NM OIL CONSERVATION

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

* Attach Additional Sheets If Necessary

State of New Mexico Energy Minerals and Natural Resources

MAR 02 2018

Form C-141 Revised April 3, 2017

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in EL Leoprdance with 19.15.29 NMAC.

Release Notification and Corrective Action													
NAB18					OPERA	ГOR			al Report_		Final Report		
Name of Company: COG Operating, LLC (OGRID# 229137) Address: 600 West Illinois Avenue, Midland TX 79701						Contact: Robert McNeill							
Facility Name: Glacier Federal Com #001H						Telephone No.: 432-683-7443 Facility Type: Tank Battery							
Surface Owner: BLM Mineral Owner													
									AFT No.: 50-015-43131				
Unit Letter	Castion	Tarmahin	Damas	LOCA Feet from the		N OF RE	Feet from the	T E 4/1	West Line	Country			
A	Section 24	Township 26S	Range 25E	330		North	560		East	County	Eddy	y	
Latitude: 32.03433384 Longitude:-104.34251690 NAD83													
NATURE OF RELEASE													
Type of Release: Produced Water						Volume of Release: 334bbls			Volume Recovered: 330bbls				
Source of Release: Filter Pot						Date and Hour of Occurrence: 2/27/2018			Date and Hour of Discovery: 2/27/2018 10:00am				
Was Immediate Notice Given? ☐ Yes ☐ No ☐ Not Required						If YES, To Whom? Crystal Weaver-NMOCD Shelly Tucker-BLM							
By Whom? Sheldon Hitchcock						Date and Hour: 2/27/2018 1:31pm							
Was a Watercourse Reached? ☐ Yes ☐ No						If YES, Volume Impacting the Watercourse.							
If a Watercou	ırse was Im	pacted, Descri	ibe Fully.*				· · · · · · · · · · · · · · · · · · ·						
Describe Cause of Problem and Remedial Action Taken.*													
		the filter pot is and Cleanup A		to corrosion. The	plug wa	as replaced w	ith a stainless stee	el plug.		····			
		-			. •	. 7721	.,						
				lined secondary co ecover all freestan									
release and w	ve will prese	ent a remediat	ion work p	olan to the NMOC	D for a	ipproval prioi	to any significan	t remed	iation activ	ities.			
regulations a public health should their or or the environ	Il operators or the envi operations h nment. In a	are required to ronment. The nave failed to a	o report ar acceptance adequately OCD accep	is true and completed or file certain rece of a C-141 report investigate and retained of a C-141 report investigate and restance of a C-141 report in the certain cert	elease nort by the emediate	notifications a ne NMOCD n te contaminat	nd perform corre- narked as "Final R ion that pose a the	ctive act Report" of reat to g	ions for rel does not rel round wate	eases which lieve the ope r, surface w	may en rator of ater, hu	ndanger f liability ıman health	
							OIL CON	SERV	ATION	DIVISIO	<u> </u>		
Signature: Sheldon Juiton						Approved by Environmental Specialist:							
Printed Name: Sheldon L. Hitchcock													
Title: HSE C	oordinator					Approval Da	ite: 3 5 18	5	Expiration	Date: N	A		
E-mail Address: slhitchcock@concho.com						Conditions of Approval: See attached Attached ZRP-4642							
Date: 3/2/2018 Phone: 575-746-2010													

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 3/2/2018 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 289-4642 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 <u>division-approved corrective action</u> 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 $\underline{2}$ office in $\underline{ARTESIA}$ on or before $\underline{4/2/2018}$. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.

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

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

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

- •Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.
- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.
- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

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

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

Bratcher, Mike, EMNRD

From: Sheldon Hitchcock <SLHitchcock@concho.com>

Sent: Friday, March 2, 2018 1:21 PM

To: 'Shelly Tucker'; Weaver, Crystal, EMNRD; Bratcher, Mike, EMNRD

Cc: Robert McNeill; Rebecca Haskell; Dakota Neel; Christopher Gray; DeAnn Grant

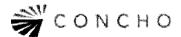
Subject: (C-141 Initial) Glacier Federal Com #001H (30-015-43131) 2-27-2018 **Attachments:** (C-141 Initial) Glacier Federal Com #001H (30-015-43131) 2-27-2018.pdf

Ms. Weaver/Ms. Tucker,

Please see attached C-141 for your consideration. If you have any questions or concerns please let me know.

Thank you,

Sheldon L. Hitchcock
HSE Coordinator
COG Operating LLC
2407 Pecos Avenue | Artesia, NM 88210
Cell: 575-703-6475 | Office: 575-746-2010
slhitchcock@concho.com



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

NOTICE: The information in this email may be confidential and/or privileged. If you are not the intended recipient or an authorized representative of the intended recipient, you are hereby notified that any review, dissemination or copying of this email and its attachments, if any, or the information contained herein, is prohibited. If you have received this email in error, please immediately notify the sender by return email and delete this email from your system. Further, any contract terms proposed or purportedly accepted in this email are not binding and are subject to management's final approval as memorialized in a separate written instrument, excluding electronic correspondence, executed by an authorized representative of COG Operating LLC or its affiliates.