

AUG 10 2017

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

**Release Notification and Corrective Action**

NAB1722928340

**OPERATOR**

Initial Report  Final Report

Name of Company Lime Rock Resources II-A, L.P. <u>297558</u>		Contact Mike Barrett
Address 1111 Bagby St. Ste. 4600, Houston, TX 77002		Telephone No. 575-365-9724
Facility Name West Red Lake Unit #41		Facility Type Oil
Surface Owner BLM	Mineral Owner Federal	API No. 30-015-28443

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	7	18S	27E	330	North	1800	East	Eddy

Latitude 32.7687035 Longitude -104.3148575 NAD83

**NATURE OF RELEASE**

Type of Release Produced Water	Volume of Release 323bbbs	Volume Recovered 40bbbs
Source of Release Flowline	Date and Hour of Occurrence 8/5/2017 @ 10:00am	Date and Hour of Discovery 8/5/2017 @ 11:00 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher/Crystal Weaver-NMOCD Shelly Tucker-BLM	
By Whom? Sheldon Hitchcock	Date and Hour 8/5/2017 @ 6:17pm	
Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse. Approx. 250bbbs	
If a Watercourse was Impacted, Describe Fully.*  The fluid from the release flowed into a drainage leading to the Pecos River. No fluid entered the river. The fluid was contained with earthen berms at the bottom of the flow path. Lined sumps were built in the upper and lower portion of the drainage so that any runoff could be collected utilizing a vacuum truck.		
Describe Cause of Problem and Remedial Action Taken.* A flowline failed resulting in the release of approximately 323bbbs of produced water. A vacuum truck was utilized to recover approximately 40bbbs of produced water. The line was repaired and put back into service.		
Describe Area Affected and Cleanup Action Taken.* The fluid from the release entered an adjacent drainage which flows into the Pecos River. No fluid entered the river. The fluid was contained at the end of the flow path with earthen berms. Lined sumps were constructed in the upper and lower portions of the drainage so that any fluid running down the drainage will be captured. In an effort to mitigate impacts from the release the draw was flushed with fresh water. The water was recovered from the sumps following the flush utilizing vacuum trucks. Soil samples were taken from the draw after the flush in order to determine the extent of the soil impacts.		
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: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Mike Barrett	Approved by Environmental Specialist 	
Title: Production Superintendent	Approval Date: <u>8/15/17</u>	Expiration Date: <u>NA</u>
E-mail Address: mbarrett@limerockresources.com	Conditions of Approval: <u>See attached</u>	
Date: 8/10/2017 Phone: 575-365-9724	Attached <input type="checkbox"/> <u>DRP-4345</u>	

\* Attach Additional Sheets If Necessary

*AKL 10*

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 8/10/2017 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number ORP-4346 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 9/10/2017. 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](mailto:jim.griswold@state.nm.us)