<u>District I</u> 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**

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

Form C-141 Revised April 3, 2017

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

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			Kel	case Mulli	cauoi	OPERA		CHOIL		al Report		Final Report	
Name of C	omnany Gr	and Banks F				A IIIII	ai Report		r mar repor				
Traine of company or and Earth Sy Co							Contact Denise Jones Telephone No. 432-620-9181						
							Facility Type Producer						
racinty iva	me Kanen	verue 10 St	atc #Z	E. C.		racinty ryp	oc i roudeci						
Surface Owner State Mineral Owner							State API No				. 30-025-34725		
				LOC	ATIO!	N OF RE	LEASE						
						h/South Line Feet from the East/West Line				County	County		
	10 16S 32E 2230				North	orth 930			West Lea				
E								1					
			Latitud	le	L	ongitude		NAD	83				
				NAT	FURE	OF REL							
Type of Release Oil											ecovered 0		
Source of Release Well Was Immediate Notice Given?							Date and Hour of Occurrence Date and Hour of Discovery 01/16/2018						
☐ Yes X No ☐ Not Required							If YES, To Whom?						
By Whom?							Date and Hour						
Was a Watercourse Reached?							If YES, Volume Impacting the Watercourse.						
If a Watawaa	was was Im	pacted, Descr	iba Eulle	*		\bot							
		12					CEIVED Olivia Yu a	at 11:	06 am	, Feb 2	1, 20	018	
Describe Ca	use of Probl	em and Reme	dial Actio	n Taken.*		inter-							
This is a shu	it in well tha	t had a small,	shallow c	asing leak. We h	nave clea	ned up the lo	cation and are rep	airing th	ne leak.				
Dagariba Ar	an Affontad	and Cleanup	Action To	kon *									
Describe Ar	ea Affecteu	and Cleanup.	ACHOII 1a	Ken.									
The area aff stained dirt.	ected was ap	proximately	10'x20' in	nmediately aroun	d the we	ll. The dirt v	vas hauled to a dis	sposal ar	nd location	dirt was use	ed to re	place the	
I hereby cer	tify that the	information g	iven abov	e is true and com	plete to t	he best of my	knowledge and u	understa	nd that pur	suant to NM	1OCD	rules and	
regulations	all operators	are required	to report a	nd/or file certain	release r	otifications a	and perform corre	ctive act	ions for re	leases whicl	n may e	endanger	
public healtl	h or the envi	ronment. The	acceptan	ce of a C-141 rep	ort by th	e NMOCD n	narked as "Final R	Report" o	loes not re	lieve the ope	erator o	of liability	
should their	operations h	nave failed to	adequately	y investigate and	remediat	te contaminat	ion that pose a the ve the operator of	reat to g	ibility for	r, surrace w	with an	uman neamn w other	
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•							OIL CON	SERV	ATION	DIVISI	ON		
. 0 .													
Signature: Jones													
Printed Nan	ne: Denise	Jones				Approved by	Environmental S	Specialis	t:	1			
Title: Regulatory Analyst						Approval Date: 2/21/2018 Expiration Date:							
E-mail Address: djones@cambrianmgmt.com						Conditions of Approval:					/		
D-man Address. djones@eamonamiigme.com						Attached							
Date: 01/26/2018 Phone: 432-620-9181						Confirmatory soil samples from							
	DESCRIPTION OF THE PROPERTY OF	ets If Neces				impacted area.							

1RP-4973

nOY1805241827

pOY1805242216

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _2/20/2018_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-4973__ 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 _3/21/2018_. 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