

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

LEASE DESIGNATION AND SERIAL NO.

SF -079366

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1.a TYPE OF WORK

DRILL



DEEPEN



b. TYPE OF WELL

OIL
WELLGAS
WELL

OTHER

SINGLE
ZONE070 Farmington MULTIPLE ZONE ☒ NM

2. NAME OF OPERATOR

Pure Resources

3. ADDRESS AND TELEPHONE NO.

P.O. Box 850, Bloomfield New Mexico

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirement*)

At surface

2155' FSL and 660' FWL

At proposed prod. zone

Same as Surface

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

40 miles Southeast from Bloomfield NM.

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE FT. (Also to
nearest dip. Unit line, if any)

660'

18. DISTANCE FROM PROPOSED* LOCATION TO
NEAREST WELL, DRILLING, COMPLETED
OR APPLIED FOR, ON THIS LEASE, FT.

1500'

16. NO. OF ACRES IN LEASE

2645.09

19. PROPOSED DEPTH

7700'

17. NO. OF ACRES ASSIGNED TO
THIS WELL

W/P 320 318.72

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR,

6598' GR

22. APPROX. DATE WORK WILL START*

June 2002

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#	2638'	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 174P 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)

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

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

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.

24.

SIGNED


MIKE C. PHILLIPS

TITLE

San Juan Basin Area Drilling Production Foreman

DATE

2/24/03

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

SEP 10 2003

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

SEP 10 2003

*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
1325 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

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

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

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-27328		*Pool Code 71599	*Pool Name Basin Dakota
*Property Code 26629	*Property Name RINCON UNIT		*Well Number 174P
*OGRD No. 189071	*Operator Name PURE RESOURCES		*Elevation 6598'

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
L	19	27-N	6-W		2155	SOUTH	660	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		17 OPERATOR CERTIFICATION	
		I hereby certify that the information contained herein is 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: <u>Feb. 24th, 2003</u>	
Date: <u>Feb. 24th, 2003</u>		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.	
		Signature: <u>DAVID A. JOHNSON</u>	
		Date of Survey: <u>2002</u>	
		Registered Seal of Professional Surveyor: <u>14827</u>	
Certificate Number: <u>14827</u>			

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1825 N. French Dr., Hobbs, N.M. 88240

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Form C-102
Revised August 15, 2000

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Santa Fe, NM 87505

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-	² Pool Code 72319	³ Pool Name Blanco Mesa Verde
⁴ Property Code 26629	⁵ Property Name RINCON UNIT	⁶ Well Number 174P
⁷ OGRD No. 189071	⁸ Operator Name PURE RESOURCES	⁹ Elevation 6598'

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
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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
¹² Dedicated Acres			¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.		

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OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16		17 OPERATOR CERTIFICATION	
<p>QUARTER COR. FD 3 1/4" BC 1955 BLM</p> <p>660' 461' 651'</p> <p>N 01-20-55 E 2616.09'(M)</p> <p>2155'</p> <p>SEC. COR. FD 3 1/4" BC 1955 BLM</p> <p>S 86-10-38 E 2622.14'(M)</p> <p>QUARTER COR. FD 3 1/4" BC 1955 BLM</p> <p>LAT. = 36°33'31" N. LONG. = 107°30'55" W.</p> <p>9</p> <p>*PURE - RINCON UNIT No. 107</p>		<p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Mike Phillips</u> Signature</p> <p>Mike Phillips Printed Name</p> <p>San Juan Basin Drilling/ Production Foreman Title</p> <p>Feb. 24th, 2003 Date</p>	
		18 SURVEYOR CERTIFICATION	
		<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>OCT 2002 Date of Survey</p> <p>DAVID A. JOHNS Signature and Seal of Professional Surveyor</p> <p>14827 REGISTERED PROFESSIONAL SURVEYOR</p> <p>D.</p>	
		Certificate Number	

**PURE RESOURCES
RINCON UNIT WELL NO. 174P
2155' FSL, 660' FWL, SEC. 19, 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	2,168'
Kirtland Shale	2,598'
Pictured Cliffs	3,103'
Cliff House	4,793'
Point Lookout	5,313'
Mancos	5,743'
Tocito Sand	6,913'
Dakota	7,498'
ETD	7,663'
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	3004'-3103'
Pictured Cliffs	3103-3155'
Mesa Verde	4793-5313'
Dakota	7498-7663'

<u>EXPECTED WATER ZONES</u>	<u>DEPTH FROM GL</u>
Ojo Alamo	2168'

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. 174P
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	0-2638'	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 X-80	LT&C

MINIMUM SAFETY FACTORS

Collapse: 1.125

Tension: 1.8

Burst: 1.0

RINCON UNIT WELL NO. 174P
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. C
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.
350-2638'	Fresh Water Gel	8.3-8.6	30-35	N.C
2638'-TD	Air	N.C.	N.C.	N.C.