RECEIVED

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

JUN 06 2018

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

DISTRICT II ARTESIA O.C.D.

Form C-141
Revised April 3, 2017

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

fAB1623951305
nAB1816337739

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company EOG Resources, Inc. 25605	Contact Jamon Hohensee
Address 5509 Champions Drive, Midland, TX 79706	Telephone No. (432) ~~686-3667~~ 432-686-3760
Facility Name Livingston Ridge SWD System	Facility Type flow line

Surface Owner Federal	Mineral Federal	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from	North/South Line	Feet from the	East/West Line	County
H	35	22S	31E					Eddy

Latitude 32.35501 **Longitude** -103.74051 NAD83

NATURE OF RELEASE

Type of Release Produced Water and oil	Volume of Release 1.5 bbs Oil / 148.5 bbls produced water	Volume Recovered 1 bbl oil / 130 bbls produced water
Source of Release pipeline leak	Date and Hour of Occurrence unknown	Date and Hour of Discovery 6/4/18 10:00 am
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom? Reported to Mike Bratcher w/ NMOCD via telephone message	
By Whom? Jamon Hohensee	Date and Hour 6/6/18 0730	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

A flow line ruptured spilling produced water/oil. The transfer pump at the SWD was turned off and vacuum trucks were called. The release ran into a large puddle of rainwater and all of the water was pumped out. Impacted soil in the area of the release will be excavated and soil samples will be collected for laboratory analysis. Vertical and horizontal delincation of the impacted soil will be performed and a work plan for remediation will be prepared for approval by NMOCD.

Describe Area Affected and Cleanup Action Taken.*
Area affected is just east of Red road within the pipeline right-of-way. Impacted soils to be excavated and disposed of at a licensed facility. Confirmation samples will be collected for laboratory analysis.

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: R Ic Brancher as agent for	OIL CONSERVATION DIVISION
Printed Name: Jamon Hohensee	Approved by Environmental Specialist: Signed By Mike Bratcher
Title: Environmental Rep., EOG Resources	Approval Date: 6/7/18 Expiration Date: N/A
E-mail Address: jamon_hohensee@eogresources.com	Conditions of Approval: See attached Attached ☒ 2RP-4798
Date: 6/6/2018 Phone: ~~432-425-2023~~ 432-686-3760	

* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 6/06/2018 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4198 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 7/06/2018. 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_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

Bratcher, Mike, EMNRD

From: Alan.Brandon@ghd.com
Sent: Wednesday, June 6, 2018 11:35 AM
To: Bratcher, Mike, EMNRD
Cc: Jamon Hohensee
Subject: RE: C-141 form for Livingston Ridge SWD system
Attachments: 20180606113041426.pdf

Mike,

Here is the revised C-141.

Thanks

From: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>
Sent: Wednesday, June 06, 2018 11:24 AM
To: Alan Brandon <Alan.Brandon@ghd.com>
Cc: Jamon Hohensee <Jamon_Hohensee@eogresources.com>
Subject: RE: C-141 form for Livingston Ridge SWD system

CORRECTION: I did receive the call from Jamon this morning with request to call him back. Sorry about that. If you would just sort out the volume issue, I would appreciate it.

Thanks,

Mike Bratcher
NMOCD District 2
811 South First Street
Artesia, NM 88210
575-748-1283 Ext 108

From: Bratcher, Mike, EMNRD
Sent: Wednesday, June 6, 2018 11:15 AM
To: 'Alan.Brandon@ghd.com' <Alan.Brandon@ghd.com>
Cc: Jamon Hohensee <Jamon_Hohensee@eogresources.com>
Subject: RE: C-141 form for Livingston Ridge SWD system

Alan,

There are some issues with this C-141; I need a break down of how much of the fluid released was oil and how much was PW. I realize it may just be an estimate on EOG's part, but it would be closer than mine. Also, unless the fluid was released to a lined containment, 100% recovery of fluid would be highly unlikely, and would not require delineation/remediation as indicated on the form. The form indicates immediate notification was provided on 6/6/18 via phone message. I have no record of that phone call. Immediate notification is within 24 hours of discovery. The release was discovered on 6/4, so even if a phone message was left on 6/6, that would be past the 24 hour notification period.

Please at least correct the volume issue and resubmit.

If you have any questions or concerns, contact me.

Thank you,

Mike Bratcher
NMOCD District 2
811 South First Street
Artesia, NM 88210
575-748-1283 Ext 108

From: Alan.Brandon@ghd.com <Alan.Brandon@ghd.com>
Sent: Wednesday, June 6, 2018 10:12 AM
To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>
Cc: Jamon Hohensee <Jamon_Hohensee@eogresources.com>
Subject: C-141 form for Livingston Ridge SWD system

Mike,

On behalf of EOG Resources, I have attached an initial C-141 form for the Livingston Ridge SWD system release.

Thanks

Alan Brandon
Senior Project Manager

GHD
T: +1 505 884 0672 | M: +1 505 697 2025 | VOIP Ext: 867318 | E: Alan.Brandon@ghd.com
6121 Indian School Rd. NE Albuquerque New Mexico 87110 | www.ghd.com

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