Form 3160-5
(August 2007)

NM OIL CONSERVATION
ARTESIA DISTRICT
MAY 16 2016

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Carlsbad Field Office
OCD Artesia

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

RECEIVED

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No. NMNM20965	
6. If Indian, Allottee or Tribe Name	
7. If Unit or CA/Agreement, Name and/or No.	
1. Type of Well ☐ Oil Well ☒ Gas Well ☐ Other	8. Well Name and No. RDX FEDERAL COM 17 40H
2. Name of Operator RKI EXPLORATION & PROD LLC — Contact: CHARLES AHN — E-Mail: charles.ahn@wpxenergy.com	9. API Well No. 30-015-43634-00-X1
3a. Address 210 PARK AVE SUITE 900 OKLAHOMA CITY, OK 73102 — 3b. Phone No. (include area code) Ph: 405-996-5771 Fx: 405-996-5772	10. Field and Pool, or Exploratory BRUSHY DRAW
4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)* Sec 17 T26S R30E NENE 175FNL 1310FEL	11. County or Parish, and State EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Drilling Operations
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Due to losses noted in the offset wells from 5,486 feet to 6,144 feet, RKI Exploration & Production LLC requests the following changes to the approved APD:

9-5/8 inch intermediate casing be set at 6,400 feet
9-5/8 inch casing will be upgraded to 40# HCL-80
DV tool will be run at 4,500 feet

Revised drilling/casing program is attached for reference.

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #338232 verified by the BLM Well Information System
For RKI EXPLORATION & PROD LLC, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 05/03/2016 (16PP1070SE)

Name *(Printed/Typed)* CHARLES AHN — Title MGR-REGULATORY & PERMITTING

Signature (Electronic Submission) — Date 05/03/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By CHARLES NIMMER — Title PETROLEUM ENGINEER — Date 05/09/2016

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. — Office Carlsbad

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Accepted for record - NMOCD

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WPX Energy

Well RDX Federal 17-40H
Location Surface: 175 FNL 1,310 FEL Sec 17-26S-30E
Bottom Hole: 300 FSL 330 FEL Sec 17-26S-30E

County Eddy
State New Mexico

1) The elevation of the unprepared ground is 3,086 feet above sea level.

2) The geologic name of the surface formation is Quaternary - Alluvium.

3) A rotary rig will be utilized to drill the well to 15,648 feet and run casing and cement.
This equipment will then be rigged down and the well will be completed with a workover rig.

4) Proposed depth is 15,648 feet MD

5) Estimated tops:

	MD	TVD		BHP = .44 psi/ft x depth
Rustler	950	950		
Bell Canyon Sand (Base Salt)	3,541	3,541		
Cherry Canyon Sand	4,630	4,616		1,558 psi
Brushy Canyon Sand	5,715	5,687		2,031 psi
Bone Spring Lime	7,420	7,366	Oil	2,502 psi
1st Bone Spring Sand	8,309	8,242	Oil	3,241 psi
2nd Bone Spring Sand	9,135	9,057	Oil	3,626 psi
3rd Bone Spring Sand	10,236	10,157		3,985 psi
KOP	10,354	10,275	Oil	4,469 psi
Wolfcamp	10,606	10,519		4,521 psi
Landing Point (Wolfcamp)	11,354	10,919	Oil	4,628 psi
TD	15,648	10,919		4,804 psi

6) Casing program:

Hole Size	Top	Bottom	OD Csg	Wt/Grade	Connection	Collapse Design Factor	Burst Design Factor	Tension Design Factor
17 1/2"	0	1,000	13 3/8"	54.5#/J-55	ST&C	2.57	12.41	9.43
12 1/4"	0	6,400	9 5/8"	40#/HC-L80	LT&C	1.50	4.08	3.27
8 3/4"	0	11,354	7"	29#/HCP-110	BT&C	1.24	1.99	2.70
6 1/8"	10,354	15,648	4 1/2"	13.5#/HCP-110	CDC-HTC	2.22	1.24	6.20

Collapse	1.125
Burst	1.0
Tension	2.0

7) Cement program:

Surface		17 1/2" hole				
Pipe OD		13 3/8"				
Setting Depth		1,000 ft				
Annular Volume		0.69462 cf/ft				
Excess		1		100 %		
Lead	794 sx		1.75 cf/sk		9.13 gal/sk	13.5 ppg
Tail	200 sx		1.33 cf/sk		6.32 gal/sk	14.8 ppg

Lead: "C" + 4% PF20 (gel) + 2% PF1 (CC) + .125 pps PF29 (CelloFlake) + .4 pps PF46 (antifoam)
Tail: "C" + 1% PF1 (CC)

Top of cement: Surface

Intermediate		12 1/4" hole				
Pipe OD		9 5/8"				
Setting Depth		6,400 ft				
Annular Volume		0.3132 cf/ft		0.323 cf/ft		
DV Tool		4,500 ft				
Excess	1st Stage	0.6			60 %	
	2nd Stage	1.6			160 %	
Stage 1:						
Lead	643 sx		1.48 cf/sk		13 ppg	7.609 gal/sk

Lead: PVL + 1.3% PF44 + 5% PF174 + .5% PF606 + .4% PF13 + .1% PF153 + .4 pps PF45

Top of cement: 4,500 ft DV tool: 4,500 ft
1 per joint bottom 3 joints, then 1 every 3th jt

Stage 2:						
Lead	1196 sx		2.87 cf/sk		11.6 ppg	16.793 gal/sk
Tail	175 sx		1.33 cf/sk		14.8 ppg	6.331 gal/sk

Lead: 35/65 Poz "C" + 5% PF44 + 6% PF20 + .2% PF13 + .125 ps PF29 + .4 pps PF46
Tail: "C" + .2% PF13
Top of cement: SURFACE ft
1 per joint bottom 3 joints, then 1 every 3th jt

Intermediate		8 3/4" hole				
Pipe OD		7"				
Setting Depth		11,354 ft				
Annular Volume		0.15033 cf/ft		0.1585 cf/ft	500 ft	
Excess		0.35		35 %		
Stage 2						
Lead:	465 sx		1.89 cf/sk		10.06 gal/sk	12.9 ppg
Tail:	175 sx		1.33 cf/sk		6.32 gal/sk	14.8 ppg

Lead: 35/65 Poz "C" + 5% PF44 + 6% PF20 + .2% PF13 + .125 ps PF29 + .4 pps PF46
Tail: "C" + .2% PF13

Top of cement: 5,900 ft

Production		6 1/8" hole				
Pipe OD *(in OH)*		4 1/2"				
Setting Depth		15,648 ft				
Annular Volume		0.0942				
Excess		0.50				
Lead:	400 sx		1.87 cf/sk		9.52 gal/sk	13.0 ppg

Lead: AcidSolid PVL + 5% PF174 + .7% PF606 + .2% PF153 + .5% PF13 + 30% PF151 + .4 pps PF46

Top of cement: 10,354 ft

8) Pressure control equipment:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram type (5,000 psi WP) preventer, a bag-type annular preventer (5,000 psi WP), and rotating head. Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and pipe rams (sized to accommodate the drill pipe size being utilized) on bottom. A 13 3/8" SOW x 13 5/8" 5M casing head will be installed on the 13 3/8" casing and utilized until total depth is reached. All BOP and associated equipment will be tested to 5,000 psi and the annular will be tested to 1,500 psi after setting 13-3/8" casing string & 7" casing string. The 13 3/8" and 9 5/8" casing will be tested to .22 psi per ft of casing string length or 1500 psi whichever is greater, but not to exceed 70% of the minimum yield.
The 9 5/8" casing will be hung in the casing head and the stack will not be nippled down at this point.
The stack will not be isolated and tested after running the 9 5/8" casing, but will be tested along with the 9 5/8" casing. Pipe rams will be operated and checked each 24 hour period and each time the drill string is out of the hole. These function test will be documented on the daily driller's log.
A drilling spool or blowout preventer with 2 side outlets (choke side shall be 3" minimum diameter, kill side shall be at least 2" diameter).
2 kill line valves, one of which will be a check valve.
2 chokes on the manifold along with a pressure gauge.
Upper kelly cock valve with handle available.
Safety valve and subs to fit all drill string connections in use.
All BOP equipment connections subjected to pressure will be flanged, welded, or clamped.
Fill up line above the upper most preventer.

9) Mud program:

Top	Bottom	Mud Wt.	Vis	PV	YP	Fluid Loss	Type System
0	1,000	8.5 to 8.9	32 to 36	1 - 6	1 - 6	NC	Fresh Water
1,000	6,400	9.8 to 10.0	28 to 30	1 - 3	1 - 3	NC	Deisel/Brine
6,400	11,354	8.9 to 9.1	28 to 36	1 - 3	1 - 3	NC	Cut Brine
11,354	15,648	10.5 to 12.5	50 to 55	20-22	8 - 10	8 - 10	OBM

10) Logging, coring, and testing program:

No drill stem test are planned
KOP to intermediate: No logs planned
Intermediate to surface: No logs planned
No coring is planned

11) Potential hazards:

No abnormal pressure or temperature is expected. No H2S is known to exist in the area.
Lost circulation can occur in, lost circulation material will be on location and readily available if needed.

12) Anticipated start date ASAP
Duration 30 days