Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
NMNM19612

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 28 12

2. Name of Operator
RKI EXPLORATION & PROD LLC
Contact: JODY NOERDLINGER
E-Mail: jnoerdlinger@rkixp.com

9. API Well No.
30-015-42110-00-X1

3a. Address
210 PARK AVE SUITE 900
OKLAHOMA CITY, OK 73102

3b. Phone No. (include area code)
Ph: 405-996-5774

10. Field and Pool, or Exploratory
ROSS DRAW

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 28 T26S R30E NENW 360FNL 2010FWL
32.011082 N Lat, 103.531802 W Lon

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
	☐ 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.)

RKI Exploration and Production seeks approval for the subject well to change the production casing hole size to 7 7/8 inches.

Please see the attached revised drilling plan.

This well is scheduled to spud on 5/13/2014.

Accepted for record
NMOCD 165
5-19-2014

RECEIVED
MAY 19 2014
NMOCD

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

Electronic Submission #245256 verified by the BLM Well Information System
For RKI EXPLORATION & PROD LLC, sent to the Carlsbad
Committed to AFMSS for processing by CHRISTOPHER WALLS on 05/12/2014 (14CRW0258SE)

Name *(Printed/Typed)* JODY NOERDLINGER — Title REGULATORY ANALYST

Signature (Electronic Submission) — Date 05/12/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

APPROVED
MAY 15 2014
/s/ Chris Walls
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

Approved By _____ Title _____ Date

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

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 ****

RKI Exploration & Production, LLC

Well	RDX Federal 28-12			
Location	Surface:	360 FNL	2,010 FWL	Sec. 28-26S-30E
	Bottom Hole:	360 FNL	2,010 FWL	Sec. 28-26S-30E
County	Eddy			
State	New Mexico			

1) The elevation of the unprepared ground is 3,013 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 7,324 feet and run casing. This equipment will then be rigged down and the well will be completed with a workover rig.

4) Proposed depth is 7,324 feet

5) *Estimated tops:*

	TVD		BHP = .44 psi/ft x depth
Rustler	841		
Salado	1,140		
Castile	1,589		
Lamar Lime	3,200		
Delaware Top	4,394		
Bell Canyon Sand	4,394	Oil	1,933 psi
Cherry Canyon Sand	4,424	Oil	1,947 psi
Brushy Canyon Sand	6,896	Oil	3,034 psi
Bone Spring	7,174	Oil	3,157 psi
TD	7,324		3,223 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	725	13 3/8"	54.5#/J-55	ST&C	3.54	17.12	13.01
12 1/4"	0	3,250	9 5/8"	40#/J-55	LT&C	1.41	5.52	4.00
7-7/8"	0	7,324	5 1/2"	17#/N-80	LT&C	1.95	1.55	2.80

Collapse	1.125
Burst	1.0
Tension	2.0

7) Cement program:

Surface	17 1/2"	hole			
Pipe OD	13 3/8"				
Setting Depth	725	ft			
Annular Volume	0.69462	cf/ft			
Excess	1			100 %	
Lead	424 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 + 2% PF1 + .125 pps PF29 + .2% PF46

Tail: "C" + 1% PF1

Top of cement: Surface

Intermediate	12 1/4"	hole			
Pipe OD	9 5/8"				
Setting Depth	3,250	ft			
Annular Volume	0.31318	cf/ft		0.3627	cf/ft
Excess	0.5			50 %	
Lead	615 sx		1.92 cf/sk	9.95 gal/sk	12.6 ppg
Tail	200 sx		1.33 cf/sk	6.32 gal/sk	14.8 ppg

Lead: 35/65 Poz "C" + 5% PF44 + 6% PF20 + 3 pps PF42 + .125 pps PF29 + .2% PF46 +1% PF1

Tail: "C" + .2% PF13

Top of cement: Surface

Production	7-7/8"	hole				
Pipe OD	5 1/2"					
Setting Depth	7,324	ft				
Annular Volume	0.1732699	cf/ft		0.26074	cf/ft	500 ft
Excess	0.32		0.5	32	%	
DV Tool Depth	5500	ft				

Stage 1							
Lead:	398	sx	1.48	cf/sk	7.58	gal/sk	13.0 ppg
Lead:	PVL + 1.3% PF44 + 5% PF174 + 0.5% PF606 + 0.1% PF153 + 0.4 pps PF46 + 0.4% PF13						
Stage 2							
Lead:	276	sx	1.89	cf/sk	10.06	gal/sk	12.9 ppg
Tail:	175	sx	1.48	cf/sk	7.57	gal/sk	13.0 ppg
Lead:	35/65 Poz "C" + 5% PF44 (salt) + 6% PF20 (gel) + .125 pps PF29 (cellophane) + .25 pps PF46 (antifoam) + .2% PF13 (retarder						
Tail:	PVL + 1.3% PF44 + 5% PF174 + 0.5% PF606 + 0.1% PF153 + 0.4 pps PF46 + 0.4% PF13						
	Top of cement:		2,750	ft			

8) Pressure control equipment:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram type (3,000 psi WP) preventer, a bag-type annular preventer (3,000 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" 3M 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 3,000 psi and the annular will be tested to 1,500 psi after setting the 13 3/8" string. The 13 3/8" and 9 5/8" casing will be tested to .22 psi per ft of casing string length or 1,500 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	Fluid Loss	Type System
0	725	8.5 to 8.9	32 to 36	NC	Fresh Water
725	3,250	9.8 to 10.0	28 to 30	NC	Brine
3,250	7,324	8.9 to 9.1	28 to 36	NC	Fresh Water

10) Logging, coring, and testing program:

No drillstem test are planned
Total depth to intermediate: CNL, Caliper, GR, DLL,
Intermediate to surface: CNL, GR
No coring is planned

11) Potential hazards:

No abnormal pressures or temperatures are expected. There is no known presences of H2S in this area, although some form a of H2S detection equipment will be utilized. Gas and pit level monitoring equipment will be utilized below the 9 5/8" casing as deemed necessary. Lost circulation and weighting material will be available.

12) Anticipated start date ASAP
Duration 25 days