

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.

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. NORTH BRUSHY DRAW FED 35 3H
2. Name of Operator RKI EXPLORATION & PROD LLC Contact: CHARLES K AHN E-Mail: cahn@rkixp.com		9. API Well No. 30-015-40185-00-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 CORRAL CANYON
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 35 T25S R29E SESW 0330FSL 1980FEL		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			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Drilling Operations
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 recompleat 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 & Production, LLC needs to change the drilling program to reflect 8-3/4 inch hole & 5-1/2 production casing in lieu of previously mentioned 7-inch intermediate string and a 4-1/2 inch liner. Detailed information is provided in the attached drilling program.

Accepted for record
C. Decker NMOC D 8/19/13

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

RECEIVED
AUG 12 2013
NMOC D ARTESIA

14. I hereby certify that the foregoing is true and correct. Electronic Submission #215575 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 08/07/2013 (13CRW0134SE)	
Name (Printed/Typed) CHARLES K AHN	Title HS&E/REGULATORY MANAGER
Signature (Electronic Submission)	Date 08/01/2013
THIS SPACE FOR FEDERAL OR STATE OFFICE USE	
Approved By _____	Title _____
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 _____	Date _____

APPROVED
AUG 7 2013
Is/ Chris Walls
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD 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 North Brush Draw Federal 35-3H
 Location Surface: 330 FSL 1,980 FWL Sec. 35-25S-29E
 Bottom Hole: 330 FNL 1,980 FWL Sec. 35-25S-29E
 County Eddy
 State New Mexico

1) The elevation of the unprepared ground is 2,999 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 11,778 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 11,778 feet

5) Estimated tops:

	MD	TVD		
Rustler	800	800		
Salado	1,100	1,100		
Castile	1,450	1,450		
Lamar Lime	3,118	3,118		
Base of Lime	3,158	3,158		
Delaware Top	3,560	3,560		
Bell Canyon Sand	3,560	3,560	Oil	BHP = .44 psi/ft x depth 1,566 psi
Cherry Canyon Sand	4,242	4,242	Oil	1,866 psi
Brushy Canyon Sand	5,554	5,554	Oil	2,444 psi
KOP	6,802	6,802	Oil	2,993 psi
Bone Spring	6,948	6,946	Oil	3,057 psi
Landing Point (Avalon Shale)	7,706	7,375	Oil	3,245 psi
TD	11,778	7,350		3,234 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	360	13 3/8"	54.5#/J-55	ST&C	7.13	34.47	26.20
12 1/4"	0	3,125	9 5/8"	40#/J-55	LT&C	1.47	5.75	4.16
8 3/4"	0	11,778	5 1/2"	17#/HCP-110	LT&C	2.53	1.55	6.03
Collapse	1.125							
Burst	1.0							
Tension	2.0							

7) Cement program:

Surface 17 1/2" hole
 Pipe OD 13 3/8"
 Setting Depth 360 ft
 Annular Volume 0.69462 cf/ft
 Excess 1 100 %

Lead 133 sx 1.75 cf/sk 13.5 ppg
 Tail 200 sx 1.34 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 3,125 ft
 Annular Volume 0.31318 cf/ft
 Excess 0.5 50 %

Lead 569 sx 1.92 cf/sk 12.6 ppg
 Tail 200 sx 1.34 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	8 3/4" hole		
Pipe OD	5 1/2"		
Setting Depth	11,778 ft		
Annular Volume	0.2526 cf/ft	0.26074 cf/ft	300 ft
Excess	0.28	28 %	
DV Tool Depth	5500 ft		

Stage 1

Lead:	342 sx	2.08 cf/sk	11.5 ppg
Tail:	705 sx	1.87 cf/sk	13.0 ppg
Lead:	PVL + .5% CC + .3% PF79 (extender) + .25 pps PF46 (defoamer) + 3 pps PF42 (Kolite) + .125 pps + .125 pps PF29 (Cellophane) + .2% PF13 (retarder)		
Tail:	PVL + 30% PF151 (calcium carbonate) + .5% PF174 (expanding agent) + .7% PF606 + .7% PF606 (gel suppressing agent) + .2% PF153 (antisettling agent) + .25 pps PF46 (antifoam) + .2% PF13 (retarder)		
Top of cement:	DV tool		

Stage 2

Lead:	336 sx	1.89 cf/sk	12.9 ppg
Tail:	175 sx	1.33 cf/sk	14.8 ppg
Lead:	35/65 Poz "C" + 5% PF44 (salt) + 6% PF20 (gel) + .125 pps PF29 (cellophane) + .25 pps PF46 (antifoam) + .2% PF13 (retarder)		
Tail:	"C" + .2% PF13 (retarder)		
Top of cement:	2,825 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 each casing 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.

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	360	8.5 to 8.9	32 to 36	Fresh Water
	360	3,125	9.8 to 10.0	28 to 30	Brine
	3,125	11,778	8.9 to 9.1	28 to 36	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 pressures or temperatures are expected. There is no known presences of H2S in this area, although some form 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

RKI Exploration & Production

Project: Eddy County (NM83E)
 Site: Sec 35-T25S-R29E
 Well: North Brushy Draw Fed 35-3H
 Wellbore: Wellbore #1
 Design: 08-01-13



Azimuths to True North
 Magnetic North: 7.49°

Magnetic Field
 Strength: 48299.8snT
 Dip Angle: 59.93°
 Date: 2013/08/01
 Model: IGRF2010

Wolverine Directional

WELL DETAILS: North Brushy Draw Fed 35-3H

+N/-S	+E/-W	Northing	Ground Level: 0.0
0.0	0.0	393000.20	Easting 657826.20
			Latitude 32° 4' 47.564 N
			Longitude 103° 57' 26.005 W
			SHL: 330' FSL / 1980' FWL
			BHL: 330' FNL / 1980' FWL

SECTION DETAILS

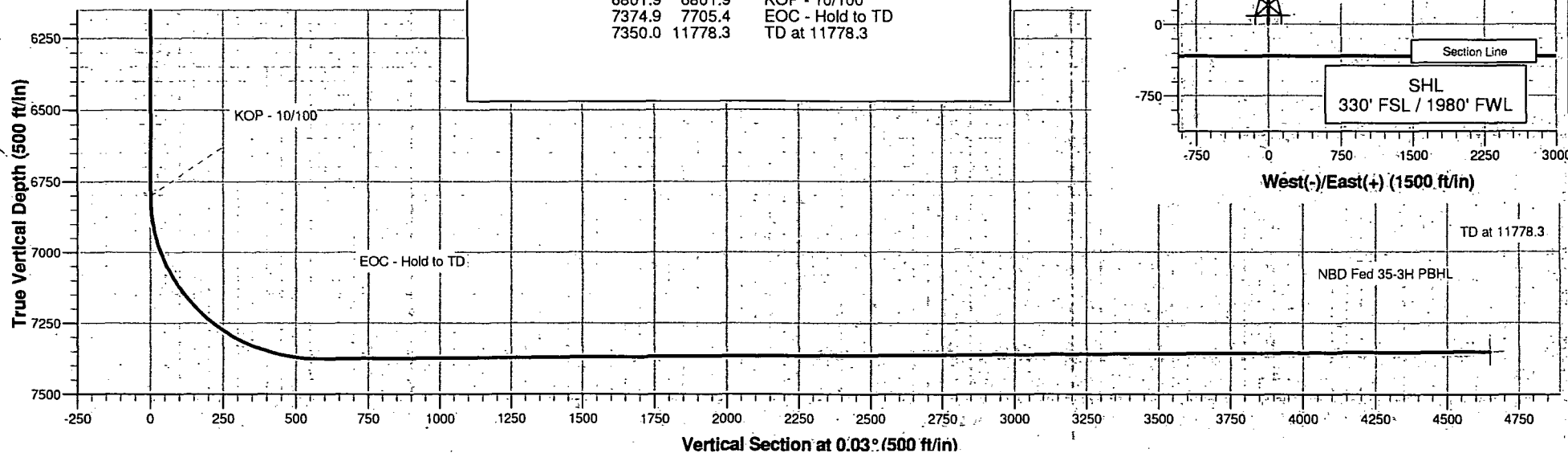
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	6801.9	0.00	0.00	6801.9	0.0	0.0	0.00	0.00	0.0	
3	7705.4	90.35	0.03	7374.9	576.5	0.3	10.00	0.03	576.5	
4	11778.3	90.35	0.03	7350.0	4649.2	2.6	0.00	0.00	4649.2	NBD Fed 35-3H PBHL

Wellbore TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
NBD Fed 35-3H PBHL	7350.0	4649.2	2.6	397649.40	657812.60	Point

Annotations

TVD	MD	Annotation
6801.9	6801.9	KOP - 10/100
7374.9	7705.4	EOC - Hold to TD
7350.0	11778.3	TD at 11778.3



Conditions of Approval

1. The minimum required fill of cement behind the 5-1/2 inch production casing is:

a. First stage to DV tool:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stageSecond stage above DV tool:

☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.