458 0.101 0.0683 68 0.0618 62 70-130 10 35 04.03.19 16:17 X mg/kg < 0.000568 mg/kg 04.03.19 16:17 Ethylbenzene 0.101 0.0674 67 0.0600 60 70-130 12 35 X 04.03.19 16:17 X < 0.00102 0.201 0.134 67 0.119 70-130 12 35 m,p-Xylenes 60 mg/kg < 0.000346 04.03.19 16:17 0.0601 70-130 12 X o-Xylene 0.101 0.0677 67 60 35 mg/kg

MSD MS MS **MSD** Limits Units Analysis **Surrogate** %Rec Flag Flag Date %Rec 1,4-Difluorobenzene 105 106 70-130 % 04.03.19 16:17 4-Bromofluorobenzene 101 101 70-130 % 04.03.19 16:17

MS/MSD Percent Recovery Relative Percent Difference LCS/LCSD Recovery Log Difference

[D] = 100\*(C-A) / BRPD = 200\* | (C-E) / (C+E) |[D] = 100 \* (C) / [B]

Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample

A = Parent Result

= MS/LCS Result = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

Received by OCD: 2/	16/2022		Relinquished by:			AH-2		LAB #		Colling	Receiving Laboratory:	invoice to:	(county, state)	Project I coation:	Project Name:	age 34 of 40
	ad by: Date: Time:	4-1	ad by: Date: Time:			-2 0-1' (Refusal)					y: Xenco		Eddy County, NM	Moody 18	COG	Congress of the congress of th
ORIGINAL COPY	Received by:	Received by:	Received by:			3/26/2019 X	3/26/2019 X	DATE TIME WATER SOIL	SAMPLING MATRIX		Sampler Signature: Rob	COG	Project #:	Moody 18 St Com #001H (3-2-13) 2RP-1591	Site Manager: Ike Tavarez	
	Date: Time:	7///19 / \$\frac{3}{2}\$ Date: Time:	Date: Time:			×		HCL HNO <sub>3</sub> ICE # CONTAINE	PRESERVATIVE METHOD S		Robert Grubbs Jr			1	z itavarez@concho.com	One Concho Center/600/Illinois Avenue/Midland, Texas Tel (432) 683-7443
(Circle) HAND DELIVERED FEDEX UPS Tracking#.	3000   Special Report Lin	ONLY Sample Temperature  RUSH: Same Day 24 F Sample Temperature Rush Charges Authorized	LAB USE REMARKS:			×	×	BTEX 8021B TPH TX1005 TPH 8015M ( PAH 8270C Total Metals A TCLP Wolatiles TCLP Semi Vol RCI GC/MS Vol. 8 GC/MS Semi. PCB's 8082 / NORM PLM (Asbesto	(Ext to GRO - ag As Ba Ag As B solatiles 260B / 0 Vol. 82	DRO - M a Cd Cr P a Cd Cr F	b Se H			(Circle of Specify Method	ANALYSIS RE	( )()()
Released to Imaging	TRRP Report	, 24 hr 48 hr <u>7<b>2 hr</b></u>	PM			×		Chloride Chloride Su General Wate Anion/Cation	r Chem		e attach	ned list)			. [	Page 1 of 1



# XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: COG Operating LLC

Date/ Time Received: 04/01/2019 03:53:00 PM

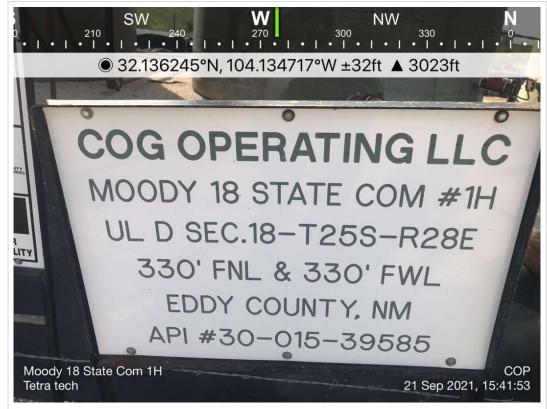
Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient

Work Order #: 619641

Temperature Measuring device used: R8

	Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?		3.2
#2 *Shipping container in good condition	?	Yes
#3 *Samples received on ice?		Yes
#4 *Custody Seals intact on shipping cor	ntainer/ cooler?	N/A
#5 Custody Seals intact on sample bottle	es?	N/A
#6*Custody Seals Signed and dated?		N/A
#7 *Chain of Custody present?		Yes
#8 Any missing/extra samples?		No
#9 Chain of Custody signed when relinqu	uished/ received?	Yes
#10 Chain of Custody agrees with sampl	e labels/matrix?	Yes
#11 Container label(s) legible and intact?	?	Yes
#12 Samples in proper container/ bottle?		Yes
#13 Samples properly preserved?		Yes
#14 Sample container(s) intact?		Yes
#15 Sufficient sample amount for indicate	ed test(s)?	Yes
#16 All samples received within hold time	e?	Yes
#17 Subcontract of sample(s)?		No
#18 Water VOC samples have zero head	dspace?	N/A
* Must be completed for after-hours de Analyst:	livery of samples prior to placing in PH Device/Lot#:	the refrigerator
Checklist completed by: Checklist reviewed by:	Katie Lowe	Date: 04/01/2019  Date: 04/03/2019
	Kalei Stout	

# APPENDIX D Photographic Documentation



TETRA TECH, INC.	DESCRIPTION	View west of Moody 18 State Com #1H signage	1
PROJECT NO. 212C-MD-02578	SITE NAME	HConcho - MOODY 18 STATE COM #001H	9/21/2021



TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View east of the release area and lease pad.	2
212C-MD-02578	SITE NAME	HConcho - MOODY 18 STATE COM #001H	9/21/2021



TETRA TECH, INC.	DESCRIPTION	View south of the release area and lease pad.	3
PROJECT NO. 212C-MD-02578	SITE NAME	HConcho - MOODY 18 STATE COM #001H	9/21/2021



TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View west of the existing tanks and lease pad.	4
212C-MD-02578	SITE NAME	HConcho - MOODY 18 STATE COM #001H	9/21/2021



TETRA TECH, INC.	DESCRIPTION	View south of the release area and pasture.	5
PROJECT NO. 212C-MD-02578	SITE NAME	HConcho - MOODY 18 STATE COM #001H	9/21/2021



TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View north of the release area and lease pad.	6
212C-MD-02578	SITE NAME	HConcho - MOODY 18 STATE COM #001H	9/21/2021

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

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 82015

#### **CONDITIONS**

Operator:	OGRID:
COG OPERATING LLC	229137
600 W Illinois Ave	Action Number:
Midland, TX 79701	82015
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By	Condition	Condition Date
bbillings	None	3/4/2022