

January 31, 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
McIntyre DK Federal #003 Water Tank Release
Unit Letter N, Section 17, Township 17 South, Range 30 East
Eddy County, New Mexico
Incident ID# nAB1424627897
2RP-2463

Mr. Billings:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips to assess a Heritage Concho release and subsequent remedial actions taken at the Northwest Central Tank Battery, which shares a pad with the McIntyre DK Federal #003 well (API No. 30-015-04186). The release footprint is located in Public Land Survey System (PLSS) Unit Letter N, Section 17, Township 17 South, Range 30 East, in Eddy County, New Mexico (Site). The approximate release point occurred at coordinates 32.830465°, -103.996345°, as shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico Oil Conservation District (NMOCD) C-141 Initial Report, the release was discovered on August 18, 2014. The C-141 reports that the release was caused by a corroded 4-inch nipple on the collar of the water tank at the Northwest Central Tank Battery. Approximately 950 barrels (bbls) of produced water and 2 bbls of crude oil were released, of which approximately 900 bbls of produced water and 1 bbl of oil were recovered. The release stayed within the bermed containment, with no release to pasture. The NMOCD approved the initial C-141 on September 3, 2014, and subsequently assigned the release the Incident ID nAB1424627897 and the remediation permit (RP) 2RP-2463. 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 low 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 0.95 miles (1,500 meters) of the site, the depth to groundwater is 85 feet below ground surface (bgs). The site characterization data are presented in Appendix B.

Tetra Tech

ConocoPhillips

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	Site RRALs
Chloride	10,000 mg/kg
TPH	2,500 mg/kg
BTEX	50 mg/kg

Additionally, in accordance with the NMOCD guidance *Procedures for Implementation of the Spill Rule* (19.15.29 NMAC) (September 6, 2019), the following reclamation requirements for surface soils (0-4 ft bgs) outside of active oil and gas operations are as follows:

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

INITIAL RESPONSE ACTIVITIES AND CLOSURE REQUEST

Following the release, Concho repaired the tank fitting. The release extent was excavated to a depth of approximately 2-4 inches to remove visually impacted soils, which were sent to an approved facility for disposal. The release extent and initial response extent are presented in Figure 3.

No soil assessment samples were obtained due to the associated hazards consisting of produced water lines, electrical conduits, and production equipment on the north, west, and south side of the tank. The south and east side of the release area occurred over a portion that was previously capped with a 3.5-foot clay liner. To avoid compromising the existing cap, no soil bores were installed through the lined section.

A *Closure Request* letter dated November 5, 2014 was submitted to NMOCD following the initial response actions. The Closure Request letter is included as Appendix C. In an email dated November 12, 2014, NMOCD requested a sample point on the west side of the tank to delineate the release before making a determination. The NMOCD correspondence is included as Appendix D.

SITE ASSESSMENT AND SAMPLING RESULTS

In order to comply with the NMOCD directive given in the November 12, 2014 email, Concho was onsite on March 19, 2019 to install one hand auger soil boring (AH-1) to a depth of 3.5 feet, where refusal was met. A total of four (4) soil samples were collected and sent to Xenco Laboratories in Midland, Texas to be analyzed for chloride via EPA Method 300.0, TPH via EPA Method 8015M and BTEX via EPA Method 8261B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix E.

Analytical results from the 2021 assessment activities are summarized in Table 1. All analytical results were below the applicable Site RRALs for soils in active oil and gas production areas.

Tetra Tech performed a visual inspection on behalf of ConocoPhillips at the Site on December 29, 2021 to assess current Site conditions. No evidence of lasting impacts from the August 2014 release were observed

Release Characterization and Closure Request January 31, 2022

ConocoPhillips

during the visual inspection. Photographic documentation of the visual inspection is presented as Appendix F.

CONCLUSION

Based on the results of the site assessment, all analytical results associated with the on-pad site assessment were below applicable Site RRALs following the initial response actions; therefore, no further remediation of the release footprint is necessary. The remaining contamination is on an active, developed oil and gas production pad, fully delineated, and does not cause an imminent risk to human health, the environment, or groundwater. The impacted surface area occurring on the developed pad at the site was remediated to meet the standards of Table I of 19.15.29.12 NMAC during the initial response activities.

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.

Project Manager

Christian M, Llull, P.G.

Program Manager

CC:

Mr. Ike Tavarez, RMR – ConocoPhillips Mr. Charles Beauvais, BU – ConocoPhillips Release Characterization and Closure Request January 31, 2022

ConocoPhillips

LIST OF ATTACHMENTS

Figures:

Figure 1 – Overview Map

Figure 2 – Topographic Map

Figure 3 – Approximate Release Extent and Site Assessment

Tables:

Table 1 – Summary of Analytical Results – Soil Assessment

Appendices:

Appendix A – C-141 Forms

Appendix B – Site Characterization Data

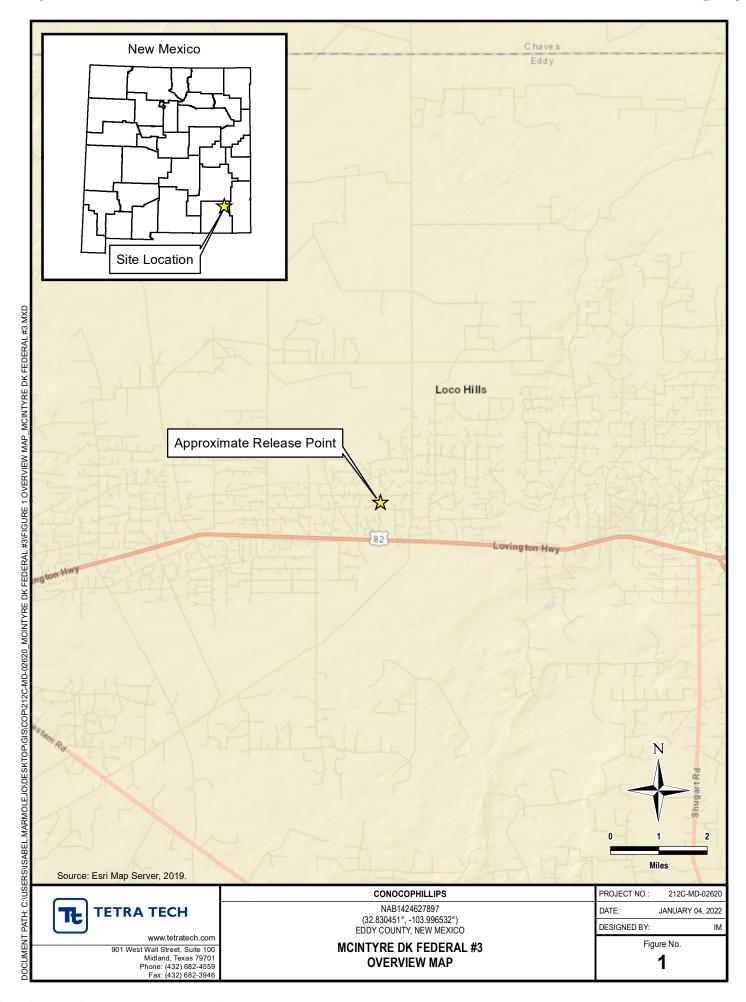
Appendix C – Closure Request (November 5, 2014)

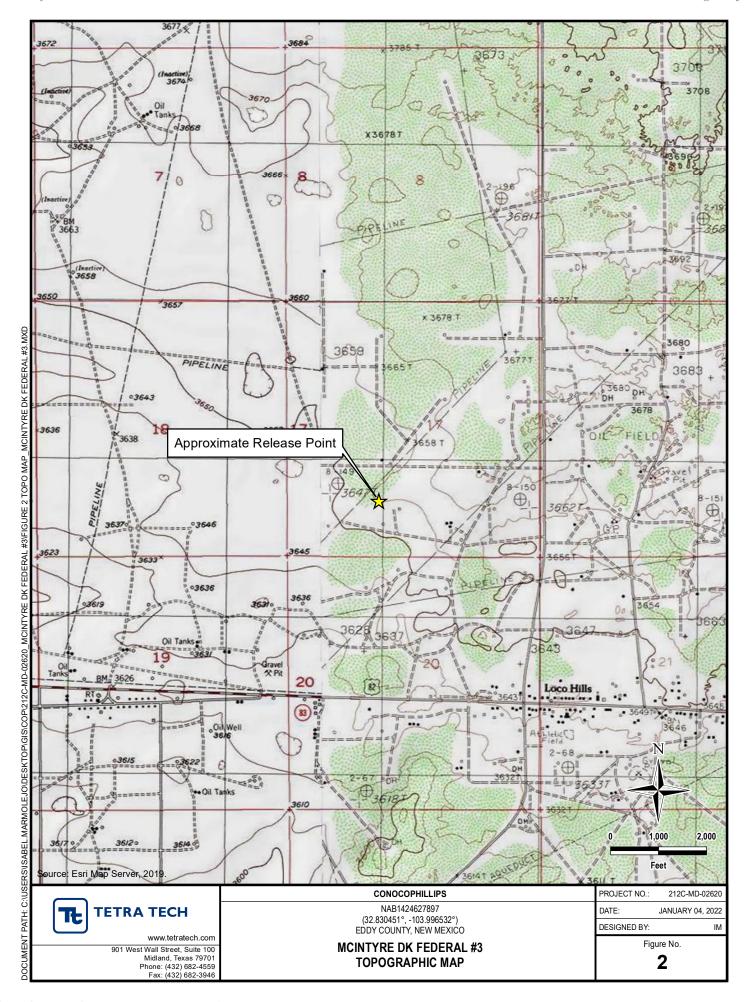
Appendix D – NMOCD Correspondence

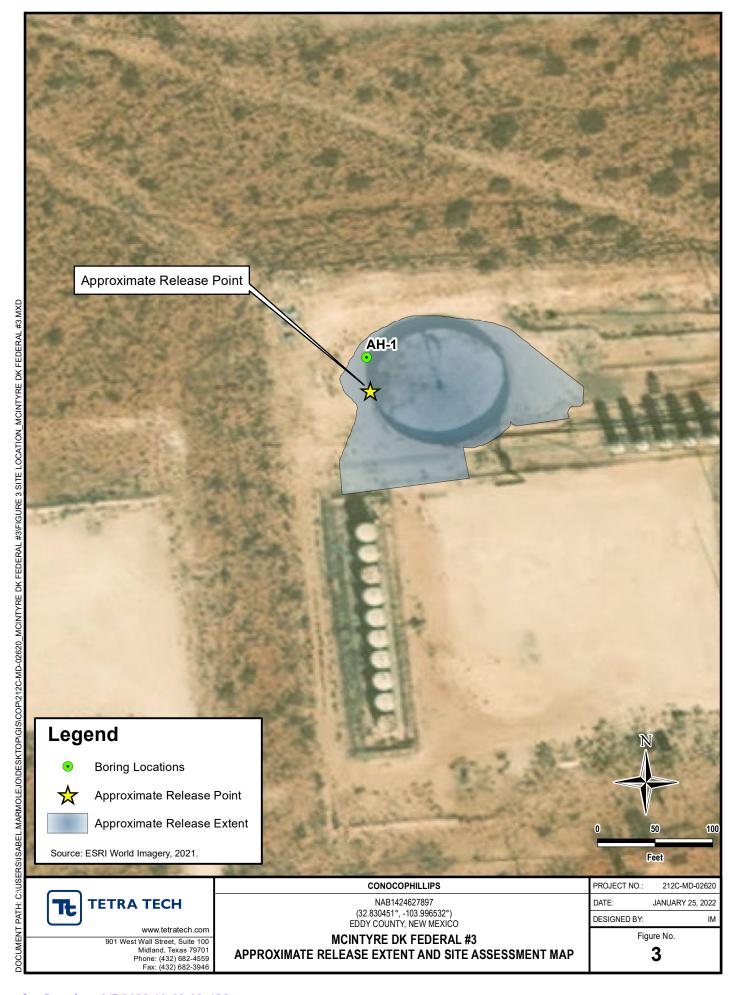
Appendix E – Laboratory Analytical Data

Appendix F – Photographic Documentation

FIGURES







TABLE

TABLE 1 SUMMARY OF ANALYTICAL RESULTS SOIL ASSESSMENT - NAB1424627897 HERITAGE CONCHO

MCINTYRE DK FEDERAL #003 WATER TANK RELEASE LEA COUNTY, NM

		Sample Depth	Chloride ¹								BTEX ²											TPH	l ³		
Sample ID	Sample Date	Sample Depth	Chioride		Benzene		Toluene		Ethylbenzen	ie	m,p-Xylenes		o-Xylene		Total Xylene	:S	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	mg/kg	Q	mg/kg Q
		0-1	84.2		< 0.00199		< 0.00199		< 0.00199		< 0.00398		< 0.00199		< 0.00199		< 0.00199		< 15.0		< 15.0		< 15.0		< 15.0
AH-1	3/19/2019	1.5	162		< 0.00200		< 0.00200		< 0.00200		< 0.00400		< 0.00200		< 0.00200		< 0.00200		< 15.0		< 15.0		< 15.0		< 15.0
All-1	3/19/2019	2.5	428		< 0.00202		< 0.00202		< 0.00202		< 0.00403		< 0.00202		< 0.00202		< 0.00202		< 15.0		19.1		< 15.0		19.1
		3.5 (Refusal)	733		< 0.00199		< 0.00199		< 0.00199		< 0.00398		< 0.00199		< 0.00199		< 0.00199		< 15.0		< 15.0		< 15.0		< 15.0

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

MRO Motor Oil range organics

EPA Method 300.0

2 EPA Method 8021B

3 Method SW8015 Mod

APPENDIX A C-141 Forms

Form C-141

<u>District 1</u> 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III
1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico **Energy Minerals and Natural Resources**

Revised August 8, 2011

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

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

Release Notifi	cation	and Co	rrective A	ction		
NAB1424627897		OPERA	ΓOR		nitial Report	☐ Final Report
Name of Company: COG Operating LLC 2291			bert McNeill		3.2	
Address: 600 West Illinois Avenue, Midland TX 79701			lo. 432-230-00			
Facility Name: Northwest Central Tank Battery	<u> </u>	Facility Typ	e: Tank Battery		·····	
Surface Owner: Federal Mineral	Owner:				se No. NMNM	I-86025
		OF REI		API		- 04 186
Unit Letter Section Township Range Feet from the N 17 17S 30E 990	1	South Line	Feet from the 2310	East/West L West	ine	County Eddy
Latitude:	32.49.81	3 Longitud	e103 59.725		•	
NA	TURE	OF RELI	EASE	-		
Type of Release:		Volume of		Volu	me Recovered:	
Oil and Produced Water			; PW: 950 bbls		bbls; PW: 900	
Source of Release:		1	lour of Occurrenc		and Hour of Dis	covery:
4" Nipple on collar of water tank Was Immediate Notice Given?		8/18/2014 If YES, To		8/18/	2014 10:30 am	
✓ Yes ☐ No ☐ Not F	Required		her – OCD / Jeffi	rey Robertson	BLM	PATE ACT
By Whom? Amanda Trujillo		Date and H	lour: 8/18/2014 4	:56 pm		
Was a Watercourse Reached?		If YES, Vo	lume Impacting t	the Watercours	6e.	
☐ Yes ☐ No						
If a Watercourse was Impacted, Describe Fully.*		. <u>* </u>				
Describe Cause of Problem and Remedial Action Taken.* The release was caused by a corroded 4" nipple on the collar on standing fluids. All fluids were disposed at an NMOCD approve		tank. The tan	k was repaired. V	acuum trucks	were dispatched	to pick up all
Describe Area Affected and Cleanup Action Taken.* The impacted area was contained to the bermed area, with no rel contamination from the release and we will present a remediation						
I hereby certify that the information given above is true and com regulations all operators are required to report and/or file certain public health or the environment. The acceptance of a C-141 rep should their operations have failed to adequately investigate and or the environment. In addition, NMOCD acceptance of a C-141 federal, state, or local laws and/or regulations.	release no cort by the remediate	otifications as NMOCD m contaminati	nd perform correct arked as "Final R on that pose a thr	ctive actions for eport" does not eat to ground	r releases which t relieve the oper water, surface wa	may endanger rator of liability ater, human health
Signature: Fisher			OIL CON	SERVATI /	ON DIVISIO	<u>N</u>
Printed Name: Amanda Trujillo		Approved by	Environmental S	pecialist:	hope	
Title: Senior Environmental Coordinator		Approval Da	le: 9314	Expira	tion Date:	4
E-mail Address: atrujillo@concho.com	(Conditions of	f Approval: iation per OC	רו פוון פי צי	Attached	
Date: August 29, 2014 Phone: 575-748-6940)		s. SUBMIT RE	1	u	
Attach Additional Sheets If Necessary			SALNO LATE			2RP-2463

Received by OCD: 1/31/2022 2:25:04 PM Form C-141 State of New Mexico Page 3 Oil Conservation Division

	Page 13 of 56
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?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☐ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☐ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☐ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☐ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☐ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☐ No
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ☐ No
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	tical extents of soil
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 well 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	ls.

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: 1/31/2022 2:25:04 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

	Page 14 of 5	56
Incident ID		
District RP		
Facility ID		
Application ID		

	octifications and perform corrective actions for releases which may endanger oct does not relieve the operator of liability should their operations have reat to groundwater, surface water, human health or the environment. In
Printed Name:	Title:
Signature: 7473	Date:
email:	Telephone:
OCD Only	
Received by:	Date:

Received by OCD: 1/31/2022 2:25:04 PM Form C-141 State of New Mexico Page 6 Oil Conservation Division

	Page 15 of 56
Incident ID	
District RP	
Facility ID	
Application ID	

Closure

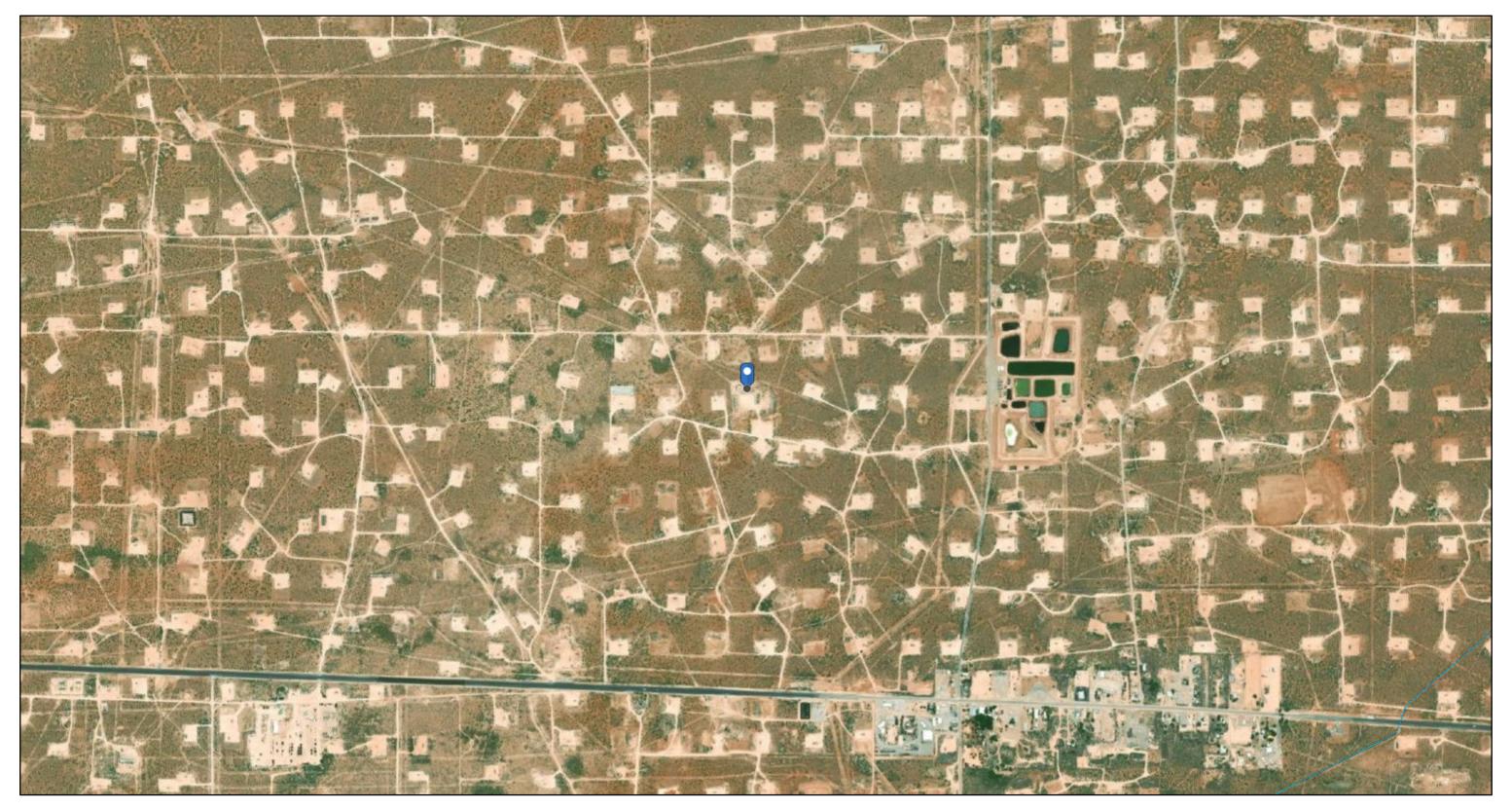
The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled 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 19.15.29.1	1 NMAC
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate ODC	C District office must be notified 2 days prior to final sampling)
☐ Description of remediation activities	
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of	nediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for tions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in
Printed Name:	
Signature: _ /4 75	Date:
email:	Telephone:
OCD Only	
Received by:	Date:
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.
Closure Approved by:	Date:
Printed Name:	Title:

APPENDIX B Site Characterization Data

OCD Waterbodies

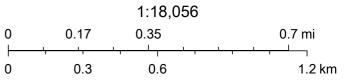


11/30/2021, 11:36:35 AM

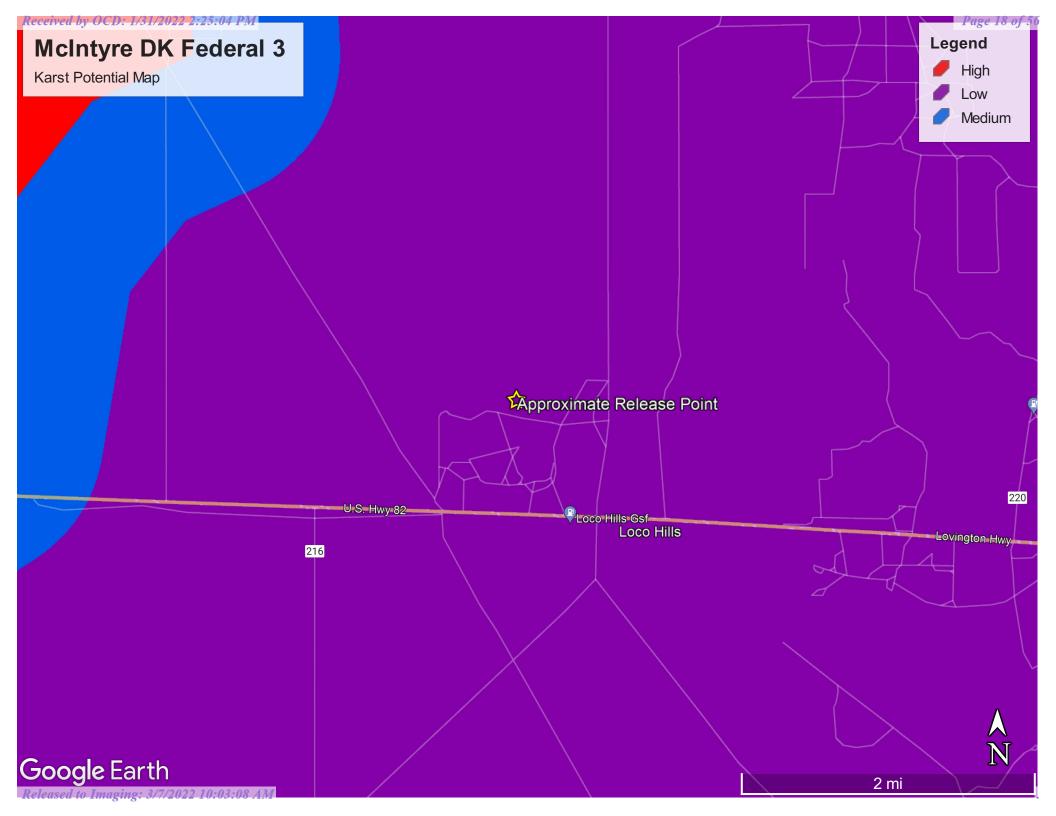
OSE Water-bodies

PLJV Probable Playas

OSE Streams



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) (Na

(NAD83 UTM in meters)

(In feet)

 POD

 Sub Q Q Q
 Depth Depth Water

 POD Number
 Code basin County 64 16 4 Sec Tws Rng
 X
 Y
 Distance Well Water Column

 RA 11914 POD1
 RA ED 2 4 2 20 17S 30E 594801 3632002
 1252 85 80 5

Average Depth to Water: 80 feet

Minimum Depth: 80 feet

Maximum Depth: 80 feet

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 593970.45 Northing (Y): 3632939.49 Radius: 1500

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.

APPENDIX C Closure Request (November 5, 2014)



November 5, 2014

Oil Conservation Division District 2 - Artesia 811 S. First St. Artesia, NM 88210

Re: **Northwest Central Tank Battery** Lease No. NMNM-86025 Sec. 17, T17S-R30E **Eddy County, NM**

Mr. Mike Bratcher,

COG Operating LLC would like to submit for your consideration the enclosed work plan for the above captioned well. The plan is in response to the C-141 initial report dated August 29, 2014.

Background

The release was caused by a corroded 4" nipple on a collar attached to the tank releasing approximately 2 barrels of oil and 950 barrels of produced water of which 1 barrel of oil and 900 barrels of produced water were recovered. All fluid was contained within the bermed facility. The tank fitting was repaired and an initial scrape of 2-4" was done with all impacted material hauled to an approved NMOCD facility for disposal.

Groundwater

Based on the Chevron Trend Maps, the release area would be classified at a site ranking of Zero due to the depth of groundwater at greater than 250'. No well information could be found for Section 17 per NMOSE.

Soil Assessment and Analytical Results

Soil assessment results were not obtained due to the associated hazards consisting of produced water lines, electrical conduits, and production equipment on the North, West, and South side of the tank. The South and East side of the release area occurred over a portion that was previously capped with a 3.5' of clay material (see attached diagram). At the risk of not compromising the existing cap, no soil bores were installed through the lined section.

Released to Imaging: 3/7/2022 10:03:08 AM

Received by OCD: 1/31/2022 2:25:04 PM

Work Plan

COG Operating LLC proposes no further excavation of the release area due to the clay material in place and the associated safety hazards involved with excavation and sampling. As approved in a previous work plan submitted to the NMOCD (May 2014), any future mitigation of releases will be handled at time of abandonment of the facility.

If there are no objections or further stipulations, COG Operating LLC would like to request closure of the site based on approval of this work plan. Please feel free to contact me with any questions or concerns at (575) 725-0787.

Sincerely,

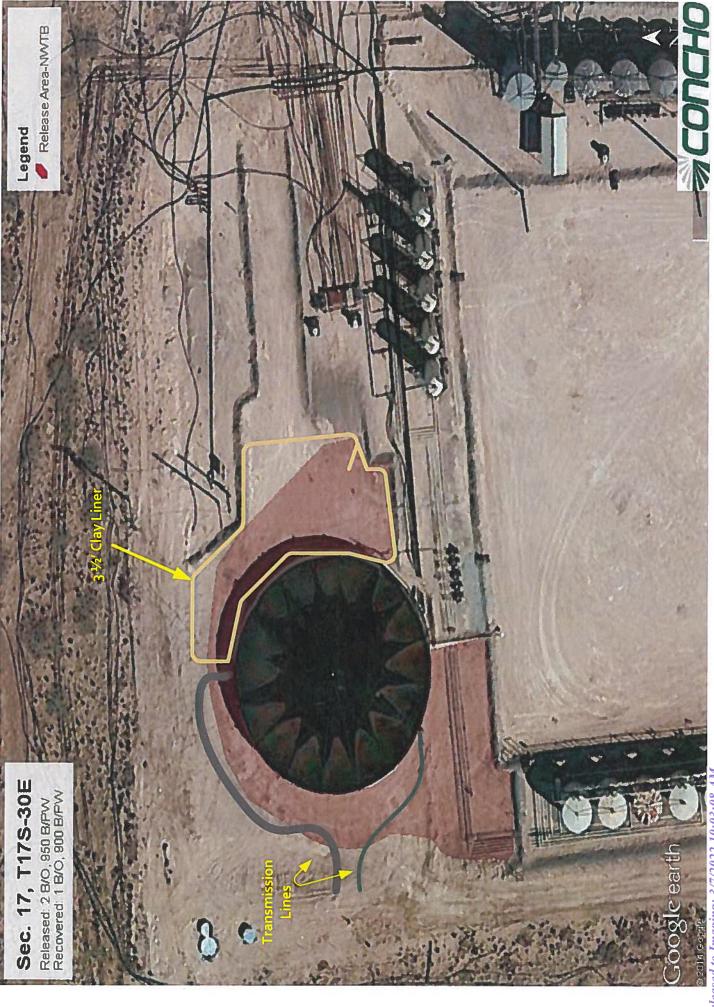
Lupe Carrasco

Environmental Scientist

Enclosed

- (1) Site Diagram
- (2) C-141 Initial (copy)
- (3) C-141 Final

Northwest Central Tank Battery



Released to Imaging: 3/7/2022 10:03:08 AM

District 1 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico **Energy Minerals and Natural Resources**

Oil Conservation Division Santa Fe, NM 87505

Release Notification and Corrective Action

Form C-141 Revised August 8, 2011 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

1220 South St. Francis Dr.

No.		200				OPERA	ГOR	⊠ Init	ial Report		Final Repor
		COG Operati				Contact: Ro	bert McNeill				
Address: 600 West Illinois Avenue, Midland TX 79701 Facility Name: Northwest Central Tank Battery							No. 432-230-007	7	321110-44110-44110		0
Facility Na	ne: North	west Central	Tank Ba	ttery		Facility Typ	e: Tank Battery				
Surface Ow	ner: Fedei	al		Mineral Ow	vner:			Lease	No. NMNM	1-860	25
				LOCAT	ΓΙΟ	N OF REI	EASE				
Unit Letter	Section	Township	Range			1/South Line	Feet from the	East/West Line	1	Cour	nty
N	17	178	30E	990		South	2310	West		Edd	y
				Latitude 32.	49.8	13 Longitud	e103 59.725				
_				NATU	RE	OF RELI					
Type of Rele						Volume of	Release: ; PW: 950 bbls		Recovered:	LLI.	100
Source of Re		- ,					our of Occurrence		ls; PW: 900 Hour of Dis		j÷
4" Nipple on	collar of w	ater tank				8/18/2014	10:30 am		4 10:30 am	covery	
Was Immedia	ite Notice (V	No. D No. Dec.	. :	If YES, To		D-ht	1.14		
D. 117	4 1 - 7		res _	No Not Requ	uirea		her - OCD / Jeffre		LM		
By Whom? Was a Watero	Amanda I	rujillo hed?					our: 8/18/2014 4:: lume Impacting th				
was a water	ourse rear		Yes 🗌	No		11 125, 70	idine impacting di	ic watercourse.			
If a Watercou	rse was Im	pacted, Descri	be Fully.*	100-740-50							
			-								
The release w standing fluid Describe Area The impacted	as caused be s. All fluid Affected a area was c	s were dispose and Cleanup A ontained to the	inipple of at an NI action Takes bermed a	on the collar on the MOCD approved fac	cility.	ne pasture. Con	ncho will have the	spill site sampled	l to delineate	any p	ossible
regulations all public health of should their o	operators or the envir perations h ment. In a	are required to conment. The ave failed to a ddition, NMO	report an acceptanc dequately CD accept	is true and completed/or file certain relees of a C-141 report investigate and remande of a C-141 report ance of a C-141 rep	ase n by the ediat	otifications an e NMOCD ma e contamination	d perform corrections as "Final Report that pose a three sections as three sections are three sections as the sections are sections as the sections are sections as the section are section as the section are section as the section are sections as the section are section	ive actions for rel port" does not rel at to ground wate	eases which ieve the oper r, surface wa	may en ator of ter, hu	ndanger f liability man health
	1	/	11			34,100	OIL CONS	ERVATION	DIVISIO	N	0.0
Signature:	A	an V	6								
	V					Approved by I	Environmental Spe	ecialist:			
Printed Name	Amanda	Trujillo			-				_		
Title: Senior E	Environmer	tal Coordinate	or			Approval Date		Expiration	Date:		
E-mail Addres	s: atrujillo	@concho.com				Conditions of	Approval:		Am1-1		
Date: Augus	t 29, 2014		Phone	: 575-748-6940					Attached		
Attach Additi		ts If Necessa				W. 32					
											3m

State of New Mexico Energy Minerals and Natural Resources

Revised August 8, 2011

Form C-141

Oil Conservation Division 1220 South St. Francis Dr. Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

	Fe, NM 87505								
Release Notificat	ion and Correc	ctive Action							
	OPERATOR	<u></u> 82	Initial Rep	ort	Final Repo				
Name of Company: COG Operating LLC		Contact: Robert McNeill							
Address: 600 West Illinois Avenue, Midland TX 79701 Facility Name: Northwest Central Tank Battery	Telephone No. 43								
		Facility Type: Tank Battery							
Surface Owner: Federal Mineral Own	er:		Lease No. NN	MNM-86	025				
	ON OF RELEAS								
Unit LetterSectionTownshipRangeFeet from theNN1717S30E990		I	Vest Line Vest		unty Idy				
Latitude 32.49	9.813 Longitude103	59.725							
	RE OF RELEASI	E							
Type of Release: Oil and Produced Water	Volume of Releas Oil: 2 bbls; PW:		Volume Recove Oil: 1 bbls; PW						
Source of Release:	Date and Hour of		Date and Hour of						
4" Nipple on collar of water tank	8/18/2014 10:30 a		8/18/2014 10:30) am					
Was Immediate Notice Given? ☑ Yes ☐ No ☐ Not Requi	If YES, To Whon	1? DCD / Jeffrey Rob	ertson – RI M						
By Whom? Amanda Trujillo	Date and Hour: 8/		DEWI						
Was a Watercourse Reached?		mpacting the Wate	ercourse.						
☐ Yes ☐ No		1 8							
If a Watercourse was Impacted, Describe Fully.*									
standing fluids. All fluids were disposed at an NMOCD approved faci Describe Area Affected and Cleanup Action Taken.* The impacted area was contained to the bermed area, with no release to		ill have the spill si	te sampled to deli	ineate any	possible				
I hereby certify that the information given above is true and complete regulations all operators are required to report and/or file certain relea public health or the environment. The acceptance of a C-141 report b should their operations have failed to adequately investigate and reme or the environment. In addition, NMOCD acceptance of a C-141 report	to the best of my knowlesse notifications and perfect the NMOCD marked addite contamination that	edge and understar orm corrective acti is "Final Report" d pose a threat to gr	nd that pursuant to ons for releases w oes not relieve the ound water, surfa	NMOCD which may e operator ce water, I	rules and endanger of liability numan health				
federal, state, or local laws and/or regulations.	0.1	I CONCEDI	ATION DIV	ICIONI	-				
Signature:		<u>L CONSERV</u>	ATION DIV.	1910N					
Printed Name: Amanda Trujillo	Approved by Enviro	nmental Specialist	:						
Title: Senior Environmental Coordinator	Approval Date:		Expiration Date:						
E-mail Address: atrujillo@concho.com	Conditions of Appro	oval:	Atte	ached					
Date: November 5, 2014 Phone: 575-748-6940			1111						
Attach Additional Sheets If Necessary									

APPENDIX D NMOCD Correspondence

From: Patterson, Heather, EMNRD

To: "Lupe Carrasco"

Cc: Amanda Trujillo; Garrett Merket; Bratcher, Mike, EMNRD; james amos@blm.gov

Subject: RE: (Closure) Northwest Central Tank Battery (McIntyre DK Federal #3) (30-015-04186)

Date: Wednesday, November 12, 2014 1:23:00 PM

Attachments: image001.png

Lupe,

The OCD needs a delineation on this site before a determination can be made. A sample point on the West side of the tank will suffice at this time.

Heather Patterson Environmental Specialist NMOCD District II (575)748-1283 ext.101

From: Lupe Carrasco [mailto:GCarrasco@concho.com] Sent: Wednesday, November 05, 2014 10:43 AM

To: Bratcher, Mike, EMNRD; Patterson, Heather, EMNRD; james_amos@blm.gov

Cc: Amanda Trujillo; Garrett Merket

Subject: (Closure) Northwest Central Tank Battery (McIntyre DK Federal #3) (30-015-04186)

Mr. Bratcher,

Attached for your consideration is a Closure report for the Norwest Central Tank Battery release reported on August 18, 2014. Please feel free to contact me with any questions or concerns.

Thanks!

Lupe Carrasco

Environmental Coordinator

Concho Resources Cell: <u>575.725.0787</u>

Office: <u>575.748.6933</u> gcarrasco@concho.com

2208 W. Main St. Artesia, NM 88210

CONFIDENTIALITY NOTICE: The information in this email may be confidential and/or privileged. If you are not the intended recipient or an authorized representative of the intended recipient, you are hereby notified that any review, dissemination or copying of this email and its attachments, if any, or the information herein, is prohibited. If you received this email in error, please immediately notify the sender by return email and delete this email from your system. Thank you.

From: Amanda Trujillo

Sent: Friday, August 29, 2014 6:11 PM

To: Bratcher, Mike, EMNRD; Patterson, Heather, EMNRD; james_amos@blm.gov; jlrobertson@blm.gov

Subject: (C-141) Northwest Central Tank Battery (McIntyre DK Federal #3) (30-015-04186)

Mr. Bratcher,

Attached is the required C-141 for your consideration. Please feel free to contact me if you have any additional questions or concerns.

Thank you,

Amanda Trujillo

Senior Environmental Coordinator COG Operating LLC Cell: 505.350.1336 Office: 575.748.6930

atrujillo@concho.com

2208 W. Main St. Artesia , NM 88210



CONFIDENTIALITY NOTICE: The information in this email may be confidential and/or privileged. If you are not the intended recipient or an authorized representative of the intended recipient, you are hereby notified that any review, dissemination or copying of this email and its attachments, if any, or the information herein, is prohibited. If you received this email in error, please immediately notify the sender by return email and delete this email from your system. Thank you.

From: Amanda Trujillo

Sent: Monday, August 18, 2014 4:56 PM

To: 'Bratcher, Mike, EMNRD'; 'Patterson, Heather, EMNRD'; 'james_amos@blm.gov';

'ilrobertson@blm.gov'

Subject: (Notification) McIntyre DK Federal #3 (30-015-04186)

Mr. Bratcher/Mr. Amos,

COG Operating LLC is reporting a release at the McIntyre DK Federal #3 (30-015-04186).

The release occurred at 10:30 am on 08/18/2014.

Released: Oil 2 bbls; PW 950 bbls **Recovered:** Oil 1 bbls; PW 900 bbls

This release was caused by corrosion of a 4" nipple on the tank. All fluid stayed within the bermed area and there was no release to the pasture. The site is being evaluated for clean-up and a C-141

submitted. If you have any additional questions please feel free to contact me.

Thank you,

Amanda Trujillo

Senior Environmental Coordinator COG Operating LLC Cell: 505.350.1336 Office: 575.748.6930 atrujillo@concho.com

2208 W. Main St. Artesia , NM 88210



CONFIDENTIALITY NOTICE: The information in this email may be confidential and/or privileged. If you are not the intended recipient or an authorized representative of the intended recipient, you are hereby notified that any review, dissemination or copying of this email and its attachments, if any, or the information herein, is prohibited. If you received this email in error, please immediately notify the sender by return email and delete this email from your system. Thank you.

CONFIDENTIALITY NOTICE: The information in this email may be confidential and/or privileged. If you are not the intended recipient or an authorized representative of the intended recipient, you are hereby notified that any review, dissemination or copying of this email and its attachments, if any, or the information contained herein, is prohibited. If you have received this email in error, please immediately notify the sender by return email and delete this email from your system. Thank you.

APPENDIX E Laboratory Analytical Data



Certificate of Analysis Summary 618649

COG Operating LLC, Artesia, NM

Project Name: McIntyre DK Fed #3 (8-18-14) 2RP-2463

Page 31 of 56

Project Id: Contact:

Ike Tavarez

Project Location: Eddy County, NM

Date Received in Lab: Fri Mar-22-19 03:12 pm

Report Date: 27-MAR-19

Project Manager: Brandi Ritcherson

	1 1										
Analysis Requested	Lab Id:	618649-001		618649-002		618649-003		618649-004			
	Field Id:	AH-1 0-1'		AH-1 1.5'		AH-1 2.5'		AH-1 3.5 (Refusal)			
	Depth:										
	Matrix:	SOIL		SOIL		SOIL		SOIL			
	Sampled:	Mar-19-19 00:00		Mar-19-19 00:00		Mar-19-19 00:00		Mar-19-19 00:00			
BTEX by EPA 8021B	Extracted:	Mar-26-19 16:00 Mar-27-19 06:49		Mar-26-19 16:00 Mar-27-19 07:08		Mar-26-19 16:00 Mar-27-19 07:27		Mar-26-19 16:00 Mar-27-19 07:46			
	Analyzed:										
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		< 0.00199	0.00199	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00199	0.00199		
Toluene		< 0.00199	0.00199	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00199	0.00199		
Ethylbenzene		< 0.00199	0.00199	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00199	0.00199		
m,p-Xylenes		< 0.00398	0.00398	< 0.00400	0.00400	< 0.00403	0.00403	< 0.00398	0.00398		
o-Xylene		< 0.00199	0.00199	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00199	0.00199		
Total Xylenes		< 0.00199	0.00199	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00199	0.00199		
Total BTEX		< 0.00199	0.00199	< 0.00200	0.00200	< 0.00202	0.00202	< 0.00199	0.00199		
Chloride by EPA 300	Extracted:	Mar-23-19 17:00		Mar-23-19 17:00		Mar-23-19 17:00		Mar-23-19 17:00			
	Analyzed:	Mar-23-19 21:15		Mar-23-19 21:22		Mar-23-19 21:28		Mar-23-19 21:35			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		84.2	4.96	162	5.01	428	4.99	733	4.97		
TPH By SW8015 Mod	Extracted:	Mar-23-19	11:00	Mar-23-19	11:00	Mar-23-19	11:00	Mar-23-19	11:00		
	Analyzed:	Mar-23-19 23:45		Mar-24-19 00:04		Mar-24-19 00:24		Mar-24-19 00:43			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0		
Diesel Range Organics		<15.0	15.0	<15.0	15.0	19.1	15.0	<15.0	15.0		
Motor Oil Range Hydrocarbons (MRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0	<15.0	15.0		
Total TPH		<15.0	15.0	<15.0	15.0	19.1	15.0	<15.0	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

Brand Rotinson

Brandi Ritcherson Project Manager

Analytical Report 618649

for COG Operating LLC

Project Manager: Ike Tavarez

McIntyre DK Fed #3 (8-18-14) 2RP-2463

27-MAR-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)





27-MAR-19

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

Reference: XENCO Report No(s): 618649

McIntyre DK Fed #3 (8-18-14) 2RP-2463

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) 618649. 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. 618649 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,

Brandi Ritcherson

Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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



Sample Cross Reference 618649



COG Operating LLC, Artesia, NM

McIntyre DK Fed #3 (8-18-14) 2RP-2463

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
AH-1 0-1'	S	03-19-19 00:00		618649-001
AH-1 1.5'	S	03-19-19 00:00		618649-002
AH-1 2.5'	S	03-19-19 00:00		618649-003
AH-1 3.5 (Refusal)	S	03-19-19 00:00		618649-004

CASE NARRATIVE

Client Name: COG Operating LLC

Project Name: McIntyre DK Fed #3 (8-18-14) 2RP-2463

Project ID: Report Date: 27-MAR-19
Work Order Number(s): 618649
Date Received: 03/22/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3083516 BTEX by EPA 8021B

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



Certificate of Analytical Results 618649



COG Operating LLC, Artesia, NM

McIntyre DK Fed #3 (8-18-14) 2RP-2463

Soil

03.23.19 17.00

Sample Id: AH-1 0-1' Matrix:

Date Received:03.22.19 15.12

Lab Sample Id: 618649-001

Analytical Method: Chloride by EPA 300

Date Collected: 03.19.19 00.00

Prep Method: E300P

% Moisture:

Basis:

CHE Tech:

Wet Weight

CHE Analyst: Seq Number: 3083129

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil 16887-00-6 Chloride 03.23.19 21.15 84.2 4.96 mg/kg 1

Date Prep:

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

% Moisture:

Tech: Analyst: ARM ARM

03.23.19 11.00 Date Prep:

Basis: Wet Weight

Seq Number: 3083123

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0		mg/kg	03.23.19 23.45	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0		mg/kg	03.23.19 23.45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0		mg/kg	03.23.19 23.45	U	1
Total TPH	PHC635	<15.0	15.0		mg/kg	03.23.19 23.45	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	96	%	70-135	03.23.19 23.45		
o-Terphenyl		84-15-1	96	%	70-135	03.23.19 23.45		



Sample Id:

Tech:

Analyst:

Certificate of Analytical Results 618649



Date Received:03.22.19 15.12

Wet Weight

Basis:

COG Operating LLC, Artesia, NM

McIntyre DK Fed #3 (8-18-14) 2RP-2463

Soil

03.26.19 16.00

•

Lab Sample Id: 618649-001 Date Collected: 03.19.19 00.00

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

Date Prep:

Matrix:

SCM % Moisture:

Seq Number: 3083516

SCM

AH-1 0-1'

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199		mg/kg	03.27.19 06.49	U	1
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	03.27.19 06.49	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	03.27.19 06.49	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	03.27.19 06.49	U	1
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	03.27.19 06.49	U	1
Total Xylenes	1330-20-7	< 0.00199	0.00199		mg/kg	03.27.19 06.49	U	1
Total BTEX		< 0.00199	0.00199		mg/kg	03.27.19 06.49	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	130	%	70-130	03.27.19 06.49		
1.4-Difluorobenzene		540-36-3	102	%	70-130	03.27.19 06.49		



Certificate of Analytical Results 618649



COG Operating LLC, Artesia, NM

McIntyre DK Fed #3 (8-18-14) 2RP-2463

Soil

Sample Id: AH-1 1.5' Matrix:

Date Received:03.22.19 15.12

Lab Sample Id: 618649-002

Date Collected: 03.19.19 00.00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

CHE Tech:

% Moisture:

Basis:

Wet Weight

Analyst:

CHE Seq Number: 3083129

Date Prep: 03.23.19 17.00

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil 16887-00-6 Chloride 03.23.19 21.22 162 5.01 mg/kg 1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

% Moisture:

Tech: Analyst: ARM ARM

03.23.19 11.00 Date Prep:

Basis: Wet Weight

Seq Number: 3083123

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0		mg/kg	03.24.19 00.04	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0		mg/kg	03.24.19 00.04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0		mg/kg	03.24.19 00.04	U	1
Total TPH	PHC635	<15.0	15.0		mg/kg	03.24.19 00.04	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	98	%	70-135	03.24.19 00.04		
o-Terphenyl		84-15-1	98	%	70-135	03.24.19 00.04		



AH-1 1.5'

Certificate of Analytical Results 618649



Date Received:03.22.19 15.12

COG Operating LLC, Artesia, NM

McIntyre DK Fed #3 (8-18-14) 2RP-2463

Soil

Lab Sample Id: 618649-002 Date Collected: 03.19.19 00.00

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

Matrix:

Tech: SCM % Moisture:

Analyst: SCM Date Prep: 03.26.19 16.00 Basis: Wet Weight

Seq Number: 3083516

Sample Id:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	03.27.19 07.08	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	03.27.19 07.08	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	03.27.19 07.08	U	1
m,p-Xylenes	179601-23-1	< 0.00400	0.00400		mg/kg	03.27.19 07.08	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	03.27.19 07.08	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	03.27.19 07.08	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	03.27.19 07.08	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	123	%	70-130	03.27.19 07.08		
1,4-Difluorobenzene		540-36-3	101	%	70-130	03.27.19 07.08		



Certificate of Analytical Results 618649



COG Operating LLC, Artesia, NM

McIntyre DK Fed #3 (8-18-14) 2RP-2463

Sample Id: AH-1 2.5' Matrix:

Soil

Date Received:03.22.19 15.12

Lab Sample Id: 618649-003

Date Collected: 03.19.19 00.00

Prep Method: E300P

Tech: CHE

Analyst:

CHE

Analytical Method: Chloride by EPA 300

Date Prep:

% Moisture: 03.23.19 17.00

Basis:

Wet Weight

Seq Number: 3083129

Parameter Cas Number Result RLUnits **Analysis Date** Flag Dil 16887-00-6 Chloride 03.23.19 21.28 428 4.99 mg/kg 1

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

% Moisture:

Tech: Analyst: ARM ARM

03.23.19 11.00 Date Prep:

Basis:

Wet Weight

Seq Number: 3083123

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0		mg/kg	03.24.19 00.24	U	1
Diesel Range Organics	C10C28DRO	19.1	15.0		mg/kg	03.24.19 00.24		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0		mg/kg	03.24.19 00.24	U	1
Total TPH	PHC635	19.1	15.0		mg/kg	03.24.19 00.24		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	105	%	70-135	03.24.19 00.24		
o-Terphenyl		84-15-1	105	%	70-135	03.24.19 00.24		



AH-1 2.5'

Certificate of Analytical Results 618649



Date Received:03.22.19 15.12

COG Operating LLC, Artesia, NM

McIntyre DK Fed #3 (8-18-14) 2RP-2463

Soil

•

Lab Sample Id: 618649-003 Date Collected: 03.19.19 00.00

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

Tech: SCM % Moisture:

Analyst: SCM Date Prep: 03.26.19 16.00 Basis: Wet Weight

Matrix:

Seq Number: 3083516

Sample Id:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00202	0.00202		mg/kg	03.27.19 07.27	U	1
Toluene	108-88-3	< 0.00202	0.00202		mg/kg	03.27.19 07.27	U	1
Ethylbenzene	100-41-4	< 0.00202	0.00202		mg/kg	03.27.19 07.27	U	1
m,p-Xylenes	179601-23-1	< 0.00403	0.00403		mg/kg	03.27.19 07.27	U	1
o-Xylene	95-47-6	< 0.00202	0.00202		mg/kg	03.27.19 07.27	U	1
Total Xylenes	1330-20-7	< 0.00202	0.00202		mg/kg	03.27.19 07.27	U	1
Total BTEX		< 0.00202	0.00202		mg/kg	03.27.19 07.27	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	127	%	70-130	03.27.19 07.27		
1,4-Difluorobenzene		540-36-3	102	%	70-130	03.27.19 07.27		



Certificate of Analytical Results 618649



COG Operating LLC, Artesia, NM

McIntyre DK Fed #3 (8-18-14) 2RP-2463

Sample Id: AH-1 3.5 (Refusal) Matrix: Soil Date Received:03.22.19 15.12

Lab Sample Id: 618649-004

Date Collected: 03.19.19 00.00

Prep Method: E300P

Analysis Date

Tech:

CHE

Analytical Method: Chloride by EPA 300

% Moisture:

Wet Weight

CHE Analyst: Seq Number: 3083129

Date Prep:

Cas Number

03.23.19 17.00

Basis:

Units

Dil

Flag

Parameter

16887-00-6 Chloride 733 03.23.19 21.35 4.97 mg/kg 1

RL

Result

Analytical Method: TPH By SW8015 Mod

Prep Method: TX1005P

% Moisture:

Tech: Analyst: ARM ARM

03.23.19 11.00 Date Prep:

Basis:

Wet Weight

Seq Number: 3083123

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<15.0	15.0		mg/kg	03.24.19 00.43	U	1
Diesel Range Organics	C10C28DRO	<15.0	15.0		mg/kg	03.24.19 00.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0		mg/kg	03.24.19 00.43	U	1
Total TPH	PHC635	<15.0	15.0		mg/kg	03.24.19 00.43	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	95	%	70-135	03.24.19 00.43		
o-Terphenyl		84-15-1	96	%	70-135	03.24.19 00.43		



AH-1 3.5 (Refusal)

Certificate of Analytical Results 618649



Date Received:03.22.19 15.12

COG Operating LLC, Artesia, NM

McIntyre DK Fed #3 (8-18-14) 2RP-2463

Soil

Lab Sample Id: 618649-004 Date Collected: 03.19.19 00.00

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

Matrix:

Tech: SCM % Moisture:

Analyst: SCM Date Prep: 03.26.19 16.00 Basis: Wet Weight

Seq Number: 3083516

Sample Id:

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199		mg/kg	03.27.19 07.46	U	1
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	03.27.19 07.46	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	03.27.19 07.46	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	03.27.19 07.46	U	1
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	03.27.19 07.46	U	1
Total Xylenes	1330-20-7	< 0.00199	0.00199		mg/kg	03.27.19 07.46	U	1
Total BTEX		< 0.00199	0.00199		mg/kg	03.27.19 07.46	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	124	%	70-130	03.27.19 07.46		
1,4-Difluorobenzene		540-36-3	101	%	70-130	03.27.19 07.46		



Flagging Criteria



- Page 44 of 56
- 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

^{**} Surrogate recovered outside laboratory control limit.

Flag

Flag



QC Summary 618649

COG Operating LLC

McIntyre DK Fed #3 (8-18-14) 2RP-2463

Analytical Method: Chloride by EPA 300

Seq Number: 3083129

MB Sample Id: 7674202-1-BLK

Matrix: Solid LCS Sample Id: 7674202-1-BKS

E300P Prep Method:

Date Prep: 03.23.19 LCSD Sample Id: 7674202-1-BSD

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

03.23.19 20:42 Chloride < 0.858 250 249 100 254 102 90-110 2 20 mg/kg

Analytical Method: Chloride by EPA 300

Seq Number: 3083129

Matrix: Soil

MS Sample Id: 618648-009 S

E300P Prep Method: Date Prep:

03.23.19

Parent Sample Id: 618648-009 MSD Sample Id: 618648-009 SD

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

Chloride 21.3 252 291 107 294 108 90-110 20 mg/kg 03.23.19 21:02

Analytical Method: Chloride by EPA 300

3083129 Seq Number:

Matrix: Soil

Prep Method:

E300P

03.23.19 Date Prep:

MS Sample Id: 618648-010 S MSD Sample Id: 618648-010 SD 618648-010 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 32.0 251 290 103 289 90-110 0 20 03.23.19 22:35 102 mg/kg

Analytical Method: TPH By SW8015 Mod

Seq Number:

LCS Sample Id: 7674187-1-BLK

Prep Method:

TX1005P

3083123 Matrix: Solid 03.23.19 Date Prep: LCSD Sample Id: 7674187-1-BSD 7674187-1-BKS MB Sample Id:

%RPD RPD Limit Units MB Spike LCS LCS LCSD Limits Analysis **LCSD Parameter** Result %Rec Date Result Amount Result %Rec 03.23.19 17:56 1060 106 70-135 5 20 Gasoline Range Hydrocarbons < 8.00 1000 1010 101 mg/kg 03.23.19 17:56 70-135 20 Diesel Range Organics 1000 1160 116 1090 109 6 < 8.13 mg/kg

LCS LCSD MB MB LCS LCSD Limits Units Analysis **Surrogate** %Rec Flag %Rec Flag Flag Date %Rec 1-Chlorooctane 119 120 128 70-135 % 03.23.19 17:56 03.23.19 17:56 o-Terphenyl 121 118 114 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



QC Summary 618649

COG Operating LLC

McIntyre DK Fed #3 (8-18-14) 2RP-2463

Analytical Method: TPH By SW8015 Mod

3083123 Matrix: Soil

TX1005P Prep Method:

Date Prep: 03.23.19

Parent Sample Id: 618605-001

Seq Number:

MS Sample Id: 618605-001 S MSD Sample Id: 618605-001 SD

Spike MS MS Limits %RPD RPD Limit Units Parent **MSD MSD** Analysis Flag **Parameter** Result Amount Result Date %Rec %Rec Result 03.24.19 12:31 Gasoline Range Hydrocarbons 10100 1000 11700 160 11300 120 70-135 3 20 X mg/kg 2 20 03.24.19 12:31 Diesel Range Organics 11000 1000 12200 120 100 70-135 12000 mg/kg

MS MS **MSD MSD** Limits Units Analysis **Surrogate** Flag %Rec %Rec Flag Date 1-Chlorooctane 105 120 70-135 % 03.24.19 12:31 o-Terphenyl 127 127 70-135 % 03.24.19 12:31

Analytical Method: BTEX by EPA 8021B

3083516

Prep Method: Date Prep:

SW5030B 03.26.19

Seq Number: MB Sample Id:

7674413-1-BLK

LCS Sample Id: 7674413-1-BKS

Matrix: Solid

LCSD Sample Id: 7674413-1-BSD

Flag

Flag

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date
Benzene	< 0.000383	0.0996	0.106	106	0.113	113	70-130	6	35	mg/kg	03.26.19 23:36
Toluene	< 0.000454	0.0996	0.103	103	0.109	109	70-130	6	35	mg/kg	03.26.19 23:36
Ethylbenzene	< 0.000563	0.0996	0.110	110	0.116	116	70-130	5	35	mg/kg	03.26.19 23:36
m,p-Xylenes	< 0.00101	0.199	0.214	108	0.227	114	70-130	6	35	mg/kg	03.26.19 23:36
o-Xylene	< 0.000343	0.0996	0.111	111	0.119	119	70-130	7	35	mg/kg	03.26.19 23:36

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	93		101		104		70-130	%	03.26.19 23:36
4-Bromofluorobenzene	108		115		122		70-130	%	03.26.19 23:36

Analytical Method: BTEX by EPA 8021B

3083516

Matrix: Soil

Prep Method: Date Prep:

SW5030B 03.26.19

Parent Sample Id:

Seq Number:

618647-001

MS Sample Id: 618647-001 S MSD Sample Id: 618647-001 SD

MS %RPD RPD Limit Units Parent Spike MS MSD MSD Limits Analysis **Parameter** Result Amount Result %Rec %Rec Date Result < 0.000384 03.27.19 00:14 0.0998 108 Benzene 0.108 0.109 110 70-130 1 35 mg/kg Toluene < 0.000455 0.0998 0.0985 99 0.0981 99 70-130 0 35 mg/kg 03.27.19 00:14 < 0.000564 mg/kg 03.27.19 00:14 Ethylbenzene 0.0998 0.0936 94 0.0913 92 70-130 2 35 03.27.19 00:14 < 0.00101 0.200 0.180 90 0.175 70-130 3 35 m,p-Xylenes 88 mg/kg 03.27.19 00:14 < 0.000344 0.0938 0.0914 70-130 o-Xylene 0.0998 94 92 3 35 mg/kg

MSD MS MS **MSD** Limits Units Analysis **Surrogate** %Rec Flag %Rec Flag Date 1,4-Difluorobenzene 103 103 70-130 % 03.27.19 00:14 4-Bromofluorobenzene 121 122 70-130 % 03.27.19 00:14

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

1			Ce Aveni Tel	One Concho Center/600/Illinois Avenue/Midland, Texas Tel (432) 683-7443		8 2	2000		
Client Name:	cog	Site Manager:	lke Tavarez	itavarez@concho.com	o.com	8	ANALYSIS REQUEST	REQUEST	
Project Name:	McIntyre DK	DK Fed #3 (8-18-14)	(8-18-14) 2RP-2463			_ <u> </u>	Circle or Specity Method	- Method No.	
Project Location: (county, state)	". Eddy County, NM	Project #:							
nvoice to:		COG					<u> </u>		ed list)
Receiving Laboratory:	atory: Xenco	Sampler Signature:	Robe	Robert Grubbs Jr		Se Hg	JOET		attach
Comments:						ORO - MI	24	TDS	stry (see
		SAMPLING	MATRIX	PRESERVATIVE		RO - As Ba	atiles 60B / 6	08	Chem
LAB#	SAMPLE IDENTIFICATION	YEAR: 2019	Ш			005 (E 5M (C DC als Ag	atiles ni Vola ol. 82	82 / 6	Vater
(LAB USE)		DATE	WATER SOIL	HCL HNO ₃ CE	# CONT/	BTEX 80 TPH TX1 TPH 801 PAH 827 Total Met	CLP Me CLP Vol. CLP Ser RCI GC/MS Vol.	PCB's 80 NORM PLM (Asb Chloride	Seneral V
	AH-1 0-1'	019			\dashv	×	- - - -	 	
	AH-1 1.5'	3/19/2019	· ×	×	_			×	
	AH-1 2.5'	3/19/2019	×	×	_			×	
	AH-1 3.5' (Refusal)	3/19/2019	×	×	1			×	
Relingu	Relinguished by: Date: Time:	Booked b							
N	3-22-15		3/20		Time:	ONLY	REMARKS:	Same Day 24 hr	hr 48 hr 72 hr
			7		- - - -	Sample Temperature		0	
	Relinquished by: Date: Time:	Received by:	y:	Date: Tii	Time:	12 A.C.	Spec	Special Report Limits or TRRP Report	y TRRP Report
ed by OCD: 1/		ORIGINAL COPY	₹			(Circle) HAND DELIVERED	FEDEX	UPS Tracking#:	



XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: COG Operating LLC

Date/ Time Received: 03/22/2019 03:12:00 PM

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

Date: 03/22/2019

Work Order #: 618649

Temperature Measuring device used: R8

Work Order #. 010049	•	•
	Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?		3.1
#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)?		N/A
#18 Water VOC samples have zero head	dspace?	N/A
* Must be completed for after-hours de	livery of samples prior to placing in	the refrigerator
Analyst:	PH Device/Lot#:	
Checklist completed by:	Bridge Tol	Date: 03/22/2019

Jessica Kramer

Checklist reviewed by:

APPENDIX F Photographic Documentation



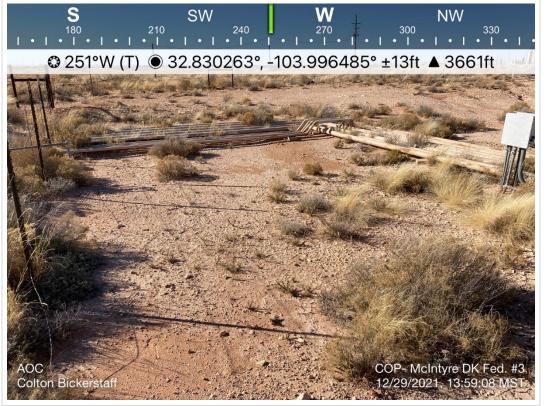
TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View northeast. Southwest corner of visually assessed area.	1
212C-MD-02620	SITE NAME	McIntyre DK Federal 3	12/29/2021



TETRA TECH, INC.	DESCRIPTION	View west northwest. Southwest portion of visually assessed area, south side of tank.	2
PROJECT NO. 212C-MD-02620	SITE NAME	McIntyre DK Federal 3	12/29/2021



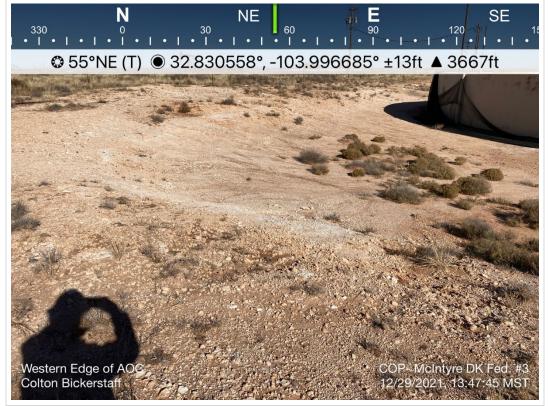
TETRA TECH, INC. PROJECT NO. 212C-MD-02620	DESCRIPTION	View northeast. South side of tank.	3
	SITE NAME	McIntyre DK Federal 3	12/29/2021



TETRA TECH, INC.	DESCRIPTION	View west southwest. Southwest portion of visually assessed area, south-southwest of tank.	4
PROJECT NO. 212C-MD-02620	SITE NAME	McIntyre DK Federal 3	12/29/2021



TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View southeast. Northwest portion of visually assessed area, northwest of tank.	5
212C-MD-02620	SITE NAME	McIntyre DK Federal 3	12/29/2021



TETRA TECH, INC.	DESCRIPTION	View northeast. Northwest portion of visually assessed area, northwest of tank.	6
PROJECT NO. 212C-MD-02620	SITE NAME	McIntyre DK Federal 3	12/29/2021



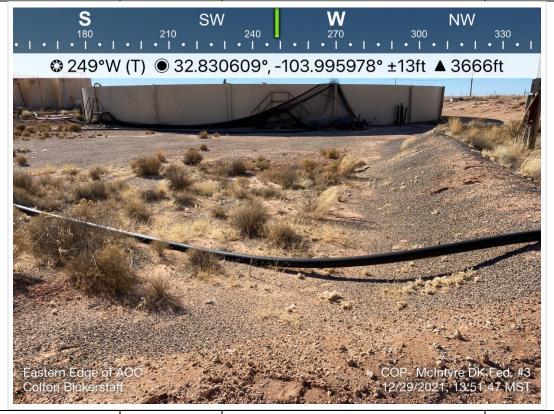
TETRA TECH, INC.	DESCRIPTION	View east-southeast. Northeast portion of visually assessed area, north of tank.	7
212C-MD-02620	SITE NAME	McIntyre DK Federal 3	12/29/2021



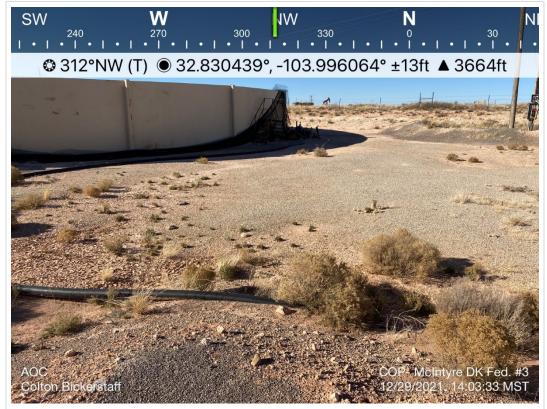
TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View south-southwest. Northeast portion of visually assessed area, northeast of tank.	8
212C-MD-02620	SITE NAME	McIntyre DK Federal 3	12/29/2021



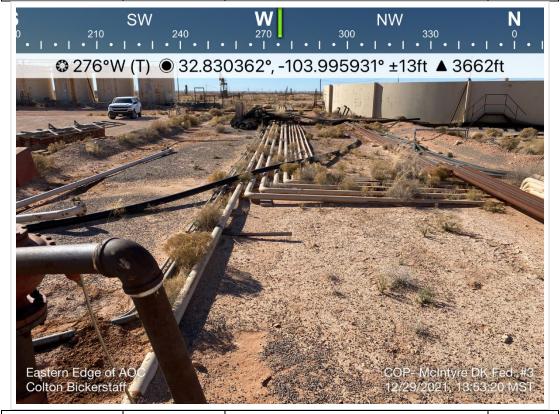
TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View southeast. Eastern portion of visually assessed area, east of tank.	9
212C-MD-02620	SITE NAME	McIntyre DK Federal 3	12/29/2021



TETRA TECH, INC.	DESCRIPTION	View west-southwest. Eastern portion of visually assessed area, east of tank.	10
PROJECT NO. 212C-MD-02620	SITE NAME	McIntyre DK Federal 3	12/29/2021



TETRA TECH, INC. PROJECT NO.	·	View northwest. East-southeast of tank.	11
212C-MD-02620	SITE NAME	McIntyre DK Federal 3	12/29/2021



TETRA TECH, INC. PROJECT NO.	DESCRIPTION	View west. Southeast of tank.	12
212C-MD-02620	SITE NAME	McIntyre DK Federal 3	12/29/2021

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 76985

CONDITIONS

Operator:	OGRID:
COG OPERATING LLC	229137
600 W Illinois Ave	Action Number:
Midland, TX 79701	76985
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bbillings	Incident is Closed. Section 13 will come in at decommission.	3/7/2022