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

HOBBS OCD State of New Mexico Minerals and N Energy Minerals and Natural Purples 2018

Form C-141 Revised April 3, 2017

Oil Conservation Division CEIVE Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Santa Fe, NM 87505

Release Notification and Corrective Action

OPERATOR													
Name of Co			Contact Rick Graham										
Address 13		010	Telephone No. 713-651-4437										
Facility Nan	ne Atha S	WD JF]]	Facility Type SWD									
Surface Owner Federal Casland Mineral Owner						Federal Casland API No. 30-025-08816							
Surface Owi	Hede	ral Pasia	iiu	I Willieral O	WIICI	-ederal	asianu		AFINO	. 30-023-0	5610		
(OF REI							
Unit Letter	Section	Township		Feet from the		South Line	Feet from the		Vest Line	County			
D	6	22S	36E	660'	No	orth Line 990'			st Line	Lea			
											-		
			Latitude	32.4263039 N	Lo	ngitude <u>-</u>	<u>103.3093185 W</u>	NAD	33				
	NATURE OF RELEASE												
Type of Relea			Volume of Release 70 bbl. Volume Recovered										
Source of Rel	lease Unlo						Hour of Discovery						
Was Immedia	NI		05/10/2018 – 8:00 am										
was immedia	ite Notice C	quired	If YES, To Whom? Maxie Brown										
By Whom? I	Rick Grahai		Date and Hour 05/11/2018 – 9:00 am										
Was a Watero			If YES, Volume Impacting the Watercourse.										
If a Watercourse was Impacted, Describe Fully.*													
N/A	N/A By Olivia Yu at 10:23 am, May 22, 2018												
Describe Cause of Problem and Remedial Action Taken.*													
	A nipple on the discharge side of a filter pot failed. The fitting gave way while the charge pump was running and an estimate of 70 bbl of produced water												
					less ste	el nipple has	been installed and	remedi	ation is un	derway.			
	Describe Area Affected and Cleanup Action Taken.* All standing liquids were immediately vacuumed up and pumped back into the disposal system. The affected surface area was scraped to remove all												
				up and pumped t en stockpiled and				ectea su	rrace area	was scraped i	io remov	e all	
	501101 1110		0011 1143 00	on stockpriou uni		o disposed of	property.						
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 all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability													
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													
federal, state, or local laws and/or regulations.													
	1.		OIL CONSERVATION DIVISION										
Signature:	7/1		$_{artheta}$										
		\neg	Approved by Environmental Specialist:										
Printed Name	: Rick Gral	nam '											
Title: Environmental Director						Approval Date: 5/22/2018 Expiration Date:							
E-mail Address: rgraham01@keyenergy.com						Conditions of Approval:							
E-man Addre	os. igranan	io i @keyenerş	gy.com				• • • • • • • • • • • • • • • • • • • •			Attached	4		
Date: 05/14/	Date: 05/14/2018 Phone: 713-651-4437 see attached directive												
		ets If Necess			101110								

1RP-5071

pOY1814238094

nOY1814237868

May 14, 2018

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division – District 1
1625 North French Drive
Hobbs, NM 88240

HOBBS OCD MAY 21 2018 RECEIVED

Re:

Release Notification and Corrective Action Form C-141

Key Energy Services, Inc.

Atha Salt Water Disposal

Lea County, New Mexico

To Whom It May Concern,

Enclosed you will find the Initial Form C-141 for a release, which took place at Key Energy Service's Atha SWD on May 10, 2018, in Lea County, New Mexico. If you have any questions or concerns, please feel free to contact me at rgraham01@keyenergy.com or 713-651-4437.

Sincerely,

Rick Graham

Environmental Director



Operator/Responsible Party,

The OCD has received the form C-141 you provided on _5/21/2018_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-5071__ 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 _6/22/2018_. 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