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** JUL 1 7 2018

Form C-141 Revised April 3, 2017

Oil Conservation Division 1220 South St. Francis Dr. DISTRICT II-ARTESIA Of Control District Office in accordance with 19,15.29 NMAC.

Santa Fe, NM 8/505													
Release Notification and Corrective Action													
							OPERATOR						
Name of Co	mpany: L	ime Rock Re	sources	II-A, L.P. 277									
Address: 11	11 Bagby	St. Ste. 4600), Housto	n, TX 77002	1	Telephone N	lo. 575-365-972	24	,, 				
Facility Nar	ne: All Tl	norn P/W Tr	ansfer Li	ne	acility Typ	e:							
Surface Owner: Key Livestock, LLC Mineral Owner: S										. 30-015-4			
LOCATION							N OF RELEASE			HAWK 8K FEd. #51			
						10110000			t/West Line County				
J	36	178	27E	1650		S	1650		E	Eddy		İ	
Latitude 34.4724 Longitude -104.1404 NAD83													
NATURE OF RELEASE													
Type of Release: Fresh and Produced Water										Recovered: 8 bbls			
Source of Release: 12" PW transfer line							ate and Hour of Occurrence Date and H			Hour of Discovery			
							6-28-18 @ Unknown AM 6-28-18 @ 12:15 PM						
Was Immediate Notice Given?						If YES, To Whom? Mike Bratcher/NMOCD voicemail							
By Whom? David Adkins						Date and Hour: 6-28-18 @ 3:15 pm							
Was a Watercourse Reached?							If YES, Volume Impacting the Watercourse.						
☐ Yes ⊠ No							N/A						
If a Watercou	irse was Im	pacted, Descr	ibe Fully.	•		•							
N/A													
Describe Cau	ise of Probl	em and Reme	dial Actic	n Taken.* Facility to the Haw	k 8K F	ederal #51 (/	API above) had p	reviousl	y been flus	hed with fre	sh wat	er and was at	
the time of th	e release id	lle Vandale s	tole the co	onnections resulting	in a re	lease of the	vater that was tra	pped in	the line. I	ne line suds	cquen	ny was capped	
to stop the le	ak. Clean o	lirt was broug	ht to bern	the spill to preven water. Talon mob	t it fron	n continuing	to run across Eva	ıns Rd. Le initial	A vac truci	ć was also d ment.	ispatci	rea to pick up	
Huids and We	is able to re	cover 8 dois c	n stanoniį	g water. Taton mot	nnzeu į	personner to	ne rocation for th	io mittua					
Describe Are	a Affected	and Cleanup	Action Ta	ken.*				4 im 4 ment	llamadh T	ha spill did :	SEASS I	Evans road	
The spill mea	asures appro	oximately 25	feet across	s at its greatest widt et long. A backhoe	h and c	extends appro	ximately 150 fee ised to carry out t	t in total the initia	i iengui. I I remediati	on activities	:1035 L 5.	zvans road	
I hereby certi	fy that the	information g	iven abov	e is true and comple nd/or file certain re	ete to th	ne best of my	knowledge and u	understa etive act	nd that pur	suant to NM leases which	IOCD	rules and endanger	
nublic health	or the envi	ronment The	eacceptan	ce of a C-141 repor	rt by the	e NMOCD π	arked as "Final P	Réport" (ioes not re	lieve the ope	erator (of liability	
should their	onerations l	nave failed to	adequatel	v investigate and re	mediate	c contaminat	ion that pose a thi	reat to g	round wate	r, surface w	aier, n	uman neam	
or the environ	nment. In a	addition, NM(ws and/or reg	OCD acce	ptance of a C-141 r	eport d	oes not reliev	e the operator of	respons	ibility for (compliance	with a	ny other	
rederal, state,	, or local la	ws allowor reg	uianons.				OIL CON	SERV	ATION	DIVISI	NC		
	1.	116-		-									
Signature: Mul Das							Approved by Environmental Specialist:						
Printed Name	e: Mike B	larrett				Approved by Environmental opecians.							
mul p 1						Approval Da	1/18/19	7	Expiration	Date: N	/A		
Title: Produ	iction Supe	rintendant			\dashv	Approvai Di	ie. IIIA II	/	CAPITATION	Date. 14		<u> </u>	
E-mail Address: mbarrett@limerockresources.com							Conditions of Approval:						
Saa attanno SRV-4											14-4865		
Date: 7-16-	10			1 110010. J/J-JUJ-7	, 47		O V O V I	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	· · · · · · · · · · · · · · · · · · ·		<u> </u>		

Date: 7-16-18 * Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on <u>VULIA 2018</u> regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number that 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 _2_ office in Artesia_ on or before ___07/27/2018___. 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; 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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