

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0136
Expires: November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED
BLM

| | | | |
|---|--|---|--|
| 1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER | | 5. Lease Serial No. NMNM-046 | |
| 1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone | | 6. If Indian, Allottee or Tribe Name 24 | |
| 2. Name of Operator Energen Resources Corporation | | 7. Unit or CA Agreement Name and No. N.M. 21896 | |
| 3a. Address 2198 Bloomfield Highway Farmington, New Mexico 87401 | | 8. Lease Name and Well No. Cheney Federal 2B | |
| 3b. Phone No. (include area code) (505) 325-6800 | | 9. API Well No. 30-039-27082 | |
| 4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 1850' FSL, 1850' FWL At proposed prod. zone | | 10. Field and Pool, or Exploratory Blanco MV/Gavilan Mancos, Ext. | |
| 14. Distance in miles and direction from nearest town or post office* 4 miles north of Ojito, NM | | 11. Sec., T., R., M., or Blk. and Survey or Area Sec. 17, T26N, R02W, N.M.P.M. | |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 1850' | | 12. County or Parish Rio Arriba | |
| 16. No. of Acres in lease 1120 | | 13. State NM | |
| 17. Spacing Unit dedicated to this well 640 Acres 320 W 1/2 NW | | 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1500' | |
| 19. Proposed Depth 7826' | | 20. BLM/BIA Bond No. on file | |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7264' GL | | 22. Approximate date work will start* 12/01/02 | |
| 23. Estimated duration 10 days | | | |

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

| | | |
|--|--|---------------------|
| 25. Signature <i>Vicki Donaghey</i> | Name (Printed/Typed) Vicki Donaghey | Date 08/20/02 |
| Title Production Assistant | | |
| Approved by (Signature) <i>S. W. Anderson</i> | Name (Printed/Typed) | Date Oct 17 2002 |
| Title <i>Asst. Field Mgr.</i> | Office <i>Albuquerque</i> | |

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 applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, 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.

*(Instructions on Reverse)

Mintoc - 1600' - to over Nacimiento

District I
PO Box 1980, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised February 21, 1994

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

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

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

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

District IV
PO Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|---|---|--|
| ¹ API Number 30-039-27082 | ² Pool Code 72319 / 27194 | ³ Pool Name BLANCO MESAVERDE / GAVILAN MANCOS, EXTENSION |
| ⁴ Property Code 21896 | ⁵ Property Name CHENEY FEDERAL | ⁶ Well Number 2B |
| ⁷ GRID No. 162928 | ⁸ Operator Name ENERGEN RESOURCES CORPORATION | ⁹ Elevation 7264' |

¹⁰ Surface Location

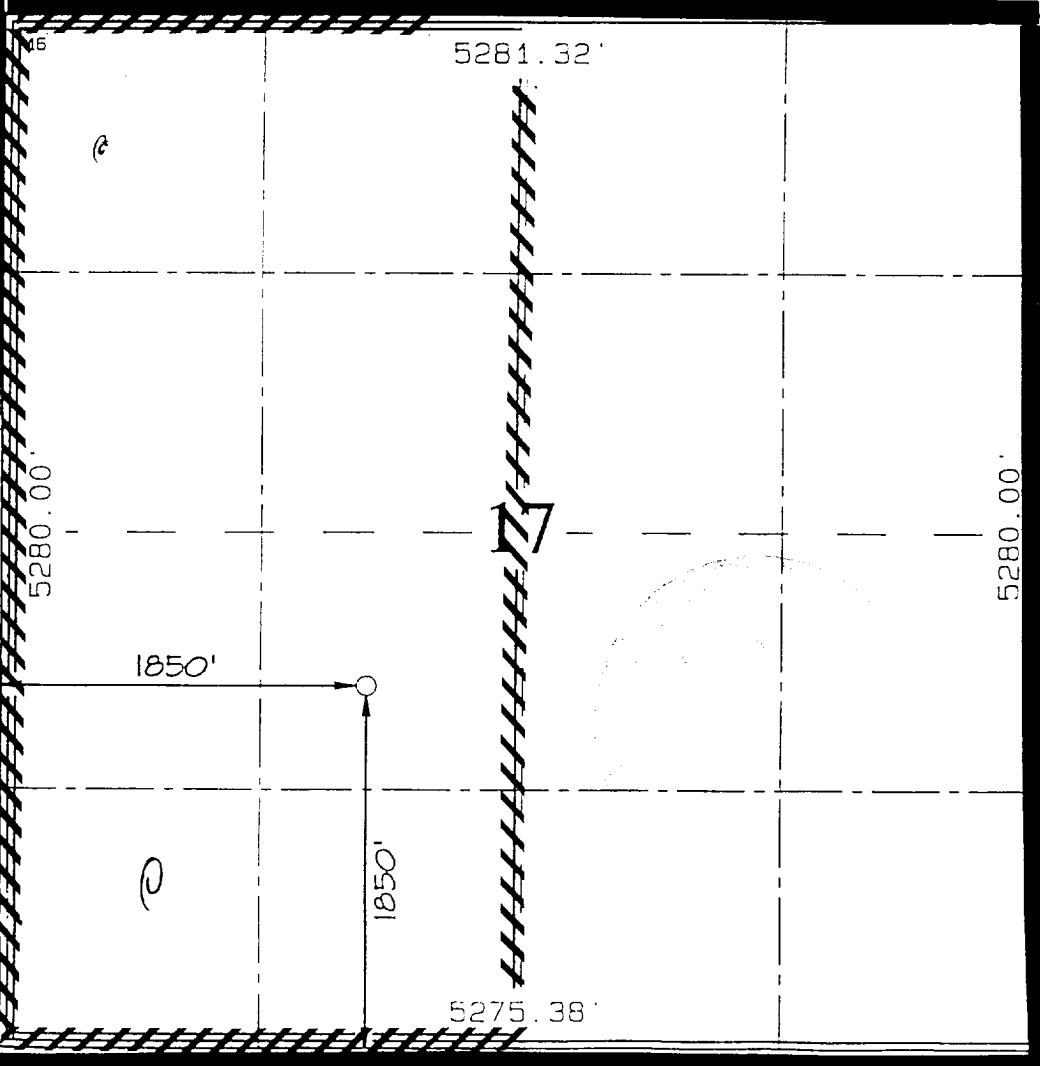
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| K | 17 | 26N | 2W | | 1850 | SOUTH | 1850 | 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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |

| | | | |
|---|-------------------------------|----------------------------------|-------------------------|
| ¹² Dedicated Acres 320.0 Acres (W/2) - MV 640.0 Acres (All) - MANCOS | ¹³ Joint or Infill | ¹⁴ Consolidation Code | ¹⁵ 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



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information
contained herein is true and complete
to the best of my knowledge and belief

Signature

Don Graham

Printed Name

Production Superintendent

Title

Date

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: JULY 25, 2002

Signature and Seal of Professional Surveyor

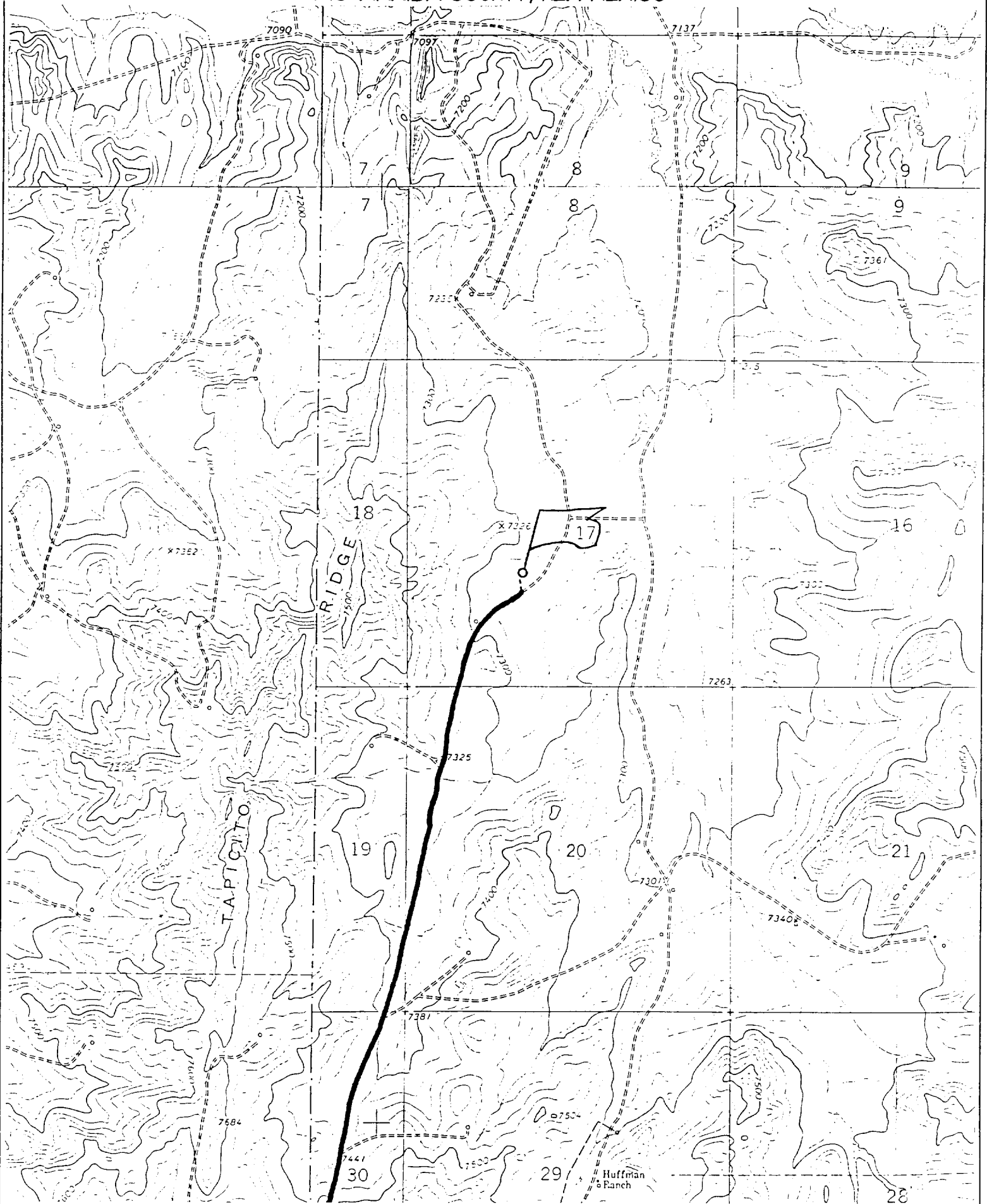


JASON C. EDWARDS

Certificate Number 15269

ENERGEN RESOURCES CORPORATION CHENEY FEDERAL #2B

1850' FSL & 1850' FWL, SECTION 17, T26N, R2W, N.M.P.M.
RIO ARriba COUNTY, NEW MEXICO



OPERATIONS PLAN

WELL NAME: Cheney Federal #2B

LOCATION: 1850' FSL, 1850' FWL, Section 17, T26N, R2W, Rio Arriba, New Mexico

FIELD: Blanco Mesaverde/Gavilan Mancos Ext.

ELEVATION: 7264' GL

FORMATION TOPS:

| | | | |
|-----------------|----------|---------------------|-------------|
| Surface | San Jose | Huerfanito Benonite | 4216 |
| Nacimiento | 2496 | Cliff House | 5486 |
| Ojo Alamo | 3376 | Menefee | 5561 |
| Kirtland | 3536 | Point Lookout | 5866 |
| Fruitland | 3556 | Mancos Shale | 6156 |
| Pictured Cliffs | 3706 | Gallup | 6946 |
| Lewis | 3886 | Total Depth | 7826 |

LOGGING PROGRAM:

Open Hole Logs:

Surface to intermediate: NONE

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

Mud Logs: 3600' to total depth

Coring: None

Natural Gauges: Every 500' from intermediate TD to total depth

MUD PROGRAM: Fresh water low solids mud from surface to intermediate TD (9.0 – 9.2 PPG).

Air/mist from intermediate casing point to total depth.

CASING PROGRAM:

| <u>HOLE SIZE</u> | <u>DEPTH</u> | <u>CSG SIZE</u> | <u>WT.</u> | <u>GRADE</u> |
|------------------|--------------|-----------------|------------|--------------|
| 12-1/4" | 200' | 9-5/8" | 36# | J-55 |
| 8-3/4" | 4086' | 7" | 23# | J-55 |
| 6-1/4" | 3981'-7826' | 4-1/2" | 11.6# | J-55 |

TUBING PROGRAM:

| | | | |
|-------|--------|------|------|
| 7700' | 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 sxs Class B Cement with 1/4" Flocele/sx 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 with centralizers on the first three joints.

7" intermediate casing - cement with 415 sks 65/35 Class B Poz with 6% gel, 2% calcium chloride, 10% gilsonite, and 1/4# flocele/sk. Tail with 100 sks Class B w/2% calcium chloride, 10% gilsonite and 1/4# flocele/sk. (921 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. 8 bow spring centralizers spaced every 2nd joint off bottom. Two turbolating centralizers at the base of the Ojo Alamo.

4 1/2 Production Liner

Cement with 470 sks 50/50 poz with 2% gel, 5 PPS gilsonite, .4% halad - 9 and 1/4# flocele/sk (591 cu. Ft., 50% excess to intermediate casing). WOC 18 hrs prior to completion.

Cement nose guide shoe on bottom with float collar on top of shoe joint. Liner hanger will have a neopreme packoff on top.

OTHER INFORMATION:

- 1) The Blanco Mesaverde completed.
- 2) No abnormal temperatures or pressures are anticipated.
- 3) Anticipated pore pressure for the Mesa Verde is 800, Pictured Cliffs is 600 and the Fruitland 500 psi.
- 4) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control.
- 5) This gas is dedicated.