OCD-ARTESIA

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

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.
NMNM61349

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 31 1H

2. Name of Operator
RKI EXPLORATION & PROD LLC
Contact: JODY NOERDLINGER
E-Mail: jnoerdlinger@rkixp.com

9. API Well No.
30-015-42049-00-X1

3a. Address
210 PARK AVE SUITE 900
OKLAHOMA CITY, OK 73102

3b. Phone No. (include area code)
Ph: 405-995-5774
Fx: 405-996-5772

10. Field and Pool, or Exploratory
UNDESIGNATED

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 6 T23S R29E Lot 3 140FNL 1390FWL
32.202948 N Lat, 104.013882 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
	☐ 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 and Production requests permission to alter the hole size and casing program on the subject well:

Proposed action:
Hole size will be changed as follows: Production hole size will be 8 3/4 inches to TD.
Casing size will be changed as follows: Will run a 5 1/2-inch production longstring to TD.

The revised drilling program is attached.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Accepted for record
NMOCD TES 8/4/14

NM OIL CONSERVATION
ARTESIA DISTRICT
AUG 04 2014

RECEIVED

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #253597 verified by the BLM Well Information System
For RKI EXPLORATION & PROD LLC, sent to the Carlsbad
Committed to AFMSS for processing by DEBORAH MCKINNEY on 07/29/2014 (14DLM2535SE)

Name *(Printed/Typed)* JODY NOERDLINGER — Title REGULATORY ANALYST

Signature (Electronic Submission) — Date 07/17/2014

APPROVED
JUL 30 2014
/s/ Chris Walls
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By (BLM Approver Not Specified) — Title — Date 07/30/2014

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 Federal 31-1H
Location Surface: 140 FNL 1,390 FWL Section 6-23S-29E
Bottom Hole: 330 FNL 395 FWL Section 31-22S-29E

County Eddy
State New Mexico

1) The elevation of the unprepared ground is 3,099 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 13,484 feet and run casing and cement. This equipment will then be rigged down and the well will be completed with a workover rig.

4) Proposed depth is 13,484 feet MD

5) Estimated tops:

	TVD	MD	
Rustler	203	203	
Salado	245	245	
Top of Salt	512	512	
Base of Salt	2,555	2,555	BHP = .44 psi/ft x depth
Lamar Lime	2,735	2,735	1,203 psi
Base of Lime	2,774	2,774	1,221 psi
Delaware Top	2,820	2,820	1,241 psi
Bell Canyon Sand	2,820	2,820	1,241 psi
Cherry Canyon Sand	3,681	3,681	1,620 psi
Brushy Canyon Sand	5,905	5,905	2,598 psi
Bone Spring	6,071	6,071	2,671 psi
Bone Spring 1st Sand	7,332	7,332	3,226 psi
KOP	7,756	7,831	3,413 psi
Bone Spring 2nd Sand	8,088	8,185	3,559 psi
Landing Point	8,400	8,813	3,696 psi
TD	8,400	13,484	3,696 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	250	13 3/8"	54.5#/J-55	ST&C	10.27	49.64	37.72
12 1/4"	0	4,000	9 5/8"	40#/J-55	LT&C	1.15	4.49	3.25
8 3/4"	0	13,484	5.5"	17#/HCP-110	LT&C	1.45	2.13	2.48

Collapse	1.125
Burst	1.0
Tension	2.0

7) Cement program:

Surface

Pipe OD	13 3/8"		
Setting Depth	250	ft	
Annular Volume	0.69462	cf/ft	
Excess	1		100 %

Lead	198 sx	1.75 cf/sk	13.5 ppg
Tail	250 sx	1.34 cf/sk	14.8 ppg

Lead: "C" + 4% PF20 (gel) + 2% PF1 (CC) + .125 pps PF29 (CelloFlake) + .2% PF46 (antifoam)
Tail: "C" + 1% PF1 (CC)

Top of cement: Surface

Intermediate

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	850 sx	1.92 cf/sk	12.9 ppg
Tail	200 sx	1.33 cf/sk	14.8 ppg

Lead: 35/65 Poz "C" + 5% PF44 (salt) + 6% PF20 (gel) + 3 pps PF42 (KoalSeal) + .125 pps PF29 (CelloFlake) + .2% PF46 (antifoam) +1% PF1 (CC)
Tail: "C" + .2% PF13 (retarder)

Top of cement: Surface

Production	8 3/4" hole			
Pipe OD	5-1/2"			
Setting Depth	13,484 ft			
Annular Volume	0.2526 cf/ft		0.26074 cf/ft	4000 ft
Excess	0.35		35 %	
DV Tool Depth	5500 ft			
Stage 1				
Lead:	1,840 sx	1.48 cf/sk		13.0 ppg
Lead: PVL + 2% PF174 (expanding agent) + .3% PF167 (Uniflac) + .1% PF65 (dispersant) + .2% PF13 (retarder) + .25 pps PF46 (antifoam)				
	Top of cement:	DV tool		
Stage 2				
Lead:	937 sx	1.89 cf/sk		12.9 ppg
Tail:	100 sx	1.48 cf/sk		13.0 ppg
Lead: 35/65 Poz "C" + 5% PF44 (salt) + 6% PF20 (gel) + .125 pps PF29 (CelloFlake) + .2% PF13 (retarder) + .25 pps PF46 (antifoam)				
Tail: PVL + 1.3% PF44 (salt) + 5% PF174 (expander) +.5% FP606 (gel suppressing agent) + .25 pps PF46 (antifoam) + .2% PF13 (retarder)				
	Top of cement:	Surface 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" 5M 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 initial installation. 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	PV	YP	Fluid Loss	Type System
0	250	8.5 to 8.9	32 to 36	1 - 6	1 - 6	NC	Fresh Water
250	4,000	9.8 to 10.0	28 to 30	1 - 3	1 - 3	NC	Brine
4,000	13,484	8.9 to 9.1	28 to 36	1 - 3	1 - 3	NC	Fresh Water

10) Logging, coring, and testing program:

No drill stem test are planned
KOP to intermediate: CNL, Caliper, GR, DLL,
Intermediate to surface: CNL, GR
No coring is planned

11) Potential hazards:

No abnormal pressure or temperature is expected. No H2S is known to exist in the area.
Lost circulation can occur in, lost circulation will be on location and readily available if needed.

12) Anticipated start date ASAP
Duration 25 days

Conditions of Approval

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 5500'. 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 to surface. If cement does not circulate, contact the appropriate BLM office.