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 to accordance with 19.15.29 NMAC.

220 S. St. Francis Dr., Santa Fe, NM 87505 Sa	anta Fe	, NM 875	505							
Release Notific	cation	and Co	orrective A	ction	l					
	OPERATOR			🛛 Initial Report 🗌 Final Rep						
			Contact Lisa Hunter							
			Telephone No. (505) 258-1607							
Facility Name: Bolin Hardie #1		Facility Typ	be: Gas Well							
Surface Owner Federal – BLM Mineral Owner			Federal – SF-078049-A A				API No. 300-45-20126			
LOCA	ATION	OF RE	LEASE							
Unit LetterSectionTownshipRangeFeet from theD34T29N08W880'	1000 1000000000000000	South Line FNL	Feet from the 1170'	a second second	/West Line County FWL San Juan					
Latitude <u>36</u> .	.687259	Longitu	de <u>-107.66847</u>							
	ΓURE	OF REL					THAT IS NOT			
Type of Release Produced Water			Volume of Release 19 bbl			Volume Recovered 18 bbl				
Source of Release Pit tank – Corrosion			Date and Hour of Occurrence Unknown			Date and Hour of Discovery 3/19/17 3:04 p.m.				
Was Immediate Notice Given?		If YES, To			5/17/17	5.04 p.m.				
🗌 Yes 🔲 No 🛛 Not Re	equired									
By Whom?	Date and Hour									
Was a Watercourse Reached?			If YES, Volume Impacting the Watercours OIL CONS. DIV DIST. 3							
If a Watercourse was Impacted, Describe Fully.*						MAR 2	7 201	7		
N/A						MAN	201	(
well. Describe Area Affected and Cleanup Action Taken.* ConocoPhillips will assess the soil to determine a path forward	d for clea	an-up if nec	essary.							
I hereby certify that the information given above is true and comp regulations all operators are required to report and/or file certain r public health or the environment. The acceptance of a C-141 repo should their operations have failed to adequately investigate and r or the environment. In addition, NMOCD acceptance of a C-141 federal, state, or local laws and/or regulations.	release no ort by the remediate	otifications a NMOCD m contaminat	nd perform corre arked as "Final F ion that pose a th	ctive acti Report" d reat to gr	ons for rel oes not rel ound water	eases which ieve the open r, surface wa	may er ator of ter, hu	ndanger Tliability man health		
			OIL CON	ISERV	ATION	DIVISIO	DN			
John WA				C						
Signature:	I	Approved by	Environmental S	Specialist	:\($\langle \rangle$				
Printed Name: Lisa Hunter	La is									
Title: Field Environmental Specialist	I	Approval Da	te: 3 3813	May 1	Expiration	Date:				
E-mail Address: Lisa.Hunter@cop.com	(Conditions o	ons of Approval: For Attached							
Date: March 22, 2017 Phone: (505) 258-1607	C	Chlorides, BTEX, TPH								
Attach Additional Sheets If Necessary	~	oclude	WOOR	Land	2					
	N	JVF1	108721	0690	T					
			10							

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 320200 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 12003662 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 of office in _______ on or before _________. 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 vaters 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 setimate 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 east 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 xtents of that contamination. Groundwater and/or surface water samples, If any, must be analyzed by a competent iboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and ations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide is groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses is use the undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory is 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 ells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit there the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should t be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location d fieldwork is recommended, especially if unusual circumstances are encountered.

thing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by noval cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness emedial efforts must still be provided to the OCD before any release incident will be closed.

a Griswold D Environmental Bureau Chief 20 South St. Francis Drive nta Fe, New Mexico 87505 5-476-3465 1.griswold@state.nm.us