UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED

OM	IB NO.	100	4-0135
Exp	ires: Ju	aly 31	1, 2010
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	SUNDRY	NOTICES	AND REP	ORTS O	N WELLS
0	not use th	is form for	proposals	to drill or	to re-enter an

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

5. Lease Serial No. NMNM54290 6 If Indian, Allottee or Tribe Name

verse side. 7 If Unit or CA/Agreement, Name and/or No.		
8. Well Name and No NORTH BRUSHY DRAW FED 35 1H EY 9. API Well No 20. A. C.		
o (include area code) 10. Field and Pool, Appropriatory CORRAL CANYON		
11. County or Parish, and State EDDY COUNTY, NM		
E NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF ACTION		
Production (Start/Resume) Water Shut-Off Cure Treat Reclamation Recomplete g and Abandon g Back Production (Start/Resume) Well Integrity Coher Drilling Operations		
ding estimated starting date of any proposed work and approximate duration thereof elocations and measured and true vertical depths of all pertinent markers and zones on file with BLM/BIA. Required subsequent reports shall be filed within 30 days one completion or recompletion in a new interval, a Form 3160-4 shall be filed once requirements, including reclamation, have been completed, and the operator has rilling program for the North es. 63' to 12687' and replace with a MOCD ARTESIA 325 pps PF46, .25 pps PF29 mixed at at 14.8 ppg (1.33 cf/sk). DV tool ACCEPTED ACCEPTED NMOCD		
d by the BLM Well Information System OD LLC, sent to the Carlsbad RAH MCKINNEY on 11/30/2011 (12DLM0249SE) Title OPERATIONS		
Date 11/29/2011		
AL OR STATE OFFICE USE		
TitlePETROLEUM ENGINEER Date 12/05/2011 Office Carlsbad Derson knowingly and willfully to make to any department or agency of the United		

RKI EXPLORATION & PRODUCTION, LLC.

North Brushy Draw Federal 35-1H

Surface Location: 330' FNL & 1,980' FEL Bottom Hole Location: 330' FSL & 1,650' FEL

35-25S-29E Eddy County, TX

- 1. The elevation of the unprepared ground is 3,021' 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 12,687' MD (8,300' TVD) and run casing. This equipment will then be rigged down and the well will be completed with a workover rig.
- 4. Proposed total depth is 12,687' MD, 8,300' TVD.
- 5. Estimated tops of important geologic markers:

Rustler	800'
Salado	1,100'
Castile	1,450'
Lamar Lime	3,500'
Delaware Top	3,560'
Bell Canyon Sand	3,560'
Cherry Canyon Sand	4,630'
Brushy Canyon Sand	5,675'
KOP	7,663'
Bone Spring	7,300'
TVD	8,300' (130 degree F)

6. Estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered:

Bell Canyon	Oil (1,565 psi)
Cherry Canyon	Oil (2,030 psi)
Brushy Canyon	Oil (2,489 psi)
Bone Spring	Oil (3,221 psi)

7. The proposed casing program is as follows:

Surface: 13-3/8" 54.5# J-55 ST&C new casing set from 0' – 625'

Tension SF 2.0, Collapse SF 1.125, Burst SF 1.8.

Salt String: 9-5/8" 40# J-55 LT&C new casing set from 0'-3,175"

Tension SF 2.0, Collapse SF 1.125, Burst SF 1.8.

Production Casing: 5 ½" 17# HCP-110 LT&C new casing set from 0' – 12,687' Tension SF 2.0, Collapse SF 1.125, Burst SF 1.8.

8. Casing setting depth and cementing program:

- a. 13-3/8" surface casing set at 625' in 17-1/2" hole. Circulate cement to surface with 450 sx "C" with 4% PF20, 2% PF1, .25 pps PF46, .25 pps PF29 mixed at 13.5 ppg (1.75 cf/sk) followed by 200 sx "C" with 2% PF1 mixed at 14.8 ppg (1.34 cf/sk).
- b. 9-5/8" intermediate casing set at 3,175' in 12 1/4" hole. Cement will be circulated to surface with 950 sx 35:65 Poz "C" with 5% PF44, 6% PF20, .25 pps PF46, 25 pps PF29 mixed at 12.6 ppg (2.04 cf/sk) followed by 200 sx "C" with .1% PF13 mixed 14.8 ppg (1.33 cf/sk).
- c. 5 ½" production casing set at 12,687' in 8 ¾" hole. Cement will be calculated to bring TOC to 2,875'. The well will be cemented in two stages as follows: Stage 1: 1,350 sx PVL with 30% PF151, .5% PF174, .25 pps PF46, .5% PF79, 1% PF13, .4% PF112 mixed at 13.0 ppg (1.80 cf/sk).
 Stage 2: 250 sx 35:65 Poz "C" with 5% PF44, 6% PF20, .2% PF13, .25 pps PF46, .25 pps PF29 mixed at 12.6 ppg (2.04 cf/sk) followed by 100 sx "C" with .3% PF13 mixed at 14.8 ppg (1.33 cf/sk). DV tool at approximately 5000'

9. Pressure Control Equipment

After setting the 13 3/8" casing a 3,000 psi casing head will be installed and 5,000 psi BOP equipment will be utilized. The 13 3/8" casing will be tested to 1,500 psi before drilling out. The BOP equipment will be tested to 250/3,000 psi and the Hydril will be tested to 1,500 psi. After setting 9 5/8" casing a 5,000 psi casing head will be installed and 5,000 psi BOP equipment will be utilized. The 9 5/8" casing will be tested to 1,500 psi before drilling out. The BOP equipment will be tested to 250/5,000 psi and the Hydril will be tested to 1,500 psi. After setting the 7" casing a 5,000 psi tubing head will be installed and 5,000 psi BOP equipment will be utilized. The 7" casing will tested to 2,000 psi before drilling out. The BOP equipment will be tested to 250/5,000 psi and the Hydril will be tested to 2,000 psi.

The BOP equipment will consist of the following:

- Annular preventers
- Double ram with blind rams and pipe rams
- Drilling spool, or blowout preventer with 2 side outlets (choke side shall be a 3-inch minimum diameter, kill side shall be at least 2-inch diameter)

North Brushy Draw Federal 35-1H

- A minimum of 2 choke line valves (3 inch minimum)
- 3 inch diameter choke line
- 2 kill line valves, one of which shall be a check valve (2 inch minimum)
- 2 chokes
- Pressure gauge on choke manifold
- Upper kelly cock valve with handle available
- Safety valve and subs to fit all drill string connections in use
- All BOPE connections subjected to well pressure shall be flanged, welded, or clamped
- Fill-up line above the uppermost preventer.

10. Mud Program:

0' – 625'	Bentonite/Lime mud. Paper for losses and seepage. 8.6 to 8.9 ppg, FV 32 to 36, PV 1 to 6, YP 1 to 6, WL NC.
625' - 3,175'	Brine. As needed LCM for losses and seepage. 10.0 to 10.1 ppg, FV 28 to 30, PV 1 to 3, YP 1 to 3, WL NC.
3,175' – 12,687'	Drill out fresh water/cut brine. MW 8.8 to 9.1 ppg, FV 28 to 30, PV 1 to 3, YP 1 to 3, WL NC.

11. Testing, Logging and Coring Program:

Testing program: No drillstem tests are anticipated. Electric logging program: CNL/CAL/GR, DLL/CAL/GR. From 9 5/8" casing to kick off point. A gyro survey will also be run at kick off point. Coring program: None.

12. No abnormal conditions or hazards are expected.