**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**

		OPERATOR	Initial Report	Final Report
Name of Company Devon Energy Production C	Co LP (6137)	Contact Stephen Richards, Devon	<b>Completions Forema</b>	n
Address PO BOX 250, Artesia, NM 88211		Telephone No. (575) 252-3717		
Facility Name: Transfer line from Ursula Frac	Facility Type Oil well			
North Thistle 2 State 2H				
Surface Owner: See Page 2 Location of Release	Mineral Owner:	See Page 2 Location of Release	API No. 30-025-4	12821

#### LOCATION OF RELEASE: Please see Page 2 for locations of the spills related to this incident.

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County	
		23S	33E					Lea	

Latitude See Page 2 Location of Release Longitude See Page 2 Location of Release

### NATURE OF RELEASE

Type of Release: Treated Produced Water	Volume of Release: 355 bbls t	otal Volume Recovered: 250 bbls (on pad)
	(pad and past	ure)
Source of Release: Lay Flat Hose	Date and Hour of Occurrence:	Date and Hour of Discovery
	10/23/2017, 6:00 & 7:30 PM	M 10/23/2017, 6:00 & 7:30 PM
Was Immediate Notice Given?	If YES, To Whom?	
🛛 Yes 🗌 No 🗌 Not Required	OCD: Olivia Yu	RECEIVED
-	BLM: Shelly Tucker	By Olivia Yu at 7:48 am, Nov 17, 2017
By Whom?	Date and Hour:	<b>by</b> child it d dt i i c d di, i c t i i, 2017)
Mike Shoemaker, EHS Professional	OCD: 10/25/17, 7:24 AM	
	BLM: 10/25/17, 7:24 AM	
Was a Watercourse Reached?	If YES, Volume Impacting the	Watercourse.
🗌 Yes 🖾 No	NA	
If a Watercourse was Impacted, Describe Fully.* NA		
Describe Cause of Problem and Remedial Action Taken.*		

At 6:00 PM, the lay flat hose transferring treated produced water from the Ursula frac pond to location failed at Site #1 (see attached GIS map). The frac went from flush and then shut down, releasing produced water to the ground. Repairs were made to the hose and completion activities resumed. At 7:30 PM, there were four additional failures along the line. Completion activities shut down. The line is being replaced.

Describe Area Affected and Cleanup Action Taken.\* There were a total of five different spill sites from the pond to the pad location along the lay flat line, which are identified on the attached GIS map with their respective chronologic number. The estimated square footage affected be each release is as follows: 1) 5,600' 2) 7,744' 3) 400' 4) 1,974' 5) 115,480'. An estimated 355 barrels total of treated produced water were spilled and 250 barrels were recovered from the combined locations. A remediation contractor will be contacted to assist with the delineation and remediation efforts.

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: Denise Menaud	OIL CONSERVATION	OIL CONSERVATION DIVISION					
Printed Name: Denise Menoud	Approved by Environmental Specialist:						
Title: Admin Field Support	Approval Date: 11/17/2017 Expiration	Date:					
E-mail Address: denise.menoud@dvn.com Date: 10/25/2017 Phone: (575)746-5544	Conditions of Approval: See attached directive	Attached					
* Attach Additional Sheets If Necessary	1RP-4868 nOY1732130408	pOY1732130912					

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 - PAGE 2

PERATOR 🛛	Initial Report		Final Report
act Stephen Richards, Devon Con	mpletions Forema	n	
phone No. (575) 252-3717			
lity Type Oil well			
lity	Type Oil well	Type Oil well	Type Oil well

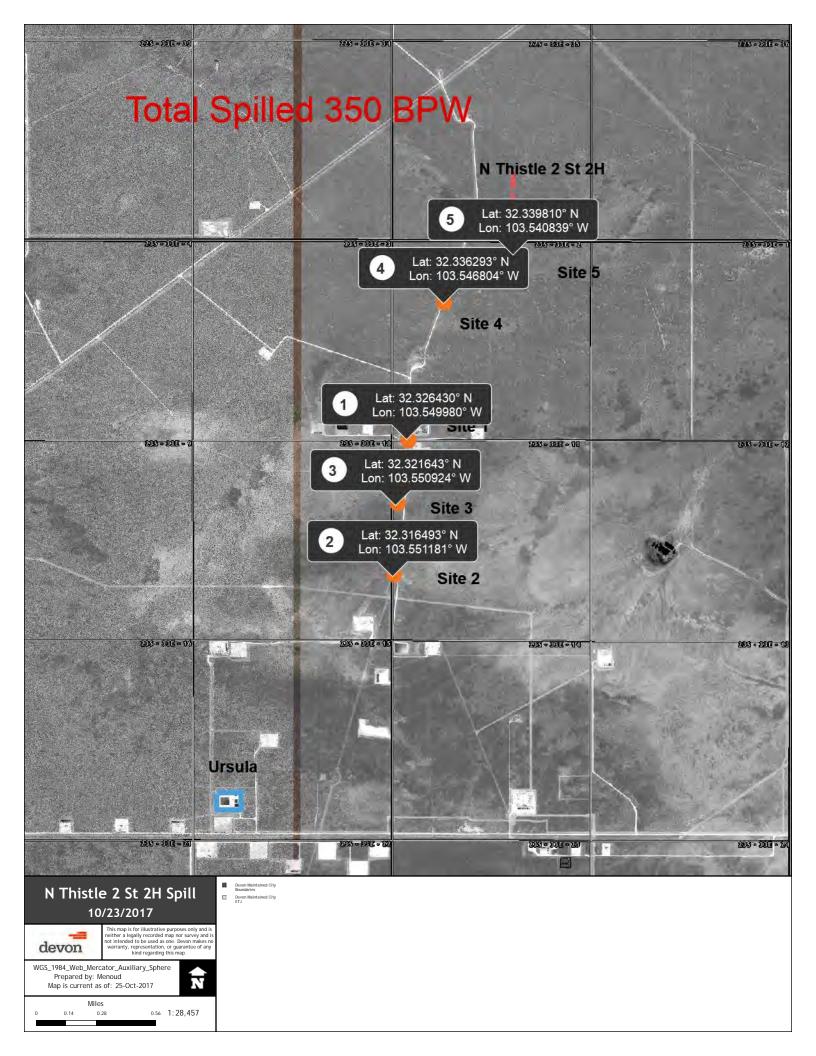
Surface Owner: State / Federal	Mineral Owner: State / Federal	API No. 30-025-42821		

## LOCATION OF RELEASES:

Unit Letter	<b>Section</b>	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
		23S	33E					Lea

SITE 1) M-02-23S-33E, 32.326430 N, 103.549980 W (Surface Owned)	er-State, Mineral Owner-Federal) 1	1-D						
SITE 2) L-11-23S-33E, 32.316493 N, 103.551181 W (Surface Owner	r-State, Mineral Owner-Federal)							
SITE 3) E-11-23S-33E, 32.321643 N, 103.550924 W (Surface Owner-State, Mineral Owner-Federal)								
SITE 4) F-02-23S-33E, 32.336293 N, 103.546804 W (Surface Owner-State, Mineral Owner-State)								
SITE 5) B-02-23S-33E, 32.339810 N, 103.540839 W(Surface Owner-State, Mineral Owner-State)								
	OIL CONSER	VATION	DIVISION					
Signature: Denise Menoud Printed Name: Denise Menoud	Approved by Environmental Special	list:						
Title: Admin Field Support	Approval Date:	Expiration D	Date:					
E-mail Address: denise.menoud@dvn.com Date: 10/25/2017 Phone: (575)746-5544	Conditions of Approval:		Attached					

\* Attach Additional Sheets If Necessary



Operator/Responsible Party,

The OCD has received the form C-141 you provided on \_11/6/2017\_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number \_1RP-4868\_ 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 \_12/17/2017\_. 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; 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