Form C-141 Revised August 8, 2011

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

1220 S. St. Francis Dr., Santa Fe, NM 87505 Santa Fe, NM 87505													
Release Notification and Corrective Action													
							OPERATOR Initial Report					Final Report	
Name of Company Devon Energy Production Company						Contact Mark Kramer, Drilling Supervisor							
Address 6488 Seven Rivers Hwy Artesia, NM 88210						Telephone No. 405-552-7820							
Facility Name Arabian 30-19 Fed Com 2H							pe Oil						
Surface Owner Federal Mineral Owner						Federal			API No 30-025-43773				
				LOCA	TIO	N OF RE	LEASE						
									ist/West Line County West Lea				
Latitude: 32.1018231 Longitude:-103.7177108													
NATURE OF RELEASE													
Type of Release Water Based Mud (WBM)							Volume of Release 5BBLS			Volume Recovered 4.5BBLS			
Source of Release Centrifuge Feed Pump Hose						Date and Hour of Occurrence 8/17/2017 @ 10:00 PM			Date and Hour of Discovery 8/17/2017 @ 10:00 PM				
Was Immediate Notice Given? Xes No Not Required													
By Whom? Mike Shoemaker, Environmental Specialist						BLM-Shelly Tucker Date and Hour							
						OCD- 8/18/2017 @ 9:01 PM BLM- 8/18/2017 @ 9:02 pm							
Was a Watercourse Reached?						If YES, Volume Impacting the Watercourse							
☐ Yes ⊠ No						RECEIVED							
If a Watercourse was Impacted, Describe Fully.* N/A							By Olivia Yu at 7:29 am, Sep 05, 2017						
Describe Cause of Problem and Remedial Action Taken.* While rigging down the solids control equipment, solids control employee disconnected the centrifuge feed pump hose and approximately 5													
barrels of water based mud spilled onto the ground, due to the valve on the mud tanks not being closed. The valve was immediately closed and a peanut pump was used to collect material from pad surface.													
Describe Are	ea Affected	and Cleanu	Action 7	aken.*									
Approximate	ly 5BBLS o	of WBM was a	eleased as	a result of a cent			ng disconnected a						
Approximate	ly 4.5 BBL	S of WBM wa	is recovere	ed via the peanut	pump a	nd scraping th	e location surface	e. All flu	uid stayed o	on the pad lo	cation		
							knowledge and u						
							nd perform correc arked as "Final R						
							on that pose a three						
or the environ	nment. In a	ddition, NMC	CD accep				e the operator of 1						
federal, state, or local laws and/or regulations.													
Signature: <i>Michael R. Shoemaker</i>							OIL CONSERVATION DIVISION						
							#M						
Printed Name: Michael R. Shoemaker						Approved by Environmental Specialist:							
Title: Environmental Specialist						Approval Date: 9/5/2017 Expiration Date:							
E-mail Address: mike.shoemaker@dvn.com						Conditions of	Conditions of Approval:						
						see attached directive							
Date: 08/31/17 Phone: 575.748.3371													

1RP-4799

nOY1724827524

pOY1724828133

* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _8/31/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-4799_ 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 _1_ office in __Hobbs____ on or before _10/5/2017_. 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 1220 South St. Francis Drive Santa Fe, New Mexico 87505 505-476-3465 jim.griswold@state.nm.us

