FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

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|---|---|--|--|--|--|--|--------------------------|
| 4. | | | O STATES | | | | |
| | DE | | OF THE INTE | 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - | =[) | 5. LEASE DESIGNATION | |
| | APPLICATION | ON FOR PER | | OR DEEPEN | | 6. IF INDIAN, ALLOTTEE | OR TRIBE NAME |
| TYPE OF WORK | | | | 7M3 SEP -5 PM | 12: 59 | 7. UNIT AGREEMENT NA | 145 |
| | DRILL X | | DEEPEN | Zma act in th | 14. 21 | | 266 |
| TYPE OF WELL OIL WELL | GAS WELL X | OTHER | | one (177) Farmington | ň, N X | 8. FARM OR LEASE NAM | on Unit ME, WELL NO. |
| NAME OF OPERATOR | | | | | | 9. API WELL NO. | Jnit 159P |
| | | Pure Re | sources | A34067 | | 30039 | 27/ |
| ADDRESS AND TELEPHON | | D-i Ch. 404 | D | 1 2 2 2 2 2 | ~~? <u>}</u> | 10. FIELD AND POOL OR | /aC/Y |
| LOCATION OF WELL (Repor | 463 TUFN t location clearly and in acco | ordance with any State rec | Durango Colorac | 10 81303 | - CO-A | Basin Dakota | |
| At surface | | 705 | ' FNL & 335' FWL | | | 11. SEC., T.,R.,M., OR BLK. AND SURVEY OR AREA | ar iviesa ver |
| At proposed prod.zone | | c | ama an Surface | | ~ [다] | Λ | 07 N D C 14 |
| DISTANCE IN MILES AND D | RECTION FROM NEARES | | ame as Surface | 162 | : 37 | 12. COUNTY OR PARISH | 27-N, R-6-W 13. STATE |
| | 4 | 0 miles Southeas | t from Bloomfield N | | | Rio Arriba | NN |
| DISTRICE FROM PROPUSED LOCATION TO NEAREST PROPERTY OR LEASE LINE FT | (Also to | 705' | 16. NO. OF ACRES | CASID WW. | 17 NO. OF ACRES | ASSIGNED TO | ./ |
| nearest drig. Unit line, if any) DISTANCE FROM PROPOSED | | | 19. PROPOSED DE | 2045.05 | 20. ROTARY OR | 18.68 -320 N | 12 |
| NEAREST WELL, DRILLING, CO OR APPLIED FOR, ON THIS | MPLETED | 1625 | 19. PROPOSED DE | 7700' | 20. ROTARTOR | Rotary | |
| ELEVATIONS (Show whethe | rDF, RT, GR, c | | | | ļ | 22. APPROX.DATE WORK | (WILL START* |
| | | | 6502' 0 | ₽R | | ASA | ,P |
| | The second second | PROP | OSED CASING AN | D CEMENTING PROGRAM | | | |
| SIZE OF HOLE | GRADE, SIZE | | WEIGHT PER FOOT 32.3# | SETTING DEPTH 350' | 285 SACKS | QUANTITY OF CEMENTERS TOC @ SURFACE | T |
| 12-1/4" | K-55 | | 20# | 2596 | | TYPE III TOC @ SURFA | ACE |
| 8-3/4" 6-1/4" | N-80 4 | 1-1/2" | 11.6# | 7700' | | 65/35 POZ TYPE III TO | |
| <u>~</u> | | : | . : | | INTO 7" CA | SING OR CIRC | |
| | | | <u>"Expeaned</u> | i APD/ROW | | | |
| well will be an infill 8 BOP- One double ga will hydraulically ope | 0 acre. ate BOP with 3-1/2" erate BOP with 1 1/2 | pipe and blind rai 2 times the necess | the Mesa Verde a ms, one choke ma sary capacity to clo | nd the Basin Dakota and do nifold with adjustable and po ose the rams and retain a m | ositive chokes | s, an accumulator | |
| well will be an infill 8 BOP- One double go will hydraulically ope Rotating head will be | 0 acre. ate BOP with 3-1/2" erate BOP with 1 1/2 e utilized during the | pipe and blind rai 2 times the necess | the Mesa Verde a ms, one choke ma sary capacity to clo | nd the Basin Dakota and do nifold with adjustable and pose the rams and retain a m | ositive chokes inimum of 20 ITHORIZED AR | s, an accumulator O psi above recharge | |
| well will be an infill 8 BOP- One double go will hydraulically ope Rotating head will be | to acre. ate BOP with 3-1/2" arate BOP with 1 1/2 autilized during the ached) This action procedure | pipe and blind rate times the necess drilling of the 6-1/ | the Mesa Verde and ms, one choke ma sary capacity to clo | nd the Basin Dakota and do | ositive chokes inimum of 20 ITHORIZED AR WITH ATTAC | s, an accumulator O psi above recharge | |
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| well will be an infill 8 BOP- One double ga | to acre. ate BOP with 3-1/2" arate BOP with 1 1/2 autilized during the ached) This action procedure | pipe and blind rate times the necess drilling of the 6-1/ | the Mesa Verde and ms, one choke ma sary capacity to clo | nid the Basin Dakota and do nifold with adjustable and po ose the rams and retain a m DRILLING OPERATIONS AL SUBJECT TO COMPLIANCE | ositive chokes inimum of 20 ITHORIZED AR WITH ATTAC | s, an accumulator O psi above recharge | |

*See Instructions On Reverse Side

Title18 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 of fraudulent statements or representations as to any matter within its jurisdiction.

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

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

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

DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505

☐ AMENDED REPORT QUINU_ 1

| | | W. | | | AND AC | REAGE DEDI | | | <u> </u> | 79904-A |
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| *Property Code | 7 | ~ - | | ~ U1 (| ⁵ Property | | ment v | | • Wel | Number |
| 2662 | 7 | | | | RINCON U | NIT | | | 15 | 59P |
| OGRED No. | | | | | *Operator | r Name | | | _ | levation |
| L | l | | | | PURE RES | SOURCES | | | 6 | 502' |
| ` | | | | | 10 Surface | Location | | , | | |
| , , | ection 18 | Township 27—N | Range 6-W | Lot idn | Feet from the 705 | North/South line | Feet from the | WEST | est line | RIO ARRIBA |
| | | | 11 Botto | om Hole | Location | If Different Fr | om Surface | | | |
| UL or lot no. S | isction | Township | Range | Lot ldn | Feet from the | | | East/W | est line | County |
| Dedicated Acres | 10 | | ¹⁸ Joint or | hfili | ¹⁴ Consolidation | Code | 26 Order No. | | ٠ ٠ . | |
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DISTRICT 1 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 H '811 South First, Artesia, N.M. 88210

DISTRICT III 1000 Rio Brazos Rd., Asteo, N.M. 87410 OIL CONSERVATION DIVISION
2040 South Pacheco

Submit to Appropriate District Office State Lease - 4 Copies

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87605 2040 South Pacheco Santa Fe, NM 87505

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|-----------------------------------|---------------|---------------------------------------|------------------------|---------------------|---|-------------------------------|-------------------------|---------------------------------------|-----------------------|
| ¹ API | Number | | | Pool Code | 9 | Basin | Pool Name | | |
| ⁴ Property Co | ode | | | | ⁵ Property | | | ° Ve | ll Number |
| <u> </u> | | | | | RINCON UI | NIT | | 1 | 59P |
| OGRID No | | | | | *Operator | Name | | • 1 | llevation |
| | | | | | PURE RES | OURCES | | 6 | 5502' |
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| UL or lot no. | Section 18 | Township 27-N | Range 6-W | Lot idn | Feet from the 705 | Horth/South line NORTH | Feet from the 335 | East/West line WEST | County RIO ARRIBA |
| | | <u></u> | 11 Botto | m Hole | Location | If Different From | om Surface | | |
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| ²³ Dedicated Acre | | | ¹⁰ Joint or | infili | ¹⁴ Consolidation | Code | ¹⁵ Order No. | <u>.</u> | ļ |
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"PURE RESOURCES RINCON UNIT WELL NO. 159P 705' FNL, 335' FWL, SEC. 18, T-27-N, R-6-W

8 POINT DRILLING PLAN

1. ESTIMATED FORMATION TOPS

| FORMATION NAME | | DEPTH FROM GL |
|-----------------|-----------------|----------------------|
| San Jose | | Surface |
| Ojo Alamo | | 2,491' |
| Kirtland Shale | | 2,591' |
| Pictured Cliffs | | 3,093 |
| Cliff House | | 4,743' |
| Point Lookout | | 5,273' |
| Mancos | | 5,733' |
| Tocito Sand | 100 miles | 6,873 |
| Dakota | | 7,238' |
| ETD | e grand and the | 7,573' |
| Permit TD | | 7,700' |

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

| EXPECTED GAS ZONES | <u>DEPTH FROM GL</u> |
|--------------------|----------------------|
| Fruitland Coal | 2991'-3093' |
| Pictured Cliffs | 3093-3152' |
| Mesa Verde | 4743-5733 |
| Dakota | 7238-7700' |
| | |

| EXPECTED WATER ZONES | DEPTH FROM GL |
|----------------------|----------------------|
| Ojo Alamo | 2491' |

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. 159P 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> | Hole Size | Size | Weight | <u>Grade</u> | Thread | |
| New | 0-350' | 12-1/4" | 9-5/8" | 32.3# | H-40 | ST&C | |
| | INTERMEDIATE CASING (FW Mud) | | | | | | |
| Age | <u>Depth</u> | Hole Size | Size | Weight | <u>Grade</u> | Thread | |
| New | 0-2596' | 8-3/4" | 7" | 20# | K-55 | ST&C | |
| PRODUCTION CASING (Air Dusting) | | | | | | | |
| Age | <u>Depth</u> | Hole Size | Size | Weight | <u>Grade</u> | Thread | |
| New | 0-TD | 6-1/4" | 4-1/2" | 11.6# | L-80 | LT&C | |

MINIMUM SAFETY FACTORS

Collapse: 1.125 Tension: 1.8 Burst: 1.0

RINCON UNIT WELL NO. 159P DRILLING PROGRAM – PAGE 3

Cementing Program

- 1. The 9-5/8" surface casing will be cemented to the surface with 285 sacks of class "B" cement + 2 Cacl2 and 1/4# per cello flake. 14.5ppg
- 2. The 7" intermediate casing will be cemented to surface with; 300 sacks of type III (35:65) Poz cement + 8% gel + 2% CACL2, + 6.25#/sack Gilsonite, .25 lbs/sk Cello Flake @ 12.1 ppg, Followed by 50 sacks class "B" cement + 2% CACL2 + 1/4 #/sack cello-flake. @ 14.5 ppg.
- 3. The 4-1/2" production casing will be cemented and tied into the intermediate casing with 600 sacks 65/35 Poz Type III cement + ¼ #/sack CF, 6% gel, 10#/sack CSE + 3% KCL, FL-62 + .2% CD-32, @ 12.5 ppg.

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> | Weight | <u>Vis</u> | <u>W.L.</u> |
|--------------|-----------------|---------|------------|-------------|
| 0-350' | Spud Mud | | | N.C. |
| 350-2596' | Fresh Water Gel | 8.3-8.6 | 30-35 | N.C |
| 2596'-TD | Air | N.C. | N.C. | N.C. |