State of New Mexico Energy Minerals and Natural Resources

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

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

1220 S. St. Fran	cis Dr., Sant	a Fe, NM 8750	Vanadari konstru on debetata da 1			e, NM 875						deterriterritet terreterritet et en deterriterritet	
			Rel	ease Notifie	catio	n and Co	orrective A	ction					
				OPERATOR			🛛 Initial Report 🗌 Final Repo						
		imarex Ener	Contact Christine Alderman Telephone No. 432-853-7059										
							Facility Type production						
Surface Ow		· ·		Mineral (DINO	20 025 4	2201		
Surface Ow	ner Stat	ie	State	API No. 30-025-43291									
Y Just Y - they	0	TT	D			N OF RE		East/West	Ting C	Journal			
Unit Letter	Section	Township	Range	Feet from the	North	/South Line	Feet from the	East/west		County			
M	26	218	33E	330		S	630	W	I	.ea			
				Latitude_32.	443458	Longitud	e -103.549728						
				NAT	URE	OF REL	EASE						
Type of Rele	ase produc	ed water/oil			Volume of Release 4 bbls oil/11 Volume Recovered 3 bbls oil/8 bbls						1/8 bbls PW		
Source of Re	lease					bbls PW Date and Hour of Occurrence			Date and Hour of Discovery				
valve	NI	70			11/21/2017 If YES, To Whom?			11/21/2017 7:00am					
Was Immedia	ate Notice (Yes 🗌	No 🗌 Not Re	equired		Amber Groves						
By Whom?	Gloria Gar	za				Date and H	Iour 11/21/2017	5:20 pm					
Was a Water	course Read	_	If YES, Volume Impacting the Watercourse.										
		L		1 110						-		<u> </u>	
If a Watercou	irse was Im	pacted, Descr	ibe Fully.				RECEIVI	ED					
							By Olivia	Yu at 7	:42 ar	n. De	c 18	2017	
Describe Cau	se of Probl	em and Reme	dial Actio	n Taken.						, -			
A hole develo	oped on a b	ack pressure v	alve on a	2" tee. The valve	has bee	en replaced.							
Describe Are					1 101	a		.4		- E 41		o . A m	
				s that were release ssess and delineat						or me pas	ture are	a. All	
						_							
I hereby certi	fy that the i	information gi	ven above	is true and comp	lete to t	he best of my	knowledge and u	inderstand th	nat pursua	nt to NM	OCD ru	les and	
regulations al	loperators	are required t	o report ai	nd/or file certain r	elease n	otifications a	nd perform correct	ctive actions	for releas	es which	may en	danger	
should their o	perations h	ave failed to a	adequately	e of a C-141 report investigate and r	emediat	e contaminati	on that pose a thr	eat to groun	d water, s	urface wa	ter, hun	nan health	
				tance of a C-141	report d	oes not reliev	e the operator of	responsibilit	ly for com	pliance w	rith any	other	
federal, state,	21						OIL CON	SERVAT	TON D	IVISIC)N		
Signature:	MAINT	tri ali	JAA M	A m		OIL CONSERVATION DIVISION							
Signature:		VU VIC				Approved by	Environmental S	necialist		4_	-		
Printed Name	: Christine	Alderman				Арриотеа ву		pecialise.	<u> </u>	<u>\</u>			
Title: ESH S	upervisor	,				Approval Dat	e: 12/18/20	17 _{Expi}	iration Da	te:			
	•												
E-mail Addre	ss: caldern	nan@cimarex	.com	****		Conditions of Approval: Attached directive							
Date: 12/5/20	17	Phone: 432				200 4.14		· •					
Attach Addit	tional Shee	ets If Necess	ary		1					-			
						1RP-489	3 nOY	1734133	3250				

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Operator/Responsible Party,

The OCD has received the form C-141 you provided on _12/13/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-4893_ 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 _1_ office in __Hobbs____ on or before _1/18/2018_. 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 OCD Environmental Bureau Chief 1220 South St. Francis Drive Santa Fe, New Mexico 87505 505-476-3465 jim.griswold@state.nm.us