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.
NMNM21767

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.
EAST PECOS FEDERAL COM 22 6H

2. Name of Operator
RKI EXPLORATION & PROD LLC
Contact: HEATHER BREHM
E-Mail: hbrehm@rkixp.com

9. API Well No.
30-015-42281-00-X1

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

3b. Phone No. (include area code)
Ph: 405-996-5769
Fx: 405-949-2223

10. Field and Pool, or Exploratory
UNDESIGNATED

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 22 T26S R29E SWSE 250FSL 1840FEL
32.011543 N Lat, 103.580855 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 to Original APD
	☐ 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 respectfully requests to deepen our 9-5/8" casing to the BS Lime and run an external casing packer at 4873' and DV tool at 4850'; take out DV tool in 5.5" string and tie cement into 9-5/8" casing on the production job.

Summary of changes:
1) Extend 12.25" hole and run 9-5/8" HCL80 LTC casing to Bone Spring Lime approximately 6664'
2) DV tool in 9-5/8" string at 4850'
3) 5 1/2" 20# HCP110 GBCD long string with cement 500' up into 9-5/8" casing

Please see attached revised drilling program.

NM OIL CONSERVATION
ARTESIA DISTRICT
JAN 04 2016
RECEIVED

* Work already done without Approval - As of 12/27/15

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

Electronic Submission #326527 verified by the BLM Well Information System
For RKI EXPLORATION & PROD LLC, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 12/22/2015 (16PP0015SE)

Name *(Printed/Typed)* HEATHER BREHM — Title REGULATORY ANALYST

Signature (Electronic Submission) — Date 12/16/2015

KED 1/5/2016
Accepted for record
NMOCD

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ACCEPTED — EDWARD FERNANDEZ, Title PETROLEUM ENGINEER — Date 12/30/2015

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	East Pecos Federal Com 22-6H				
Location	Surface:	250 FSL	1,840 FEL	22-26S-29E	
	Bottom Hole:	230 FNL	1,840 FEL	22-26S-29E	

County Eddy
State NM

1) The elevation of the unprepared ground is 2,881 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 13,371 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 13,371 feet MD

5) Estimated tops:

	MD	TVD		BHP = .44 psi/ft x depth
Rustler	950	950		
Salado	1,100	1,100		
Lamar Lime	2,947	2,947		1,297 psi
Cherry Canyon Sand	3,918	3,918	Oil	1,724 psi
Brushy Canyon	4,998	4,998	Oil	2,199 psi
Bone Spring Lime	6,664	6,652	Oil	2,932 psi
Bone Spring 1nd SS	7,569	7,556	Oil	3,330 psi
KOP	7,783	7,762	Oil	3,425 psi
Bone Spring 2rd SS	8,431	8,372	Oil	3,710 psi
Landing Point (2nd BS)	8,981	8,608	Oil	3,952 psi
TD	13,371	8,573		5,883 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	375	13 3/8"	54.5#/J-55	ST&C	6.85	33.09	25.15
12 1/4"	0	6,664	9-5/8"	40#/HCL-80	LT&C	1.44	1.15	4.83
8-3/4"	-	13,371	5 1/2"	20#/HCP-110	GBCD	2.94	1.26	2.17

Collapse	1.125
Burst	1.0
Tension	2.0

7) Cement program:

Surface	17 1/2" hole				
Pipe OD	13 3/8"				
Setting Depth	375 ft				
Annular Volume	0.69462 cf/ft				
Excess	1		100 %		
Lead	298 sx	1.75 cf/sk		9.13 gal/sk	13.5 ppg
Tail	200 sx	1.33 cf/sk		6.32 gal/sk	14.8 ppg

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

Intermediate					
Pipe OD	9-5/8"				
Setting Depth	6,664 ft				
Annular Volume	0.3132 cf/ft		0.3627 cf/ft	0 ft	
Excess	0.35		35 %		
DV Tool Depth	4850 ft	Top of Cement			
Stage 1					
Lead:	518 sx	1.48 cf/sk		7.58 gal/sk	13.0 ppg

Lead: PVL + 1.3% PF44 + 5% PF174 + .5% PF606 + .35% PF813 + .1% PF153 + .4 pps PF46
Top of cement: DV tool

Stage 2					
Lead:	878 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 + 6% PF20 + .2% PF13 + .125 ps PF29 + .4 pps PF46
Tail: "C" + .2% PF13
Top of cement: Surface 375 ft

Production	8-3/4" hole				
Pipe OD	5 1/2"				
Setting Depth	13,371 ft				
Annular Volume	0.2526				
Excess	0.32				
Lead:	1,285 sx	1.87 cf/sk		9.52 gal/sk	13.0 ppg

Lead: AcidSolid PVL + 5% PF174 + .7% PF606 + .2% PF153 + .5% PF13 + 30% PF151 + .4 pps PF46
Top of cement: 6,164 ft

8) Pressure control equipment:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram type (5,000 psi WP) preventer, a bag-type annular preventer (5,000 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 5,000 psi and the annular will be tested to 1,500 psi after setting 13-3/8" casing string & 9 5/8" casing string. The 13 3/8" and 9 5/8" casing will be tested to .22 psi per ft of casing string length or 1500 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 and a check valve.
2 chokes on the manifold along with a pressure gauge, with one remotely controlled from rig floor.
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	375	8.5 to 8.9	32 to 36	1 - 6	1 - 6	NC	Fresh Water
375	6,664	9.8 to 10.0	28 to 30	1 - 3	1 - 3	NC	Brine
6,664	13,371	9.6 to 10.2	35 to 40	20-22	8 - 10	<20	White Starch

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 material will be on location and readily available if needed.

12) Anticipated start date ASAP
Duration 40 days