

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL ☐  
WELL

GAS ☒  
WELL

OTHER

SINGLE ☒  
ZONE

MULTIPLE ☐  
ZONE

2. NAME OF OPERATOR

ENERGEN RESOURCES CORPORATION

3. ADDRESS AND TELEPHONE NO.

2198 Bloomfield Highway; Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. \*)  
At surface

2490' FSL, 860' FWL

At proposed prod. zone

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

Seven (7) Miles NE of Gobernador, New Mexico

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any) 830'

16. NO. OF ACRES IN LEASE

539.04

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

269.56

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

1300'

19. PROPOSED DEPTH

6916'

20. ROTARY OR CABLE TOOLS

Rotary

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

7215' GR This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4.

22. APPROX. DATE WORK WILL START\*

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
GENERAL REQUIREMENTS

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	36#	200'	130 cu. ft., circ. to surface
8 3/4"	7"	20 & 23#	4525'	1021 cu. ft., circ. to surface
6 1/8"	4 1/2"	10.5#	4375'-6916'	360 cu. ft., circ. to intermediate

Selectively perforate and sand water fracture the Mesaverde Formation.

This gas is dedicated.

A Williams Field Service Pipeline ROW Plat is attached.

THIS IS AN EXPEDITED APD.



IN ABOVE SPACE DESCRIBE PROPOSED 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

*Don Graham*

TITLE

Drilling & Completion Foreman

DATE

12/18/00

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

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:

APPROVED BY

*/s/ David J. Mankiewicz*

TITLE

DATE

MAY 10 2004

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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.

NMOCD

District I  
PO Box 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

☐ AMENDED REPORT

200 DEC 20 PM 1:54

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number <b>30039-26624</b>	*Pool Code 72319	*Pool Name Blanco Mesaverde
*Property Code <b>21994</b>	*Property Name SAN JUAN 30-4 UNIT	*Well Number 41B
*OGRID No. 162928	*Operator Name ENERGEN RESOURCES CORPORATION	*Elevation 7213'

<sup>10</sup> Surface Location

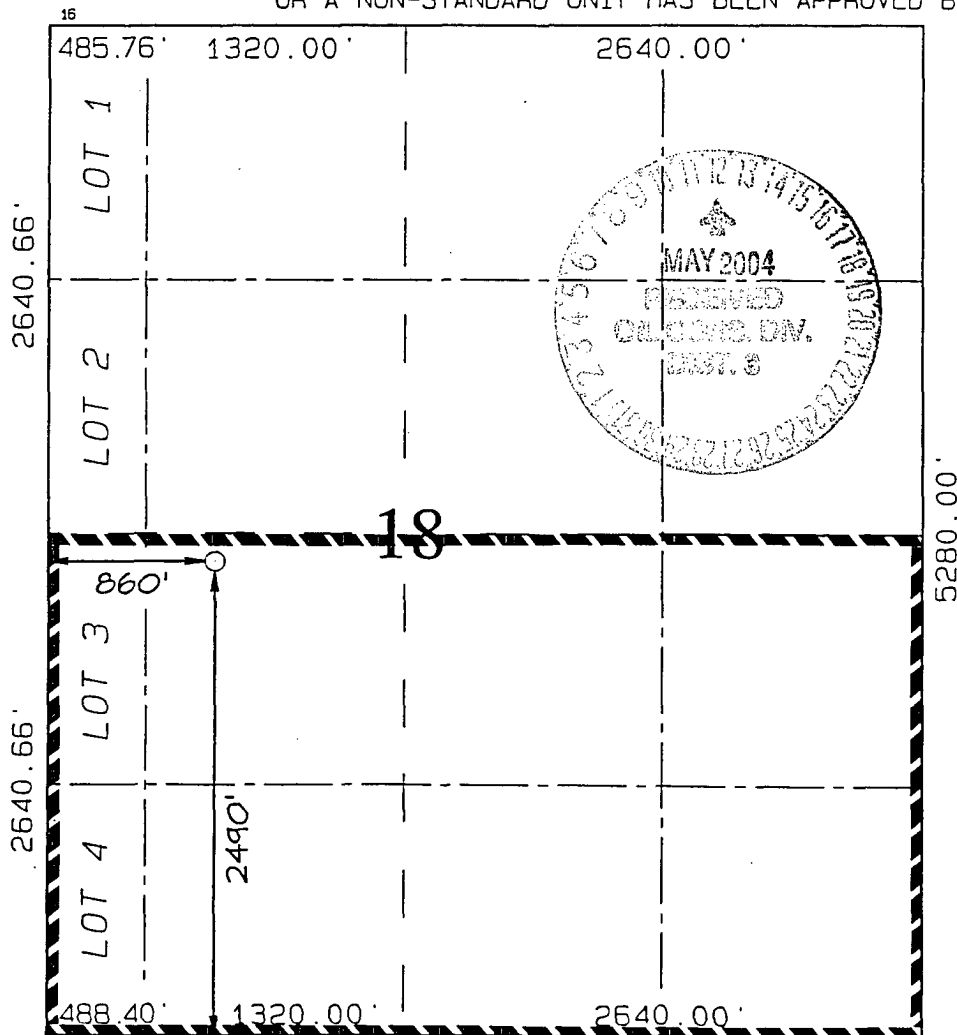
UL or lot no. K	Section 18	Township 30N	Range 4W	Lot Idn	Feet from the 2490	North/South line SOUTH	Feet from the 860	East/West line WEST	County RIO ARriba
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<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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<sup>12</sup> Dedicated Acres 269.56	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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



<sup>17</sup> OPERATOR CERTIFICATION

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

Signature

Gary Brink

Printed Name

Production Superintendant

Title

12/18/00

Date

<sup>18</sup> 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.

DECEMBER 5, 2000

Date of Survey

Signature and Seal of Professional Surveyor

Certificate Number 6857

## OPERATIONS PLAN

WELL NAME: San Juan 30-4 Unit 41B

LOCATION: 2490' FSL, 860' FWL, Section 18, T30N, R4W, Rio Arriba County, NM

FIELD: Blanco Mesaverde

ELEVATION: 7214' GR

### FORMATION TOPS:

Surface	San Jose	Huerfanito Benonite	4956
Nacimiento	1986	Cliff House	5806
Ojo Alamo	3281	Menefee	6156
Kirtland	3511	Point Lookout	6366
Fruitland	3741	Total Depth	6916
Pictured Cliffs	3916		
Lewis	4326		

### 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.

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

### 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"	4525'	7"	20 & 23#	J-55
6 1/8"	4375'-6916'	4 1/2"	10.5#	J-55

### TUBING PROGRAM:

6800	2 3/8"	4.7	J-55
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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 1/4# 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 530 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. (1021 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.

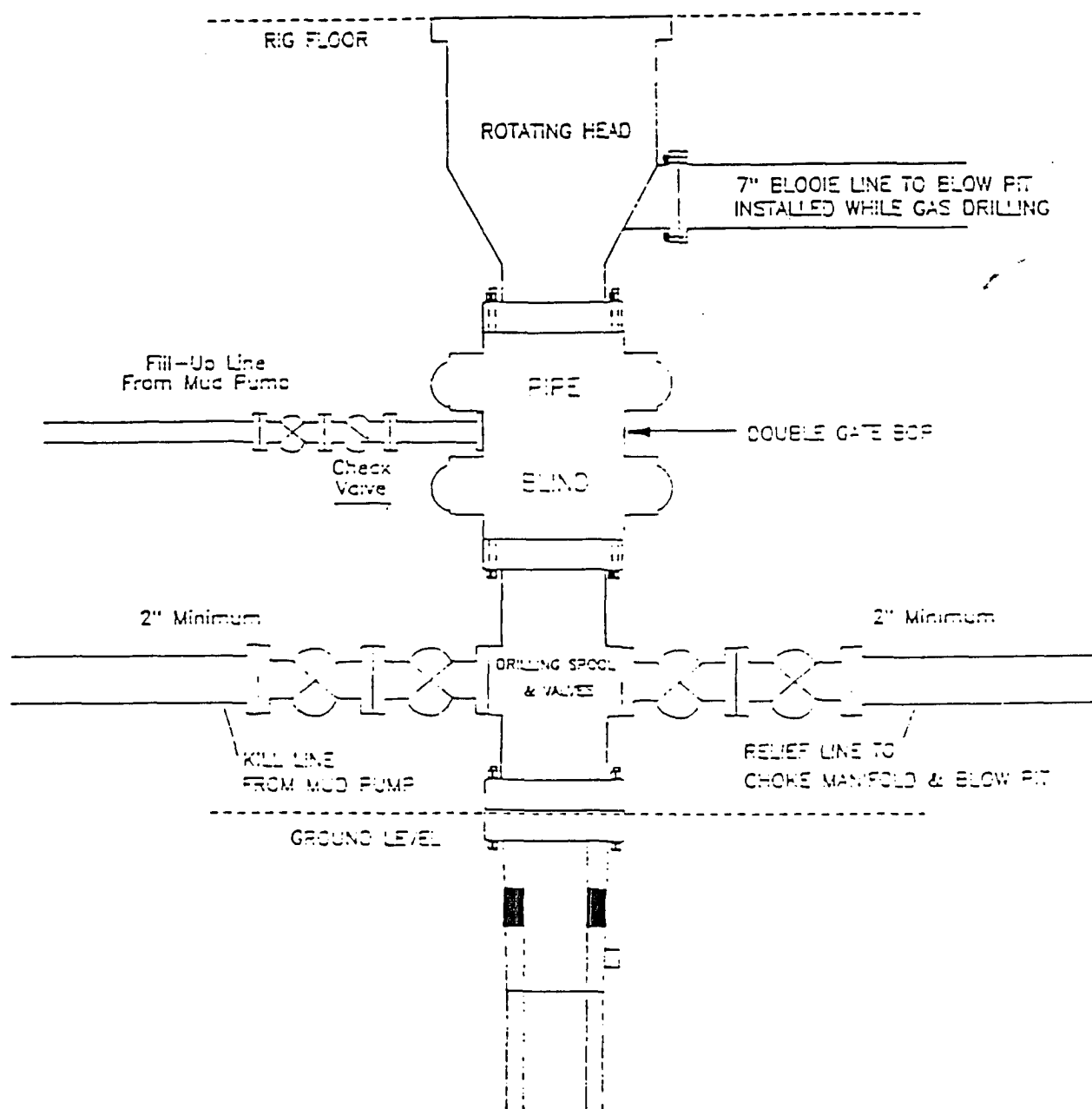
Cement nose guide shoe on bottom with float collar on top of shoe joint.

### 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.

# ENERGEN RESOURCES CORPORATION

## Mesa Verde / Dakota Well BOP Configuration



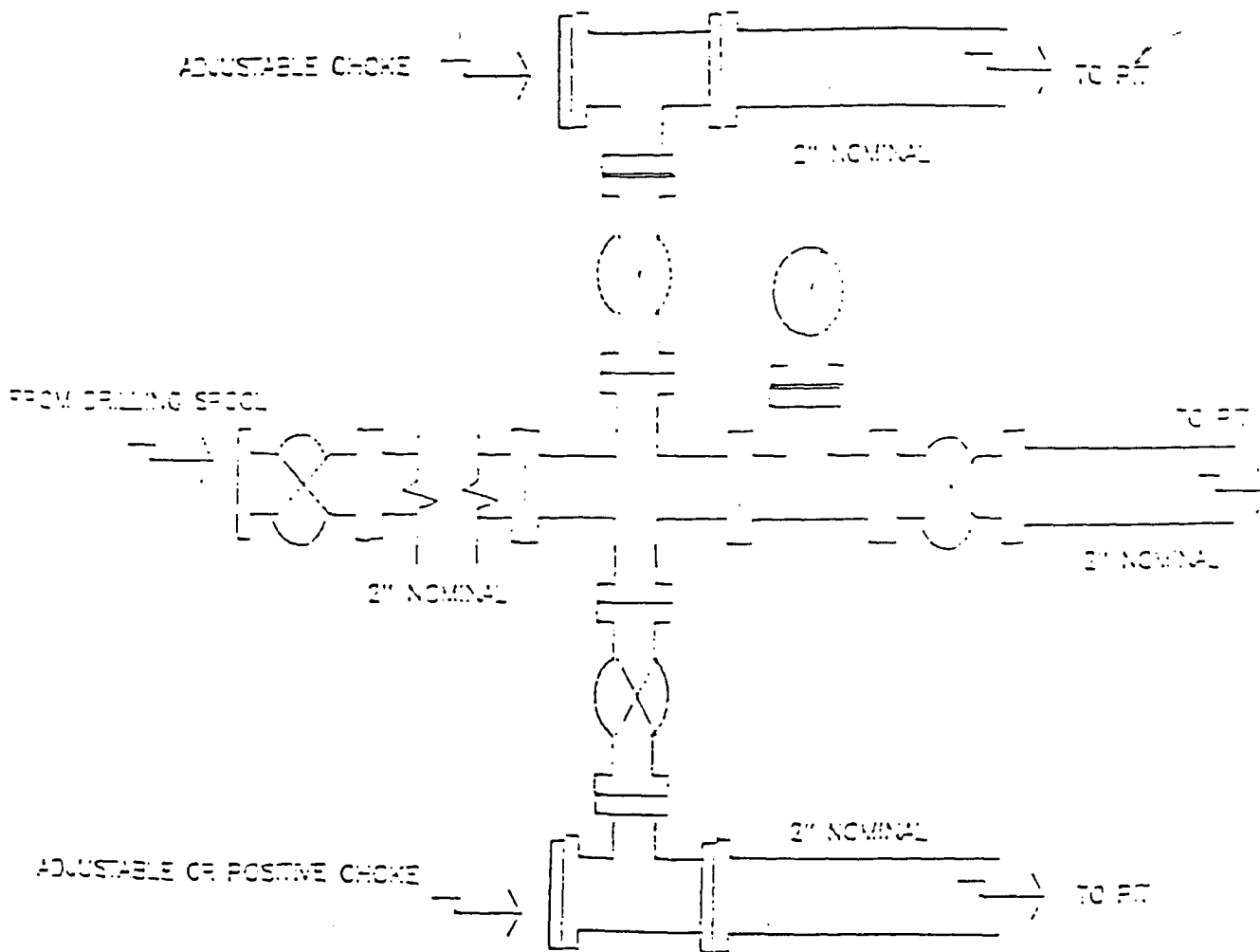
Minimum BOP installation for a Mesoverde well from Surface to Total Depth. 11" Bore, 2000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 or equivalent rotating head to be installed on the top of the BOP. All equipment is 2000psi working pressure or greater.

Figure #1

# ENERGEN RESOURCES CORPORATION

## Choke Manifold Configuration

2M psi SYSTEM



Minimum choke manifold installation from surface to Total Depth.  
2" minimum, 2000psi working pressure equipment with two chokes.

**ENERGEN RESOURCES SAN JUAN 30-4 UNIT #41B**  
**2490' FSL & 860' FWL, SECTION 18, T30N, R4W, NMPM**  
**RIO ARriba COUNTY, NEW MEXICO**  
**GROUND ELEVATION: 7213'**

**LATITUDE: 36°48'41"**  
**LONGITUDE: 107°17'59"**

