OCD Rec'd:07/26/18

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

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

Form C-141
Revised April 3, 2017

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

Release Notification and Corrective Action

nAB1821234959 371755 OPERATOR ☒ Initial Report ☐ Final Report

Name of Company Percussion Petroleum Operating, LLC	Contact Eli Trevino
Address 919 Milam Street, Suite 2475 Houston, TX 77002	Telephone No. (575) 499-3993
Facility Name Vermejo SWD #1	Facility Type Production

Surface Owner Federal	Mineral Owner	API No. 30-015-40644

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	15	17S	28E	900'	South	2530'	East	Eddy

Latitude 32.8296547 **Longitude** -104.1635208 NAD83

NATURE OF RELEASE

Type of Release Produced water	Volume of Release 60 bbls	Volume Recovered 15 bbls
Source of Release Water flowline at SWD	Date and Hour of Occurrence 7/11/18 at 12:00 PM	Date and Hour of Discovery 7/11/2018 at 12:00 PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher (NMOCD)	
By Whom? Michael Martin	Date and Hour 7/11/18 at 7:00 PM 12:02pm *email	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
No watercourse impacted.

Describe Cause of Problem and Remedial Action Taken.*
A flowline leak was discovered going to the location for the subject well at 12 noon on July 11, 2018. A 3" check valve sealed shut at the battery, which caused the flowline to pressure up and leak. All the pumps leading to the battery were shut off. The damaged line was isolated and repaired, and the check valve has been inspected for future use.

Describe Area Affected and Cleanup Action Taken.*
The spill happed on the road heading to the location for the subject well. We called vac trucks to pick up the standing fluid on the ground. We recovered 15bbls out of the 60bbls of produced water that were spilled.

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:	OIL CONSERVATION DIVISION
Printed Name: Michael Martin	Approved by Environmental Specialist: Maria Pruett
Title: Petroleum Engineer	Approval Date: 7/30/18 Expiration Date: N/A
E-mail Address: Michael@percussionpetroleum.com	Conditions of Approval: See attached Attached ☐
Date: 7/26/2018 Phone: (713) 429-4249	

fAPP4882

* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on __07/26/18_____ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4882 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 division-approved corrective action 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 _2__ office in Artesia_ on or before ___08/11/18_____. 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_6 thru C_{36}), 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_6 thru C_{36}), 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

Pruett, Maria, EMNRD

From: Bratcher, Mike, EMNRD
Sent: Thursday, July 26, 2018 5:19 PM
To: Pruett, Maria, EMNRD
Subject: FW: 30-015-40644 Vermejo SWD #1
Attachments: Vermejo SWD #1 C-141.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

From: Michael Martin <Michael@percussionpetroleum.com>
Sent: Thursday, July 26, 2018 4:35 PM
To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>
Subject: RE: 30-015-40644 Vermejo SWD #1

Mike,

Sorry had a mistake on the previous version. Please use this one. Thanks

Thanks,
Michael Martin
(281) 974-6817
Michael@percussionpetroleum.com

From: Michael Martin
Sent: Thursday, July 26, 2018 4:50 PM
To: 'Bratcher, Mike, EMNRD' <mike.bratcher@state.nm.us>; 'Weaver, Crystal, EMNRD' <Crystal.Weaver@state.nm.us>
Cc: Toby Rhodes <Toby@percussionpetroleum.com>
Subject: RE: 30-015-40644 Vermejo SWD #1

Mike and Crystal,

Sorry for the delay. Please see attached for the C-141 for the Vermejo SWD #1.

Thanks,
Michael Martin
(281) 974-6817
Michael@percussionpetroleum.com

From: Michael Martin
Sent: Wednesday, July 11, 2018 7:02 PM
To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; 'Weaver, Crystal, EMNRD' <Crystal.Weaver@state.nm.us>
Cc: Lelan Anders <lelan@percussionpetroleum.com>; Jordan Blount <jordan@percussionpetroleum.com>; John Campbell <John@percussionpetroleum.com>; Lupe Carrillo <Lupe@percussionpetroleum.com>; Toby Rhodes <Toby@percussionpetroleum.com>; Eli Trevino <eli@percussionpetroleum.com>
Subject: 30-015-40644 Vermejo SWD #1

A flowline leak was discovered on the location for the subject well at 12 noon on July 11, 2018. The release is estimated to 100bbls of produced water. We currently have a vacuum truck picking up the standing fluid, and the damaged line is isolated and being repaired. A more detailed report will follow.

Thanks,

Michael Martin
Petroleum Engineer
Office: (713) 429-4249 | Mobile: (281) 974-6817
Michael@percussionpetroleum.com

Bratcher, Mike, EMNRD

From: Michael Martin <Michael@percussionpetroleum.com>
Sent: Wednesday, July 11, 2018 6:02 PM
To: Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD
Cc: Lelan Anders; Jordan Blount; John Campbell; Lupe Carrillo; Toby Rhodes; Eli Trevino
Subject: 30-015-40644 Vermejo SWD #1

A flowline leak was discovered on the location for the subject well at 12 noon on July 11, 2018. The release is estimated to 100bbls of produced water. We currently have a vacuum truck picking up the standing fluid, and the damaged line is isolated and being repaired. A more detailed report will follow.

Thanks,
Michael Martin
Petroleum Engineer
Office: (713) 429-4249 | Mobile: (281) 974-6817
Michael@percussionpetroleum.com