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**

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

NM OIL CONSERVATION

ARTESIA DISTRICT Form C-141

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

RECEIVED

Release Notification and Corrective Action													
NAB 1435457231											Final Report		
Name of Co	mpany	WPX Energ	v Inc/RK	1 246286	1	Contact	Karolina Blan			ii report		T mar report	
						Telephone No. 970 589 0743							
Facility Name: RDX 21-32						Facility Type: Well Pad							
Surface Owner: Federal Mineral Owner:						Federal			API No. 30- 015-40642				
· · · · · · · · · · · · · · · · · · ·	LOCATION OF RELEASE												
Unit Letter	Section	Township	Range	Feet from the		South Line	East/West Line County						
K	21	26S	30E	1880		FSL	1650	FW.	L	Eddy			
Latitude: 32.025644178 N Longitude: -103.889111316 W NATURE OF RELEASE													
Type of Release. Produced Water							Release: 12 Bbls	bls Volume Recovered: 5 Bbls					
Source of Release										d Hour of I	Hour of Discovery 6 – 9:30 hrs MT		
Stuffing Box Was Immediate Notice Given? Yes \(\square\) No Required						If YES, To Whom? MMOCD Heather Patterson & Michael Bratcher, BLM Shelly Tucker							
By Whom? Karolina Blaney						Date and Hour: 12/9/2016 – 15:40 hrs MT							
Was a Watercourse Reached? ☐ Yes ☒ No						If YES, Volume Impacting the Watercourse. N/A							
If a Watercourse was Impacted, Describe Fully.* N/A													
Describe Cause of Problem and Remedial Action Taken.*													
The cause of this spill is mechanical failure of the stuffing box. Approximately 12 bbls of produced water was spill. The spill migrated southwest towards the access road and impacted a small area to the west of the road. The impacted area was mapped with Trimble. The treater and separator caught on fire which resulted in a produced water and oil spill (less than 1 bbl of oil).													
Describe Are	a Affected	and Cleanup A	Action Tal	ken.*									
On 12/16/16, two grab surface samples were collected from the impacted area; one from the well pad and one from the pasture. The samples are being analyzed for TPH, BTEX and chlorides in accordance with NM OCD Guidelines for Remediation of Leaks, Spills, and Releases. Further remediation will be based on these results.													
regulations al public health should their co or the environ	Il operators or the envioperations homent. In a	are required to ronment. The nave failed to	o report and acceptant adequately occupance.	e is true and comp nd/or file certain r ce of a C-141 report investigate and r otance of a C-141	elease nort by the emediate	otifications a e NMOCD m e contaminat	nd perform correct parked as "Final Rition that pose a thr	ctive action eport" does eat to grou	s for rele s not rele nd water	eases which ieve the ope r, surface wa	may e rator c ater, h	endanger of liability uman health	
Signature:						OIL CONSERVATION DIVISION Approved by Environmental Specialist:							
Printed Name: Karolina Blaney						Approval Date: 13/33/14 Expiration Date: N'A							
Title: Enviro	nmental Sp	ecialist				Approval Da	te: 10)/0 0/	Y EX	piration	Date: / 1	//		
E-mail Address: Karolina.blaney@wpxenergy.com						Conditions of Approval: Attached					,		
Date: 12/16	/2016		Pho	ne: 970-589-0743	,	see attached Attached						•	

Date: 12/16/2016

^{*} Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 12/22/16 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number <u>APP-4041</u> 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 II office in Artesia on or before 2/1/17. 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

Weaver, Crystal, EMNRD

From: Blaney, Karolina < Karolina.Blaney@wpxenergy.com>

Sent: Friday, December 16, 2016 2:29 PM

To: Patterson, Heather, EMNRD; Bratcher, Mike, EMNRD; 'stucker@blm.gov'; Weaver,

Crystal, EMNRD

Subject: RDX 21-32 - initial C-141

Attachments: RDX 21-32 - C-141.doc

Attached is the initial C-141 for the RDX 21-31 produced water spill. Thank you,

Karolina Blaney

Environmental Specialist WPX Energy Office: (575) 885-7514

Cell: (970) 589-0743

karolina.blaney@wpxenergy.com

From: Blaney, Karolina

Sent: Friday, December 09, 2016 3:40 PM

To: 'Patterson, Heather, EMNRD' <Heather.Patterson@state.nm.us>; 'Bratcher, Mike, EMNRD'

<mike.bratcher@state.nm.us>; 'stucker@blm.gov' <stucker@blm.gov>

Subject: RDX 21-32 spill notification

Good afternoon,

Here is my Friday spill notification:

This morning WPX had a produced water spill at the RDX 21-32 well pad. API 30-015-40642; K-21-26S-30E. The cause of the spill is mechanical failure of the stuffing box. Estimated 12 bbls was spilled at the wellhead. The spill migrated south of the pad onto the lease road and impacted a small area of vegetation west of the road. Approximately 5 bbls of fluids were recovered. The C-141 report will be submitted by 12-28-16. In the meantime, please let me know if you have any questions or concerns.

Thank you and have a great weekend,

Karolina Blaney

Environmental Specialist WPX Energy Cell: (970) 589-0743

karolina.blaney@wpxenergy.com

Bratcher, Mike, EMNRD

From: Blaney, Karolina < Karolina.Blaney@wpxenergy.com>

Sent: Friday, December 9, 2016 3:40 PM

To: Patterson, Heather, EMNRD; Bratcher, Mike, EMNRD; 'stucker@blm.gov'

Subject: RDX 21-32 spill notification

Good afternoon,

Here is my Friday spill notification:

This morning WPX had a produced water spill at the RDX 21-32 well pad. API 30-015-40642; K-21-26S-30E. The cause of the spill is mechanical failure of the stuffing box. Estimated 12 bbls was spilled at the wellhead. The spill migrated south of the pad onto the lease road and impacted a small area of vegetation west of the road. Approximately 5 bbls of fluids were recovered. The C-141 report will be submitted by 12-28-16. In the meantime, please let me know if you have any questions or concerns.

Thank you and have a great weekend,

Karolina Blaney

Environmental Specialist WPX Energy Cell: (970) 589-0743 karolina.blaney@wpxenergy.com