| Form 1603 UNITED STATES (August 1999)  FEB 2004  BUREAU OF LAND MANAGEM  | ENT RECE   | ] (  | FORM APPROVED<br>OMB NO. 1004-0136<br>sires: November 30, 2000 |  |  |
|--|--|--|--|--|--|
| RECEIVAPPLICATION FOR PERMIT TO DRILL  | OR REENTER   | SF-0794  |  |  |  |
| 1a Type of Work REENTH   | ER   | 6.4f Indjan, A   | llotee or Tribe Name   |  |  |
| 1b. Type of Well Oil Well Gas Well Other   | Single Zone Multiple Zone  | 7. Unit or CA  | Agreement Name and No.   |  |  |
| 2. Name of Operation  Energen Resources Corporation  |  |  | e and Well No.   |  |  |
| 3a. Address  | 3b. Phone No. (include area cod  | 1 9. Ari Well IN   | 0  |  |  |
| 2198 Bloomfield Highway Farmington, New Mexico 8   | 3740 <b>2</b> (505)325-6800  | 30   | 03927557   |  |  |
| <ol> <li>Location of Well (Report location clearly and in accordance with any Statement 1835' FSL, 890' FWL</li> </ol>   | Blanco   | 10.Field and Pool, or Exploratory Blanco Mesaverde           |  |  |  |
| At proposed prod. zone   |  | 12   | 11. Sec., T., R., M., or Blk. and Survey or Are                |  |  |
| 14. Distance in miles and direction from nearest town or post office*  |  | 12. County or F  | , T30N, R4W, N.M.P.M. Parish 13.State                          |  |  |
| 9 miles Northeast of Goberna   | dor. New Mexico  | Rio Arriba   |  |  |  |
| 15. Distance from proposed*  | 16. No. of Acres in lease  | 17. Spacing Unit dedi  | · · · · · · · · · · · · · · · · · · ·                          |  |  |
| location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any)   | 1186.72  | W/   | 2 302.36   |  |  |
| <ol> <li>Distance from proposed location*<br/>to nearest well, drilling, completed,</li> </ol>   | 19. Proposed Depth 20. B   |  | BLM/BIA Bond No. on file                                       |  |  |
| applied for, on this lease, ft. 2200'  | 7210'  |  |  |  |  |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.   | 22. Approximate date work will star  | 22. Approximate date work will start* 23. Estimated duration |  |  |  |
| 7553" GL   | July 2003  | July 2003  |  |  |  |
|  | 24. Attachments  |  |  |  |  |
| The following, completed in accordance with the requirements of Onshore Oil  | and Gas Order No. 1, shall be attached   | to this form:  |  |  |  |
| <ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan</li> <li>A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).</li> </ol> | <ul> <li>4. Bond to cover the operation lem 20 above).</li> <li>5. Operator certification.</li> <li>6. Such other site specific information authorized officer.</li> </ul> | ·  |  |  |  |
| 25. Signuature   | Name (Printed/Typed)   |  | Date   |  |  |
| h ber Thorres  | loug Thomas  |  | 7/11/02  |  |  |
| Title Drilling Completion Forman   |  |  | <b>!</b>   |  |  |
|  | ame (Printed/Typed)  |  | Pate FEB - 3 2004  |  |  |
|  | Office   |  |  |  |  |
| Application approval does not warrant or certify that the applicant holds leg conduct operations thereon.  Conditions of approval, if any, are attached.   | gal or equitable title to those rights in t  | he subject lease which                                       | h would entitle the applicant to                               |  |  |
| Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crir States any false, fictitious or fraudulent statements or representations as to any   | ne for any person knowlingly and willfu<br>y matter within its jurisdiction.   | lly to make to any dep                                       | partment or agency of the United                               |  |  |
| *(Instructions on Reverse)   |  | 210  |  |  |  |

NMOCD

PO 50x 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 80x 2088, Santa Fe, NM 87504-2088

Energy, Minerals & Natural Resources Department

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

Revised February 21, 1994 Instructions on back

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

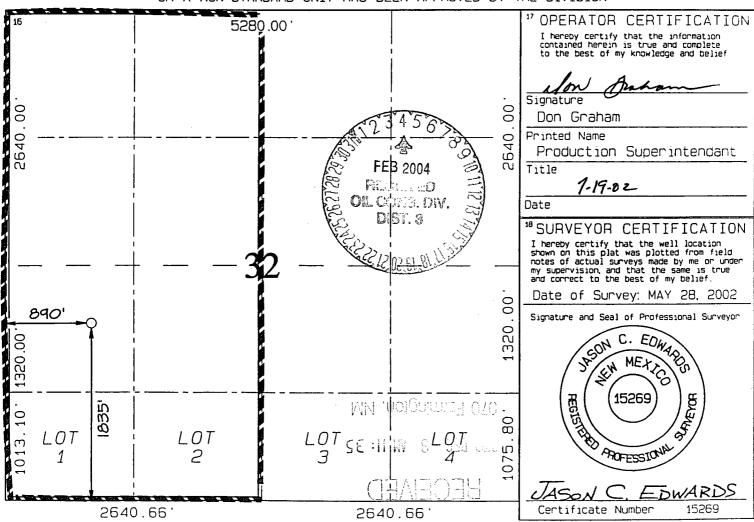
AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

| 30-039-27557         | *Pool Code<br>72319                              | ³Pool Name<br>BLANCO MESAVERDE         |                     |
|----------------------|--|--|---------------------|
| Property Code        | <del>                                     </del> | *Property Name<br>CARSON               | *Well Number<br>13A |
| 'ÓGRID No.<br>162928 | ENERGEN R  | *Operator Name<br>ESOURCES CORPORATION | *Elevation 7553 '   |

| <sup>10</sup> Surface Location                               |               |          |             |         |                               |                                  |                         |                     |                         |
|--|---------------|----------|-------------|---------|-------------------------------|----------------------------------|-------------------------|---------------------|-------------------------|
| UL or lot no.  | Section<br>32 | 30N      | Range<br>4W | Lot Idn | Feet from the 1835            | North/South line<br>SOUTH        | Feet from the           | East/West line WEST | County<br>RIO<br>ARRIBA |
| <sup>11</sup> Bottom Hole Location If Different From Surface |               |          |             |         |                               |                                  |                         |                     |                         |
| UL or lat no.  | Section       | Township | Range       | Lot Idn | Feet from the                 | North/South line                 | Feet from the           | East/West line      | County                  |
| 12 Dedicated Acres   |               | 2.36 Acr | res - V     | N/2     | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> Order Na. |                     | :                       |

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: Carson #13A

LOCATION: 1835' FSL, 890' FWL, Section 32, T30N, R4W, Rio Arriba County, NM

FIELD: Blanco Mesaverde <u>ELEVATION:</u> 7553' GR

## **FORMATION TOPS:**

| Surface         | San Jose | Huerfanito Benonite | 5250 |
|-----------------|----------|---------------------|------|
| Nacimiento      | 2385     | Cliff House         | 6110 |
| Ojo Alamo       | 3640     | Menefee             | 6415 |
| Kirtland        | 3870     | Point Lookout       | 6660 |
| Fruitland       | 4075     | Mancos Sh           | 7155 |
| Pictured Cliffs | 4290     |                     |      |
| Lewis           | 4585     | Total Depth         | 7210 |

# **LOGGING PROGRAM**:

Open Hole Logs:

Surface to intermediate: None

Inter TD to total depth: Temp/HRI/CNT; LDT/GR, MRIL

Mud Logs:

None

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:**

| <b>HOLE SIZE</b> | <u>DEPTH</u> | CSG SIZE | <u>WT.</u> | <u>GRADE</u> |
|------------------|--------------|----------|------------|--------------|
| 12 ¼"            | 200'         | 9 5/8"   | 36#        | J-55         |
| 8 3/4"           | 4810'        | 7"       | 20 & 23#   | J-55         |
| 6 1/8"           | 4660'-7210'  | 4 1/2"   | 10.5#      | J-55         |

# **TUBING PROGRAM:**

7150

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 500 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. (1084 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 285 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.