Charles Beauvais
ConocoPhillips
2208 W Main St
Artesia, New Mexico 88210
575-988-2043

December 12, 2022

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

Subject: **CCAP State Com # 6H Battery Release**
Unit Letter H, Section 16, Township 22 South, Range 27 East
Eddy County, New Mexico
Incident ID nAB1714554320

Sir or Madam:

ConocoPhillips Company("COPC") entered into an Agreed Compliance Order ("ACO") with the New Mexico Oil Conservation Division ("NMOCD") on December 15, 2021, related to unresolved releases from COPC's predecessor-in-interest ("COG"). The ACO required COPC to submit characterization and/or remediation plans with proposed timeframes for the ongoing corrective actions or remediations identified to the NMOCD no later than March 31, 2022. As of March 11, 2022, COPC has submitted characterization and remediation plans for all of the properties identified and owned.

A Closure Request (dated June 2018) for the subject line (ID nAB1714554320) release was drafted by COG and previously submitted to the NMOCD on behalf of COPC. The document was uploaded and submitted to the NMOCD via CentreStack, a Secure Access & File Sharing platform, at the direction of Mr. Bradford Billings, NMOCD as a portion of the ACO submittals.

NMOCD has recently begun issuing determinations on ACO reports submitted via CentreStack, (referred to as Internal Manual Incident File Supporting Documentation (ENV) (IM-BNF)). This subject line incident was rejected by Brittany Hall, Projects Environmental Specialist – A. In the rejection, Ms. Hall notes that to close this incident, a new C-141 Closure form must be signed and submitted to the fee application portal along with the complete/previously assembled report that contains the missing information requested.

Thus, enclosed is a copy of the amended Closure Letter for the subject line incident. The attached amended Closure Letter with an executed C-141 will be submitted via the NMOCD Fee Application portal, as requested.

If you have any questions, please contact me at 575-988-2043.

Sincerely,

Charles R. Beauvais II

Charles Beauvais
Senior Environmental Engineer | Environmental Operations | ConocoPhillips

cc: Site Files

Attachments: C-141 Incident ID nAB1714554320, Rejection, Closure Letter

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☐ Description of remediation activities

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

Printed Name: _____ Title: _____

Signature: Charles R. Beauvais II Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Jocelyn Harimon Date: 12/16/2022

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

Closure Approved by: Ashley Maxwell Date: _____

Printed Name: _____ Title: _____

Chavira, Lisbeth

From: OCDOnline@state.nm.us
Sent: Wednesday, November 23, 2022 2:40 PM
To: Beauvais, Charles R
Subject: [EXTERNAL]The Oil Conservation Division (OCD) has rejected the application, Application ID: 161267

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

The OCD has rejected the submitted *Internal Manual Incident File Supporting Documentation (ENV)* (IM-BNF), for incident ID (n#) nAB1714554320,
for the following reasons:

- **Incomplete report. Report does not contain site diagram, groundwater data, final C-141, analytical reports with chain of custody, etc.**
- **2RP-4223 closed. Please refer to incident #NAB1714554320 in all future communication.**
- **Please submit a complete closure report through the OCD Permitting website by 2/24/2023.**

The rejected IM-BNF can be found in the OCD Online: Permitting - Action Status, under the Application ID: 161267.
Please review and make the required correction(s) prior to resubmitting.
If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional IM-BNF.

Thank you,
Brittany Hall
Projects Environmental Specialist - A
505-517-5333
Brittany.Hall@emnrd.nm.gov

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

[Sheldon L. Hitchcock]
[HSE Coordinator]

June 8, 2018

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

Re: Closure Letter
CCAP State Com #6H Battery
API #: 30-015-42880
RP#: 2RP-4223
Unit Letter H Section 16, Township 22S, Range 27E
Eddy County, NM

Mr. Bratcher,

COG Operating, LLC (COG) is pleased to submit for your consideration the following closure report for the CCAP State Com #6H Battery. This release occurred on May 23, 2017. Following the release an assessment of impacted soils was conducted. A remediation work plan was submitted to and subsequently approved by the New Mexico Oil Conservation Division (NMOCD). A copy of the approved work plan is attached in appendix V.

BACKGROUND

The CCAP State Com #6H Battery release is located in Unit Letter H, Section 16, Township 22 South and Range 27 East in Eddy County, New Mexico. More specifically the latitude and longitude for this release are 32.3956264 North and -104.1870211 West.

On May 23, 2017, a gasket on the free water knockout failed resulting in the release of approximately thirty-three (33) barrels (bbls) of oil and two (2) bbls of produced water. A vacuum truck was dispatched to recover freestanding fluids. Approximately thirty-three (33) bbls of Oil and two (2) bbls of produced water were recovered.

On February 12, 2018, remediation activities began in accordance with the approved work plan. The analytical results from the NMOCD stipulated confirmation soil sampling activities are summarized in the table below. A site diagram of the excavated area is presented in appendix I.

GROUNDWATER AND SITE RANKING

According to the New Mexico Office of the State Engineer (NMOSE) groundwater in the project vicinity is approximately forty-two (42) feet below ground surface (BGS) (Appendix II). No water well or surface water was observed within one-thousand (1,000) feet of the release site. Therefore the site ranking for this release is twenty (20) based on the following:

Depth to groundwater	<50-feet
Distance to surface water body	>1000-feet
Wellhead Protection Area	>1000-feet

CONFIRMATION SOIL SAMPLING RESULTS

Sample ID	Depth (Feet)	GRO (mg/kg)	DRO (mg/kg)	EXT DRO (mg/kg)	Total TPH (mg/kg)
AH-1	2	<10.0	124	<10.0	124
SOUTH	SIDEWALL	<10.0	<10.0	<10.0	<10.0
EAST	SIDEWALL	<10.0	<10.0	<10.0	<10.0
WEST	SIDEWALL	<10.0	<10.0	<10.0	<10.0

REMEDIAL ACTIONS

- The impacted area was excavated to a depth of two (2) feet BGS.
- Per NMOCD stipulations confirmation soil samples were taken from the sidewalls and bottom of the excavation. The results of the confirmation soil sampling were submitted to NMOCD.
- NMOCD granted permission to backfill the excavation on March 27, 2018.
- The excavation was backfilled with clean like material and contoured to match the surrounding terrain.

CLOSURE REQUEST

COG Operating, LLC respectfully requests that the New Mexico Oil Conservation Division grant closure approval for the CCAP State Com #006H incident that occurred on May 23, 2017.

Should you have any questions or concerns please do not hesitate to contact me.

Sincerely,

Sheldon L. Hitchcock
HSE Coordinator
slhitchcock@concho.com

Enclosed:

Appendix I: Site Diagram
Appendix II: Groundwater Data
Appendix III: Initial C-141 (Copy)
Appendix IV: Final C-141
Appendix V: Work Plan (Copy)
Appendix VII: Analytical Reports and Chain-of-Custody Forms

APPENDIX I

May 23, 2017

CCAP State Com #006H Battery

CONCHO

APPENDIX II

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

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

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

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

POD Number	POD Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 00576		CUB	ED	3	1	1	15	22S	27E	576628	3584749*	432	119	184	-65
C 01853		C	ED		1	2	16	22S	27E	575918	3584841*	571	55	42	13
C 00760		C	ED				16	22S	27E	575717	3584215*	648	72	44	28
C 01097		C	ED	1	1	2	16	22S	27E	575817	3584940*	712	155	38	117
C 00021 A		CUB	ED	4	4	4	09	22S	27E	576421	3585150*	716	196	40	156
C 00021 CLW193276	O		ED	4	4	4	09	22S	27E	576421	3585150*	716	100		
C 02242		CUB	ED	1	1	4	15	22S	27E	577186	3584336	866	150	22	128
C 00693		C	ED	2	2	1	16	22S	27E	575612	3584935*	867	70	34	36
C 00403		C	ED		2	1	16	22S	27E	575513	3584836*	903	106	34	72
C 00701		C	ED		2	1	16	22S	27E	575513	3584836*	903	65	34	31
C 01560		C	ED		2	1	16	22S	27E	575513	3584836*	903	80	37	43
C 01861		C	ED		2	1	16	22S	27E	575513	3584836*	903	60		
C 02374		C	ED		3	4	09	22S	27E	575916	3585247*	904	54	15	39
C 02379		C	ED		3	4	09	22S	27E	575916	3585247*	904	55	20	35
C 03029		C	ED		3	4	09	22S	27E	575916	3585247*	904	45	18	27
C 00284		C	ED		2	1	15	22S	27E	577134	3584856*	909	130	20	110
C 00576 S		CUB	ED	2	4	1	15	22S	27E	577235	3584550	916	172	48	124
C 03480 POD1		C	ED	3	2	3	16	22S	27E	575466	3583961	983	74	41	33

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

Average Depth to Water: **41 feet**

Minimum Depth: **15 feet**

Maximum Depth: **184 feet**

Record Count: 18

Basin/County Search:

County: Eddy

UTMNAD83 Radius Search (in meters):

Easting (X): 576325 **Northing (Y):** 3584440 **Radius:** 1000

APPENDIX III

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: COG Operating LLC OGRID # 229137	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-683-7443
Facility Name: CCAP State Com #6H	Facility Type: Tank Battery

Surface Owner: Private	Mineral Owner: State	API No. 30-015-42880

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	16	22S	27E	1650	North	330	East	Eddy

Latitude 32.39562564 **Longitude** -104.1870211

NATURE OF RELEASE

Type of Release: Oil	Volume of Release: 35 bbls	Volume Recovered: 30 bbls
Source of Release: Gasket on FWKO	Date and Hour of Occurrence: May 23, 2017 7:00 pm	Date and Hour of Discovery: May 23, 2017 7:00 pm
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Ms. Weaver - NMOCD / Ms. Groves - SLO	
By Whom? Rebecca Haskell	Date and Hour: May 24, 2017 Time of this Email	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

The release was due to a gasket failure on a FWKO. The FWKO was drained and the gasket was replaced. Oil was sprayed on equipment and surrounding area. All standing fluid was within the falcon liner with a mist in the surrounding area.

Describe Area Affected and Cleanup Action Taken.*

The release was within a lined facility, on location and cleared area adjacent to the location. A vacuum truck was dispatched to remove all freestanding fluids. Concho will have the spill area sampled to delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.

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

Signature: Rebecca Haskell	OIL CONSERVATION DIVISION
Printed Name: Rebecca Haskell	Approved by Environmental Specialist:
Title: Senior HSE Coordinator	Approval Date: / Expiration Date:
E-mail Address: rhaskell@concho.com	Conditions of Approval: / Attached ☐
Date: May 24, 2017 Phone: 432-683-7443	

Attach Additional Sheets If Necessary

APPENDIX IV

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: COG Operating LLC OGRID # 229137	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-683-7443
Facility Name: CCAP State Com #6H	Facility Type: Tank Battery

Surface Owner: Private	Mineral Owner: State	API No. 30-015-42880

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	16	22S	27E	1650	North	330	East	Eddy

Latitude 32.39562564 **Longitude** -104.1870211

NATURE OF RELEASE

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Source of Release: Gasket on FWKO	Date and Hour of Occurrence: May 23, 2017 7:00 pm	Date and Hour of Discovery: May 23, 2017 7:00 pm
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Ms. Weaver - NMOCD / Ms. Groves - SLO	
By Whom? Rebecca Haskell	Date and Hour: May 24, 2017 Time of this Email	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

The release was due to a gasket failure on a FWKO. The FWKO was drained and the gasket was replaced. Oil was sprayed on equipment and surrounding area. All standing fluid was within the falcon liner with a mist in the surrounding area.

Describe Area Affected and Cleanup Action Taken.*

The release was within a lined facility, on location and cleared area adjacent to the location. A vacuum truck was dispatched to remove all freestanding fluids. A site assessment and soil sampling were conducted within the impacted area. Upon receipt of analytical data from the initial soil sampling event a remediation work plan was submitted to and subsequently approved by NMOCD. The impacted area was remediated in accordance with the approved work plan and stipulations issued by NMOCD.

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

Signature: Sheldon Hitchcock	OIL CONSERVATION DIVISION
Printed Name: Sheldon L. Hitchcock	Approved by Environmental Specialist:
Title: HSE Coordinator	Approval Date: / Expiration Date:
E-mail Address: slhitchcock@concho.com	Conditions of Approval: / Attached ☐
Date: 6/8/2018 Phone 575-746-2010	

* Attach Additional Sheets If Necessary

APPENDIX V

SITE INFORMATION

Report Type: Work Plan 2RP-4223

General Site Information:						
Site:	**CCAP State Com #6H Battery**					
Company:	**COG Operating LLC**					
Section, Township and Range	**Unit H**	**Sec. 16**	**T 22S**	**R 27E**		
Lease Number:	**API No. 30-015-42880**					
County:	**Eddy County**					
GPS:	**32.395626° N**			**104.187021° W**		
Surface Owner:	Private					
Mineral Owner:						
Directions:	From the intersection of S Canal St and W Wood Ave in Carlsbad, NM, travel east on W Wood Ave for approx. 1.95 mi, turn south onto S Sunset Garden Dr for approximately 0.80 mi, turn north onto lease road for approximately 0.40 mi to location.					

Release Data:	
Date Released:	5/23/2017
Type Release:	Oil & Produced Water
Source of Contamination:	FWKO
Fluid Released:	33 bbls oil & 2 bbls water
Fluids Recovered:	31 bbls oil & 2 bbls water

Official Communication:			
Name:	Robert McNeil		Ike Tavarez
Company:	COG Operating, LLC		Tetra Tech
Address:	One Concho Center		4000 N. Big Spring
	600 W. Illinois Ave.		Ste 401
City:	Midland Texas, 79701		Midland, Texas
Phone number:	(432) 686-3023		(432) 687-8110
Fax:	(432) 684-7137		
Email:	rmcneil@conchoresources.com		Ike.Tavarez@tetratech.com

Ranking Criteria		
Depth to Groundwater:	***Ranking Score***	***Site Data***
<50 ft	***20***	*42'*
50-99 ft	10	
>100 ft.	0	
WellHead Protection:	***Ranking Score***	***Site Data***
Water Source <1,000 ft., Private <200 ft.	*20*	
Water Source >1,000 ft., Private >200 ft.	***0***	*0*
Surface Body of Water:	***Ranking Score***	***Site Data***
<200 ft.	*20*	
200 ft - 1,000 ft.	10	
>1,000 ft.	***0***	*0*
Total Ranking Score:	***20***	

Acceptable Soil RRAL (mg/kg)		
Benzene	***Total BTEX***	***TPH***
10	50	100

TETRA TECH

September 21, 2017

Mike Bratcher
Environmental Engineer Specialist
Oil Conservation Division, District 2
811 S. First Street
Artesia, New Mexico 88210

Re: Work Plan for the COG Operating LLC., CCAP State Com #6H, Unit H, Section 16, Township 22 South, Range 27 East, Eddy County, New Mexico. 2RP-4223.

Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating LLC., (COG) to prepare a work plan for a release that occurred at the CCAP State Com #6H, Unit H, Section 16, Township 22 South, Range 27 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.395626º, W 104.187021º. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the leak was discovered on May 23, 2017, and released approximately thirty three (33) barrels of oil and two (2) barrels of produced water due to a failed gasket on a FWKO. Approximately thirty one (31) barrels of oil and two (2) barrels of produced water were recovered. The release occurred inside the lined facility and overspray mist impacted an area south of the pad. The impacted area to the south of the pad measured approximately 45' x 55'. The initial C-141 Form is included in Appendix A.

Groundwater

Multiple water wells are listed within Section 16 in the New Mexico Office of the State Engineers database, with depths to groundwater ranging from 34' to 70' below surface. The nearest well listed is approximately 0.35 miles to the northwest of the release area and has a listed depth to groundwater of 42' below surface. According to the Chevron Texaco Groundwater Trend map, the average depth to groundwater in the area is less than 50' below surface. The groundwater data is shown in Appendix B.

Tetra Tech
4000 North Big Spring, Suite 401, Midland, TX 79705
Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com

TETRA TECH

Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 100 mg/kg.

Soil Assessment and Analytical Results

On June 22, 2017, COG personnel were onsite to evaluate and sample the release area. One (1) auger hole (AH-1) was installed in the release area using a stainless steel hand auger, to a total depth of 1.0' below surface. Deeper samples could not be collected due to a dense formation in the area. Selected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The sampling results are summarized in Table 1. The auger hole location is shown on Figure 3.

Referring to Table 1, none of the samples collected at auger hole (AH-1) showed benzene or total BTEX concentrations above the laboratory reporting limits. Additionally, minimal chloride concentrations were detected with concentrations of 12.4 mg/kg (surface) and 22.5 mg/kg (1.0'). However, the area of auger hole (AH-1) showed total TPH concentrations above the RRAL in the shallow soils, with concentrations of 578 mg/kg at surface and 1,530 mg/kg at 1.0' below surface.

Work Plan

Based on the laboratory results, COG proposes to remove the impacted TPH soil above the RRAL. Prior to removal, COG proposes to collect additional confirmation samples with a backhoe to re-confirm the TPH concentrations. Based on the results, the impacted soils with TPH concentrations above 100 mg/kg will be removed accordingly. Once the areas is excavated to the appropriate depth, the excavation will be backfilled with clean material to surface grade. All of the excavated material will be transported offsite for proper disposal.

The proposed excavation depths may not be reached due to wall cave ins and safety concerns for onsite personnel. In addition, impacted soil around oil and gas equipment, structures or lines may not be feasible or practicable to be removed due to safely concerns for onsite personnel. As such, COG will excavate the impacted soils to the maximum extent practicable.

TETRA TECH

Conclusion

Upon completion, a final report detailing the remediation activities will be submitted to the NMOCD. If you have any questions or comments concerning the assessment or the proposed remediation activities for this site, please call at (432) 682-4559.

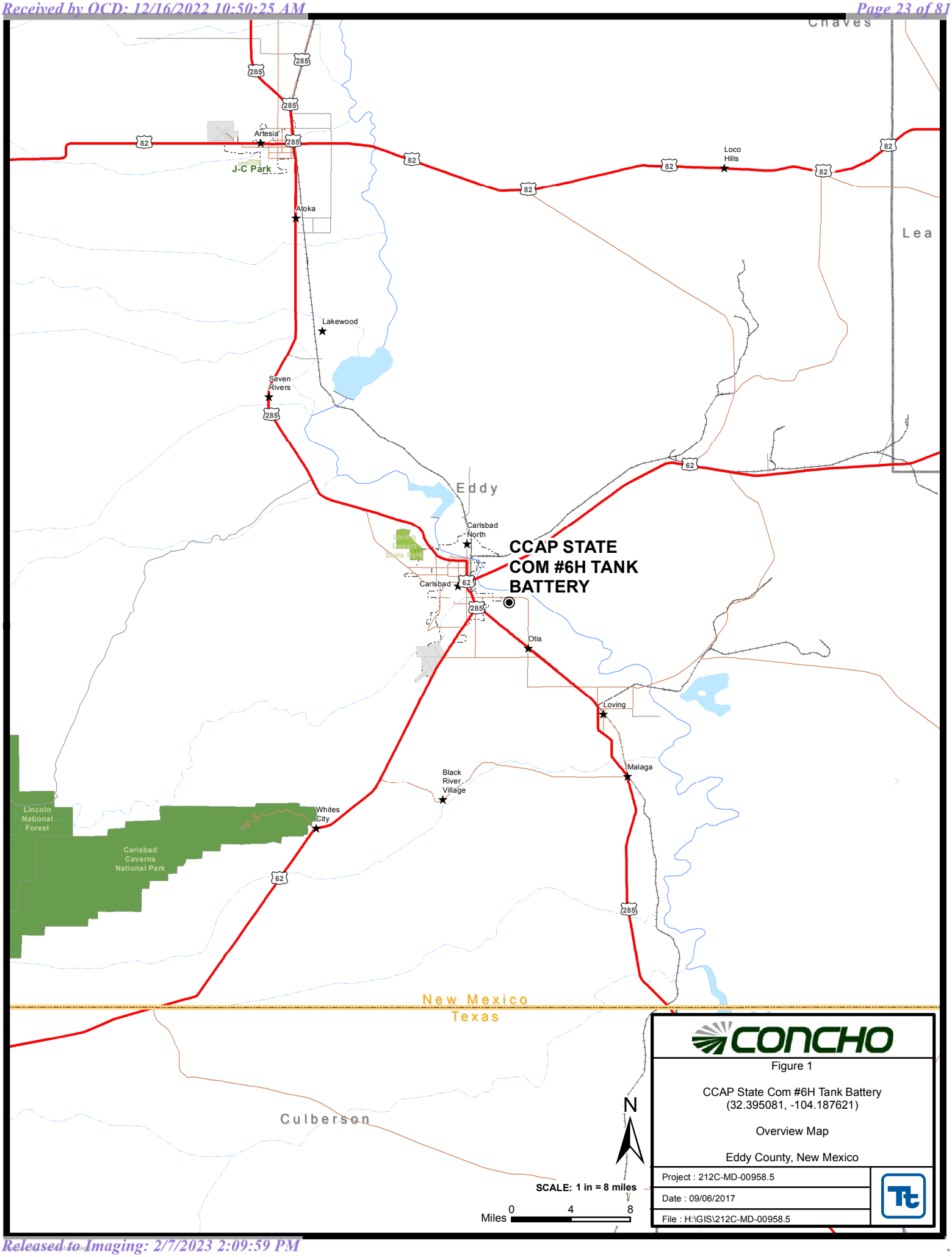
Respectfully submitted,
TETRA TECH

Clair Gonzales,
Geologist I

Ike Tavarez,
Senior Project Manager, P.G.

cc: Robert McNeill – COG
Dakota Neel – COG
Rebecca Haskell – COG
Shelly Tucker - BLM

Figures



CONCHO

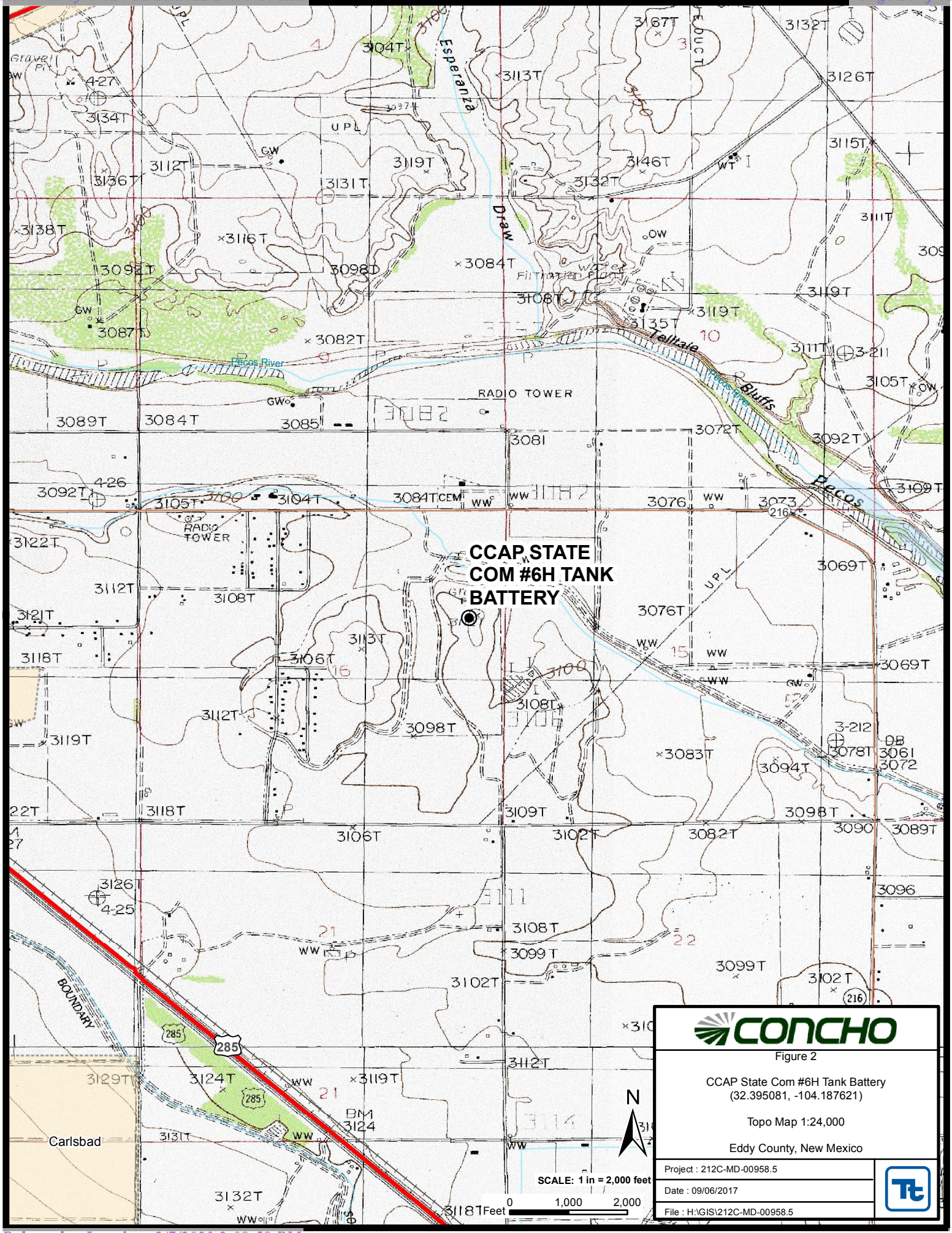
Figure 1

CCAP State Com #6H Tank Battery
(32.395081, -104.187621)

Overview Map

Eddy County, New Mexico

Project : 212C-MD-00958.5	
Date : 09/06/2017	
File : H:\GIS\212C-MD-00958.5	



CONCHO

Figure 2

CCAP State Com #6H Tank Battery
(32.395081, -104.187621)

Topo Map 1:24,000

Eddy County, New Mexico

Project : 212C-MD-00958.5

Date : 09/06/2017

File : H:\GIS\212C-MD-00958.5

EXPLANATION

- TRENCH SAMPLE LOCATIONS
- SPILL AREA

CONCHO

Figure 3

CCAP State Com #6H Tank Battery
(32.395081, -104.187621)

Spill Assessment Map

Eddy County, New Mexico

Project : 212C-MD-00958.5	
Date : 09/06/2017	
File : H:\GIS\212C-MD-00958.5	

Tables

Table 1
COG Operating LLC.
CCAP State Com #6H Battery
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	C6-C10	C10-C28	C28-C35	Total						
AH-1	6/22/2017	Surface	X		<15.0	525	53.2	**578**	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	12.4
	"	1	X		<15.0	1370	157	**1530**	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	22.5

Proposed Excavation Depths

Photos

COG Operating LLC
CCAP State Com #6H
Eddy County, New Mexico

TETRA TECH

View West – Release area inside lined containment

View North - Release area inside lined containment

COG Operating LLC
CCAP State Com #6H
Eddy County, New Mexico

TETRA TECH

View Southwest – Release area in the pasture

Appendix A

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: COG Operating LLC OGRID # 229137	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-683-7443
Facility Name: CCAP State Com #6H	Facility Type: Tank Battery

Surface Owner: Private	Mineral Owner: State	API No. 30-015-42880

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	16	22S	27E	1650	North	330	East	Eddy

Latitude 32.39562564 **Longitude** -104.1870211

NATURE OF RELEASE

Type of Release: Oil & Produced Water	Volume of Release: 33 bbls & 2 bbls	Volume Recovered: 31 bbls & 2 bbls
Source of Release: Gasket on FWKO	Date and Hour of Occurrence: May 23, 2017 7:00 pm	Date and Hour of Discovery: May 23, 2017 7:00 pm
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Ms. Weaver - NMOCD / Ms. Groves - SLO	
By Whom? Rebecca Haskell	Date and Hour: May 24, 2017 Time of this Email	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

The release was due to a gasket failure on a FWKO. The FWKO was drained and the gasket was replaced. Oil was sprayed on equipment and surrounding area. All standing fluid was within the falcon liner with a mist in the surrounding area.

Describe Area Affected and Cleanup Action Taken.*

The release was within a lined facility, on location and cleared area adjacent to the location. A vacuum truck was dispatched to remove all freestanding fluids. Concho will have the spill area sampled to delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.

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

Signature: Rebecca Haskell

Printed Name: Rebecca Haskell

Title: Senior HSE Coordinator

E-mail Address: rhaskell@concho.com

Date: June 8, 2017 Phone: 432-683-7443

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: Expiration Date:

Conditions of Approval: Attached ☐

* Attach Additional Sheets If Necessary

Appendix B

Water Well Data
Average Depth to Groundwater (ft)
COG - CCAP State Com #6H
Eddy County, New Mexico

21 South 26 East

6	5 65	4	3 140	2 120	1 89
7 66	8 170	9 150	10 115	11	12
18 150 240	17 174 178 35	16 139 65	15 93 65	14	13 76 170
19 254	20 210	21 70	22 55	23 36 34	24 50 43
30 115	29 220	28 75 190	27	26 40	25 41 40
31 200	32 164	33 45 120	34	35 90	36 23 26

21 South 27 East

6 34 175	5 350	4	3	2	1 12 186
7	8	9 81 78	10	11	12
18	17	16	15	14	13
19 30 3627	20	21 Site 75	22	23	24
30 15 16	29 11 31 30	28 40 46	27	26 70 32	25 12
31 15 17	32 15 15	33	34	35 30	36

21 South 28 East

6	5	4 80	3	2	1
7	8	9	10	11	12
18 9 19	17 37	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

22 South 26 East

6	5	4 68	3 140 135	2 105	1 32 41
7	8	9 73	10 95	11 60 60	12 32 45
18	17	16	15	14 68 30	13 45 60
19	20 180	21	22	23 78	24 85 108
30	29	28 140	27 96	26 71	25 96
31 105	32	33	34	35 150	36 115

22 South 27 East

6	5 85	4 46	3	2	1 40
7	8 22 40	9 40 40	10 11 40	11	12
18 84	17 28 29	16 70	15 15 20	14	13
19	20 52 53	21 60 55	22 34 100	23 45	24 15
30 99 100	29 85 90	28 66 84	27 47 112	26 38 40	25 40
31 112 145	32 81 170	33 66 150	34 53 60	35 57 60	36 28 57

22 South 28 East

6	5	4 131	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30 12 10	29	28	27	26	25
31 42	32 35	33	34	35	36

23 South 26 East

6	5	4	3 220	2	1
7	8 267	9	10	11	12
18	17	16	15	14	13
19	20	21	22 224	23	24
30 99	29	28	27	26	25
31	32 223	33	34	35	36

23 South 27 East

6	5 83	4 90	3	2 70	1 17
7	8	9	10	11	12 40
18	17	16	15	14 75	13
19	20	21	22	23 23	24 90
30	29 103	28	27	26	25
31	32	33	34	35	36

23 South 28 East

6 16.5	5	4	3	2	1
7 26.5	8	9	10	11 30.5	12 20
18 63	17	16	15 14	14	13 12 33
19	20 56	21	22 39	23	24 36
30	29 28.7	28	27	26	25 44
31	32	33	34	35	36

88 New Mexico State Engineers Well Reports

105 USGS Well Reports

90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)

Geology and Groundwater Resources of Eddy County, NM (Report 3)

34 NMOCD - Groundwater Data

123 Tetra Tech installed temporary wells and field water level

143 NMOCD Groundwater map well location

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 00009		CUB	ED	3	3	3	22	22S	27E	576641	3581908	165	100	65
C 00012		C	ED				18	22S	27E	572515	3584168*	120		
C 00013		C	ED		3	2	18	22S	27E	572683	3584396*	120		
C 00014		CUB	ED	3	2	3	28	22S	27E	575434	3580672*	202		
C 00014 CLW244969	O		ED	3	3	1	28	22S	27E	575028	3581074*	205		
C 00014 CLW244972	O		ED	3	3	1	28	22S	27E	575028	3581074*	205		
C 00014 S		CUB	ED	3	3	1	28	22S	27E	575028	3581074*	205		
C 00015		CUB	ED	4	4	4	28	22S	27E	576444	3580276*	200		
C 00015 CLW238653	O		ED		1	4	28	22S	27E	575938	3580778*	200		
C 00016		CUB	ED	3	3	1	21	22S	27E	575018	3582698	167		
C 00016 CLW202898	O		ED	3	3	1	21	22S	27E	575018	3582698*	209		
C 00017		C	ED	3	3	2	19	22S	27E	572589	3582669*	125		
C 00020		CUB	ED	4	4	4	07	22S	27E	573181	3585119*	50		
C 00021 A		CUB	ED	4	4	4	09	22S	27E	576421	3585150*	196	40	156
C 00021 CLW193276	O		ED	4	4	4	09	22S	27E	576421	3585150*	100		
C 00023		CUB	ED	3	3	3	09	22S	27E	575005	3585137*	90	35	55
C 00023 CLW193948	O		ED	3	3	3	09	22S	27E	575005	3585137*	90	35	55
C 00023 S		CUB	ED	3	3	3	09	22S	27E	575005	3585137*	90		
C 00027		CUB	ED	4	4	3	21	22S	27E	575628	3581891	166		
C 00027 CLW238752	O		ED	4	4	3	21	22S	27E	575628	3581891*	166		
C 00030		CUB	ED	1	2	3	34	22S	27E	577062	3579267*	205	50	155
C 00030 CLW193032	O		ED	1	2	3	34	22S	27E	577062	3579267*	205		
C 00030 CLW193040	O		ED	1	3	2	34	22S	27E	577465	3579680*	220	69	151
C 00030 CLW193055	O		ED	1	3	2	34	22S	27E	577465	3579680*	205		
C 00030 S		CUB	ED	1	3	2	34	22S	27E	577465	3579680*	200	69	131
C 00031		CUB	ED	3	1	3	32	22S	27E	573423	3579019	208	170	38
C 00031 C		CUB	ED	1	4	4	30	22S	27E	573010	3580430*	204	172	32
C 00033		C	ED				19	22S	27E	572516	3582546*	85		
C 00037		C	ED	2	4	4	18	22S	27E	573191	3583678*	100		
C 00040		C	ED		2	2	19	22S	27E	573093	3583175*	100		
C 00042		C	ED		2	2	19	22S	27E	573093	3583175*	100		
C 00043		C	ED	3	3	3	14	22S	27E	578256	3583557*	120		
C 00049		C	ED	3	2	1	07	22S	27E	572167	3586303*	105		

C 00056		CUB	ED	1	3	2	28	22S	27E	575835	3581284*	98		
C 00062		CUB	ED		1	3	29	22S	27E	573511	3580743*	270		
C 00062 A-S		CUB	ED	3	1	1	32	22S	27E	573417	3579830*	200	100	100
C 00074		CUB	ED	2	3	3	20	22S	27E	573601	3582060*	222	52	170
C 00077		C	ED	1	1	1	26	22S	27E	578266	3581726*	118	40	78
C 00078			ED	3	1	3	26	22S	27E	578269	3580712*	180		
C 00091		CUB	ED	4	3	3	08	22S	27E	573585	3585121*	300		
C 00091 CLW193608	O		ED	4	3	3	08	22S	27E	573585	3585121*	300		
C 00092		CUB	ED	4	3	3	09	22S	27E	575205	3585137*	70	40	30
C 00092 A	O		ED	1	3	4	09	22S	27E	575815	3585346*	200		
C 00092 CLW193601	O		ED	4	3	3	09	22S	27E	575205	3585137*	90	40	50
C 00092 CLW193956	O		ED	4	3	3	09	22S	27E	575205	3585137*	90	40	50
C 00092 CLW193966	O		ED	4	3	3	09	22S	27E	575205	3585137*	90	40	50
C 00093		CUB	ED	3	2	4	35	22S	27E	579487	3579109*	210	140	70
C 00093 CLW226379	O		ED	3	2	4	35	22S	27E	579487	3579109*	200		
C 00093 POD3		CUB	ED	3	2	4	35	22S	27E	579487	3579109*	174	60	114
C 00093 S		CUB	ED	1	3	3	36	22S	27E	579831	3578986	192	57	135
C 00095		CUB	ED	3	2	3	27	22S	27E	577052	3580694*	157		
C 00095 CLW196524	O		ED	2	1	3	27	22S	27E	576847	3580888*	157	112	45
C 00102		CUB	ED	1	3	1	16	22S	27E	575009	3584524*	164	70	94
C 00114		CUB	ED	3	1	4	20	22S	27E	574210	3582279*	253		
C 00130	O		ED	2	1	1	20	22S	27E	573596	3583277*	120		
C 00130 CLW240294	O		ED	2	1	1	20	22S	27E	573596	3583277*	120		
C 00147		C	ED	1	3	1	20	22S	27E	573398	3582872*	53		
C 00148		C	ED	2	2	1	17	22S	27E	573992	3584916*	60		
C 00150		CUB	ED	3	1	1	27	22S	27E	576643	3581501*	80		
C 00150 A	O		ED	3	1	1	27	22S	27E	576643	3581501*	147		
C 00152		CUB	ED	3	3	3	22	22S	27E	576641	3581908*	151		
C 00153		C	ED	3	4	1	17	22S	27E	573794	3584307*	140		
C 00160		C	ED	2	3	3	10	22S	27E	576826	3585355*	85	40	45
C 00160 CLW198701	O		ED	2	3	3	10	22S	27E	576826	3585355*			
C 00163		C	ED	2	4	3	20	22S	27E	574007	3582067*	184	80	104
C 00169		C	ED	2	1	4	07	22S	27E	572775	3585716*	150		
C 00171		CUB	ED	1	2	4	34	22S	27E	577870	3579279*	198	21	177
C 00171 CLW193980	O		ED	1	2	4	34	22S	27E	577870	3579279*	265		
C 00178		CUB	ED	1	2	3	35	22S	27E	578677	3579293*	119		
C 00191		CUB	ED	3	3	2	33	22S	27E	575844	3579458*	200		
C 00193		CUB	ED	1	3	1	33	22S	27E	575035	3579649*	190		
C 00194		C	ED	1	4	3	27	22S	27E	577054	3580487*	165	100	65
C 00204		CUB	ED	3	3	2	32	22S	27E	574227	3579437*	170		
C 00204 CLW194896	O		ED	3	3	2	32	22S	27E	574227	3579437*	170		

C 00209		C	ED	3	2	4	25	22S	27E	581111	3580763*	125		
C 00210		CUB	ED	3	3	2	35	22S	27E	579082	3579508*	211		
C 00210 CLW193708	O		ED	3	3	2	35	22S	27E	579082	3579508*	211		
C 00212 CLW193845	O		ED	1	1	1	35	22S	27E	578271	3580099*			
C 00215		CUB	ED	4	3	2	33	22S	27E	576044	3579458*	180	150	30
C 00228		CUB	ED	1	3	2	31	22S	27E	572613	3579617*	210		
C 00228 S		CUB	ED	2	2	2	31	22S	27E	573213	3580025*	225	145	80
C 00229		C	ED	1	1	1	34	22S	27E	576650	3580074	200		
C 00231 A			ED	1	4	1	23	22S	27E	578666	3582951*	178	45	133
C 00239		C	ED		1	2	17	22S	27E	574298	3584822*	58		
C 00239 POD2		C	ED	1	1	2	17	22S	27E	574197	3584921*	56	28	28
C 00249		C	ED	2	2	2	31	22S	27E	573213	3580025*	200		
C 00251		C	ED		4	4	22	22S	27E	577959	3582027*	84		
C 00267		C	ED	3	1	1	16	22S	27E	575007	3584730*	54	42	12
C 00271		C	ED		1	4	07	22S	27E	572676	3585617*	111	30	81
C 00273		C	ED	1	2	1	16	22S	27E	575412	3584935*	100		
C 00278		C	ED	3	3	1	20	22S	27E	573398	3582672*	80		
C 00279		C	ED		2	2	26	22S	27E	579583	3581647*	160	48	112
C 00282			ED	3	2	2	26	22S	27E	579482	3581546*	125	50	75
C 00284		C	ED		2	1	15	22S	27E	577134	3584856*	130	20	110
C 00286	C	C	ED	4	4	4	35	22S	27E	579688	3578702*	150		
C 00287			ED	3	1	3	34	22S	27E	576657	3579061*			
C 00292			ED	2	2	1	20	22S	27E	574001	3583285*	183		
C 00292 CLW238488	O		ED	2	2	1	20	22S	27E	574001	3583285*	183		
C 00294		C	ED	3	3	4	24	22S	27E	580701	3581970*	156	15	141
C 00308		C	ED		4	2	07	22S	27E	573077	3586019*	35		
C 00322		C	ED	3	3	2	17	22S	27E	574199	3584313*	70		
C 00343		CUB	ED	4	3	2	32	22S	27E	574427	3579437*	200		
C 00343 CLW242784	O		ED	3	3	2	32	22S	27E	574227	3579437*	193	143	50
C 00356		C	ED				34	22S	27E	577363	3579359*	155	45	110
C 00357		C	ED	4	4	2	17	22S	27E	574804	3584318*	170	50	120
C 00360		C	ED	4	4	3	08	22S	27E	573990	3585125*	125		
C 00360 A			ED	3	3	4	08	22S	27E	574195	3585129*	90		
C 00360 CLW229790	O		ED	4	4	3	08	22S	27E	573990	3585125*	125		
C 00393		C	ED	3	1	3	25	22S	27E	579890	3580742*	200	30	170
C 00393 CLW198205	O		ED	3	1	3	25	22S	27E	579890	3580742*	193	37	156
C 00393 CLW198226	O		ED	3	1	3	25	22S	27E	579890	3580742*	200	40	160
C 00393 CLW223748	O		ED	3	1	3	25	22S	27E	579890	3580742*	200	30	170
C 00403		C	ED		2	1	16	22S	27E	575513	3584836*	106	34	72
C 00410			ED	4	4	3	26	22S	27E	578875	3580313*	150	50	100
C 00410 CLW195750	O		ED	3	4	4	26	22S	27E	579486	3580329*	209	41	168

C 00412		C	ED		4	4	08	22S	27E	574701	3585234*	237	40	197
C 00436		C	ED		3	3	26	22S	27E	578371	3580407*	88	48	40
C 00444			ED	3	1	3	08	22S	27E	573382	3585522*	90		
C 00451			ED		4	2	30	22S	27E	573104	3581143*	256	130	126
C 00455		C	ED	2	2	2	34	22S	27E	578066	3580093*	133		
C 00467		C	ED		2	4	27	22S	27E	577964	3580807*	200	74	126
C 00479		C	ED			3	03	22S	27E	576919	3587082*	200		
C 00480		C	ED	3	4	2	17	22S	27E	574604	3584318*	200		
C 00486		C	ED	4	4	4	28	22S	27E	576444	3580276*	146		
C 00496	O		ED	3	3	4	35	22S	27E	579083	3578694*	225		
C 00496 POD3		CUB	ED	4	4	4	35	22S	27E	579688	3578702*	152	21	131
C 00514		C	ED				06	22S	27E	572498	3587396*	50		
C 00515		C	ED	3	4	4	33	22S	27E	576254	3578650*	180	80	100
C 00515 CLW197977	O		ED	3	4	4	33	22S	27E	576254	3578650*	180		
C 00526		C	ED	3	2	1	17	22S	27E	573792	3584716*	325		
C 00531			ED	1	1	1	35	22S	27E	578271	3580099*	150	87	63
C 00532		C	ED	2	2	2	27	22S	27E	578060	3581720*	90		
C 00540			ED	3	1	3	20	22S	27E	573399	3582266*	300		
C 00540 CLW449978	O		ED		2	1	20	22S	27E	573803	3582878*	148	45	103
C 00540 POD2			ED	1	4	1	20	22S	27E	573803	3582878*	148	45	103
C 00541			ED	3	4	1	20	22S	27E	573803	3582678*	148		
C 00542			ED	3	1	1	20	22S	27E	573396	3583077*	120		
C 00559		C	ED	3	4	4	29	22S	27E	574628	3580255*	200		
C 00562		C	ED	4	2	4	27	22S	27E	578063	3580706*	150		
C 00572		C	ED	2	4	1	27	22S	27E	577250	3581301*	98	90	8
C 00576		CUB	ED	3	1	1	15	22S	27E	576628	3584749*	119	184	-65
C 00576 S		CUB	ED	2	4	1	15	22S	27E	577235	3584550	172	48	124
C 00582		C	ED	1	3	1	14	22S	27E	578252	3584567*	60		
C 00586		CUB	ED	1	2	3	35	22S	27E	578677	3579293*	254		
C 00587		C	ED	2	2	2	28	22S	27E	576438	3581696*	130	84	46
C 00588		C	ED	2	2	1	27	22S	27E	577248	3581707*	200		
C 00589		C	ED	2	4	4	04	22S	27E	576412	3586974*			
C 00597		C	ED	1	2	3	29	22S	27E	573815	3580848*	140	90	50
C 00611		CUB	LE	1	1	3	17	22S	27E	573392	3584092*	185	60	125
C 00613		C	ED	4	2	4	21	22S	27E	576434	3582309*	100	60	40
C 00614		C	ED	3	1	3	22	22S	27E	576639	3582314*	95	60	35
C 00619		C	ED	3	3	2	32	22S	27E	574227	3579437*	250		
C 00621		C	ED		4	2	19	22S	27E	573094	3582771*	265		
C 00627		C	ED			1	13	22S	27E	580178	3584690*	100		
C 00628		C	ED	2	3	3	20	22S	27E	573601	3582060*	175	80	95
C 00640		C	ED	2	2	1	17	22S	27E	573992	3584916*	60	34	26

C 00644			ED	3	2	4	33	22S	27E	576251	3579056*	190		
C 00644 CLW198574	O		ED	3	2	4	33	22S	27E	576251	3579056*	100		
C 00653		C	ED	1	1	2	34	22S	27E	577462	3580087*	120	80	40
C 00663		C	ED				17	22S	27E	574098	3584187*	115	30	85
C 00680		C	ED	3	1	3	35	22S	27E	578272	3579085*	150	46	104
C 00693		C	ED	2	2	1	16	22S	27E	575612	3584935*	70	34	36
C 00700		CUB	ED	3	3	2	15	22S	27E	577441	3584355*	132		
C 00701		C	ED		2	1	16	22S	27E	575513	3584836*	65	34	31
C 00717		C	ED	3	3	1	05	22S	27E	573369	3587548*	60	32	28
C 00733		C	ED	4	3	3	20	22S	27E	573601	3581860*	220	60	160
C 00744			ED	3	3	4	10	22S	27E	577437	3585166*	175		
C 00747			ED	3	3	2	21	22S	27E	575828	3582709*	148	85	63
C 00747 CLW198561	O		ED	3	3	2	21	22S	27E	575828	3582709*	148		
C 00760		C	ED				16	22S	27E	575717	3584215*	72	44	28
C 00770			ED	3	3	4	25	22S	27E	580705	3580351*	200	44	156
C 00770 CLW202385	O		ED	1	3	4	25	22S	27E	580705	3580551*	210	22	188
C 00770 S		C	ED	1	3	4	25	22S	27E	580705	3580551*	210		
C 00783		C	ED	3	1	3	05	22S	27E	573372	3587136*	135	73	62
C 00825			ED	3	3	3	26	22S	27E	578270	3580306*	132	68	64
C 00836		C	ED	3	1	1	13	22S	27E	579874	3584794*	175	52	123
C 00870			ED	3	3	1	36	22S	27E	579892	3579523*	200	50	150
C 00880		C	ED	4	2	2	34	22S	27E	578066	3579893*	190		
C 00901		C	ED	1	2	1	27	22S	27E	577048	3581707*	193	40	153
C 00971		C	ED		3	3	13	22S	27E	579981	3583679*	60	18	42
C 00978		C	ED	3	3	2	18	22S	27E	572582	3584295*	200	68	132
C 00978 POD2		C	ED	3	3	2	18	22S	27E	572582	3584295*	200	68	132
C 00981		C	ED	2	2	2	34	22S	27E	578066	3580093*	250	41	209
C 01010		C	ED		4	3	16	22S	27E	575519	3583617*	150		
C 01035		C	ED			3	20	22S	27E	573703	3582162*	90	75	15
C 01037		C	ED	2	2	2	31	22S	27E	573213	3580025*	141	109	32
C 01056		C	ED	2	4	1	17	22S	27E	573994	3584507*	115	45	70
C 01086		C	ED			1	30	22S	27E	572121	3581328*	200	140	60
C 01088		C	ED	3	3	3	12	22S	27E	579872	3585199*	64	36	28
C 01097		C	ED	1	1	2	16	22S	27E	575817	3584940*	155	38	117
C 01110		C	ED	3	1	3	16	22S	27E	575011	3583917*	97		
C 01172			ED	3	4	3	34	22S	27E	577064	3578661*	220		
C 01184		C	ED	4	4	4	30	22S	27E	573210	3580230*	144	131	13
C 01209		C	ED		2	2	01	22S	27E	581173	3588142*	150		
C 01242			ED	1	3	3	23	22S	27E	578264	3582133*	155	40	115
C 01275			ED	1	2	3	17	22S	27E	573797	3584100*	205	45	160
C 01286		C	ED		2	3	36	22S	27E	580401	3579227*	210	60	150

C 01291		C	ED	4	2	1	06	22S	27E	572354	3587914*	50		
C 01312		CUB	ED		3	1	35	22S	27E	578373	3579593*	203	65	138
C 01356		C	ED	4	2	4	30	22S	27E	573207	3580636*	210	130	80
C 01383		C	ED	4	3	3	20	22S	27E	573601	3581860*	65	50	15
C 01407			ED	3	3	1	16	22S	27E	575009	3584324*	86		
C 01478		C	ED	2	2	4	30	22S	27E	573207	3580836*	172	149	23
C 01493		C	ED	2	3	3	09	22S	27E	575205	3585337*	60	18	42
C 01504		C	ED	4	3	2	17	22S	27E	574399	3584313*	65	45	20
C 01523		C	ED	3	3	1	35	22S	27E	578272	3579492*	118	60	58
C 01545		C	ED	1	3	1	16	22S	27E	575009	3584524*	90		
C 01560		C	ED		2	1	16	22S	27E	575513	3584836*	80	37	43
C 01578			ED	1	4	3	17	22S	27E	573799	3583692*	225	55	170
C 01578 CLW199122	O		ED	1	1	1	20	22S	27E	573396	3583277*	205		
C 01590		C	ED		3	1	13	22S	27E	579977	3584489*	100	40	60
C 01621			ED	3	1	3	08	22S	27E	573382	3585522*	82	24	58
C 01625		C	ED			1	18	22S	27E	572109	3584591*	36	28	8
C 01677		C	ED		1	3	13	22S	27E	579979	3584084*	56	20	36
C 01691		C	ED	3	1	1	30	22S	27E	571816	3581434*	210	68	142
C 01700		C	ED		3	3	34	22S	27E	576760	3578756*	205	118	87
C 01713		C	ED	3	1	3	23	22S	27E	578262	3582339*	101	46	55
C 01722		C	ED	3	1	1	13	22S	27E	579874	3584794*	180	64	116
C 01744		C	ED		4	4	28	22S	27E	576345	3580377*	140	100	40
C 01749		C	ED			3	32	22S	27E	573728	3578915*	156	126	30
C 01761		C	ED			3	35	22S	27E	578575	3578980*	135	85	50
C 01768		C	ED		2	1	20	22S	27E	573902	3583186*	104		
C 01776		C	ED		3	1	23	22S	27E	578361	3582846*	157	40	117
C 01790		C	ED		1	1	06	22S	27E	571887	3588005*	59	17	42
C 01801		C	ED		3	3	34	22S	27E	576760	3578756*	220		
C 01805		C	ED			3	23	22S	27E	578566	3582235*	125	98	27
C 01829		CUB	ED	3	2	4	28	22S	27E	576242	3580682*	125		
C 01833		C	ED			3	32	22S	27E	573728	3578915*	180	155	25
C 01853		C	ED		1	2	16	22S	27E	575918	3584841*	55	42	13
C 01861		C	ED		2	1	16	22S	27E	575513	3584836*	60		
C 01953		C	ED		2	3	17	22S	27E	573898	3584001*	82	42	40
C 02063		C	ED				08	22S	27E	574089	3585825*	45	25	20
C 02117			ED	1	1	2	28	22S	27E	575834	3581691*	150	60	90
C 02124		C	ED		3	3	32	22S	27E	573527	3578714*	195	60	135
C 02127		C	ED	4	4	3	02	22S	27E	578846	3586802*	160	30	130
C 02149		C	ED	4	4	4	28	22S	27E	576444	3580276*	119	62	57
C 02149 CLW468826	O		ED			4	28	22S	27E	576141	3580572*	125	70	55
C 02206		C	ED	2	4	4	08	22S	27E	574800	3585333*	60	18	42

C 02230		C	ED			33	22S	27E	575742	3579340*	260	90	170
C 02239			ED	3	1 2	17	22S	27E	574197	3584721*	150	34	116
C 02242		CUB	ED	1	1 4	15	22S	27E	577186	3584336	150	22	128
C 02259		C	ED		2 4	21	22S	27E	576335	3582410*	60	45	15
C 02262		C	ED		4 2	32	22S	27E	574732	3579544*	128	60	68
C 02374		C	ED		3 4	09	22S	27E	575916	3585247*	54	15	39
C 02379		C	ED		3 4	09	22S	27E	575916	3585247*	55	20	35
C 02392		C	ED		4 2	33	22S	27E	576350	3579564*	150	48	102
C 02409		C	ED	3	3 4	30	22S	27E	572607	3580225*	191	90	101
C 02412		C	ED	2	3 3	33	22S	27E	575238	3578836*	251	65	186
C 02433		C	ED	4	3 3	33	22S	27E	575238	3578636*	96	64	32
C 02449		C	ED			33	22S	27E	575742	3579340*	300	70	230
C 02458			ED	2	2 2	34	22S	27E	578066	3580093*			
C 02470 CLW198142	O		ED	4	3 4	24	22S	27E	580901	3581970*	67	36	31
C 02488		C	ED		4 4	27	22S	27E	577966	3580401*	76	38	38
C 02499		C	ED		1 1	25	22S	27E	579989	3581653*	100	35	65
C 02502		C	ED		2 2	32	22S	27E	574731	3579950*	98	64	34
C 02512		C	ED		1 3	22	22S	27E	576740	3582415*	68	38	30
C 02512 POD2		C	ED		1 3	22	22S	27E	576740	3582415*	142	57	85
C 02525		C	ED	1	3 3	08	22S	27E	573385	3585321*	49	17	32
C 02529		C	ED		3	12	22S	27E	580174	3585501*	113	51	62
C 02536		C	ED	4	1 1	25	22S	27E	580088	3581552*	120	20	100
C 02558		C	ED		2 4	21	22S	27E	576335	3582410*	55	36	19
C 02587	R	C	ED		2 2	26	22S	27E	579630	3581720	71	12	59
C 02590		C	ED	2	1 2	32	22S	27E	574425	3580043*	87	45	42
C 02590 POD2		C	ED	2	1 2	32	22S	27E	574425	3580043*	300	114	186
C 02593		C	ED	3	4 3	06	22S	27E	572164	3586697*	25	15	10
C 02618		C	ED	3	1 3	08	22S	27E	573382	3585522*	41	20	21
C 02624		C	ED	3	2 2	31	22S	27E	573013	3579825*	220	75	145
C 02631		C	ED	4	4 2	29	22S	27E	574823	3581067*	96	69	27
C 02648		C	ED		4 2	29	22S	27E	574724	3581168*	200	66	134
C 02667		C	ED	1	3 4	29	22S	27E	574223	3580448*	128	81	47
C 02696		C	ED	1	3 3	33	22S	27E	575038	3578836*	124	71	53
C 02709		C	ED	2	3 4	07	22S	27E	572777	3585318*	61	28	33
C 02787		C	ED	1	3 1	28	22S	27E	575028	3581274*	143	54	89
C 02881		C	ED		4 4	22	22S	27E	577959	3582027*	60	39	21
C 02885		C	ED	2	4 3	08	22S	27E	573990	3585325*	47	18	29
C 02899		C	ED	1	3 4	09	22S	27E	575815	3585346*	33	22	11
C 02903		C	ED	3	4 4	22	22S	27E	577858	3581926*	57	40	17
C 02922			ED	3	3 4	17	22S	27E	574204	3583502*	200	48	152
C 02961		C	ED	3	1 4	21	22S	27E	575830	3582303*	150	70	80

C 02970		C	ED	3	4	4	32	22S	27E	574635	3578630*	138	71	67
C 02996		C	ED	1	1	1	33	22S	27E	575034	3580055*	120	62	58
C 03007		C	ED	1	2	3	06	22S	27E	572161	3587304*	39	11	28
C 03013		C	ED	4	1	3	33	22S	27E	575237	3579043*	118	63	55
C 03028		C	ED	1	1	2	32	22S	27E	574225	3580043*	217	89	128
C 03029		C	ED		3	4	09	22S	27E	575916	3585247*	45	18	27
C 03030		C	ED	3	1	2	32	22S	27E	574225	3579843*	100	53	47
C 03038		C	ED	1	3	4	09	22S	27E	575815	3585346*	43	15	28
C 03043		C	ED	2	3	3	34	22S	27E	576859	3578855*	118	68	50
C 03062			ED	3	2	4	27	22S	27E	577863	3580706*	150	100	50
C 03063			ED	1	4	1	23	22S	27E	578666	3582951*	163	40	123
C 03064		C	ED	4	2	4	28	22S	27E	576442	3580682*	125	70	55
C 03066		C	ED	1	1	3	33	22S	27E	575037	3579243*	240		
C 03068		C	ED	1	3	3	20	22S	27E	573401	3582060*		60	
C 03073		C	ED	4	4	2	34	22S	27E	578068	3579486*	150	122	28
C 03074		C	ED	4	3	1	33	22S	27E	575235	3579449*	115	85	30
C 03078		C	ED	1	2	4	31	22S	27E	573019	3579216*	130	60	70
C 03084		C	ED	3	1	4	08	22S	27E	574192	3585532*	112	14	98
C 03085		C	ED	2	2	2	32	22S	27E	574830	3580049*	155	82	73
C 03086		C	ED	2	3	3	08	22S	27E	573585	3585321*	163	38	125
C 03117		C	ED	1	3	3	08	22S	27E	573385	3585321*	400		
C 03123		C	ED	2	2	4	30	22S	27E	573207	3580836*	159	97	62
C 03129	O		ED	4	2	4	28	22S	27E	576442	3580682*	115		
C 03130		C	ED	4	2	1	29	22S	27E	574010	3581461*	162		
C 03157		C	ED	1	4	1	30	22S	27E	572196	3581231*	173	100	73
C 03161		C	ED	3	1	1	31	22S	27E	571829	3579813*	200		
C 03162		C	ED	2	2	2	18	22S	27E	573183	3584909*	42		
C 03164		C	ED	3	1	3	19	22S	27E	571811	3582254*	130	87	43
C 03274		C	ED	4	4	3	33	22S	27E	575643	3578641*	130	81	49
C 03290		C	ED	1	3	3	34	22S	27E	576715	3578778	127	72	55
C 03364 POD1	R	C	ED	4	3	4	27	22S	27E	577765	3580245	107	50	57
C 03364 POD2		C	ED	4	3	4	27	22S	27E	577765	3580249	250		
C 03374 POD1		C	ED	4	4	4	08	22S	27E	574898	3585044	58	25	33
C 03392 POD1		C	ED	2	2	4	28	22S	27E	576508	3580886	140	70	70
C 03434 POD1		C	ED	4	4	2	29	22S	27E	574876	3581101	99	75	24
C 03445			ED	3	3	3	31	22S	27E	571774	3578630		200	
C 03480 POD1		C	ED	3	2	3	16	22S	27E	575466	3583961	74	41	33
C 03504 POD1		C	ED	2	3	4	32	22S	27E	574508	3578789	105	90	15
C 03505 POD1		C	ED	3	2	2	26	22S	27E	579548	3581491	80		
C 03506 POD1		C	ED	2	1	4	19	22S	27E	572735	3582415	85	71	14
C 03514 POD1		C	ED	1	3	1	24	22S	27E	579923	3583010	59	31	28

C 03549 POD1	C	ED	3	4	3	03	22S	27E	567352	3586612	200	195	5
C 03550 POD1	C	ED	2	3	4	06	22S	27E	572728	3586988	25		
C 03553 POD1	C	ED	4	2	2	33	22S	27E	576554	3579841	200	75	125
C 03651 POD1	CUB	ED	4	3	4	06	22S	27E	572781	3586705	30		
C 03651 POD10	CUB	ED	4	3	4	06	22S	27E	572729	3586650	27		
C 03651 POD11	CUB	ED	4	3	4	06	22S	27E	572731	3586752	25		
C 03651 POD12	CUB	ED	4	3	4	06	22S	27E	572855	3586667	33		
C 03651 POD13	CUB	ED	4	3	4	06	22S	27E	572840	3586636	30		
C 03651 POD14	CUB	ED	4	3	4	06	22S	27E	572768	3586633	30		
C 03651 POD2	CUB	ED	4	3	4	06	22S	27E	572772	3586694	30		
C 03651 POD3	CUB	ED	4	3	4	06	22S	27E	572783	3586690	30		
C 03651 POD4	CUB	ED	4	3	4	06	22S	27E	572772	3586719	30		
C 03651 POD5	CUB	ED	4	3	4	06	22S	27E	572815	3586694	31	17	14
C 03651 POD6	CUB	ED	4	3	4	06	22S	27E	572748	3586682	28	17	11
C 03651 POD7	CUB	ED	4	3	4	06	22S	27E	572748	3586678	31	17	14
C 03651 POD8	CUB	ED	4	3	4	06	22S	27E	572744	3586709	30		
C 03651 POD9	CUB	ED	4	3	4	06	22S	27E	572860	3586602	26		
C 03673 POD1	CUB	ED	1	3	3	17	22S	27E	572182	3583640	399	47	352
C 03673 POD2	CUB	ED	3	4	3	17	22S	27E	573361	3583724	404	40	364
C 03688 POD1	CUB	ED	4	1	1	20	22S	27E	573568	3583978	409	40	369
C 03691 POD1	CUB	ED	3	3	3	17	22S	27E	573339	3583490	701	40	661
C 03738 POD1	C	ED	1	1	3	34	22S	27E	576785	3579382	137	68	69
C 03763 POD1	C	ED	1	2	2	28	22S	27E	575687	3581616	240	55	185
C 03821 POD1	C	ED	2	2	3	32	22S	27E	573988	3579146	200	120	80
C 03899 POD1	CUB	ED	1	4	3	17	22S	27E	573779	3583749	55	10	45
C 03899 POD2	CUB	ED	1	4	3	17	22S	27E	573792	3583751	55	10	45
C 03899 POD3	CUB	ED	1	4	3	17	22S	27E	573767	3583756	55	10	45
C 03899 POD4	CUB	ED	1	4	3	17	22S	27E	573783	3583755	55	10	45
C 03899 POD5	CUB	ED	1	4	3	17	22S	27E	573786	3583744	55	10	45
C 04027 POD1	CUB	ED	1	3	1	27	22S	27E	576700	3581792	140	55	85

Average Depth to Water: **59 feet**
Minimum Depth: **10 feet**
Maximum Depth: **200 feet**

Record Count: 350

PLSS Search:

Township: 22S **Range:** 27E

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

8/28/17 9:55 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Appendix C

Certificate of Analysis Summary 556361

COG Operating LLC, Artesia, NM

Project Name: CCAP State #6H

Project Id:
Contact: Aaron Lieb
Project Location:

Date Received in Lab: Tue Jun-27-17 10:15 am
Report Date: 06-JUL-17
Project Manager: Kelsey Brooks

Analysis Requested									
	Lab Id:	556361-001		556361-002					
	Field Id:	AH1-Surface		AH1-1'					
	Depth:			1 ft					
	Matrix:	SOIL		SOIL					
	Sampled:	Jun-22-17 14:00		Jun-22-17 14:10					
BTEX by EPA 8021B	***Extracted:***	Jun-30-17 08:00		Jun-30-17 17:30					
	Analyzed:	Jun-30-17 10:37		Jul-01-17 13:17					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00201	0.00201	<0.00200	0.00200				
Toluene		<0.00201	0.00201	<0.00200	0.00200				
Ethylbenzene		<0.00201	0.00201	<0.00200	0.00200				
m_p-Xylenes		<0.00402	0.00402	<0.00399	0.00399				
o-Xylene		<0.00201	0.00201	<0.00200	0.00200				
Total Xylenes		<0.00201	0.00201	<0.00200	0.00200				
Total BTEX		<0.00201	0.00201	<0.00200	0.00200				
Chloride by EPA 300	***Extracted:***	Jul-05-17 14:30		Jul-05-17 14:30					
	Analyzed:	Jul-05-17 14:48		Jul-05-17 15:11					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		12.4	5.00	22.5	4.98				
TPH By SW8015 Mod	***Extracted:***	Jun-27-17 18:00		Jun-27-17 18:00					
	Analyzed:	Jun-28-17 06:18		Jun-28-17 06:40					
	Units/RL:	mg/kg	RL	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		<15.0	15.0	<15.0	15.0				
C10-C28 Diesel Range Organics		525	15.0	1370	15.0				
C28-C35 Oil Range Hydrocarbons		53.2	15.0	157	15.0				
Total TPH		578	15.0	1530	15.0				

Kelsey Brooks
Project Manager

Analytical Report 556361

for

COG Operating LLC

Project Manager: Aaron Lieb

CCAP State #6H

06-JUL-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

06-JUL-17

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

Reference: XENCO Report No(s): **556361**
CCAP State #6H
Project Address:

Aaron Lieb:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 556361. 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. 556361 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 556361

COG Operating LLC, Artesia, NM

CCAP State #6H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
AH1-Surface	S	06-22-17 14:00		556361-001
AH1-1'	S	06-22-17 14:10	- 1 ft	556361-002

CASE NARRATIVE

Client Name: COG Operating LLC

Project Name: CCAP State #6H

Project ID:
Work Order Number(s): *556361*

Report Date: *06-JUL-17*
Date Received: *06/27/2017*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3021299 BTEX by EPA 8021B
Benzene, Ethylbenzene, Toluene, m_p-Xylenes , o-Xylene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.
Samples in the analytical batch are: 556361-001
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Lab Sample ID 556361-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD).
Benzene, Ethylbenzene, Toluene, m_p-Xylenes , o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 556361-001.
The Laboratory Control Sample for Toluene, Benzene, Ethylbenzene, m_p-Xylenes , o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3021391 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 556361

COG Operating LLC, Artesia, NM

CCAP State #6H

Sample Id:	**AH1-Surface**	Matrix:	Soil	Date Received:	06.27.17 10.15
Lab Sample Id:	556361-001	Date Collected:	06.22.17 14.00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	07.05.17 14.30	Basis:	Wet Weight
Seq Number:	3021560				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.4**	5.00	mg/kg	07.05.17 14.48		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.27.17 18.00	Basis:	Wet Weight
Seq Number:	3020944				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.28.17 06.18	U	1
C10-C28 Diesel Range Organics	C10C28DRO	**525**	15.0	mg/kg	06.28.17 06.18		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	**53.2**	15.0	mg/kg	06.28.17 06.18		1
Total TPH	PHC635	**578**	15.0	mg/kg	06.28.17 06.18		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	06.28.17 06.18	
o-Terphenyl	84-15-1	89	%	70-135	06.28.17 06.18	

Certificate of Analytical Results 556361

COG Operating LLC, Artesia, NM

CCAP State #6H

Sample Id:	**AH1-Surface**	Matrix:	Soil	Date Received:	06.27.17 10.15
Lab Sample Id:	556361-001	Date Collected:	06.22.17 14.00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.30.17 08.00	Basis:	Wet Weight
Seq Number:	3021299				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.30.17 10.37	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.30.17 10.37	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.30.17 10.37	U	1
m_p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.30.17 10.37	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.30.17 10.37	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.30.17 10.37	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.30.17 10.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	83	%	80-120	06.30.17 10.37	
4-Bromofluorobenzene	460-00-4	108	%	80-120	06.30.17 10.37	

Certificate of Analytical Results 556361

COG Operating LLC, Artesia, NM

CCAP State #6H

Sample Id:	**AH1-1'**	Matrix:	Soil	Date Received:	06.27.17 10.15
Lab Sample Id:	556361-002	Date Collected:	06.22.17 14.10	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	07.05.17 14.30	Basis:	Wet Weight
Seq Number:	3021560				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**22.5**	4.98	mg/kg	07.05.17 15.11		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.27.17 18.00	Basis:	Wet Weight
Seq Number:	3020944				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.28.17 06.40	U	1
C10-C28 Diesel Range Organics	C10C28DRO	**1370**	15.0	mg/kg	06.28.17 06.40		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	**157**	15.0	mg/kg	06.28.17 06.40		1
Total TPH	PHC635	**1530**	15.0	mg/kg	06.28.17 06.40		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	06.28.17 06.40	
o-Terphenyl	84-15-1	90	%	70-135	06.28.17 06.40	

Certificate of Analytical Results 556361

COG Operating LLC, Artesia, NM

CCAP State #6H

Sample Id:	**AH1-1'**	Matrix:	Soil	Date Received:	06.27.17 10.15
Lab Sample Id:	556361-002	Date Collected:	06.22.17 14.10	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.30.17 17.30	Basis:	Wet Weight
Seq Number:	3021391				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.01.17 13.17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.01.17 13.17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.01.17 13.17	U	1
m_p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.01.17 13.17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.01.17 13.17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.01.17 13.17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.01.17 13.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	80-120	07.01.17 13.17	
1,4-Difluorobenzene	540-36-3	102	%	80-120	07.01.17 13.17	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

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

QC Summary 556361

COG Operating LLC

CCAP State #6H

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3021560 Matrix: Solid Date Prep: 07.05.17
MB Sample Id: 727151-1-BLK LCS Sample Id: 727151-1-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
Chloride	<5.00	250	238	95	90-110	mg/kg	07.05.17 14:33	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3021560 Matrix: Soil Date Prep: 07.05.17
Parent Sample Id: 556361-001 MS Sample Id: 556361-001 S MSD Sample Id: 556361-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	12.4	250	244	93	248	94	90-110	2	20	mg/kg	07.05.17 14:56	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3021560 Matrix: Soil Date Prep: 07.05.17
Parent Sample Id: 556745-001 MS Sample Id: 556745-001 S MSD Sample Id: 556745-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6.72	249	252	99	255	100	90-110	1	20	mg/kg	07.05.17 17:05	

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3020944 Matrix: Solid Date Prep: 06.27.17
MB Sample Id: 726859-1-BLK LCS Sample Id: 726859-1-BKS LCSD Sample Id: 726859-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	1060	106	1080	108	70-135	2	35	mg/kg	06.28.17 02:24	
C10-C28 Diesel Range Organics	<15.0	1000	1020	102	1060	106	70-135	4	35	mg/kg	06.28.17 02:24	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		108		109		70-135	%	06.28.17 02:24
o-Terphenyl	103		107		110		70-135	%	06.28.17 02:24

QC Summary 556361

COG Operating LLC

CCAP State #6H

Analytical Method: TPH By SW8015 Mod | Prep Method: TX1005P
Seq Number: 3020944 | Matrix: Soil | Date Prep: 06.27.17
Parent Sample Id: 556210-001 | MS Sample Id: 556210-001 S | MSD Sample Id: 556210-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	999	1040	104	1010	101	70-135	3	35	mg/kg	06.28.17 03:27	
C10-C28 Diesel Range Organics	<15.0	999	1050	105	986	99	70-135	6	35	mg/kg	06.28.17 03:27	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		99		70-135	%	06.28.17 03:27
o-Terphenyl	100		96		70-135	%	06.28.17 03:27

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3021299 | Matrix: Solid | Date Prep: 06.30.17
MB Sample Id: 727062-1-BLK | LCS Sample Id: 727062-1-BKS | LCSD Sample Id: 727062-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0979	98	0.102	103	70-130	4	35	mg/kg	06.30.17 08:59	
Toluene	<0.00199	0.0996	0.0902	91	0.0932	94	70-130	3	35	mg/kg	06.30.17 08:59	
Ethylbenzene	<0.00199	0.0996	0.0958	96	0.104	105	71-129	8	35	mg/kg	06.30.17 08:59	
m_p-Xylenes	<0.00398	0.199	0.168	84	0.182	92	70-135	8	35	mg/kg	06.30.17 08:59	
o-Xylene	<0.00199	0.0996	0.0895	90	0.0941	95	71-133	5	35	mg/kg	06.30.17 08:59	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		92		97		80-120	%	06.30.17 08:59
4-Bromofluorobenzene	108		106		100		80-120	%	06.30.17 08:59

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3021391 | Matrix: Solid | Date Prep: 06.30.17
MB Sample Id: 727129-1-BLK | LCS Sample Id: 727129-1-BKS | LCSD Sample Id: 727129-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0852	86	0.0832	83	70-130	2	35	mg/kg	07.01.17 03:00	
Toluene	<0.00199	0.0996	0.0808	81	0.0808	81	70-130	0	35	mg/kg	07.01.17 03:00	
Ethylbenzene	<0.00199	0.0996	0.0873	88	0.0891	89	71-129	2	35	mg/kg	07.01.17 03:00	
m_p-Xylenes	<0.00398	0.199	0.166	83	0.162	81	70-135	2	35	mg/kg	07.01.17 03:00	
o-Xylene	<0.00199	0.0996	0.0825	83	0.0897	90	71-133	8	35	mg/kg	07.01.17 03:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	86		90		96		80-120	%	07.01.17 03:00
4-Bromofluorobenzene	81		85		89		80-120	%	07.01.17 03:00

QC Summary 556361

COG Operating LLC

CCAP State #6H

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

Seq Number: 3021299 Matrix: Soil Date Prep: 06.30.17

Parent Sample Id: 556361-001 MS Sample Id: 556361-001 S MSD Sample Id: 556361-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0673	67	0.0370	37	70-130	58	35	mg/kg	06.30.17 09:31	XF
Toluene	<0.00200	0.0998	0.0572	57	0.0370	37	70-130	43	35	mg/kg	06.30.17 09:31	XF
Ethylbenzene	<0.00200	0.0998	0.0547	55	0.0287	29	71-129	62	35	mg/kg	06.30.17 09:31	XF
m_p-Xylenes	<0.00399	0.200	0.0938	47	0.0520	26	70-135	57	35	mg/kg	06.30.17 09:31	XF
o-Xylene	<0.00200	0.0998	0.0533	53	0.0325	33	71-133	48	35	mg/kg	06.30.17 09:31	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		89		80-120	%	06.30.17 09:31
4-Bromofluorobenzene	90		87		80-120	%	06.30.17 09:31

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

Seq Number: 3021391 Matrix: Soil Date Prep: 06.30.17

Parent Sample Id: 556362-001 MS Sample Id: 556362-001 S MSD Sample Id: 556362-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0779	78	0.0706	70	70-130	10	35	mg/kg	07.01.17 03:32	
Toluene	<0.00199	0.0996	0.0789	79	0.0689	68	70-130	14	35	mg/kg	07.01.17 03:32	X
Ethylbenzene	<0.00199	0.0996	0.0784	79	0.0662	66	71-129	17	35	mg/kg	07.01.17 03:32	X
m_p-Xylenes	<0.00398	0.199	0.145	73	0.136	67	70-135	6	35	mg/kg	07.01.17 03:32	X
o-Xylene	<0.00199	0.0996	0.0809	81	0.0675	67	71-133	18	35	mg/kg	07.01.17 03:32	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		118		80-120	%	07.01.17 03:32
4-Bromofluorobenzene	120		120		80-120	%	07.01.17 03:32

CHAIN OF CUSTODY

Page 1 Of 1

XENCO LABORATORIES

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Xenco Quote # | Xenco Job # 5563361

Client / Reporting Information

Company Name / Branch: COG Operating LLC

Company Address: 2407 PECOS Avenue Artesia NM 88210

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

Project Contact: Aaron Lieb

Samplers's Name- Aaron Lieb

Project Information

Project Name/Number: CCAP State #6H

Project Location: CCAP State #6H

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

PO Number:

Matrix Codes

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

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Analytical Information: TPH	BTEX	Chloride	Field Comments
1	AH 1-Surface	SURF	6/22/17	2:00pm	S	1									X	X	X	
2	AH1-1'	1'	6/22/17	2:00pm	S	1									X	X	X	
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Temp: 1.3 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 1.1

FED-EX / UPS: Tracking #

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		6/26/17 10:00 AM	Sid Butler 6-26-17 10:00A	Sid Butler 11:45	6-26-17	
2						
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
4						
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: X

Cooler Temp. 26° | Thermo. Corr. Factor

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

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: COG Operating LLC

Date/ Time Received: 06/27/2017 10:15:00 AM

Work Order #: 556361

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.7
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seal present on shipping container/ cooler?	**N/A**
#5 *Custody Seals intact on shipping container/ cooler?	**N/A**
#6 Custody Seals intact on sample bottles?	**N/A**
#7 *Custody Seals Signed and dated?	**N/A**
#8 *Chain of Custody present?	**Yes**
#9 Sample instructions complete on Chain of Custody?	**Yes**
#10 Any missing/extra samples?	**No**
#11 Chain of Custody signed when relinquished/ received?	**Yes**
#12 Chain of Custody agrees with sample label(s)?	**Yes**
#13 Container label(s) legible and intact?	**Yes**
#14 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#15 Samples in proper container/ bottle?	**Yes**
#16 Samples properly preserved?	**Yes**
#17 Sample container(s) intact?	**Yes**
#18 Sufficient sample amount for indicated test(s)?	**Yes**
#19 All samples received within hold time?	**Yes**
#20 Subcontract of sample(s)?	**N/A**
#21 VOC samples have zero headspace?	**N/A**

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

Analyst: PH Device/Lot#:

Checklist completed by: Jessica Kramer Date: 06/27/2017
Jessica Kramer

Checklist reviewed by: Kelsey Brooks Date: 06/27/2017
Kelsey Brooks

APPENDIX VI

CARDINAL Laboratories

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

February 16, 2018

SHELDON HITCHCOCK

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: CCAP STATE COM #6H

Enclosed are the results of analyses for samples received by the laboratory on 02/15/18 9:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-10. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received:	02/15/2018	Sampling Date:	02/12/2018
Reported:	02/16/2018	Sampling Type:	Soil
Project Name:	CCAP STATE COM #6H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CONCHO		

Sample ID: AH-1 2' (H800474-01)

TPH 8015M **mg/kg** **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/16/2018	ND	194	96.9	200	7.84	
DRO >C10-C28*	**124**	10.0	02/16/2018	ND	203	101	200	14.8	
EXT DRO >C28-C36	<10.0	10.0	02/16/2018	ND					

Surrogate: 1-Chlorooctane	*91.5 %*	*41-142*
Surrogate: 1-Chlorooctadecane	*97.0 %*	*37.6-147*

Sample ID: SOUTH (H800474-02)

TPH 8015M **mg/kg** **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/16/2018	ND	194	96.9	200	7.84	
DRO >C10-C28*	<10.0	10.0	02/16/2018	ND	203	101	200	14.8	
EXT DRO >C28-C36	<10.0	10.0	02/16/2018	ND					

Surrogate: 1-Chlorooctane	*89.7 %*	*41-142*
Surrogate: 1-Chlorooctadecane	*90.1 %*	*37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received:	02/15/2018	Sampling Date:	02/12/2018
Reported:	02/16/2018	Sampling Type:	Soil
Project Name:	CCAP STATE COM #6H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	CONCHO		

Sample ID: EAST (H800474-03)

TPH 8015M **mg/kg** **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/16/2018	ND	194	96.9	200	7.84	
DRO >C10-C28*	<10.0	10.0	02/16/2018	ND	203	101	200	14.8	
EXT DRO >C28-C36	<10.0	10.0	02/16/2018	ND					

Surrogate: 1-Chlorooctane	*92.7 %*	*41-142*
Surrogate: 1-Chlorooctadecane	*87.2 %*	*37.6-147*

Sample ID: WEST (H800474-04)

TPH 8015M **mg/kg** **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/16/2018	ND	194	96.9	200	7.84	
DRO >C10-C28*	<10.0	10.0	02/16/2018	ND	203	101	200	14.8	
EXT DRO >C28-C36	<10.0	10.0	02/16/2018	ND					

Surrogate: 1-Chlorooctane	*86.3 %*	*41-142*
Surrogate: 1-Chlorooctadecane	*84.5 %*	*37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

PG 1 OF 1

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Concho Resources	BILL TO
Project Manager: Sheldon Hitchcock	P.O. #:
Address: 2407 Pecos Avenue	Company: COG
City: Artesia State: NM Zip: 88210	Attn: Robert McNeill
Phone #: 575-703-6475 Fax #:	Address:
Project #: Project Owner: Concho	City:
Project Name: CCAP State Com #6H	State: Zip:
Project Location:	Phone #:
Sampler Name: Sheldon Hitchcock	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: TPH Extended (EPA 8015M)
H800474															
1	AH-1 2'	1	1			/					/		2/12/18	2:30	/
2X	South	1	1			/					/			2:38	/
3X	East	1	1			/					/			2:45	/
4X	West	1	1			/					/			2:50	/

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

Relinquished By: Sheldon Hitchcock	Date: 2-15-18 Time: 9:25	Received By: Tamara Oldaker	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) 5.3°	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials) TO #75	REMARKS: Rush
Sampler - UPS - Bus - Other: Corrected 5.5°C			

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

Certificate of Analysis Summary 556361

COG Operating LLC, Artesia, NM

Project Name: CCAP State #6H

Project Id:
Contact: Aaron Lieb
Project Location:

Date Received in Lab: Tue Jun-27-17 10:15 am
Report Date: 06-JUL-17
Project Manager: Kelsey Brooks

Analysis Requested									
	Lab Id:	556361-001		556361-002					
	Field Id:	AH1-Surface		AH1-1'					
	Depth:			1 ft					
	Matrix:	SOIL		SOIL					
	Sampled:	Jun-22-17 14:00		Jun-22-17 14:10					
BTEX by EPA 8021B	***Extracted:***	Jun-30-17 08:00		Jun-30-17 17:30					
	Analyzed:	Jun-30-17 10:37		Jul-01-17 13:17					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00201	0.00201	<0.00200	0.00200				
Toluene		<0.00201	0.00201	<0.00200	0.00200				
Ethylbenzene		<0.00201	0.00201	<0.00200	0.00200				
m_p-Xylenes		<0.00402	0.00402	<0.00399	0.00399				
o-Xylene		<0.00201	0.00201	<0.00200	0.00200				
Total Xylenes		<0.00201	0.00201	<0.00200	0.00200				
Total BTEX		<0.00201	0.00201	<0.00200	0.00200				
Chloride by EPA 300	***Extracted:***	Jul-05-17 14:30		Jul-05-17 14:30					
	Analyzed:	Jul-05-17 14:48		Jul-05-17 15:11					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		12.4	5.00	22.5	4.98				
TPH By SW8015 Mod	***Extracted:***	Jun-27-17 18:00		Jun-27-17 18:00					
	Analyzed:	Jun-28-17 06:18		Jun-28-17 06:40					
	Units/RL:	mg/kg	RL	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		<15.0	15.0	<15.0	15.0				
C10-C28 Diesel Range Organics		525	15.0	1370	15.0				
C28-C35 Oil Range Hydrocarbons		53.2	15.0	157	15.0				
Total TPH		578	15.0	1530	15.0				

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

Kelsey Brooks
Project Manager

Final 1.000

Analytical Report 556361

for

COG Operating LLC

Project Manager: Aaron Lieb

CCAP State #6H

06-JUL-17

Collected By: Client

1211 W. Florida Ave, Midland TX 79701

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

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

06-JUL-17

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

Reference: XENCO Report No(s): **556361**
CCAP State #6H
Project Address:

Aaron Lieb:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 556361. 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. 556361 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 556361

COG Operating LLC, Artesia, NM

CCAP State #6H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
AH1-Surface	S	06-22-17 14:00		556361-001
AH1-1'	S	06-22-17 14:10	- 1 ft	556361-002

CASE NARRATIVE

Client Name: COG Operating LLC

Project Name: CCAP State #6H

Project ID:
Work Order Number(s): *556361*

Report Date: *06-JUL-17*
Date Received: *06/27/2017*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3021299 BTEX by EPA 8021B
Benzene, Ethylbenzene, Toluene, m_p-Xylenes , o-Xylene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.
Samples in the analytical batch are: 556361-001
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.
Lab Sample ID 556361-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD).
Benzene, Ethylbenzene, Toluene, m_p-Xylenes , o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 556361-001.
The Laboratory Control Sample for Toluene, Benzene, Ethylbenzene, m_p-Xylenes , o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3021391 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Certificate of Analytical Results 556361

COG Operating LLC, Artesia, NM

CCAP State #6H

Sample Id:	**AH1-Surface**	Matrix:	Soil	Date Received:	06.27.17 10.15
Lab Sample Id:	556361-001	Date Collected:	06.22.17 14.00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	07.05.17 14.30	Basis:	Wet Weight
Seq Number:	3021560				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.4**	5.00	mg/kg	07.05.17 14.48		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.27.17 18.00	Basis:	Wet Weight
Seq Number:	3020944				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.28.17 06.18	U	1
C10-C28 Diesel Range Organics	C10C28DRO	**525**	15.0	mg/kg	06.28.17 06.18		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	**53.2**	15.0	mg/kg	06.28.17 06.18		1
Total TPH	PHC635	**578**	15.0	mg/kg	06.28.17 06.18		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	06.28.17 06.18	
o-Terphenyl	84-15-1	89	%	70-135	06.28.17 06.18	

Certificate of Analytical Results 556361

COG Operating LLC, Artesia, NM

CCAP State #6H

Sample Id:	**AH1-Surface**	Matrix:	Soil	Date Received:	06.27.17 10.15
Lab Sample Id:	556361-001	Date Collected:	06.22.17 14.00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.30.17 08.00	Basis:	Wet Weight
Seq Number:	3021299				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	06.30.17 10.37	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	06.30.17 10.37	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	06.30.17 10.37	U	1
m_p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	06.30.17 10.37	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	06.30.17 10.37	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	06.30.17 10.37	U	1
Total BTEX		<0.00201	0.00201	mg/kg	06.30.17 10.37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	83	%	80-120	06.30.17 10.37	
4-Bromofluorobenzene	460-00-4	108	%	80-120	06.30.17 10.37	

Certificate of Analytical Results 556361

COG Operating LLC, Artesia, NM

CCAP State #6H

Sample Id:	**AH1-1'**	Matrix:	Soil	Date Received:	06.27.17 10.15
Lab Sample Id:	556361-002	Date Collected:	06.22.17 14.10	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MGO			% Moisture:	
Analyst:	MGO	Date Prep:	07.05.17 14.30	Basis:	Wet Weight
Seq Number:	3021560				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**22.5**	4.98	mg/kg	07.05.17 15.11		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	TX1005P
Tech:	ARM			% Moisture:	
Analyst:	ARM	Date Prep:	06.27.17 18.00	Basis:	Wet Weight
Seq Number:	3020944				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
C6-C10 Gasoline Range Hydrocarbons	PHC610	<15.0	15.0	mg/kg	06.28.17 06.40	U	1
C10-C28 Diesel Range Organics	C10C28DRO	**1370**	15.0	mg/kg	06.28.17 06.40		1
C28-C35 Oil Range Hydrocarbons	PHCG2835	**157**	15.0	mg/kg	06.28.17 06.40		1
Total TPH	PHC635	**1530**	15.0	mg/kg	06.28.17 06.40		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	06.28.17 06.40	
o-Terphenyl	84-15-1	90	%	70-135	06.28.17 06.40	

Certificate of Analytical Results 556361

COG Operating LLC, Artesia, NM

CCAP State #6H

Sample Id:	**AH1-1'**	Matrix:	Soil	Date Received:	06.27.17 10.15
Lab Sample Id:	556361-002	Date Collected:	06.22.17 14.10	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	ALJ			% Moisture:	
Analyst:	ALJ	Date Prep:	06.30.17 17.30	Basis:	Wet Weight
Seq Number:	3021391				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.01.17 13.17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.01.17 13.17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.01.17 13.17	U	1
m_p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.01.17 13.17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.01.17 13.17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.01.17 13.17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.01.17 13.17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	80-120	07.01.17 13.17	
1,4-Difluorobenzene	540-36-3	102	%	80-120	07.01.17 13.17	

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

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

U Analyte was not detected.

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

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

K Sample analyzed outside of recommended hold time.

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

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

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

QC Summary 556361

COG Operating LLC

CCAP State #6H

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3021560 Matrix: Solid Date Prep: 07.05.17
MB Sample Id: 727151-1-BLK LCS Sample Id: 727151-1-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
Chloride	<5.00	250	238	95	90-110	mg/kg	07.05.17 14:33	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3021560 Matrix: Soil Date Prep: 07.05.17
Parent Sample Id: 556361-001 MS Sample Id: 556361-001 S MSD Sample Id: 556361-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	12.4	250	244	93	248	94	90-110	2	20	mg/kg	07.05.17 14:56	

Analytical Method: **Chloride by EPA 300** Prep Method: E300P
Seq Number: 3021560 Matrix: Soil Date Prep: 07.05.17
Parent Sample Id: 556745-001 MS Sample Id: 556745-001 S MSD Sample Id: 556745-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6.72	249	252	99	255	100	90-110	1	20	mg/kg	07.05.17 17:05	

Analytical Method: **TPH By SW8015 Mod** Prep Method: TX1005P
Seq Number: 3020944 Matrix: Solid Date Prep: 06.27.17
MB Sample Id: 726859-1-BLK LCS Sample Id: 726859-1-BKS LCSD Sample Id: 726859-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	1060	106	1080	108	70-135	2	35	mg/kg	06.28.17 02:24	
C10-C28 Diesel Range Organics	<15.0	1000	1020	102	1060	106	70-135	4	35	mg/kg	06.28.17 02:24	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		108		109		70-135	%	06.28.17 02:24
o-Terphenyl	103		107		110		70-135	%	06.28.17 02:24

QC Summary 556361

COG Operating LLC

CCAP State #6H

Analytical Method: TPH By SW8015 Mod | Prep Method: TX1005P
Seq Number: 3020944 | Matrix: Soil | Date Prep: 06.27.17
Parent Sample Id: 556210-001 | MS Sample Id: 556210-001 S | MSD Sample Id: 556210-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
C6-C10 Gasoline Range Hydrocarbons	<15.0	999	1040	104	1010	101	70-135	3	35	mg/kg	06.28.17 03:27	
C10-C28 Diesel Range Organics	<15.0	999	1050	105	986	99	70-135	6	35	mg/kg	06.28.17 03:27	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		99		70-135	%	06.28.17 03:27
o-Terphenyl	100		96		70-135	%	06.28.17 03:27

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3021299 | Matrix: Solid | Date Prep: 06.30.17
MB Sample Id: 727062-1-BLK | LCS Sample Id: 727062-1-BKS | LCSD Sample Id: 727062-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0979	98	0.102	103	70-130	4	35	mg/kg	06.30.17 08:59	
Toluene	<0.00199	0.0996	0.0902	91	0.0932	94	70-130	3	35	mg/kg	06.30.17 08:59	
Ethylbenzene	<0.00199	0.0996	0.0958	96	0.104	105	71-129	8	35	mg/kg	06.30.17 08:59	
m_p-Xylenes	<0.00398	0.199	0.168	84	0.182	92	70-135	8	35	mg/kg	06.30.17 08:59	
o-Xylene	<0.00199	0.0996	0.0895	90	0.0941	95	71-133	5	35	mg/kg	06.30.17 08:59	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		92		97		80-120	%	06.30.17 08:59
4-Bromofluorobenzene	108		106		100		80-120	%	06.30.17 08:59

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3021391 | Matrix: Solid | Date Prep: 06.30.17
MB Sample Id: 727129-1-BLK | LCS Sample Id: 727129-1-BKS | LCSD Sample Id: 727129-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0852	86	0.0832	83	70-130	2	35	mg/kg	07.01.17 03:00	
Toluene	<0.00199	0.0996	0.0808	81	0.0808	81	70-130	0	35	mg/kg	07.01.17 03:00	
Ethylbenzene	<0.00199	0.0996	0.0873	88	0.0891	89	71-129	2	35	mg/kg	07.01.17 03:00	
m_p-Xylenes	<0.00398	0.199	0.166	83	0.162	81	70-135	2	35	mg/kg	07.01.17 03:00	
o-Xylene	<0.00199	0.0996	0.0825	83	0.0897	90	71-133	8	35	mg/kg	07.01.17 03:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	86		90		96		80-120	%	07.01.17 03:00
4-Bromofluorobenzene	81		85		89		80-120	%	07.01.17 03:00

QC Summary 556361

COG Operating LLC

CCAP State #6H

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

Seq Number: 3021299 Matrix: Soil Date Prep: 06.30.17

Parent Sample Id: 556361-001 MS Sample Id: 556361-001 S MSD Sample Id: 556361-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0673	67	0.0370	37	70-130	58	35	mg/kg	06.30.17 09:31	XF
Toluene	<0.00200	0.0998	0.0572	57	0.0370	37	70-130	43	35	mg/kg	06.30.17 09:31	XF
Ethylbenzene	<0.00200	0.0998	0.0547	55	0.0287	29	71-129	62	35	mg/kg	06.30.17 09:31	XF
m_p-Xylenes	<0.00399	0.200	0.0938	47	0.0520	26	70-135	57	35	mg/kg	06.30.17 09:31	XF
o-Xylene	<0.00200	0.0998	0.0533	53	0.0325	33	71-133	48	35	mg/kg	06.30.17 09:31	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		89		80-120	%	06.30.17 09:31
4-Bromofluorobenzene	90		87		80-120	%	06.30.17 09:31

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

Seq Number: 3021391 Matrix: Soil Date Prep: 06.30.17

Parent Sample Id: 556362-001 MS Sample Id: 556362-001 S MSD Sample Id: 556362-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.0779	78	0.0706	70	70-130	10	35	mg/kg	07.01.17 03:32	
Toluene	<0.00199	0.0996	0.0789	79	0.0689	68	70-130	14	35	mg/kg	07.01.17 03:32	X
Ethylbenzene	<0.00199	0.0996	0.0784	79	0.0662	66	71-129	17	35	mg/kg	07.01.17 03:32	X
m_p-Xylenes	<0.00398	0.199	0.145	73	0.136	67	70-135	6	35	mg/kg	07.01.17 03:32	X
o-Xylene	<0.00199	0.0996	0.0809	81	0.0675	67	71-133	18	35	mg/kg	07.01.17 03:32	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	111		118		80-120	%	07.01.17 03:32
4-Bromofluorobenzene	120		120		80-120	%	07.01.17 03:32

CHAIN OF CUSTODY

Page 1 Of 1

XENCO LABORATORIES

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Stafford,Texas (281-240-4200) | San Antonio, Texas (210-509-3334) | Phoenix, Arizona (480-355-0900)

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

www.xenco.com

Xenco Quote # | Xenco Job # 5563361

Client / Reporting Information

Company Name / Branch: COG Operating LLC

Company Address: 2407 PECOS Avenue Artesia NM 88210

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

Project Contact: Aaron Lieb

Samplers's Name- Aaron Lieb

Project Information

Project Name/Number: CCAP State #6H

Project Location: CCAP State #6H

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

PO Number:

Analytical Information

Matrix Codes

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

No.	Field ID / Point of Collection	Collection: Sample Depth	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	TPH	BTEX	Chloride	Field Comments
1	AH 1-Surface	SURF	6/22/17	2:00pm	S	1									X	X	X	
2	AH1-1'	1'	6/22/17	2:00pm	S	1									X	X	X	
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Turnaround Time (Business days)

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

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

Data Deliverable Information

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

Temp: 1.3 IR ID:R-8
CF:(0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 1.1

FED-EX / UPS: Tracking #

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		6/26/17 10:00 AM	Sid Butler 6-26-17 10:00A	Sid Butler 11:45	6-26-17	
2						
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
4						
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: X
						Cooler Temp. 26°

Thermo. Corr. Factor

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

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: COG Operating LLC

Date/ Time Received: 06/27/2017 10:15:00 AM

Work Order #: 556361

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

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.7
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seal present on shipping container/ cooler?	**N/A**
#5 *Custody Seals intact on shipping container/ cooler?	**N/A**
#6 Custody Seals intact on sample bottles?	**N/A**
#7 *Custody Seals Signed and dated?	**N/A**
#8 *Chain of Custody present?	**Yes**
#9 Sample instructions complete on Chain of Custody?	**Yes**
#10 Any missing/extra samples?	**No**
#11 Chain of Custody signed when relinquished/ received?	**Yes**
#12 Chain of Custody agrees with sample label(s)?	**Yes**
#13 Container label(s) legible and intact?	**Yes**
#14 Sample matrix/ properties agree with Chain of Custody?	**Yes**
#15 Samples in proper container/ bottle?	**Yes**
#16 Samples properly preserved?	**Yes**
#17 Sample container(s) intact?	**Yes**
#18 Sufficient sample amount for indicated test(s)?	**Yes**
#19 All samples received within hold time?	**Yes**
#20 Subcontract of sample(s)?	**N/A**
#21 VOC samples have zero headspace?	**N/A**

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

Analyst: PH Device/Lot#:

Checklist completed by: Jessica Kramer Date: 06/27/2017
Jessica Kramer

Checklist reviewed by: Kelsey Brooks Date: 06/27/2017
Kelsey Brooks

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

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

CONDITIONS

Action 167787

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 167787
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	2/7/2023