

District I
1625 N. French Dr., Hobbs, NM 88240

District II
1301 W. Grand Avenue, Artesia, NM 88210

District III
1000 Rio Brazos Road, Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.

Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

MAR 10 2008
OCD-ARTESIA

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address RKI EXPLORATION & PRODUCTION, LLC. 3817 NW EXPRESSWAY SUITE 950 OKLAHOMA CITY, OKLAHOMA 73112		² OGRID Number 246289
³ Property Code 303271	⁴ Property Name PINNACLE STATE	⁵ API Number 30-015-36217
⁶ Proposed Pool 1 HERRADURA BEND-DELAWARE EAST (30670)		⁷ Well No. 23
⁸ Proposed Pool 2		

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	36	22S	28E		965'	SOUTH	1865'	EAST	EDDY

⁸ Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Additional Well Information

¹¹ Work Type Code N	¹² Well Type Code O	¹³ Cable/Rotary ROTARY	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3110'
¹⁶ Multiple NO	¹⁷ Proposed Depth 6657'	¹⁸ Formation BONE SPRING	¹⁹ Contractor TEACO	²⁰ Spud Date WHEN APPROVED
Depth to Groundwater Less than 100'		Distance from nearest fresh water well unknown		Distance from nearest surface water Pecos River 2 mi Southwest
Pit: Liner: Synthetic <input type="checkbox"/> _____ mils thick Clay <input type="checkbox"/> Pit Volume: _____ bbls Drilling Method: Closed-Loop System <input checked="" type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input checked="" type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
26"	20"	Conductor	40'	Redi-mix	Surface
12 1/4"	9 5/8"	36#	400'	375 Sx.	Surface
7 7/8"	5 1/2"	17#	6657'	675 Sx.	Surface

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

SEE ATTACHED SHEET

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines <input checked="" type="checkbox"/> a general permit <input type="checkbox"/> or an (attached) alternative OCD-approved plan <input type="checkbox"/> .		OIL CONSERVATION DIVISION	
Printed name: Joe T. Janica		Approved by: <i>Jim W. Green</i>	
Title: Permit Engineer		Title: <i>District II Supervisor</i>	
E-mail Address: joejanica@valornet.com		Approval Date: 3/17/08	
Date: 03/08/08		Expiration Date: 7/17/10	
Phone: 575-391-8503		Conditions of Approval Attached <input type="checkbox"/>	

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State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-36217	Pool Code 30670	Pool Name HERRADURA BEND DELEWARE-EAST
Property Code 303271	Property Name PINNACLE STATE	Well Number 23
OGRID No. 246289	Operator Name RKI EXPLORATION & PRODUCTION	Elevation 3110'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	36	22 S	28 E		965	SOUTH	1865	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature Date 03/08/08 Joe T. Janica Printed Name
	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date Surveyed Signature Professional Surveyor Certificate No. 7977 Basin Surveys

GEOLOGICAL PROGNOSIS

Well Name: Pinnacle State #23
API #: 0
Field: Herradura Bend

Location (Standard): 965 FSL 1865 FEL
Sec. 36-22S-28E
Eddy Co., NM
Lat/Long: 32.3444067 / -104.0376226
Elevation: GL(ft): 3,110 KB(ft): 3,122

<u>FORMATION</u>	<u>DEPTH (TVD)(ft)</u>	<u>SUBSEA(ft)</u>
Base of Salt	2,570	552
Base of Lime	2,833	289
Delaware Top	2,877	245
Bell Canyon Sand	2,877	245
Cherry Canyon Sand	3,856	-734
Brushy Canyon Sand	4,857	-1,735
Pipeline Shale	6,361	-3,239
Bone Spring Lime	6,383	-3,261
Bone Spring Avalon Sand	6,487	-3,365
TD (includes 150 ft. rat hole)	6,657	-3,535

Primary Objective(s): Brushy Canyon, Bone Spring Avalon
Secondary Objective(s): Bell Canyon, Cherry Canyon

Mud Logger: Company Name: Morco Starting Depth: 2,370
Catch 10' Samples from Start to Total Depth (unless told 200' above Delaware
otherwise)

Electric Logging Program: (Schlumberger or Halliburton)

Laterolog from 50' above Delaware top to T.D.
Gamma Ray/Density/Neutron/Caliper Log from 50' above Delaware top to T.D.
Magnetic Resonance Tool from Delaware top to T.D.

Correlation Logs:

Pinnacle 5	Pinnacle 10	Pinnacle 13
NW SE	NE SE	SW SE
36-22S-28E	36-22S-28E	36-22S-28E

Remarks: Tops are based on Measured Depths.

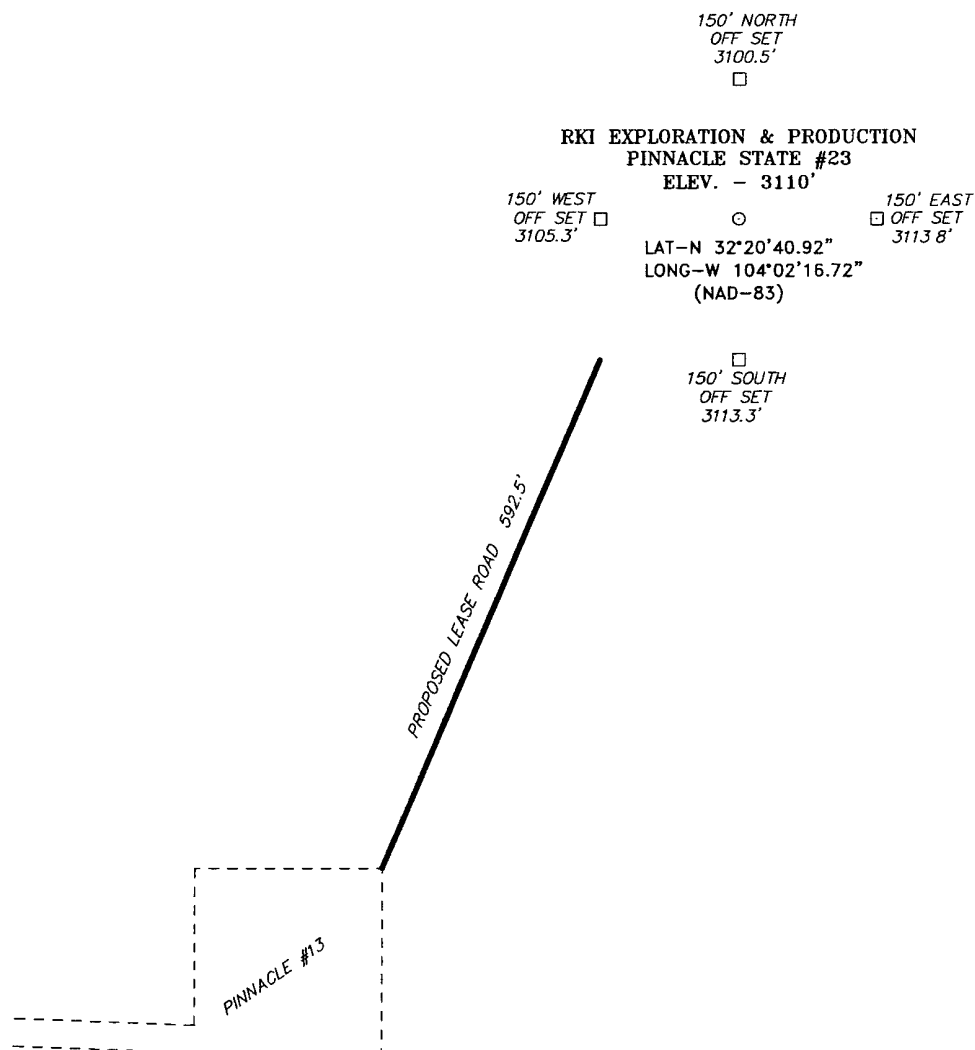
Date: 2/22/2008

Geologist: Matt Huhnke
Office: (405) 996-5755
Cell: (405) 476-2355
E-mail: mhuhnke@rkixp.com
FAX: (405) 949-2223

Engineer: Pat McCollom
Office: (405) 996-5748
Cell: (405) 833-0332
E-mail: pmccollom@rkixp.com
FAX: (405) 949-2223

1. Drill 26" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 12½" hole to 400'. Run and set 400' of 9 5/8" 36# J-55 ST&C casing. Cement with 375 Sx of Class "C" cement + 2% CaCl₂ + ¼# Flocele/Sx. Yield 1.32, circulate cement to surface.
3. Drill 7 7/8" hole to 6657'. Run and set 6657' of 5½" 17# J-55 ST&C casing. Cement in two stages, with DV Tool at 4000'±. Cement 1st stage with 210 Sx. of Class "C" cement + additives, Yield 2.47, tail in with 140 Sx. of Class "C" cement + additives, Yield 1.3. Cement 2nd stage with 200 Sx of Class "C" cement + additives yield 2.47, tail in with 125 Sx. of Class "C" cement + additives Yield 1.32, circulate cement to surface.
4. Cement volumes on both strings of pipe may have to be re-calculated after the open hole logs have been run. The results of the caliper log calculations may result in having to alter the prior estimated volumes of cement needed.
5. Fresh water mud will be used to drill the surface hole and saturated brine will be used to drill the 7 7/8" production hole in order to keep from washing out the salt section.
6. The Bureau of Land Management does not have any records of the presence of H₂S in this area. RKI Exploration & Production, LLC. has drilled wells in this area and have not encountered any H₂S while drilling their wells.

SECTION 36, TOWNSHIP 22 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF CO. RD. 605 AND STATE
HWY. 31, GO NORTHWEST ON CO. RD. 605 FOR
APPROX. 1.9 MILES TO LEASE ROAD, ON LEASE ROAD
GO NORTHEAST FOR APPROX. 0.3 MILES TO LEASE
ROAD, ON LEASE ROAD GO EAST TO PROPOSED
LEASE ROAD AT PINNACLE #13 LOCATION.

200 0 200 400 FEET



SCALE: 1" = 200'

RKI EXPLORATION & PRODUCTION

REF: PINNACLE STATE #23/ Well Pad Topo

THE PINNACLE STATE #23 LOCATED 965' FROM
THE SOUTH LINE AND 1865' FROM THE EAST LINE OF
SECTION 36, TOWNSHIP 22 SOUTH, RANGE 28 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

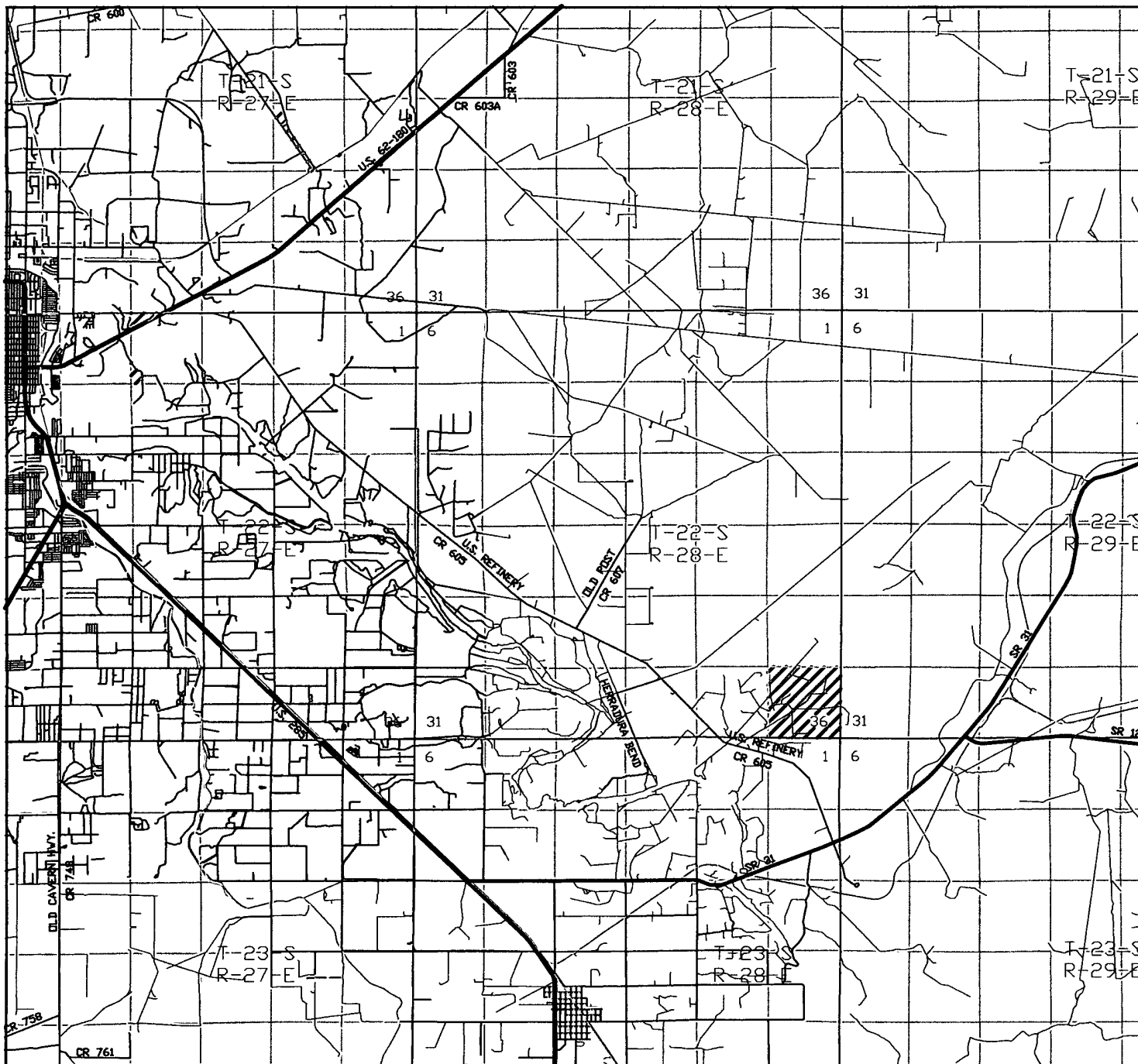
BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 19217 Drawn By: J. M. SMALL

Date: 02-19-2008 Disk: JMS 19217W

Survey Date: 02-17-2008 Sheet 1 of 1 Sheets

*RKI
EXPLORATION &
PRODUCTION*



PINNACLE STATE #23
 Located at 965' FSL and 1865' FWL
 Section 36, Township 22 South, Range 28 East,
 N.M.P.M., Eddy County, New Mexico.

basin
surveys

focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

W.O. Number: JMS 19216TR

Survey Date: 02-17-2008

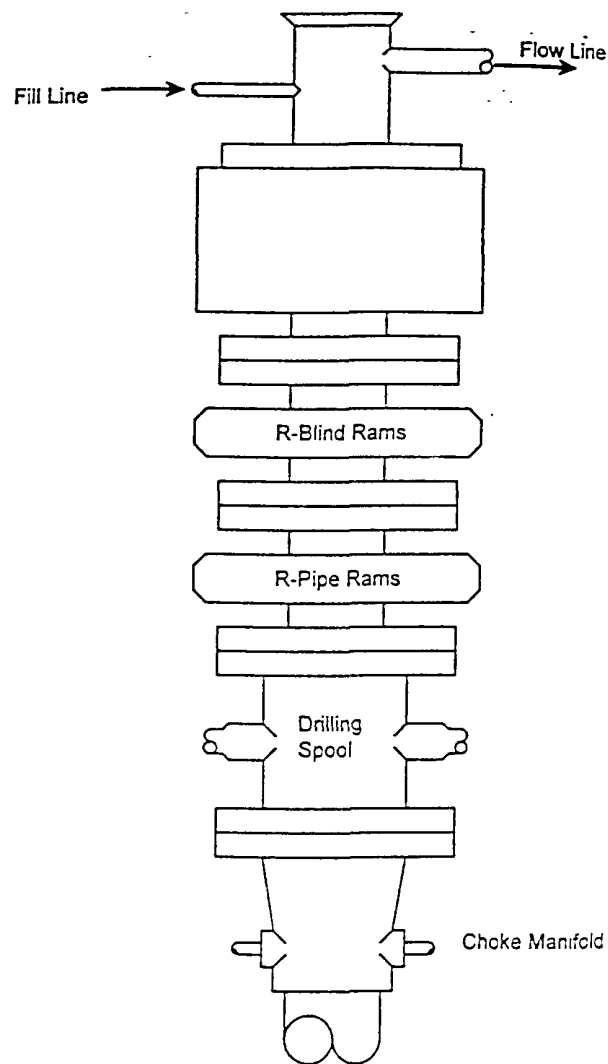
Scale: 1" = 2 MILES

Date: 02-19-2008

RKI
**EXPLORATION &
 PRODUCTION**

BLOWOUT PREVENTER SYSTEM

3000 PSI



Type 900 SERIES
3000 PSI WP

Choke Manifold Assembly for 5M WP System

