NM OIL CONSERVATION

ARTESIA DISTRICT

<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 NOV 2 9 2017

Form C-141 Revised April 3, 2017

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in RECEIVED accordance with 19.15.29 NMAC.

Release Notification and Corrective Action													
NAD 1022845000												Final Report	
Name of Company Percussion Petroleum Operating, LLC Contact Roger King													
Address 919 Milam Street, Suite 2475 Houston, TX 77002 Telephone No. (575) 361-3605													
Facility Name Dagger Draw/Foster Battery Facility Type Fee													
Surface Owner Kevin Willbanks Mineral Owner St							St Devote LLC, et al API No. 30-015-27493						
				LOCA	ATION	OF RE	LEASE						
Unit Letter	Section	Township	Range	Feet from the		rth/South Line Feet from the East/West Line County							
K	31	198	25E	2600		South 2310 West Eddy						y	
<u></u>	<u> </u>		I - 4!4	3- 30 (1731	.		104 52512	NATOR		<u> </u>			
Latitude 32.61721 Longitude -104.52512 NAD83													
NATURE OF RELEASE Type of Release Produced Water Volume of Release 5 bbl Volume Recovered 0 bbl													
Type of Release Produced Water Source of Release Water line from battery to SWD										Date and Hour of Discovery			
Source of Refease water fine from battery to 3 w D						11/22/17 12:00 PM					COVCIY	-	
Was Immediate Notice Given?						If YES, To Whom? N/A							
By Whom? N/A													
Was a Watercourse Reached?						Date and Hour N/A If YES, Volume Impacting the Watercourse.							
Yes No						N/A							
If a Watercou	irse was Im	nacted. Descr	ibe Fully.*	C	······································	I							
If a Watercourse was Impacted, Describe Fully.* No watercourse impacted.													
Describe Cause of Problem and Remedial Action Taken.*													
Hole in produced water line on South side of Dagger Draw/Foster Battery. Line is now isolated and is in the process of being repaired.													
Trails in produced water the on south side of Dagger Drawn oster Daties y. Line is flow isolated and is in the process of being repaired.													
Describe Are	Describe Area Affected and Cleanup Action Taken.*												
					dready di	ried when for	und on 11/20/17.	Remove	d affected	area with ba	ckhoe	and cleaned	
ncarby area.		80		,	,	_						***************************************	
												and the second s	
I herehy certi	fy that the i	information of	ven above	is true and comp	lete to th	e hest of my	knowledge and u	ınderstar	d that nurs	mant to NM	OCD r	ules and	
							nd perform correct						
public health	or the envir	ronment. The	acceptano	e of a C-141 repo	ort by the	NMOCD m	arked as "Final R	leport" d	oes not rel	ieve the ope	rator o	f liability	
should their o	perations h	ave failed to a	adequately	investigate and r	emediate	contaminati	ion that pose a thr	reat to gr	ound water	r, surface wa	ter, hu	man health	
		ws and/or regu		tance of a C-141	report ac	es not renev	e the operator of	responsi	bility for c	ompliance v	vitn an	y otner	
		.,				***************************************	OIL CON	SERV	ATION	DIVISIO	N		
Signature: Much M							~ 1 O x						
Signature:	men.	_ 7//				Car I	11	/1.					
Printed Name: Michael Martin						Approved by Environmental Specialist							
				11/201.	. T	(1	1/1	Λ					
Title: Petroleum Engineer						Approval Da	te: IIIOUII)	Expiration	Date: N	11_		
E-mail Address: Michael@percussionpetroleum.com						Conditions of	f Approval:	1	í)	Attacked	M	Samon Agreement of the Control of th	
Date: 11/29/2017 Phone: (713) 429-4249						see affached Attached 200-4503							

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 11/29/17 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number ARD-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 12/29/17. 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

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