<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

Revised August 8, 2011

Form C-141

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													
				4	ΓOR		Initia	al Report	□ I	Final Report			
Name of Company Foundation Energy Management, LLC						Contact Rachel Grant							
Address 16000 Dallas Parkway, Suite 875						Telephone No. 918-526-5592							
Facility Name Chalupa SWD						Facility Type Salt water disposal well							
Surface Owner Mineral Owner						API No. 30-025-29184							
V				LOCA	TIC	N OF RE	LEASE						
Unit Letter	Section	Township	Range			h/South Line	Feet from the	East/West Line		County			
	13	14S	33E	330	So	uth	330	We	st	Lea			
Latitude 33.0982437 Longitude -103.5753937													
NATURE OF RELEASE  Type of Release Saltwater Volume of Release 25 bbls Volume Recovered 15 bbls													
Type of Release Saltwater Source of Release Flowline leak										nd Hour of Discovery 3/2/2017, 2:30pm			
Was Immediate Notice Given?  If YES, To Whom?													
☐ Yes ■ No ☐ Not Required													
By Whom? Was a Watercourse Reached?						Date and Hour  If YES, Volume Impacting the Watercourse.							
was a watercourse Reached?  ☐ Yes ■ No						NA							
If a Waterco	urse was Im	pacted, Descr	ibe Fully.	*		DECE							
	If a Watercourse was Impacted, Describe Fully.* NA  RECEIVED												
By Olivia Yu at 8:47 am, Mar 07, 2017													
Describe Cause of Problem and Remedial Action Taken.* Pumper installed repair clamp to fix leak until line can be													
replaced. Vacuum truck picked up 15 bbl fluid.													
	Special Control of the Control of th												
Describe Are	ea Affected	and Cleanup	Action Tal	cen.*	f	المسالية	nair Onas fl	والبرو	. !	inad nan	aalala		
		- E			_		pair. Once fl					ig	
15				HOWIITE V	VIII L	e pressur	e tested to e	HISUI	e no iuu	lie leaks			
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 a	ify that the i	information g are required t	o report at	e is true and comple nd/or file certain re	ete to lease	notifications a	nd perform correc	indersta ctive act	nd that purs ions for rele	eases which	may end	anger	
public health	or the envi	ronment. The	acceptano	ce of a C-141 repor	t by t	he NMOCD m	arked as "Final R	eport" o	loes not reli	eve the opera	ator of li	iability	
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													
		ws and/or regi		nance of a C-141 fo	срогі	does not renev	e the operator of	гсарона	ionity for co	omphanee w	itii aiiy C	inci	
Signature:						OIL CONSERVATION DIVISION							
11000						Approved by Environmental Specialist:							
Printed Name: Rachel Grant													
Title: HSE/Regulatory Manager						Approval Date: Sexpiration Date:							
E-mail Address: regulatory@foundationenergy.com Conditions of Approval:													
L-mail Addr		atory@fo	oundat		om				-	Attached	/		

## Operator/Responsible Party,

The OCD has received the form C-141 you provided on \_3/7/2017\_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number \_\_1R-\_4633\_ 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 \_4/7/2017\_. 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