

Submit 1 Copy To Appropriate District
Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-41587
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator RKI EXPLORATION AND PRODUCTION		6. State Oil & Gas Lease No:
3. Address of Operator 210 PARK AVE., SUITE 900, OKLAHOMA CITY, OK 73102		7. Lease Name or Unit Agreement Name PINNACLE STATE 36
4. Well Location Unit Letter C : 150 feet from the NORTH line and 1700 feet from the WEST line Section 36 Township 22S Range 28E NMPM County EDDY		8. Well Number 32H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3142.5 GR		9. OGRID Number 246289
		10. Pool name or Wildcat CULEBRA BLUFF; BONE SPRING, SOUTH

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input checked="" type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input checked="" type="checkbox"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
CLOSED-LOOP SYSTEM <input type="checkbox"/>			
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

RKI proposes a re-design in the approved casing program. These are the proposed revisions:

- Set surface casing @ 450', as opposed to the 950' originally proposed on approved permit.
- Set a 7" intermediate string into the 2nd Bone Spring Sand to be 2-stage cemented at a depth of 8,740'.
- Set a 4-1/2" Liner Packer System (Baker Frac Point System) at a depth of 12,967'.

Please see the attached drilling program, revised on 8/13/2013.

RECEIVED OGD
2013 AUG 16 P 1:32

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Jody Noerdlinger TITLE Regulatory Analyst DATE 8/15/13

Type or print name Joy Noerdlinger E-mail address: jnoerdlinger@rkixp.com PHONE: 405-996-5774

For State Use Only

APPROVED BY: SR Dade TITLE Dist # Supervisor DATE 8/20/13

Conditions of Approval (if any):

Well : Pinnacle State 36-32H
 Location Surface: 150 FNL 1,700 FWL Section 36-22S-28E
 Bottom Hole: 330 FSL 1,715 FWL Section 36-22S-28E

County : Eddy
 State : New Mexico

- 1) The elevation of the unprepared ground is 3,143 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 12,967 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 12,967 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	7,833	7,833	3,447 psi
Bone Spring 2nd Sand	8,088	8,097	3,559 psi
Landing Point	8,406	8,740	3,699 psi
TD	8,356	12,967	3,677 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	450	13 3/8"	54.5#/J-55	ST&C	5.71	27.58	20.96
12 1/4"	0	4,000	9 5/8"	40#/J-55	LT&C	1.15	4.49	3.25
8 3/4"	0	8,740	7"	26#/P-110	LT&C	1.61	1.99	3.51
6 1/8"	7,890	12,967	4 1/2"	11.6#/HCP-110	Buttress	1.52	2.14	13.53
Collapse	1.125							
Burst	1.0							
Tension	2.0							

7) Cement program:

Surface	17 1/2" hole			
Pipe OD	13 3/8"			
Setting Depth	450 ft			
Annular Volume	0.69462 cf/ft			
Excess	1		100 %	
Lead	357 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	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	858 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		

Intermediate 8 3/4" hole
 Pipe OD 7"
 Setting Depth 8,740 ft
 Annular Volume 0.15033 cf/ft 0.1585' cf/ft 300 ft
 Excess 0.35 35 %
 DV Tool Depth 5500 ft
 Stage 1

Lead: 444 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: 117 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: 3,700 ft

Liner 6 1/8" hole
 Pipe OD 4 1/2"
 Setting Depth 12,967 ft
 Baker Frac Point System

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 setting each casing 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.
 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	450	8.5 to 8.9	32 to 36	1 - 6	1 - 6	NC	Fresh Water
450	4,000	9.8 to 10.0	28 to 30	1 - 3	1 - 3	NC	Brine
4,000	12,967	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

Duration 25 days