

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1. a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		2003 FEB 24 AM 8:31		5. LEASE DESIGNATION AND SERIAL NO. SF-079366
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>		070 Farmington NM		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Pure Resources				7. UNIT AGREEMENT NAME Rincon Unit
3. ADDRESS AND TELEPHONE NO. P.O. Box 850, Bloomfield New Mexico				8. FARM OR LEASE NAME, WELL NO. Rincon Unit 170R
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirement) At surface 2070' FSL and 2460' FSL At proposed prod. zone Same as Surface				9. API WELL NO. 3003927324
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE 40 miles Southeast from Bloomfield NM.				10. FIELD AND POOL OR WILDCAT Basin Dakota/ Mesa Verde
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE FT (Also to nearest drg. Unit line, if any) 7850'	16. NO. OF ACRES IN LEASE 2645.09	17. NO. OF ACRES ASSIGNED TO THIS WELL W/2 MV 320 S/2 DK		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA K Sec. 20, T-27-N, R-6-W
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED OR APPLIED FOR, ON THIS LEASE, FT. 1525'	19. PROPOSED DEPTH 7700'	20. ROTARY OR CABLE TOOLS Rotary		12. COUNTY OR PARISH Rio Arriba
21. ELEVATIONS (Show whether DF, RT, GR, 6541')		22. APPROX. DATE WORK WILL START ASAP		13. STATE NM
23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	H-40 9-5/8"	32.3#	350'	200 SACKS "B" TOC @ SURFACE
8-3/4"	K-55 7"	20#	2628'	405 SACKS TYPE III TOC @ SURFACE
6-1/4"	N-80 4-1/2"	11.6#	7700'	610 SACKS 65/35 POZ TYPE III TOC TIED INTO
7" casing				

"Expedited APD/ROW"

Pure plans to drill the Rincon Unit 170R, and complete in the Mesa Verde and the Basin Dakota and downhole commingle the two formations. This well will be an infill 80 acre.

BOP- One double gate BOP with 3-1/2" pipe and blind rams, one choke manifold with adjustable and positive chokes, an accumulator will hydraulically operate BOP with 1 1/2 times the necessary capacity to close the rams and retain a minimum of 200 psi above recharge.

Rotating head will be utilized during the drilling of the 6-1/4" hole.

(Schematics are attached)

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4

IN ABOVE SPACE DESCRIBED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED Mike C. Philpips TITLE San Juan Basin Area Drlg Prod Foreman DATE 2/20/03

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE 6/2/03

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the application to conduct operations thereon.
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY Original Signed: Stephen Mason TITLE _____ DATE 6/2/03

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, 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.

NMOC

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

DISTRICT II
811 South First, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-27.324		*Pool Code 71599	*Pool Name Basin Dakota
*Property Code 26629	*Property Name RINCON UNIT		*Well Number 170R
*OGED No. 189071	*Operator Name PURE RESOURCES		*Elevation 6541'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	20	27-N	6-W		2070	SOUTH	2460	WEST	RIO ARriba

11 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			*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

16 RECEIVED 2003 FEB 24 AM 8:32 QUARTER COR. FD 3 1/4" BC 1955 BLM		070 Farmington, NM PURE - RINCON UNIT No. 175M		LAT. = 36°33'28" N. LONG. = 107°29'28" W.		17 OPERATOR CERTIFICATION I hereby certify that the information contained herein to true and complete to the best of my knowledge and belief: Signature <u>Mike Phillips</u> Printed Name <u>San Juan Basin Drilling/ Production Foreman</u> Title Feb 14th, 2003 Date	
2460'		17.3'		2070'		18 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 of Survey <u>Feb 14, 2003</u> Signature and Seal of Registered Surveyor: <u>DAVID A. JOHNSON</u> REGISTERED PROFESSIONAL SURVEYOR Certificate Number	
N 01-38-16 E 2659.14'(M)		N 87-12-02 E 5266.38'(M)		SEC. COR. FD 3 1/4" BC 1955 BLM			

DISTRICT I
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039- 27324		Pool Code 72319	Pool Name Blanco Mesa Verde
Property Code 26629	Property Name RINCON UNIT		Well Number 170R
CGED No. 189071	Operator Name PURE RESOURCES		Elevation 6541'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	20	27-N	6-W		2070	SOUTH	2460	WEST	RIO ARRIBA

¹¹ 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 3.20 <i>W/2</i>					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

		<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief:</p> <p><i>Mike Phillips</i> Signature</p> <p>Mike Phillips Printed Name</p> <p>San Juan Basin Drilling/ Production Foreman Title</p> <p>Feb. 14th, 2003 Date</p>
<p>18 SURVEYOR CERTIFICATION</p> <p>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.</p> <p><i>DAVID A. JOHNSON</i> Signature</p> <p>DAVID A. JOHNSON Printed Name</p> <p>REGISTERED PROFESSIONAL SURVEYOR 14027 Date of Survey</p> <p>Certificate Number</p>	<p>QUARTER COR. FD 3 1/4 BC 1985 BLM</p> <p>SEC. COR. FD 3 1/4 BC 1955 BLM</p> <p>SEC. COR. FD 3 1/4 BC 1955 BLM</p> <p>N 01-36-18 E 2659.14'(M)</p> <p>N 87-12-02 E 5266.38'(M)</p> <p>LAT. = 36°33'28" N. LONG. = 107°29'28" W.</p> <p>2460'</p> <p>17.5'</p> <p>2070'</p>	

PURE RESOURCES
RINCON UNIT WELL NO. 170R
2070' FSL, 2460' FWL, SEC. 20, T-27-N, R-6-W
Rio Arriba County NM

8 POINT DRILLING PLAN

1. ESTIMATED FORMATION TOPS

<u>FORMATION NAME</u>	<u>DEPTH FROM GL</u>
San Jose	Surface
Ojo Alamo	2,216'
Kirtland Shale	2,586'
Pictured Cliffs	3,101'
Cliff House	4,816'
Point Lookout	5,281'
Mancos	5,731'
Tocito Sand	6,881'
Dakota	7,466'
ETD	7,631'
Permit TD	7,700'

2. OIL, GAS, WATER, OR OTHER MINERAL BEARING ZONES

<u>EXPECTED GAS ZONES</u>	<u>DEPTH FROM GL</u>
Fruitland Coal	3000'-3101'
Pictured Cliffs	3101-3141'
Mesa Verde	4816-5281'
Dakota	7466-7631'

<u>EXPECTED WATER ZONES</u>	<u>DEPTH FROM GL</u>
Ojo Alamo	2216'

Possible water zones will be protected by 7" intermediate casing and/or 4-1/2" production strings, 7" cemented to surface, and 4-1/2" casing cement tied in to 7".

3. PRESSURE CONTROL BOP'S AND RELATED EQUIPMENT

Casing Head: 7" x 11" – 3000 psi W.P.

BOP Stack and Related Equipment: (See Attachment No. 1 &2).

RINCON UNIT WELL NO. 170R
DRILLING PROGRAM – PAGE 2

One double-gate BOP with 4-1/2" and then 3-1/2" pipe and blind rams.
 One choke manifold with adjustable and positive chokes.
 An accumulator will hydraulically operate the BOP with 1-1/2 times the necessary capacity to close the rams and retain a minimum of 200psi above recharge. The remote unit will be located in the bottom "dog house" or on the ground between the "dog house" and the toolpushers trailer. A rotating head on top of the BOP stack will be utilized when necessary.

Testing Procedure:

The BOP and related equipment will be tested in accordance with the provisions of Onshore Oil and Gas Order No. 2.

BOP's will be operationally tested daily and each test will be logged in the IADC Daily Drilling Report.

Blooie Line:

The blooie line and related equipment will meet all requirements of Onshore Oil and Gas Order No. 2.

4. CASING AND CEMENTINNG PROGRAM

SURFACE CASING (Spud Mud)

<u>Age</u>	<u>Depth</u>	<u>Hole Size</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>
New	0-350'	12-1/4"	9-5/8"	32.3#	H-40	ST&C

INTERMEDIATE CASING (FW Mud)

<u>Age</u>	<u>Depth</u>	<u>Hole Size</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>
New	0-2626'	8-3/4"	7"	20#	K-55	ST&C

PRODUCTION CASING (Air Dusting)

<u>Age</u>	<u>Depth</u>	<u>Hole Size</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>
New	0-TD	6-1/4"	4-1/2"	11.6#	N 1/8-80	LT&C

MINIMUM SAFETY FACTORS

Collapse: 1.125
 Tension: 1.8
 Burst: 1.0

RINCON UNIT WELL NO. 170R
DRILLING PROGRAM – PAGE 3

Cementing Program

1. The 9-5/8" surface casing will be cemented to the surface with 200 sacks of class "Type III" cement + 2% Cacl₂ and 1/4# per cello flake. 14.6ppg, 1.39 yield. Represents 137% excess.
2. The 7" intermediate casing will be cemented to surface with; 325 sacks of Premium Lite FM cement + 8% gel + 2% CACL₂, + 6.25#/sack LCM + .25 lbs/sk Cello Flake @ 12.1 ppg, + 2.11 yield, Followed by 80 sacks class "Type III" cement + 2% CACL₂ + 1/4 #/sack cello-flake. @ 14.6 ppg, 1.39 yield. This represents 33% excess.
3. The 4-1/2" production casing will be cemented and tied into the intermediate casing with 85 sacks Premium Lite HS FM + .3% R-3, + 2% CACL₂ + 1/4 #/sack CF + .3% CD-32 + 5#/SK LCM-1 + 1% FL-52, 11.9 ppg, 2.37 yield. Followed by 525 sks Premium Lite HS FM + .3% R-3, + 2% CACL₂ + 1/4# /sk CF + .3% CD-32 + 5#/sk LCM-1 + 1% FL-52. 12.5 ppg, 2.02 yield. Represents 45% excess.

Casing hardware for the production string to include guide shoe, float collar, centralized shoe joint and next five joints. Centralizers across producing zones.

Auxiliary Equipment

A kelly cock will be used with handle available. A full opening safety valve will be used when Kelly is out of string. Rotating head while air drilling. Will have vacuum diversion on blooie line.

5. **DRILLING FLUID PROGRAM**

<u>Depth</u>	<u>Type</u>	<u>Weight</u>	<u>Vis</u>	<u>W.L.</u>
0-350'	Spud Mud			N.C.
350-2626'	Fresh Water Gel	8.3-8.6	30-35	N.C
2626'-TD	Air	N.C.	N.C.	N.C.