Form 3160-5
(August 2007)

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.

5. Lease Serial No.
NMNM91078

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
LONGVIEW FEDERAL 12 4H

2. Name of Operator
RKI EXPLORATION & PROD LLC
Contact: CHARLES K AHN
E-Mail: cahn@rkixp.com

9. API Well No.
30-015-42238-00-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
UNDESIGNATED

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 12 T23S R28E NENE 0565FNL 0335FEL
32.193337 N Lat, 104.015904 W Lon

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			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Drilling Operations
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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.)

RKI Exploration & Production, LLC requests authorization to remove the 7-inch intermediate string from the casing design by continuing with an 8.75 inch hole size to TD then run a 5.5 inch production casing. Updated drilling program is attached for reference.

NM OIL CONSERVATION
ARTESIA DISTRICT
NOV 09 2015
RECEIVED

SEE ATTACHED FOR CONDITIONS OF APPROVAL

(ES) 11/20/15
Accepted for record
NMOCD

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #322076 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 10/30/2015 (16CRW0004SE)

Name *(Printed/Typed)* CHARLES K AHN — Title HS&E/REGULATORY MANAGER

Signature (Electronic Submission) — Date 10/30/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By CHRISTOPHER WALLS — Title PETROLEUM ENGINEER — Date 11/02/2015

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 Carlsbad

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	Longview 12-4H				
Location	Surface:	565 FNL	335 FEL	Sec. 12-23S-28E	
	Bottom Hole:	330 FNL	395 FEL	Sec. 1-23S-28E	
County	Eddy				
State	New Mexico				

1) The elevation of the unprepared ground is 3,028 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 13,973 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 13,973 feet

5) Estimated tops:

	MD	TVD		BHP = .44 psi/ft x depth
Base_ Lamar	3,000	3,000		
Delaware	3,256	3,256	Oil	1,433 psi
Cherry Canyon	3,811	3,811	Oil	1,677 psi
Kingrea	5,628	5,628	Oil	2,476 psi
Bone Spring Lime	6,638	6,335	Oil	2,921 psi
1st BoneSpring SS	7,543	7,435	Oil	3,319 psi
KOP	7,769	7,748	Oil	3,418 psi
2nd BoneSpring SS	8,386	8,151	Oil	3,690 psi
Landing Point (2nd Bonespring)	9,006	8,392	Oil	3,692 psi
TD	13,973	8,362		3,679 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	225	13 3/8"	54.5#/J-55	ST&C	11.41	55.15	41.92
12 1/4"	0	4,000	9 5/8"	40#/J-55	LT&C	1.15	4.49	3.25
8 3/4"	0	13,973	5 1/2"	17#/HCP-110	BT&C	2.17	1.55	5.08

Collapse	1.125
Burst	1.0
Tension	2.0

7) Cement program:

Surface	17 1/2" hole			
Pipe OD	13 3/8"			
Setting Depth	225 ft			
Annular Volume	0.69462 cf/ft			
Excess	1		100 %	
Lead	27 sx	1.75 cf/sk	9.13 gal/sk	13.5 ppg
Tail	200 sx	1.33 cf/sk	6.30 gal/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	4,000 ft			
Annular Volume	0.31318 cf/ft		0.3627 cf/ft	
Excess	0.5		50 %	
Lead	780 sx	1.92 cf/sk	9.95 gal/sk	12.6 ppg
Tail	200 sx	1.33 cf/sk	6.32 gal/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	13,973	ft			
Annular Volume	0.2526	cf/ft	0.26074	cf/ft	300 ft
Excess	0.32		32 %		
DV Tool Depth	5000	ft			

Stage 1							
Lead:	687	sx	2.08	cf/sk	11.94	gal/sk	11.5 ppg
Tail:	836	sx	1.87	cf/sk	9.53	gal/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 supressing agent) + .2% PF153 (antisettling agent) + .25 pps PF46 (antifoam) + .2% PF13 (retarder)						
	Top of cement:	DV tool					
Stage 2							
Lead:	108	sx	1.89	cf/sk	10.06	gal/sk	12.9 ppg
Tail:	175	sx	1.33	cf/sk	6.32	gal/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:	3,700 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 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 nipped 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	225	8.5 to 8.9	32 to 36	NC	Fresh Water
225	4,000	9.8 to 10.0	28 to 30	NC	Brine
4,000	13,973	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

Conditions of Approval
Longview Federal 12 4H
3001542238

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

Operator has proposed DV tool at a depth of 5000'. Operator is to submit sundry if DV tool depth varies by more than 100' from approved depth.

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 stage.

b. Second stage above DV tool:

☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. **Additional Cement may be required, as excess calculates to 14%**