Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

5. Lease Serial No.
NMNM19612

SUNDRY Do not use the abandoned we	NMNM19612 6. If Indian, Allottee or Tribe Name						
SUBMIT IN TRI		7. If Unit or CA/Agreement, Name and/or No.					
Type of Well Gas Well ☐ Oth		8. Well Name and No. RDX FEDERAL 28 13					
Name of Operator RKI EXPLORATION & PROD		9. API Well No. 30-015-41984-00-X1					
3a. Address 210 PARK AVE SUITE 900 OKLAHOMA CITY, OK 7310:	o. (include area code) 96-5774		10. Field and Pool, or Exploratory ROSS DRAW				
4. Location of Well (Footage, Sec., T	., R., M., or Survey Description)			11. County or Parish,	and State	
Sec 28 T26S R30E NWNE 66 32.010787 N Lat, 103.530257					EDDY COUNTY	′, NM	
12. CHECK APPI	ROPRIATE BOX(ES) TO	O INDICATE	NATURE OF N	NOTICE, RE	PORT, OR OTHER	R DATA	
TYPE OF SUBMISSION		٠.	ТҮРЕ ОГ	FACTION			
Notice of Intent ■	☐ Acidize	· 🗖 Dee	pen	☐ Production	on (Start/Resume)	■ Water Shut-Off	
	☐ Alter Casing `	☐ Frac	ture Treat	☐ Reclama	tion	☐ Well Integrity	
☐ Subsequent Report	□ Casing Repair	☐ Nev	Construction	Recompl	ete	⊠ Other	
☐ Final Abandonment Notice	☐ Change Plans	☐ Plug	g and Abandon	☐ Tempora	rily Abandon	Change to Original A PD	
	☐ Convert to Injection	Plug	Back	☐ Water Di	ater Disposal		
13. Describe Proposed or Completed Ope If the proposal is to deepen directions Attach the Bond under which the wor following completion of the involved testing has been completed. Final Ab- determined that the site is ready for fi RKI Exploration and Production hole size to 7 7/8 inches.	illy or recomplete horizontally, k will be performed or provide operations. If the operation re- andonment Notices shall be fil- nal inspection.)	give subsurface the Bond No. or sults in a multipi ed only after all	locations and measure file with BLM/BIA e completion or recorrequirements, including	red and true ver . Required subsempletion in a neing reclamation,	tical depths of all pertine sequent reports shall be winterval, a Form 316(have been completed, a	ent markers and zones. filed within 30 days)-4 shall be filed once and the operator has	
Please see the attached revise	ed drilling plan.				NM OIL CO	A	
This well is scheduled to spud		Α	ccepted fo NMO(or record CD /67	ARTESIA JUN 0 RECEI	•	
,	#2 Electronic Submission For RKI EXPLOF nmitted to AFMSS for proc	RATION & PR	OD LLC, sent to ti GEL MAYES on 0	he Carlsbad 5/06/2014 (14/	AXM0092SE)		
Name (Printed/Typed) JODY NO	ERDLINGER		Title REGULA	ATORY ANA	LYST	,	
Signature (Electronic S	ubmission)		Date 03/27/20)14 AP	PROVED		
	THIS SPACE FO	R FEDERA	L OR STATE	OFFICE US	E		
Approved By Conditions of approval, if any, are attached ertify that the applicant holds legal or equivalent would entitle the applicant to conductive 18 U.S.C. Section 1001 and Title 43 U.S.C.	itable title to those rights in the ct operations thereon.	subject lease	Office	BUREAU	hris Walls FLAND MANAGEME	Date NT	
States any false, figitions on frondulant at	J.S.C. Section 1212, make it a	crime for any pe	rson knowingly and	willfully to mak	e to any department or a	gency of the United	

Well

RDX Federal 28-13

Location

Surface: 660 FNL

1,980 FEL 1,980 FEL

Sec. 28-26S-30E Sec. 28-26S-30E

Bottom Hole: 660 FNL

County 'Eddy State New Mexico

1) The elevation of the unprepared ground is

3,002 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

7,359 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

7,359 feet

5) Estimated tops:

· ·	TVD
Rustler	841
Salado ·	1,140
Castile	1,589
Lamar Lime	3,200
Delaware Top	4,394 BHP = .44 psi/ft x depth
Bell Canyon Sand	4,394 Oil 1,933 psi
Cherry Canyon Sand	4,459 Oil 1,962 psi
Brushy Canyon Sand	6,931 Oil 3,050 psi
Bone Spring	7,209 Oil 3,172 psi
TD	7,359 3,238 psi

6) Casing program:				•			Burst	Tension	
Hole S	Size	Top	Bottom	OD Csg	Wt/Grade	Connection	Design Factor	Design Factor	Design Factor
17 1/	'2"' .	0	925	13 3/8"	54.5#/J-55	ST&C	2.78	13.42	10.20
12 1/	4"	0	3,290	9 5/8"	40#/J-55	LT&C	1.40	5.46	3.95
7-7/	3"	0	7,359	5 1/2"	17#/N-80	ŁT&C	1.94	1.55	2.78

Collapse	1.125
Burst	1.0
Tension	2.0

7) Cement program:

Surface 17 1/2" 13 3/8" Pipe OD Setting Depth 925 ft Annular Volume 0.69462 cf/ft

Excess

100 %

1.75 cf/sk Lead . 9:13 gal/sk Tail ' 200 sx 1.33 cf/sk 6.32 gal/sk 14.8 ppg

Lead: "C" + 4% PF20 + 2% PF1 + .125 pps PF29 + .2% PF46 .

Tail: "C" + 1% PF1

Top of cement: Surface

12 1/4" Intermediate Pipe OD 9 5/8" Setting Depth 3,290 ft Annular Volume 0.31318 cf/ft 0.5 Excess

0.3627 cf/ft 50 %

1.92 cf/sk 9.95 gal/sk Lead 12.6 ppg Tail 200 sx 1.33 cf/sk 6.32 gal/sk

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

7-7/8" Production Pipe OD 5 1/2"

7,359 ft Setting, Depth 0.1732699 cf/ft Annular Volume 0.26074 cf/ft

0.32 DV Tool Depth 5500 ft

Stage 1

Excess

1.48 cf/sk 7.58 gal/sk 13.0 ppg 404 sx Lead:

0.5

PVL + 1.3% PF44 + 5% PF174 + 0.5% PF606 + 0.1% PF153 + 0.4 pps PF46 + 0.4% PF13

32 %

500 ft

Stage 2

1.89 cf/sk 10.03 gal/sk 270 sx 12.9. ppg Lead: 7.58 gal/sk Tail: 175 SX 1.48 cf/sk

35/65 Poz "C" + 5% PF44 (salt) + 6% PF20 (gel) + .125 pps PF29 (cellophane) Lead:

+ .25 pps PF46 (antifoam) + .2% PF13 (retarder

PVL + 1.3% PF44 + 5% PF174 + 0.5% PF606 + 0.1% PF153 + 0.4 pps PF46 + 0.4% PF13 Tail:

Top of cement:

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 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	925	8.5 to 8.9	32 to 36	NC	Fresh Water
	925	3,290	9.8 to 10.0	28 to 30	NC	Brine
	3,290	7,359	8.9 to 9.1	28 to 36	NC	Fresh Water

10) Logging, coring, and testing program:

No drillstem 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 a 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