<u>District I</u> 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**

Form C-141 Revised April 3, 2017

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

						, NM 8/5		_	
Release Notification and Corrective Action Thit only									
Name of Company Devon Energy Production Company///37						OPERATOR Initial Report Final Papers			
						t Wesley Ryan, Production Foreman one No. 575-513-5436			
						Facility Type Oil			
Unit Letter Section Township Range Feet from the North/South Line Feet from the East/West Line County									
Unit Letter E	Section 22	Township 22S	Range 27E	Feet from the	North/S	South Line Feet from the East/West Line County Eddy			
Latitude 32.38218 Longitude 104.18518NAD83									
NATURE OF RELEASE									
Type of Release Produced Water						Volume of Release Volume Recovered 590 bbls 590 bbls			
Source of Release						Date and Hour of Occurrence Date and Hour of Discovery			
N/A Was Immediate Notice Given?						11/14/2017 @ 1:30AM MST			
Yes ☐ No ☐ Not Required						OCD-Mike Bratcher & Crystal Weaver			
By Whom? Mike Shoemaker, EHS Professional						Date and Hour OCD-11/15/2017 @ 6:36 AM MST			
Was a Watercourse Reached?						If YES, Volume Impacting the Watercourse.			
☐ Yes ⊠ No									
If a Watercourse was Impacted, Describe Fully.* N/A									
Describe Cause of Problem and Remedial Action Taken.* The lease operator received a high level alarm and responded to the site. Once on-site it was observed that there was produced water built up in the lined SPCC containment ring. The operator located a hole in the water fill line behind tanks and shut in the well. Approximately 590 bbls of produced water was released into the lined SPCC containment ring. A vacuum truck was dispatched and recovered approximately 590 bbls of produced water. Describe Area Affected and Cleanup Action Taken.*									
Approximately 590 bbls of produced water was released from the water fill line into the lined SPCC containment ring. A vacuum truck was dispatched and recovered approximately 590 bbls of produced water. All fluid stayed inside the lined SPCC containment. Once fluids were removed the liner was visually inspected by Devon field staff for any pinholes or punctures and none were found. Based on this									
inspection there is no evidence that the spill fluids left containment. No further action is necessary. 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 CONSERVATION DIVISION			
Signature: Dana Delarosa						Approved by Environmental Specialist:			
Printed Nam	e: Dana De	eLaRosa				Hicha Company			
Title: Field Admin Support						Approval Da	te: IIIVII	Expiration	Date: NIH
E-mail Address: dana.delarosa@dvn.com						Conditions o	Conditions of Approval: Attached Attached Attached		
Date: 11/	17/2017		Phor	ie: 575.746.5594		<u> </u>	VWVV		1 087-4700

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 11/17/17 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number ARP-4503 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 II office in Artesia on or before 12/17/17. 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

Weaver, Crystal, EMNRD

From: Weaver, Crystal, EMNRD

Sent: Friday, January 12, 2018 9:12 AM

To: 'Reyna, Jennifer'; Bratcher, Mike, EMNRD; 'Shelly Tucker (stucker@blm.gov)'; NMSLO

(Hobbs/Amber Grroves); Montoya, Kenda

Cc: Fulks, Brett; Shoemaker, Mike; Aguilar, Leonard; Ryan, Wesley

Subject: RE: Strawberry 7 Fed Com 4H_11 bbls pw_12-27-17

Hello all,

OCD started out as holding on to Initial/Final C-141 until the requested statements and photos were provided by the operators for cases when total volume recovery is mentioned due to having secondary containment that was said to have contained all fluids. Since holding on to the forms and waiting for the requested items above was not working out to be the best way to do things, OCD has decided to now to mark any Initial/Final C-141 that comes in, and is of the above mentioned nature, as an Initial C-141 only and upon receipt of the requested pictures and statements a Final C-141 can be submitted and then reviewed for processing of closure of said release case.

So for this C-141 along with the ones submitted in the recent past for Nermal 4 State 1H (DOR 10/5/17), Beetlejuice 19 Federal (DOR 11/4/17), Grandi 22 2H (DOR 11/14/17), and Lone Tree Draw 13 State COM 8H (DOR 10/24/17) I will go ahead and mark them as Initial C-141 only and process them that way so we get them in the system and off my desk.

If you have any questions or concerns about this change please let either myself or Mike Bratcher know here in the OCD District II Office.

Thank you,

Crystal Weaver

Environmental Specialist OCD – Artesia District II 811 S. 1st Street Artesia, NM 88210

Office: 575-748-1283 ext. 101

Cell: 575-840-5963 Fax: 575-748-9720

From: Reyna, Jennifer [mailto:Jennifer.Reyna@dvn.com]

Sent: Wednesday, January 10, 2018 9:36 AM

To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Weaver, Crystal, EMNRD <Crystal.Weaver@state.nm.us>;

'Shelly Tucker (stucker@blm.gov)' <stucker@blm.gov>

Cc: Fulks, Brett <Brett.Fulks@dvn.com>; Shoemaker, Mike <Mike.Shoemaker@dvn.com>; Aguilar, Leonard

<Leonard.Aguilar@dvn.com>; Ryan, Wesley <Wesley.Ryan@dvn.com>

Subject: Strawberry 7 Fed Com 4H 11 bbls pw_12-27-17

Weaver, Crystal, EMNRD

From: Weaver, Crystal, EMNRD

Sent: Tuesday, December 5, 2017 11:56 AM

To: 'DeLaRosa, Dana'; Bratcher, Mike, EMNRD; agroves@slo.state.nm.us

Cc: Shoemaker, Mike; Fulks, Brett; Billings, Bradford, EMNRD

Subject: RE: Grandi 22-2H_590BBLS PW _11.4.2017

Mike Shoemaker,

As I mentioned to you before a while back when Devon had another release similar in nature to this one, the same expectations I stated on that one will also apply to this one.

The written statement (which it seems that you all have within your C-141 submitted for this release) attesting to the integrity of the liner and stating that you yourself or another member of your organization (that has been informed/educated on what to look for) have inspected the liner etc., this is something we are normally going to want to see on the C-141 form itself. Also if any fill material is present atop of the liner a statement would also need to be made on the C-141 form that the material was fully removed and replaced.

The photos as I mentioned before we would like to have dropped into the body of an email from Devon, and if possible show the location sign in one photo and then possibly the containment before clean up and after clean up would be preferential. We are asking for this from all operators that turn in an Initial/Final C-141 form that pertains to a full recovery stated involving secondary lined containment.

Please let either myself, Mike Bratcher or our Santa Fe Office know if you have any questions or concerns regarding this request.

Thank you,

Crystal Weaver

Environmental Specialist OCD – Artesia District II 811 S. 1st Street Artesia, NM 88210

Office: 575-748-1283 ext. 101

Cell: 575-840-5963 Fax: 575-748-9720

From: DeLaRosa, Dana [mailto:Dana.DeLaRosa@dvn.com]

Sent: Friday, November 17, 2017 10:37 AM

To: Weaver, Crystal, EMNRD <Crystal.Weaver@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>;

agroves@slo.state.nm.us

Cc: Shoemaker, Mike < Mike. Shoemaker@dvn.com>; Fulks, Brett < Brett.Fulks@dvn.com>

Subject: Grandi 22-2H_590BBLS PW _11.4.2017

Good Morning,

Attached you will find a C141 and the GIS Image for the 590BBLS produced water release that occurred on 11.14.2017 at the Grandi 22-2H. The red dot represents the origin of release.

Note: During initial notification the API # for this well was reported incorrectly due to a typing error and it was listed as API #30-015-42812 the correct API is listed in the C-141 and is API #30-015-42821.

Have a wonderful day,

Field Admin Support Production B-Schedule

Devon Energy Corporation PO Box 250 Artesia, NM 88211 575 746 5594

Dana De La Rosa



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