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

Revised April 3, 2017

Form C-141

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.

Release Notification and Corrective Action												
						<b>OPERATOR</b> $\boxtimes$ I				al Report	☐ Final Report	
							Contact: Stephen Richards					
							Telephone No.: 575-252-3717					
Facility Name: Cotton Draw Unit 506H						Facility Type: Oil						
Surface Owner: BLM Mineral Owner: I						BLM API No.: 30-025-43938						
LOCATION OF RELEASE												
Unit Letter N	Section 18	Township 25S	Range 32E	Feet from the	North/S	South Line	Feet from the	East/W	Vest Line	County LEA		
<b>Latitude</b> 32.124942 <b>Longitude</b> 103.716428 NAD83												
NATURE OF RELEASE												
Type of Release: Produced Water										Recovered: 0 bbls Hour of Discover"		
Source of Release: Lay Flat Line							four of Occurrence 11:30 AM MST	ce:		11:30 AM		
Was Immediate Notice Given?   ☐ Yes ☐ No ☐ Not Required							If YES, To Whom?					
By Whom? Mike Shoemaker / Devon EHS						Date and Hour: 3/2/2018, 6:31 PM MST						
Was a Watercourse Reached? ☐ Yes ☒ No						If YES, Volume Impacting the Watercourse.						
			N/A DECEIVED									
If a Watercourse was Impacted, Describe Fully.* N/A							RECEIVED  By Olivia Yu at 12:10 pm, Mar 21, 2018					
Describe Cause of Problem and Remedial Action Taken.*  During completion operations A 12" layflat hose transferring produced water failed. The lay flat line runs parallel to the Cotton Draw Unit 506H location and the water that was release sprayed towards and landed on the pad location. The following lats/longs have been provided for this release. Point 1 on the GIS image (32.124942, -103.716428) is the most northern point and Point 2 (32.124497, -103.716562) is the most southern point of the release. The water flowed in a westerly direction of these two points. The pumping operations were shut down and the hose was replaced.  Describe Area Affected and Cleanup Action Taken.*												
Approximately 62.32 bbls of produced water was released and none was recovered. A remediation contractor will be contacted to assist with the delineation and remediation of the impacted area.												
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.												
							OIL CON	SERV	ATION	DIVISIO	N	
Signature: Denise Menoud  Printed Name: Denise Menoud							Approved by Environmental Specialist:					
Title:	Field A	,	Approval Date: 3/21/2018 Expiration Date:									
E-mail Address: denise.menoud@dvn.com						Conditions of			1			
	2/2019	DL	716 5511	_	see attached directive							

Phone:

575-746-5544

3/5/2018

<sup>\*</sup> Attach Additional Sheets If Necessary

## Operator/Responsible Party,

The OCD has received the form C-141 you provided on \_3/15/2018\_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number \_1RP-4995\_\_ 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 \_4/21/2018\_. 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; C<sub>6</sub> thru C<sub>36</sub>), 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; C<sub>6</sub> thru C<sub>36</sub>), 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

# CDU 506H Spill 3.2.18 62 BPW, Rec 0 BPW This map is for illustrative purposes only and is neither a legally recorded map nor survey and is not intended to be used as one. Devon makes no warranty, representation, or guarantee of any kind regarding this map. devon

WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere Prepared by: \_User Map is current as of: 15-Mar-2018



Miles 0.04 1:1,779

- DVN Currently Frac'ing
- Surface Hole (ACT-DVN/OBO)
- o Other
- Oil Producing Well
- Gas Producing Well Oil and Gas Producing Well
- Drilling or Completing
- \ Injection Well Salt Water Disposa
- X Shut In

(DVN/OBO)

- Devon Operated
- ✓ OBO or FIN

Surface Hole (ACT-COMPETITOR)

- o Other
- Deviated Surface
- Oil Producing Well Gas Producing Well
- Oil and Gas Producing Well
- Drilling or Completing
- \ Injection Well
- Salt Water Disposal Well
- Shut In
- Bore Path (ACT-COMPETITOR)

S18 - 25S - 32E Lat: 32.124942° N Long: 103.716428° W **CDU 506H** Lat: 32.124497° N Long: 103.716562° W

From: Shoemaker, Mike

To: Yu, Olivia, EMNRD; Shelly Tucker (stucker@blm.gov)

Cc: Fulks, Brett

**Subject:** Cotton Draw Unit 506H (API #30-025-43938)

**Date:** Friday, March 2, 2018 6:30:56 PM

Attachments: image001.png

### Good Evening,

Devon had the following release occur at 11:30 AM MST on 03/02/18. The incident is described below.

- 1. Cotton Draw Unit 506H (API #30-025-43938)
  - a. A 12" layflat hose transferring produced water failed. The lay flat line runs parallel to the Cotton Draw Unit 506H location and the water that was release sprayed towards and landed on the pad location. The root cause of the failure is still under investigation. Approximately 62.32 bbls of produced water was released and none was recovered.

A C-141 will be prepared and submitted with GPS coordinates of the area affected.

Thanks,

Mike Shoemaker EHS Representative

### **Devon Energy Corporation**

6488 Seven Rivers Highway Artesia, New Mexico 88210 575-746-5566 Office 575-513-5035 Mobile



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