

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED  
OMB No. 1004-0137  
Expires: March 31, 2007

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 ☒ Oil Well ☐ Gas Well ☐ Other MAR 25 2008

2. Name of Operator RKI EXPLORATION & PRODUCTION, LLC. OCD-ARTESIA

3a. Address 3817 NW EXPRESSWAY SUITE 950 OKLAHOMA CITY, OK 73112 3b. Phone No. (include area code) 405-996-5748

4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 950' FSL & 990' FEL SECTION 15 T26S-R30E

5. Lease Serial No. NM-102036  
6. If Indian, Allottee or Tribe Name  
7. If Unit or CA/Agreement, Name and/or No.  
8. Well Name and No. RDX "15" # 2  
9. API Well No. 30-015-36151  
10. Field and Pool, or Exploratory Area BRUSHY DRAW-DELAWARE EAST  
11. County or Parish, State EDDY CO. NEW MEXICO

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 Alter TD from 7500' to 8370'
	<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 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.)

1. RKI EXPLORATION & PRODUCTION, LLC. requests the approval to alter the depth of their RDX "15" # 2 well from 7500' to 8370' TD.

BOP = 3m OK

2. See attached sheet for changes in 5 1/2" casing depths and the change in cementing the 5 1/2" production casing.

STAGE ① → NEED ADDITIONAL 25-50 SX TO BRING CMT TO DV @ 5100'

5 1/2" T-SS 17# 0'-8370' MEETS BLM SF SPECS (SEE ATTACHED)

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

Joe T. Janica

Title Permit Engineer

Signature

Date 03/19/08

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (ORIG. SGD.) LES BARYAK

Title Petroleum Engineer MAR 21 2008

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.

(Instructions on page 2)

Accepted for record - NMOCD

# DRILLING PROGNOSIS

OPERATOR RKI Exploration and Production	FIELD Ross Draw	PROP. NO.	AFE NO.
WELL NAME RDX 15-2	API #: 30-015-36151	ZONE Brushy Canyon	TOTAL DEPTH 8,370'
LOCATION 950' FSL & 990' FEL, Sec. 16-26S-30E	COUNTY Eddy	STATE New Mexico	DATE 03/14/08

**DIRECTIONS**  
From US 285 & County Rd. 726 (Whitethorn), go East on Co. Rd. 726 for ~10 miles to Co. Rd. 725A (Tarbush). Go North on Co. Rd. 725A for 0.5 miles to Lease Rd. Go East (northeasterly) for ~9.0 miles to old lease road and proposed lease road.

C A S I N G P R O G R A M	STRING	SIZE	LENGTH	DEPTH	WEIGHT	GRADE	CPLG	THRD	S P E C I A L E Q U	FROM	TO	TYPE
	Surface	13-3/8"	800'	800'	54.5#	J-55	ST&C	8rd				
	Per drilling permit, set surface casing 25' into Rustler zone.											
	Intermediate	9-5/8"	3,500'	3,500'	36#	J-55	ST&C	8rd				
	Per drilling permit, set intermediate casing 25' into Lamar Limestone zone.											
	Production	5-1/2"	8,370'	8,370'	17#	J-55	LT&C	8rd				
	DV Tool @ ~5,000'											
	Actual DV tool locaton to be determined after logs											

M U D P R O G R A M	INTERVAL	TYPE	WEIGHT	VISC	W. L.	LCM	pH	YP	REMARKS
	0' - 800'	Fresh water bentonite system	< 9.4	34-36	nc	as needed	9-10		
	800' - 3,500'	Saturated brine system w/ chlorides > 186,000	< 10	28	nc	as needed	9-10	2 - 8	LCM as needed
	3,500' - 8,170'	Fresh water system	< 9	28	nc	as needed	9-10	2 - 8	LCM as needed
	For displacement on intermediate casing, use fresh water. Drill out with fresh water to minimize weight and losses to formation.								
	8,170' - 8,370'	Brine system w/ chlorides > 186,000	< 10	28	< 12	as needed	9-10	2 - 8	
	Mud up ~200' before TD. Use starch system, pump sweeps, spot viscous pill, and perform short-trip before attempting to log.								
	Add biocide to mud prior to laying down drillpipe and running casing.								

C E M E N T I N G P R O G R A M	STRING	DESCRIPTION	H2O required	YIELD
	SURFACE	Schlumberger - Service Location - Artesia, NM (505) 746-9363 Lead: 180 sx 35:65 Poz:Class C + 6% D20 + 5 pps D24 + 0.125 pps D130 + 3% S1 mixed 12.7 ppg. Tail: 100 sx. Class C + 0.125 pps D130 + 2% S1 mixed 14.8 ppg	9.97 gal/sk	1.95
	INTERMEDIATE	Lead: 930 sx 35:65 Poz:Class C + 6% D20 + 4 pps D24 + 0.125 pps D130 + 1% S1 mixed 12.6 ppg Tail: 100 sx Class C + 1% S1 + 0.125 pps D130 mixed 14.8 ppg	6.29 gal/sk 10.81 gal/sk	1.34 2.05
	PRODUCTION	Stage 1: Lead 200 sx 40/60 (D961/D124) + 0.2 %bwob D46 + 0.3 %bwob D65 + 1 %bwob D153 + 0.35 %bwob D800 + 0.125 pps D130 mixed 10.22 ppg. Tail 100 sx TXI Lightweight + 1.33% D44 (bwow) + 0.2% D167 + 0.1% D13 mixed 13.0 ppg	11.18 gal/sk 7.23 gal/sk	2.04 1.40
		Stage 2: Lead 155 sx 35:65 Poz:Class C + 5% D44 (bwow) + 6% D20 + 0.125 pps D130 + 0.1% D13 mixed 12.6 ppg Tail 100 sx Class C + 0.2% D13 mixed 14.8 ppg	11.18 gal/sk 6.3 gal/sk	2.04 1.32
	** DV Tool depth @ ~5,100' (subject to change after logging) **			
	** Production casing cement volumes subject to change as hole caliper dictates. **			
	** see Schlumberger cementing proposal for cementing details. **			

## SURFACE CASING

Illustration 7, Page 1

Size	Grade	#/ft.	Coupling	Fj	Pc	Pi	Length	Weight

## INTERMEDIATE CASING

Size	Grade	#/ft.	Coupling	Fj	Pc	Pi	Length	Weight

RECOMMEND 25 SY ADDITIONAL ON TAIL CMT  
ON SPACE (1) TO BRING CMT UP TO DV @ 5100  
PRODUCTION CASING

Size	Grade	#/ft.	Coupling	Fj	Pc	Pi	Length	Weight
5 1/2	J-55	17	LTC	247M	4910	5320	8370	142.3M

Total Weight 142.3M

$$BHP_{EST} = 10 * 0.052 * 8370 = 4350 \text{ psi}$$

$$= 9.5 * 0.052 * 8370 = 4130 \text{ psi}$$

## CASING PARAMETERS

$$WET 2.0 \leftarrow 247 / 142.3 * 0.855$$

## JOINT

$$MASP = 4350 - (0.22 * 8370) = 2500 \text{ psi (3m OK)}$$

$$Sft = Fj / Wt.; Sft \Rightarrow 1.6(\text{dry}) \text{ or } 1.8(\text{bouyant})$$

1. Surface \_\_\_\_\_ = (\_\_\_\_\_) / (\_\_\_\_\_)  
 2. Intermediate \_\_\_\_\_ = (\_\_\_\_\_) / (\_\_\_\_\_)  
 OK 3. Production DRY 1.1 = (247M) / (142.3M)

## COLLAPSE

$$SFc = Pc / (MW * .052 * Ls); SFc \Rightarrow 1.125$$

1. Surface \_\_\_\_\_ = (\_\_\_\_\_) / (\_\_\_\_\_) \* .052 \* \_\_\_\_\_  
 2. Intermediate \_\_\_\_\_ = (\_\_\_\_\_) / (\_\_\_\_\_) \* .052 \* \_\_\_\_\_  
 OK 3. Production 1.18 = (4910) / (.95 \* .052 \* 8370)

## BURST

$$SFb = Pi / BHP; SFb \Rightarrow 1.0$$

1. Surface \_\_\_\_\_ = (\_\_\_\_\_) / (\_\_\_\_\_) \* .052 \* \_\_\_\_\_  
 2. Intermediate \_\_\_\_\_ = (\_\_\_\_\_) / (\_\_\_\_\_) \* .052 \* \_\_\_\_\_  
 OK 3. Production 1.3 = (5320) / (.95 \* .052 \* 8370)

## CEMENT VOLUMES

STG	Hole Size	Casing Size	Ann. Vol.	Sx. Cmt.	Cmt. Yield	Vol. Cmt.	Max. Cmt. Fill up	Expected Fillup	O.K.
Sfc									
Int									
Prod	7 7/8	5 1/2	5.77	200	2.04	408	2354	3270	NEED 25 SY
				100	1.02	140	808		MORE

STAGE (OVER)

FT3/SX

FT3

FT (3162)

FT

MORE