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.
NMNM0480904B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
891013810X

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
ROSS DRAW UNIT 38

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

9. API Well No.
30-015-42295-00-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
UNDESIGNATED

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 22 T26S R30E SENW 1840FNL 1980FWL
32.014890 N Lat, 103.521672 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 to Original APD |
| | ☐ 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 to change the subject well's production hole size from 8 3/4" to 7 7/8". Please see the attached revised drilling program with the correct hole sizes. This well is scheduled to spud on 6/3/2014.

**NM OIL CONSERVATION**
ARTESIA DISTRICT
JUN 02 2014
**RECEIVED**

Accepted for record
NMOCD
6-3-2014

14. I hereby certify that the foregoing is true and correct.
**Electronic Submission #247101 verified by the BLM Well Information System**
**For RKI EXPLORATION & PROD LLC, sent to the Carlsbad**
**Committed to AFMSS for processing by CATHY QUEEN on 05/28/2014 (14CQ0040SE)**

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

Signature (Electronic Submission) — Date 05/27/2014

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

APPROVED
MAY 29 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 RDU 38
Location 1,840 FNL 1,980 FWL Surface
1,840 FNL 1,980 FWL Bottom Hole
Section 22-26S-30E
County Eddy
State New Mexico

1) The elevation of the unprepared ground is 3,061 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 7,487 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 7,487 feet

5) Estimated tops:

| | MD | TVD | | |
|---|---|---|---|---|
| Rustler | 798 | 798 | | |
| Salado | 1,140 | 1,140 | | |
| Castile | 1,589 | 1,589 | | |
| Lamar Lime | 3,478 | 3,478 | | |
| Base of Lime | 3,548 | 3,548 | | |
| Delaware Top | 3,578 | 3,578 | | |
| Bell Canyon Sand | 3,578 | 3,578 | Oil | 1,549 psi |
| Cherry Canyon Sand | 4,616 | 4,616 | Oil | 1,999 psi |
| Brushy Canyon Sand | 7,080 | 7,080 | Oil | 3,066 psi |
| Bone Spring | 7,337 | 7,337 | | |
| TD | 7,487 | 7,487 | | 146 degree F |

The Bone Spring will be penetrated as rathole to enable the entire Brushy Canyon to be logged.

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 | 870 | 13 3/8" | 54.5#/J-55 | ST&C | 3.00 | 6.10 | 10.84 |
| 12 1/4" | 0 | 3,500 | 9 5/8" | 40#/J-55 | LT&C | 1.33 | 5.30 | 3.71 |
| 7 7/8" | 0 | 7,487 | 5 1/2" | 17#/N-80 | LT&C | 1.94 | 1.55 | 2.73 |

7) Cement program:

**Surface** 17 1/2" hole
Pipe OD 13 3/8"
Setting Depth 870 ft
Annular Volume 0.69462 cf/ft
Excess 1 100 %

Lead 542 sx 1.74 cf/sk 13.5 ppg
Tail 200 sx 1.33 cf/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 3,500 ft
Annular Volume 0.31318 cf/ft 0.3627 cf/ft
Excess 0.5 50 %

Lead 669 sx 1.92 cf/sk 12.6 ppg
Tail 200 sx 1.33 cf/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 | 7,487 | ft | | | |
| Annular Volume | 0.1733 | cf/ft | 0.26074 | cf/ft | 300 ft |
| Excess | 0.4 | | 40 | % | |
| DV Tool Depth | 5500 | ft | | | |

Stage 1

| | | | | | |
|---|---|---|---|---|---|
| Lead: | 326 | sx | 1.48 | cf/sk | 13.0 ppg |

Lead: PVL + 2% PF174 + .3% PF167 + .1% PF65 + .2% PF13 + .25 pps PF46

Top of cement: DV tool

Stage 2

| | | | | | |
|---|---|---|---|---|---|
| Lead: | 236 | sx | 1.89 | cf/sk | 12.9 ppg |
| Tail: | 100 | sx | 1.48 | cf/sk | 13.0 ppg |

Lead: 35/65 Poz "C" + 5% PF44 + 6% PF20 + 3 pps PF42 + .2% PF13 + .125 pps PF130 + .25 pps PF46

Tail: PVL + 2% PF174 + .3% PF167 + .1% PF65 + .2% PF13 + .25 pps PF46

Top of cement: 3,200 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 shal 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 | 870 | 8.5 to 8.9 | 32 to 36 | 6 - 12 | 2 - 8 | NC | Fresh Water |
| 870 | 3,500 | 9.8 to 10.0 | 28 to 30 | 1 - 6 | 1 - 6 | NC | Brine |
| 3,500 | 7,487 | 8.9 to 9.1 | 28 to 36 | 1 - 6 | 1 - 6 | NC | Fresh Water |

10) Logging, coring, and testing program:

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

12) Anticipated Start Date ASAP
Duration 15 days