<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 811 S. First St., Artesia, NM 88210 <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

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.

Release Notification and Corrective Action

						OPERAT	ΓOR		🛛 Initi	al Report	Final Re	port	
Name of Co	mpany: E	endeavor End	ources		Contact: Ashley Moore								
Address: 1	10 N Mari	enfeld, Suite	dland, TX 7970 <i>6</i>	5	Telephone No. (432) 557-5006								
Facility Nat	ne: State	NC # 001			Facility Type: Battery								
Surface Ow	ner: State		Mineral C	wner				API No. 30-025-28695					
<u> </u>				LOCA	TIO	N OF REI	FASE		•				
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	Fast/W	est Line	County			
		-	32E	i cot irom the	110111	E COGGII EMIC	1 OOL HOIL GIC	2430 11	CSt Line	1			
A	3	16S						Lea County, NM					
Latitude N 32.96240° Longitude W 103.74775°													
NATURE OF RELEASE													
Type of Rele		iced water		Volume of Release 40 bbls Volume Recovered 10 bbls produced water									
Source of Re going to well	head		te at hammer unio	05/16/2017	05/16/2017			Date and Hour of Discovery					
Was Immediate Notice Given? ☐ Yes ☐ No ☐ Not Required						If YES, To Whom? Olivia YuNMOCD, Amber Groves - SLO							
By Whom?						Date and Hour 05/17/2017							
Was a Watercourse Reached? ☐ Yes ☒ No						If YES, Volume Impacting the Watercourse.							
If a Watercourse was Impacted, Describe Fully.*													
						RECEIVED							
					By Olivia Yu at 3:11 pm, May 30, 2017								
Describe Cau	Describe Cause of Problem and Remedial Action Taken.*												
Vilenation from	m tha iniaat	ian numm heal	ca at hame					11014	- <i>e e</i> - : .				
Describe Area	Affected a	nd Cleanup A	ction Tak	ner union going to en.*) Well I	icati. A vacuu	in truck recovered	u 10 0018	or nara.			\dashv	
Describe Area Affected and Cleanup Action Taken.* The affected area is 150' x 60' on the pad. The affect area is 75' x 8' off location. Remediation will be completed in accordance with a remediation plan approved by NMOCD.													
regulations al public health should their o	l operators a or the envir perations ha ment. In ac	are required to onment. The ave failed to a Idition, NMO	report an acceptanc dequately CD accept	is true and compled/or file certain re e of a C-141 report investigate and re ance of a C-141 r	lease not by the mediate	otifications an e NMOCD ma e contamination	d perform correct rked as "Final Re on that pose a thre	tive actio eport" do eat to gro	ns for rele es not reli und water	eases which make the operate, surface water	ny endanger or of liability c, human health		
Signature: John Marce						OIL CONSERVATION DIVISION							
						1 0 A L							
Printed Name: Ashley Moore						Approved by Environmental Specialist:							
Title: Environmental Technician						Approval Date	5/30/2017	Ex	epiration I	Date:			
E-mail Address: APMoore@eeronline.com						Conditions of Approval:					_ /		
						see attached directive							
	-30-17	ts If Necessa		ione: (432) 557-50)06					<u></u>	. , ,,,		

1RP-4710

nOY1715054791

pOY1715055160

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _5/30/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number __1R-4710_ 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 _6/30/2017_. 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; 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