Form 3460-5 (August 2007)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010

Expires.	July 31, 2010
Lease Serial No.	
NMNM100558	

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.

If Indian Allottee or Tribe Name

abandoned we	II. Use form 3160-3 (APD	)) for such p	roposals.		o il matan, mottoe o	1 Trioc Name
SUBMIT IN TRI	PLICATE - Other instruct	tions on rev	erse side.	-	7 If Unit or CA/Agree	ement, Name and/or No
I. Type of Well  ☐ Gas Well ☐ Otl	ner				8 Well Name and No. RDX 15 9	
Name of Operator     RKI EXPLORATION & PROD		CHARLES K	AHN		9 API Well No 30-015-36825-0	0-X1
3a. Address 3817 NW EXPRESSWAY SU OKLAHOMA CITY, OK 7311:		3b Phone No Ph: 405-99 Fx: 405-949		)	10. Field and Pool, or WILDCAT	Exploratory
4. Location of Well (Footage, Sec., 7	, R, M, or Survey Description)	)			11 County or Parish,	and State
Sec 15 T26S R30E NENW 48 32.048610 N Lat, 103 871868					EDDY COUNTY	′, NM ′
12. CHECK APP	ROPRIATE BOX(ES) TO	INDICATE	NATURE OF 1	NOTICE, REI	PORT, OR OTHE	R DATA
TYPE OF SUBMISSION			TYPE O	F ACTION		
Notice of Intent	☐ Acidize	□ Deep	oen	□ Productio	n (Start/Resume)	□ Water Shut-Off
_	☐ Alter Casing	□ Frac	ture Treat	☐ Reclamat	ion	■ Well Integrity
☐ Subsequent Report	☐ Casing Repair	□ New	Construction	Recomple	ete	Other Drilling Operations
Final Abandonment Notice	Change Plans	— □ Plug	and Abandon	Temporar	rily Abandon	Drilling Operations
_	Convert to Injection	☐ Plug	Back	□ Water Dis	sposal	
RKI is requesting the followin  11 inch hole to 12.25 inch hol attachment  7.875 inch hole to TD Run and cement 5.5 inch cas  SEE ATTACH CONDITIONS	g casing changes for the R le from 0 feet to 3412 feet. ing as per attachment	Run and cel			APPROVE	of for record
14. Thereby certify that the foregoing i	Electronic Submission #1	36294 verifie	d by the BLM We	ell Information	System CARLSON	
Comm	For RKI EXPLOR itted to AFMSS for processi					ø
Name (Printed/Typed) CHARLE				REGULATOR		
Signature (Electronic	Submission)		Date 04/24/2	2012		
	THIS SPACE FO	R FEDERA	L OR STATE	OFFICE US	E	
Approved By EDWARD FERNAN	IDEZ		TitlePETROLE	EUM ENGINEI	ER .	Date 04/26/2012
Conditions of approval, if any, are attached certify that the applicant holds legal or equipment would entitle the applicant to conditions.	uitable title to those rights in the		Office Carlsba	ıd		
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent	U.S C. Section 1212, make it a statements or representations as	crime for any poto any matter w	erson knowingly an ithin its jurisdiction	d willfully to main	ke to any department o	r agency of the United

 Well
 RDX 15-9

 Location
 480
 FNL
 1,800
 FWL

 Section 15-26S-30E

 County
 Eddy

 State
 New Mexico

#### Casing program:

odomig program	•••							
Hole · Size	Тор	Bottom	OD Csg	Wt/Grade	Connection	Collapse Design Factor	Burst Design Factor	Tension Design Factor
			1					
17 1/2"	0	824	13 3/8"	54.5#/J-55	ST&C	3.17	6.44	11 45
12 1/2"	0	3,412	9 5/8"	40#/J-55	LT&C	1.37	5 44	3 81
7 7/8"	. 0	7,612	5 1/2"	17#/N-80	LT&C	1 91	1.55	2 69
Intermediate Pipe OD Setting Depth		12 1/2" 9 5/8" 3,412	hole .		·			
Annular Volume		0.31318		0.3627	cf/ft			,
Excess		1	1	100	%		•	
Lead	943 200	sx		2.07 cf/sk	12.6			
Taıl		sx 55 Poz "C" + 5	% PF44 + 6% PF	20 +' 3 pps PF42 + .1	25 pps PF29 +		S PF1	
	Tail: "C" +		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				_	
		Top of cem	ent:	Surface				•
Production		7 7/8"	hole					

 Production
 7 7/8" hole

 Pipe OD
 5 1/2"

 Setting Depth
 7,612 ft

 Annular Volume
 0.1733 cf/ft
 0.26074 cf/ft
 300 ft

 Excess
 0.35
 35 %

 DV Tool Depth
 5000 ft

Stage 1

Lead 430 sx 1 42 cf/sk 13.0 ppg

Lead: PVL + 1.3% PF44 + 5% PF174 + .5% PF606 + .1% PF153 + 2% PF13

Top of cement: DV tool

Stage 2

 Lead:
 162 sx
 2.04 cf/sk
 12.6 ppg

 Tail:
 100 sx
 1.47 cf/sk
 13.0 ppg

Lead: 35/65 Poz "C" + 5% PF44 + 6% PF20 + .2% PF13 + .125 pps PF29 + .25% PF46

Tail: PVL + 1.3% PF44 + 5% PF174 + .5% PF606 + .1% PF153 + .2% PF13

Top of cement: 3,112 ft

SEE ATTACHED FOR APPROVAL CONDITIONS OF APPROVAL

Conditions Of Approval - Sundry date 4/24/2012

**OPERATOR'S NAME:** RKI EXPLORATION

**LEASE NO.:** NM100558

WELL NAME & NO.: | RDX 15 #9 (30-015-36825) SURFACE HOLE FOOTAGE: | 380' FNL & 1800' FWL

**LOCATION:** | Section 15, T. 26 S., R. 30 E., NMPM

**COUNTY:** Eddy County, New Mexico

### I. DRILLING

## A. Original COS still applies with the following changes:

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

#### Medium cave/karst.

Lost circulation in Redbeds, evaporites to base of Castile Group, Delaware and Bone Spring formations.

- 1. The 13-3/8 inch surface casing shall be set at approximately 824 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Formation below the 13-3/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe and the mud weight for the bottom of the hole. Report results to BLM office.

2.	The minimum	required fil	l of cement	behind the 9-5/8	inch intermediate	casing is:

$\boxtimes$	Cement to surface. If cement does not circulate see B.1.a, c-d above. Casing
	to be set into the Lamar Limestone at approximately 3412'. Wait on
	cement (WOC) time for a primary cement job is to include the lead
	cement slurry due to cave/karst.

Formation below the 8-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

If 75% or greater lost circulation occurs while drilling the intermediate casing hole, the cement on the production casing must come to surface.

- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - a. First stage to DV tool, cement shall:
  - Ement 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 stage.
  - b. Second stage above DV tool, cement shall:
  - Cement should tie-back at least 300 feet into previous casing string. Operator shall provide method of verification.

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