Form 3160-3 (July 1992)

UNITED STATES

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

FORM APPROVED OMB NO. 1004-0136

Expires: February 28, 1995

| | DEPARTMENT OF THE INTERIOR | | | | | | |
|--|---|---|--|-----------------------------------|---------------------------------|--|--|
| | 6. | SF - 079488 6. IF INDIAN, ALLOTTEE OR TRIBE NAME | | | | | |
| APPLI | CATION FOR P | ERMIT TO | DRILL OR I | DEEPE | | | |
| la. TYPE OF WORK | | DEEPEN | | | 7. | UNIT AGREEMENT NAME San Juan 30-4 Unit | |
| | GAS X OTHER | | SINGLE X | MULTIPLE ZONE | 8. | FARM OR LEASE NAME, WELL NO. San Juan 30-4 Unit 33B | |
| ENERGEN RESOURCES | CORPORATION | | | | 9 | API WELL NO. | |
| 3. ADDRESS AND TELEPHONE | | | | | | 30-039-26635 | |
| 2198 Bloomfield Hi | ighway; Farmington, | | | <u> </u> | 10 | D. FIELD AND POOL, OR WILDCAT | |
| 4. LOCATION OF WELL (Report At surface | t location clearly and in accorda | ance with any State r | equirements.*) | | | Blanco Mesaverde | |
| 1725' FNL, 1710' F | -WI | | | 1003 | - | 1. SEC., T., R., M., OR BLK. | |
| At proposed prod. zone | | | | | F | AND SURVEY OR AREA | |
| | | | | | <u>'</u> | Sec. 31, T30N, R4W, N.M.F | |
| | irection from nearest tow For Gobernador Ne | | | , | 1 | Rio Arriba NM | |
| 15. DISTANCE FROM PROPOSEI | Seven (7) Miles NE of Gobernador, New Mexico 5. DISTANCE FROM PROPOSED* | | | | | 7. NO. OF ACRES ASSIGNED | |
| LOCATION TO NEAREST PROPERTY OR LEASE LINE (Also to nearest drlg. unit.) | FT. 1710' | | 506.24 | | 205.88 W/2 | | |
| 18. DISTANCE FROM PROPOSEI | D LOCATION* | | 19. PROPOSED DEPTH | | 20. ROTARY OR CABLE TOOLS | | |
| TO NEAREST WELL, DRILL OR APPLIED FOR, ON THIS | ing, completed, lease, ft1400' | | 7069' | | Rotary | Rotary | |
| 21. ELEVATIONS (Show wheth | er DF,RT, GR, etc.) | | | | | 22. APPROX. DATE WORK WILL START* | |
| 7417' GR - | | | <u></u> | | | | |
| 23. | F | PROPOSED CASIN | G AND CEMENTING PRO | OGRAM | | | |
| SIZE OF HOLE | GRADE, SIZE OF CASING | WEIGHT PER FO | OT SETTING | DEPTH | | QUANTITY OF CEMENT | |
| 12 1/4" | 9 5/8" | 36 # | 200 | J | 130 cu. | ft., circ. to surface | |
| 8 3/4" | 7" | 20 & 23 | # 467 | 5' | | . ft., circ. to surface | |
| 6 1/8" | 4 1/2" | 10.5# | 4525'- | 7069' | 360 cu. | ft., circ. to intermedia | |
| This gas is d | n i komunitari sa | en la centi | | e Formati | on. | | |
| | ne in a service particulation of comments to 43 GPI | 3185. 4. | | | | | |
| م بادم مست | and report to the fitting of the | R 3185.4. | | | | | |
| | and report to the fitting of the | 3 318 5.4. | | | ω | | |
| procedure and appropries | est revinen pa mela in io eat-pursuant to 43 GFI | If nranasal is to de | enen give data on present | productive zon : blowout preve | e and proposed nter program, | I new productive zone. If proposal is to dril if any. | |
| procedure and approach and approach app | eat egylinn pa time ta Grigeal pursuant to 43 GFI | If proposal is to dens and measured and | epen, give data on present l true vertical depths. Give | e blowout preve | nter program, | if any. | |
| procedure and appropries | eat egylinn pa time ta Grigeal pursuant to 43 GFI | If proposal is to dens and measured and | enen give data on present | e blowout preve | nter program, | if any. | |
| procedure and approach and approach app | BE PROPOSED PROGRAM: | If proposal is to dens and measured and | epen, give data on present l true vertical depths. Give | e blowout preve | on Forema | n _{DATE} 1/30/01 | |
| IN ABOVE SPACE DESCRIE deepen directionally, give pert | BE PROPOSED PROGRAM: | If proposal is to dens and measured and | epen, give data on present l true vertical depths. Give | Completic | on Forema | if any. | |

/s/ David J. Mankiewicz

0150 100 1 PO Bax 1980, Hobbs, NM 88241-1980

District II PO Drawer DD, Artesia, NM 88211-0719

District III 1000 Rio Brazos Rd., Aztec. NM 87410

District IV PO Box 2088. Santa Fe. NM 87504-2088 State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088

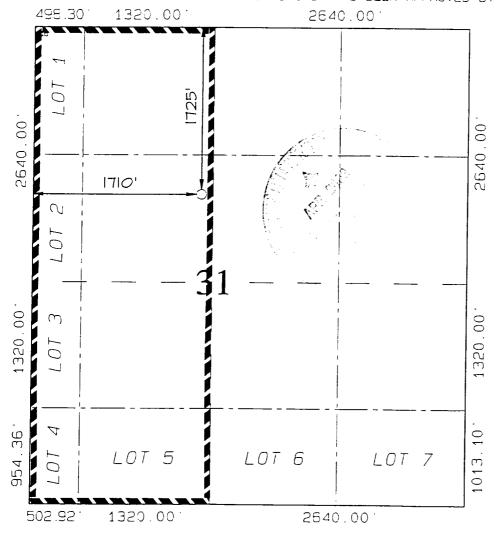
Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

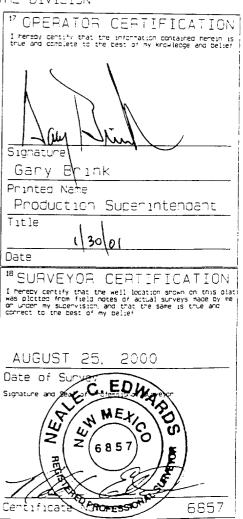
MENDED REPORT

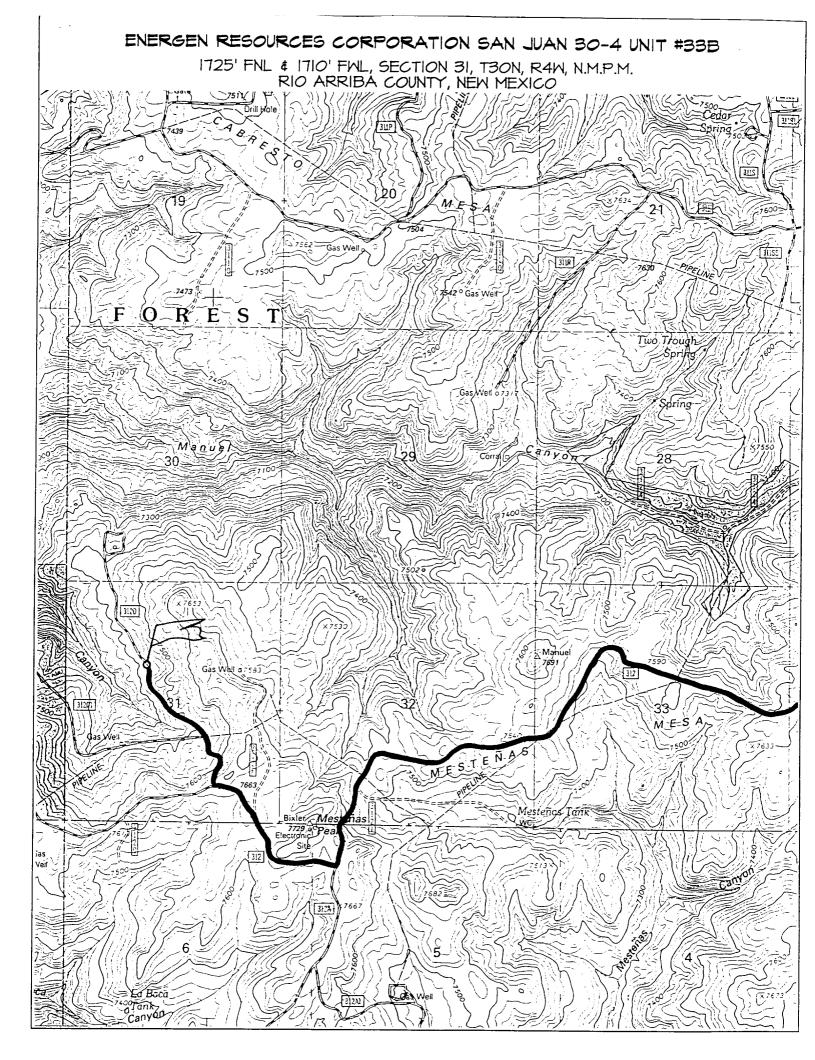
WELL LOCATION AND ACREAGE DEDICATION PLAT

| 'API Number | | | | Pool Co | de | 'Pool Name | | | | |
|---|---------------|----------|--|---------|----------------------------|--------------------------------------|------------------------|---------------------|-------------------------|--|
| 30-03 | 9-2 | 6655 | • | 72319 | 9 | Blanco Mesaverge | | | | |
| Procenty 2199 | Code 34 | | Property Name SAN JUAN 30-4 UNIT | | | | | 6 | *well Number | |
| 16292 | %. 8 | | *Operator Name ENERGEN RESOURCES CORPORATION | | | | | - | °Elevation 7417 | |
| ¹⁰ Surface Location | | | | | | | | | | |
| UL or latino. | Section 31 | 30N | Range 2W | Lot Idn | Feet from the | North/South line NORTH | Feet from the . | East/West line WEST | County RIO ARRIBA | |
| 11 Bottom Hole Location If Different From Surface | | | | | | | | | | |
| UL or lot no. | Section | Township | Range | Lat Ion | Feet from the | North/South line | Feet from the | East/West line | County | |
| 12 Dedicated Acres | | <u>!</u> | | | ¹³ Joint on Inf | 111 ¹⁴ Consolidation Code | ¹⁵ Order No | | | |
| 2 | 05.88 | | | | | | Nuv | 342 | - | |

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







OPERATIONS PLAN

WELL NAME: San Juan 30-4 Unit 33B

LOCATION: 1725' FNL, 1710' FWL, Section 31, T30N, R4W, Rio Arriba County, NM

FIELD: Blanco Mesaverde

ELEVATION: 7417' GR

FORMATION TOPS:

| Surface | San Jose | Huerfanito Benonite | 5109 |
|-----------------|----------|---------------------|--------|
| Nacimiento | 2244 | Cliff House | 5969 |
| Ojo Alamo | 3499 | Menefee | 6274 |
| Kirtland | 3729 | Point Lookout | , 6519 |
| Fruitland | 3934 | Total Depth | 7069 |
| Pictured Cliffs | 4149 | | |
| Lewis | 4444 | | |

LOGGING PROGRAM:

Open Hole Logs:

Surface to intermediate: HRI/SP/GR; CNT/LDT/MLT Inter TD to total depth: Temp/HRI/CNT; LDT/GR

Mud Logs:

200' above Ojo Alamo to total depth

Coring:

None

Natural Gauges:

Every 500' from intermediate T. D. to T. D.

<u>MUD PROGRAM:</u> Fresh water low solids mud from surface to intermediate T. D. Air/mist from intermediate casing point to T. D.

CASING PROGRAM:

| HOLE SIZE | DEPTH | <u>CSG SIZE</u> | <u>WT.</u> | <u>GRADE</u> |
|------------------|--------------|-----------------|------------|--------------|
| 12 1/4" | 200' | 9 5/8" | 36# | J-55 |
| 8 3/4" | 4675' | 7" | 20 & 23# | J-55 |
| 6 1/8" | 4525'-7069' | 4 1/2" | 10.5# | J-55 |

TUBING PROGRAM:

7000 2 3/8" 4.7 J-55

WELLHEAD: 11" 3000 x 9 5/8" casing head. 11" 3000 x 7 1/16" 3000 xmas tree.

BOP SPECIFICATIONS:

An 11" 2000 psi minimum double gate BOP stack (Figure 1) will be used following nipple up of casing head. During air drilling operations, a Shaffer Type 50 or equivalent rotating head will be installed on top of the stack. A 2" nominal, 2000 psi minimum choke manifold will be used.

CEMENTING:

9 5/8" surface casing - Cement with 110 sks Class B Cement with ¼# flocele/sk and 2% calcium chloride (130 cu. ft. of slurry, 100% excess to circulate to surface). WOC 12 hrs. Test casing to 600# for 30 minutes.

Texas Pattern Guide Shoe on bottom. 3 bow type centralizers spaced throughout the string.

7" intermediate casing:

Cement with 550 sks 65/35 Class B Poz with 6% gel, 2% calcium chloride, 10% gilsonite, and ½# flocele/sk. Tail with 100 sks Class B w/2% calcium chloride, 10% gilsonite and ½# flocele/sk. (1054 cu. ft. of slurry, 50% excess to circulate to surface). WOC 12 hrs. If cement does not circulate, run temperature survey in 8 hrs. to determine TOC. Test casing to 1200 psi for 30 minutes.

Cement nose guide shoe on bottom with a self-fill insert float valve on top of shoe joint. 10 bow spring centralizers spaced every 3rd joint off bottom. Two turbolating centralizers at the base of the Ojo Alamo.

4 1/2" Production Liner

Cement with 270 sks 50/50 poz with 2% gel, 5 PPS gilsonite, .4% halad - 9 and 1/4# flocele/sk (360 cu. ft., 50% excess to tie into intermediate casing string). WOC 18 hrs prior to completion.

Cement nose guide shoe on bottom with float collar on top of shoe joint.

OTHER INFORMATION:

- 1) The Blanco Mesa Verde will be completed.
- 2) No abnormal temperatures or pressures are anticipated.
- 3) Anticipated pore pressure for the Fruitland Coal is 800, Pictured Cliffs 900 and the Mesaverde is 1100.
- 4) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control.
- 5) This gas is dedicated.