District I 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

Release Notification and Corrective Action													
						OPERATOR Initial Report Final Re						Final Report	
Name of Company: RKI Exploration / WPX Energy						Contact: Karolina Blaney							
						Telephone No. 970 589 0743							
Facility Name: Toro 22-3						Facility Type: Well Pad							
Surface Owner: Private Mineral Owner: F						Private API No. 30- 025-35253							
		ON OF RELEASE											
Unit Letter	Section	Township	Range	Feet from the	North/	th/South Line Feet from the			ast/West Line County				
K	22	19S	35E	2130		FSL	1650	F	WL	Lee			
Latitude: 32.64457955_ Longitude -103.44839217 NAD83													
NATURE OF RELEASE													
Type of Release: Produced Water						Volume of Release: 120 bbls Volume Recovered 110 bbls						ls	
Source of Release: flowline						Date and Hour of Occurrence Date and Hour 9/21/17 Date and Hour 9/21/2017 at 8:						У	
Was Immediate Notice Given?						If YES, To Whom?							
Yes No Not Required													
By Whom? Karolina Blaney Was a Watercourse Reached?						Date and Hour 9/21/17 at 12:23 pm If YES, Volume Impacting the Watercourse.							
Was a watercourse Reached? ☐ Yes ☒ No						II IES, VC	nume impacting t	ne wate	rcourse.				
If a Watercou	ırse was Im	pacted, Descr	ibe Fully.	*									
						R	ECEIVEL						
By Olivia Yu at 10:28 am, Oct 06, 2017												2017	
Describe Cause of Problem and Remedial Action Taken.*													
The cause of this spill is equipment failure; corroded tank. Approximately 120 bbls of produced water were spilled inside dirt SPCC containment. 110 bbls													
were recovere	ed with a va	e truck.											
Describe Are	a Affected a	and Cleanup A	Action Tal	ken.*									
								-					
				th a Trimble to de ted area was scra									
				l be submitted to			red for comminue	ion. The	samples a	re semg una	1,5200	101 11 11,	
I hereby certi	fy that the i	nformation gi	ven above	e is true and comp	lete to th	ne best of my	knowledge and u	nderstar	nd that purs	suant to NM	OCD	rules and	
regulations al	ll operators	are required t	o report ai	nd/or file certain r	elease n	otifications a	nd perform correc	tive acti	ons for rel	eases which	may	endanger	
				ce of a C-141 repo									
				investigate and rotance of a C-141									
federal, state,				runce of a C 111	report d	oes not renev	e the operator of t	сороны	onny for c	omphanee (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Signature: Karolina Blaney							OIL CONSERVATION DIVISION						
							Approved by Environmental Specialist:						
Title: Environmental Specialist						Approval Date: Expiration Date:							
									•			,	
E-mail Address: Karolina.blaney@wpxenergy.com						Conditions of Approval: Attached							
D. 4 10/5/1	7	see atta	ched directiv	/e		1							

Phone: 970 589 0743

Date: 10/5/17

^{*} Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _10/5/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-4838__ 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 _11/6/2017_. 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