

October 24, 2017

Olivia Yu
Oil Conservation Division, District 1
1625 French Drive
Hobbs, NM 88240

APPROVED

By Olivia Yu at 10:22 am, Oct 25, 2018

Amber Groves
New Mexico State Land Office
2827 N. Dal Paso Suite 117
Hobbs, NM 88260

Re: Closure Request Letter
Grey Hawk State #001H (1RP-4630)
API #: 30-025-41193
Unit Letter P, Section 31, Township 21S, Range 34E
Lea County, NM

Ms. Yu / Ms. Groves,

COG Operating LLC (COG) is pleased to submit for your consideration the following Closure Request for the Grey Hawk State #001H Flare Fire. The flare fire occurred on February 27, 2017 and impacted an area of pasture adjacent to the flare. This closure letter is in response to a request from the NMOCD that a soil sample be collected from the burned pasture.

On July 19, 2017, a COG representative collected a soil sample from the impacted area. The depth to groundwater is greater than fifty (50) feet below ground surface (bgs), therefore the site ranking is ten (10). Analytical results indicate no significant impact to the pasture and are provided below.

Grey Hawk State #001H February 27, 2017					
P-31-21S-34E					
Sample ID	Date	Chloride mg/Kg	Benzene mg/Kg	BTEX mg/Kg	TPH mg/Kg
CS-1 6"	7/19/2017	<4.98	<0.00200	<0.00200	776

COG Operating LLC respectfully requests that the NMOCD and SLO grant closure approval for the Grey Hawk State #001H Flare Fire incident that occurred on February 27, 2017. If you have any questions or concerns please contact me.

October 24, 2017

Sincerely,



Rebecca Haskell
Senior HSE Coordinator
rhaskell@concho.com



Enclosed:

- (1) Site Diagram
- (2) Laboratory Analytical Reports and Chain-of-Custody Forms
- (3) Initial C-141
- (4) Final C-141

Grey Hawk State #1H

Flare Sample

Legend

-  Misted Area
-  SP-1 6"

Sp-1 6"

Google earth

© 2017 Google



90 ft



Certificate of Analysis Summary 558119

COG Operating, LLC, Midland, TX

Project Name: Grey Hawk State #1H



Project Id:

Contact: Rebecca Haskell

Project Location: Lea County, New Mexico

Date Received in Lab: Thu Jul-20-17 03:54 pm

Report Date: 28-JUL-17

Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	558119-001					
	Field Id:	CS-1 6"					
	Depth:	6- In					
	Matrix:	SOIL					
	Sampled:	Jul-19-17 00:00					
BTEX by EPA 8021B	Extracted:	Jul-25-17 09:00					
	Analyzed:	Jul-25-17 17:11					
	Units/RL:	mg/kg RL					
Benzene		<0.00200 0.00200					
Toluene		<0.00200 0.00200					
Ethylbenzene		<0.00200 0.00200					
m,p-Xylenes		<0.00399 0.00399					
o-Xylene		<0.00200 0.00200					
Total Xylenes		<0.00200 0.00200					
Total BTEX		<0.00200 0.00200					
Inorganic Anions by EPA 300/300.1	Extracted:	Jul-25-17 12:45					
	Analyzed:	Jul-25-17 18:48					
	Units/RL:	mg/kg RL					
Chloride		<4.98 4.98					
TPH By SW8015 Mod	Extracted:	Jul-26-17 11:00					
	Analyzed:	Jul-26-17 15:15					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0					
Diesel Range Organics (DRO)		776 15.0					
Oil Range Hydrocarbons (ORO)		<15.0 15.0					
Total TPH		776 15.0					

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

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

Kelsey Brooks
Project Manager

Analytical Report 558119

**for
COG Operating, LLC**

Project Manager: Rebecca Haskell

Grey Hawk State #1H

28-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)



28-JUL-17

Project Manager: **Rebecca Haskell**

COG Operating, LLC

600 W Illinois

Midland, TX 79701

Reference: XENCO Report No(s): **558119**

Grey Hawk State #1H

Project Address: Lea County, New Mexico

Rebecca Haskell:

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) 558119. 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. 558119 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks

Project Manager

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Sample Cross Reference 558119



COG Operating, LLC, Midland, TX

Grey Hawk State #1H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CS-1 6"	S	07-19-17 00:00	6 In	558119-001



CASE NARRATIVE

Client Name: COG Operating, LLC

Project Name: Grey Hawk State #1H

Project ID:

Work Order Number(s): 558119

Report Date: 28-JUL-17

Date Received: 07/20/2017

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3023231 BTEX by EPA 8021B

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



Certificate of Analytical Results 558119



COG Operating, LLC, Midland, TX

Grey Hawk State #1H

Sample Id: **CS-1 6"**
Lab Sample Id: 558119-001

Matrix: Soil
Date Collected: 07.19.17 00.00

Date Received: 07.20.17 15.54
Sample Depth: 6 In

Analytical Method: Inorganic Anions by EPA 300/300.1
Tech: RHE
Analyst: MGO
Seq Number: 3023232

Date Prep: 07.25.17 12.45

Prep Method: E300P
% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.98	4.98	mg/kg	07.25.17 18.48	U	1

Analytical Method: TPH By SW8015 Mod
Tech: ARM
Analyst: ARM
Seq Number: 3023421

Date Prep: 07.26.17 11.00

Prep Method: TX1005P
% Moisture:
Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	07.26.17 15.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	776	15.0	mg/kg	07.26.17 15.15		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	07.26.17 15.15	U	1
Total TPH	PHC635	776	15.0	mg/kg	07.26.17 15.15		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	91	%	70-135	07.26.17 15.15		
o-Terphenyl	84-15-1	101	%	70-135	07.26.17 15.15		



Certificate of Analytical Results 558119



COG Operating, LLC, Midland, TX

Grey Hawk State #1H

Sample Id: **CS-1 6"**
Lab Sample Id: 558119-001

Matrix: Soil
Date Collected: 07.19.17 00.00

Date Received: 07.20.17 15.54
Sample Depth: 6 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 07.25.17 09.00

Basis: Wet Weight

Seq Number: 3023231

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.25.17 17.11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.25.17 17.11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.25.17 17.11	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	07.25.17 17.11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.25.17 17.11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.25.17 17.11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.25.17 17.11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	99	%	80-120	07.25.17 17.11		
4-Bromofluorobenzene	460-00-4	97	%	80-120	07.25.17 17.11		

- 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

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 9701 Harry Hines Blvd , Dallas, TX 75220
 5332 Blackberry Drive, San Antonio TX 78238
 1211 W Florida Ave, Midland, TX 79701
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(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(432) 563-1800	(432) 563-1713
(602) 437-0330	



QC Summary 558119

COG Operating, LLC

Grey Hawk State #1H

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3023232

Matrix: Solid

Prep Method: E300P

MB Sample Id: 728189-1-BLK

LCS Sample Id: 728189-1-BKS

Date Prep: 07.25.17

LCSD Sample Id: 728189-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	250	100	249	100	90-110	0	20	mg/kg	07.25.17 18:32	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3023232

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 558119-001

MS Sample Id: 558119-001 S

Date Prep: 07.25.17

MSD Sample Id: 558119-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.98	249	267	107	265	106	90-110	1	20	mg/kg	07.25.17 18:55	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3023232

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 558155-004

MS Sample Id: 558155-004 S

Date Prep: 07.25.17

MSD Sample Id: 558155-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.98	249	296	119	296	119	90-110	0	20	mg/kg	07.25.17 20:43	X

Analytical Method: TPH By SW8015 Mod

Seq Number: 3023421

Matrix: Solid

Prep Method: TX1005P

MB Sample Id: 728351-1-BLK

LCS Sample Id: 728351-1-BKS

Date Prep: 07.26.17

LCSD Sample Id: 728351-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1030	103	1020	102	70-135	1	35	mg/kg	07.26.17 11:57	
Diesel Range Organics (DRO)	<15.0	1000	1020	102	1030	103	70-135	1	35	mg/kg	07.26.17 11:57	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	125		128		127		70-135	%	07.26.17 11:57
o-Terphenyl	92		101		90		70-135	%	07.26.17 11:57



QC Summary 558119

COG Operating, LLC

Grey Hawk State #1H

Analytical Method: TPH By SW8015 Mod

Seq Number: 3023421

Parent Sample Id: 558118-001

Matrix: Soil

MS Sample Id: 558118-001 S

Prep Method: TX1005P

Date Prep: 07.26.17

MSD Sample Id: 558118-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1010	101	978	98	70-135	3	35	mg/kg	07.26.17 12:57	
Diesel Range Organics (DRO)	<15.0	1000	1080	108	1030	103	70-135	5	35	mg/kg	07.26.17 12:57	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		114		70-135	%	07.26.17 12:57
o-Terphenyl	76		77		70-135	%	07.26.17 12:57

Analytical Method: BTEX by EPA 8021B

Seq Number: 3023231

MB Sample Id: 728221-1-BLK

Matrix: Solid

LCS Sample Id: 728221-1-BKS

Prep Method: SW5030B

Date Prep: 07.25.17

LCSD Sample Id: 728221-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.112	112	0.114	114	70-130	2	35	mg/kg	07.25.17 09:24	
Toluene	<0.00200	0.0998	0.115	115	0.116	116	70-130	1	35	mg/kg	07.25.17 09:24	
Ethylbenzene	<0.00200	0.0998	0.121	121	0.123	123	71-129	2	35	mg/kg	07.25.17 09:24	
m,p-Xylenes	<0.00399	0.200	0.235	118	0.239	119	70-135	2	35	mg/kg	07.25.17 09:24	
o-Xylene	<0.00200	0.0998	0.120	120	0.124	124	71-133	3	35	mg/kg	07.25.17 09:24	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		89		95		80-120	%	07.25.17 09:24
4-Bromofluorobenzene	107		101		113		80-120	%	07.25.17 09:24

Analytical Method: BTEX by EPA 8021B

Seq Number: 3023231

Parent Sample Id: 558118-001

Matrix: Soil

MS Sample Id: 558118-001 S

Prep Method: SW5030B

Date Prep: 07.25.17

MSD Sample Id: 558118-001 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	0.0767	77	0.0909	91	70-130	17	35	mg/kg	07.25.17 10:01	
Toluene	<0.00199	0.0996	0.0783	79	0.0902	90	70-130	14	35	mg/kg	07.25.17 10:01	
Ethylbenzene	<0.00199	0.0996	0.0809	81	0.0906	91	71-129	11	35	mg/kg	07.25.17 10:01	
m,p-Xylenes	<0.00398	0.199	0.157	79	0.173	87	70-135	10	35	mg/kg	07.25.17 10:01	
o-Xylene	<0.00199	0.0996	0.0820	82	0.0865	87	71-133	5	35	mg/kg	07.25.17 10:01	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		102		80-120	%	07.25.17 10:01
4-Bromofluorobenzene	115		120		80-120	%	07.25.17 10:01



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: COG Operating, LLC

Date/ Time Received: 07/20/2017 03:54:00 PM

Work Order #: 558119

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

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

Analyst:

PH Device/Lot#:

Checklist completed by:

Shawnee Smith

Date: 07/21/2017

Checklist reviewed by:

Kelsey Brooks

Date: 07/21/2017

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	Contact:	Robert McNeill
Address:	600 West Illinois Avenue, Midland TX 79701	Telephone No.	432-683-7443
Facility Name:	GREY HAWK STATE #001H	Facility Type:	Flare
Surface Owner:	State	Mineral Owner:	API No. 30-025-41193

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	31	21S	34E	190'	South	330'	East	Lea

Latitude 32.4285278 Longitude 103.501564

NATURE OF RELEASE

Type of Release:	Oil	Volume of Release:	.25bbls of Oil	Volume Recovered:	0bbls of Oil
Source of Release:	Flare (Fire)	Date and Hour of Occurrence:	02/27/2017 07:30 am	Date and Hour of Discovery:	02/27/2017 07:30 am
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Ms. Yu - NMOCD / Ms. Groves		
By Whom?	Robert Grubbs Jr.	Date and Hour:	02/28/2016	Time of this email.	
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

RECEIVED

By Olivia Yu at 8:57 am, Mar 13, 2017

Describe Cause of Problem and Remedial Action Taken.*

The oil dump on the FWKO failed to close causing the oil to flow out the gas line into the flare. Repaired the oil dump on the FWKO. The fire was quickly extinguished itself due to the limited amount of fluid that escaped the flare.

Describe Area Affected and Cleanup Action Taken.*

This release was located in the pasture. No fluid to recover due to the fire burning off any standing fluids.

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

Signature:	OIL CONSERVATION DIVISION		
Printed Name:	Robert Grubbs Jr.	Approved by Environmental Specialist:	
Title:	Senior HSE Coordinator	Approval Date:	3/13/2017
E-mail Address:	rgrubbs@concho.com	Expiration Date:	
Date:	February 28, 2017	Conditions of Approval:	see attached directive
Phone:	432-683-7443	Attached	<input checked="" type="checkbox"/>

* Attach Additional Sheets If Necessary

nOY1706258917

1RP-4630

pOY1707232347

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 2/28/2017 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 1R-4630 has been assigned. **Please refer to this case number in all future correspondence.**

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

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

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 1 office in Hobbs on or before 4/13/2017. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

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

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

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

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

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

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

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

Jim Griswold

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

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	Contact:	Robert McNeill
Address:	600 West Illinois Avenue, Midland TX 79701	Telephone No.	432-683-7443
Facility Name:	GREY HAWK STATE #001H	Facility Type:	Flare
Surface Owner:	State	Mineral Owner:	State
		API No.	30-025-41193

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	31	21S	34E	190'	South	330'	East	Lea

Latitude 32.4285278 Longitude 103.501564

NATURE OF RELEASE

Type of Release:	Oil	Volume of Release:	.25bbls of Oil	Volume Recovered:	0bbls of Oil
Source of Release:	Flare (Fire)	Date and Hour of Occurrence:	02/27/2017 07:30 am	Date and Hour of Discovery:	02/27/2017 07:30 am
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Ms. Yu - NMOCD / Ms. Groves		
By Whom?	Robert Grubbs Jr.	Date and Hour:	02/28/2016	Time of this email.	
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

APPROVED

By Olivia Yu at 10:22 am, Oct 25, 2018

Describe Cause of Problem and Remedial Action Taken.*

The oil dump on the FWKO failed to close causing the oil to flow out the gas line into the flare. Repaired the oil dump on the FWKO. The fire was quickly extinguished itself due to the limited amount of fluid that escaped the flare.

Describe Area Affected and Cleanup Action Taken.*

This release was located in the pasture. No fluid to recover due to the fire burning off any standing fluids. The pasture was sampled on July 19, 2017, and analytical results indicated no significant impact to the pasture was present.

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: <i>Rebecca Haskell</i>	OIL CONSERVATION DIVISION		
Printed Name: Rebecca Haskell	Approved by Environmental Specialist: <i>ay</i>		
Title: Senior HSE Coordinator	Approval Date: 10/25/2018	Expiration Date: xx/xx/xxxx	
E-mail Address: rhaskell@concho.com	Conditions of Approval: NMSLO approval		Attached <input type="checkbox"/>
Date: October 24, 2017	Phone: 432-683-7443		

* Attach Additional Sheets If Necessary

1RP-4630