

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0136
Expires January 31, 2004

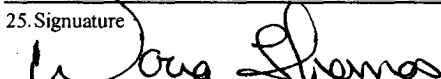
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF-079488
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Energen Resources Corporation		7. Unit or CA Agreement Name and No.
3a. Address 2198 Bloomfield Highway, Farmington, New Mexico	3b. Phone No. (include area code) (505) 325-6800	8. Lease Name and Well No. San Juan 30-4 Unit 33C
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 660' FSL, 1800' FWL At proposed prod. zone		9. API Well No. 3003927836
14. Distance in miles and direction from nearest town or post office* 7 miles northeast of Gobernador, NM		10. Field and Pool, or Exploratory Blanco Mesaverde
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 660'	16. No. of Acres in lease 506.24'	11. Sec., T., R., M., or Blk. and Survey or Area N-Sec. 31, T30N, R04W - N.M.P.M.
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2750'	19. Proposed Depth 7302'	12. County or Parish Rio Arriba
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7675' G.L.	22. Approximate date work will start* July 05	13. State NM
23. Estimated duration 11 days		17. Spacing Unit dedicated to this well W 1/2
20. BLM/BIA Bond No. on file		

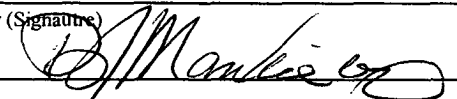
24. Attachments

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 	Name (Printed/Typed) Doug Thomas	Date 7/16/04
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Title
Drilling Superintendent

Approved by (Signature) 	Name (Printed/Typed) AFM	Date 3/1/06
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Title AFM	Office FFO
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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.

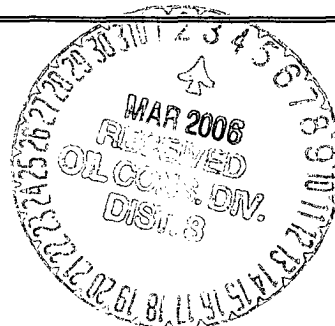
*(Instructions on Reverse)

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

HOLD C164 FOR

NMOC



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

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

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

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

2004 JUL 23 AM 9 12 ☐ AMENDED REPORT

RECEIVED
WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-27834		*Pool Code 72319	*Pool Name BLANCO MESAVERDE
*Property Code 21994	*Property Name SAN JUAN 30-4 UNIT		*Well Number 33C
*GRID No. 162928	*Operator Name ENERGEN RESOURCES CORPORATION		*Elevation 7675'

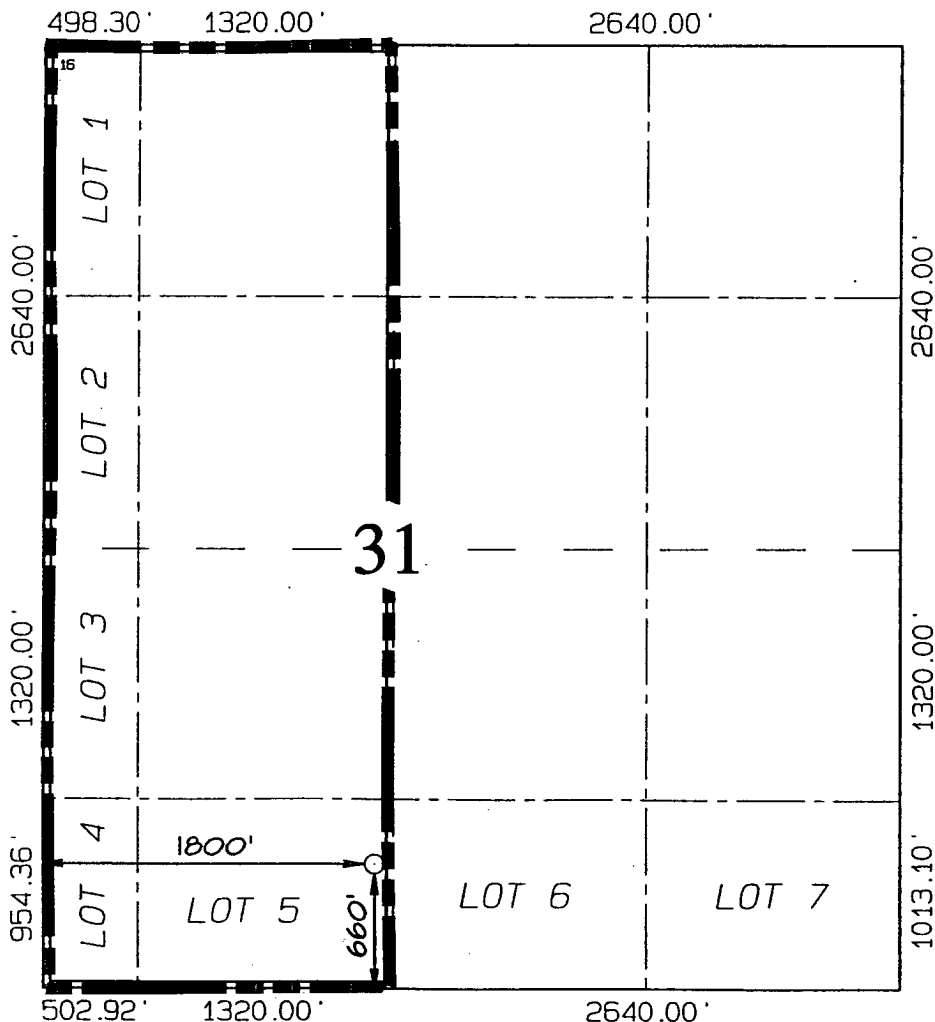
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	31	30N	4W	5	660	SOUTH	1800	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 205.88 Acres - W/2					¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. NW 4362		

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

Doug Thomas
Signature

Doug Thomas

Printed Name
Drilling Superintendent

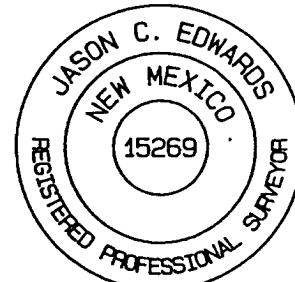
Title
7/16/04
Date

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: APRIL 16, 2004

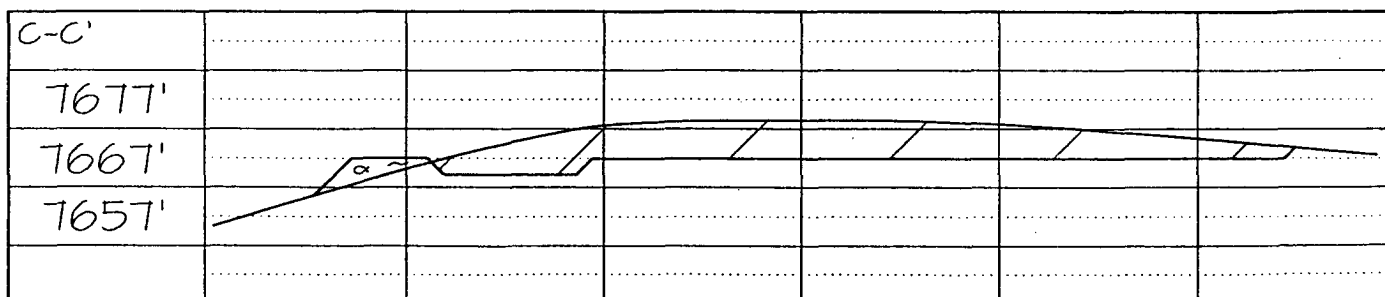
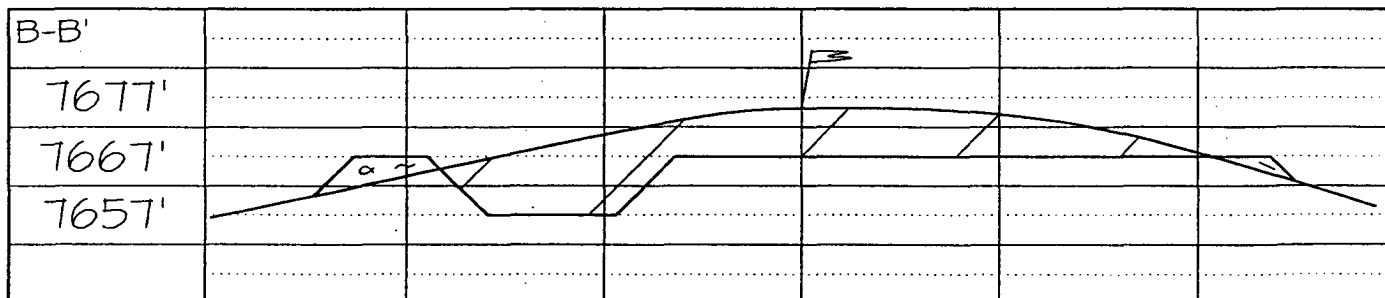
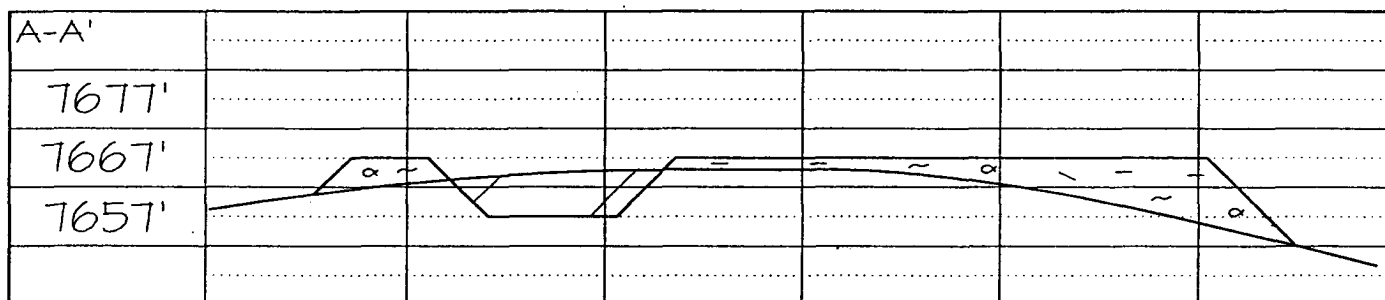
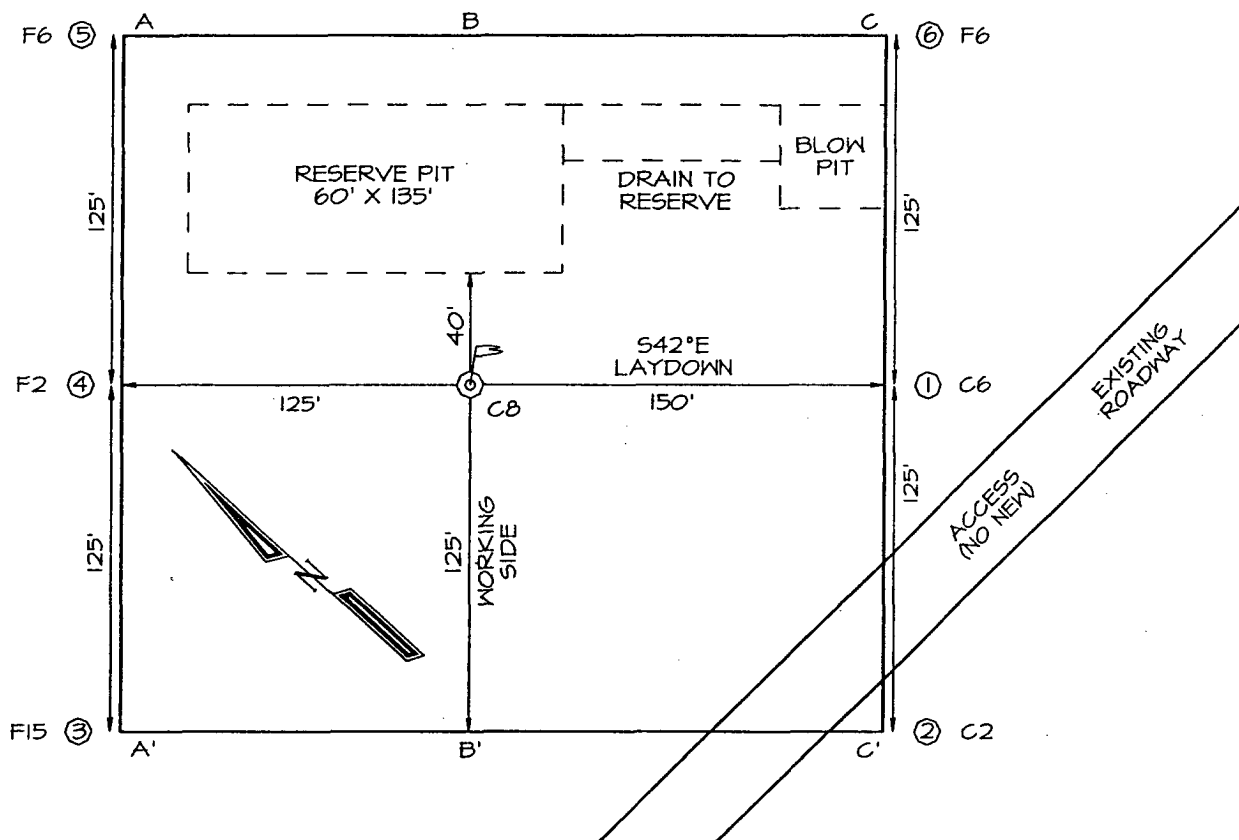
Signature and Seal of Professional Surveyor



Jason C. Edwards
Certificate Number 15269

ENERGEN RESOURCES CORPORATION SAN JUAN 30-4 UNIT #33C
660' FSL & 1800' FWL, SECTION 31, T30N, R4W, NMPM
RIO ARriba COUNTY, NEW MEXICO ELEVATION: 7675'

LATITUDE: 36°45'49"
 LONGITUDE: 107°17'45"
 DATUM: NAD1927



OPERATIONS PLAN

WELL NAME: San Juan 30-4 #33C

LOCATION: 660' FSL, 1800' FWL, Section 31, T30N, R4W, Rio Arriba County, NM

FIELD: Blanco Mesaverde

ELEVATION: 7675' GR

FORMATION TOPS:

San Jose	Surface	Huerfanito Benonite	5342
Nacimiento	2492	Cliff House	6207
Ojo Alamo	3767	Menefee	6517
Kirtland	3982	Point Lookout	6752
Fruitland	4162	Mancos Sh	7237
Pictured Cliffs	4377		
Lewis	4682	Total Depth	7302

LOGGING PROGRAM:

Open Hole Logs:

Surface to intermediate: None

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

Mud Logs: None

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 ¼"	200'	9 5/8"	32.3#	H-40
8 ¾"	4882'	7" 20# to 4000' & 23# to TD		J-55
6 1/8"	4732'-7302'	4 ½"	10.5#	J-55

TUBING PROGRAM:

7280'	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:

First Stage - cement with 175 sks 50/50 Poz with 2% Calcium Chloride, 10% Gilsonite and 1/4# flocele/sks (223 cu. ft. of slurry, 90% excess to circulate stage tool @ 4100').

Second Stage - cement with 540 sks 65/35 Class B Poz with 6% gel, 2% calcium chloride, 10#/sx gilsonite, and 1/2# flocele/sk. Tail with 100 sks 50/50 Poz w/2% calcium chloride, 5#/sx gilsonite and 1/4# flocele/sk. (1170 cu. ft. of slurry, 90% 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. (If Cmt is calculated off caliper log run 50% excess.)

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 395 sks 50/50 poz with 2% gel, 5 PPS gilsonite, .4% halad - 9 and 1/4# flocele/sk (501 cu. ft., 90% 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.

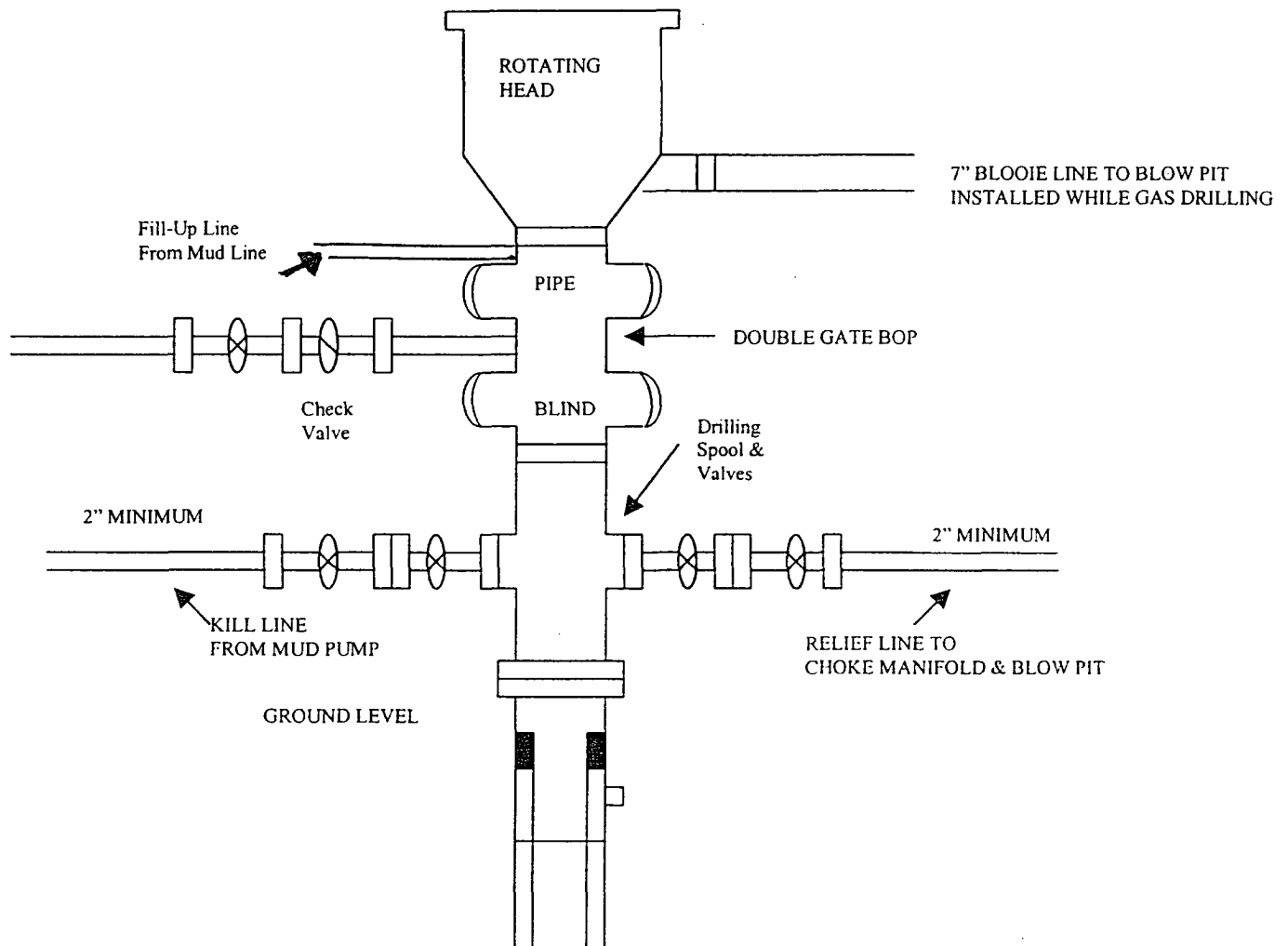
OTHER INFORMATION:

- 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

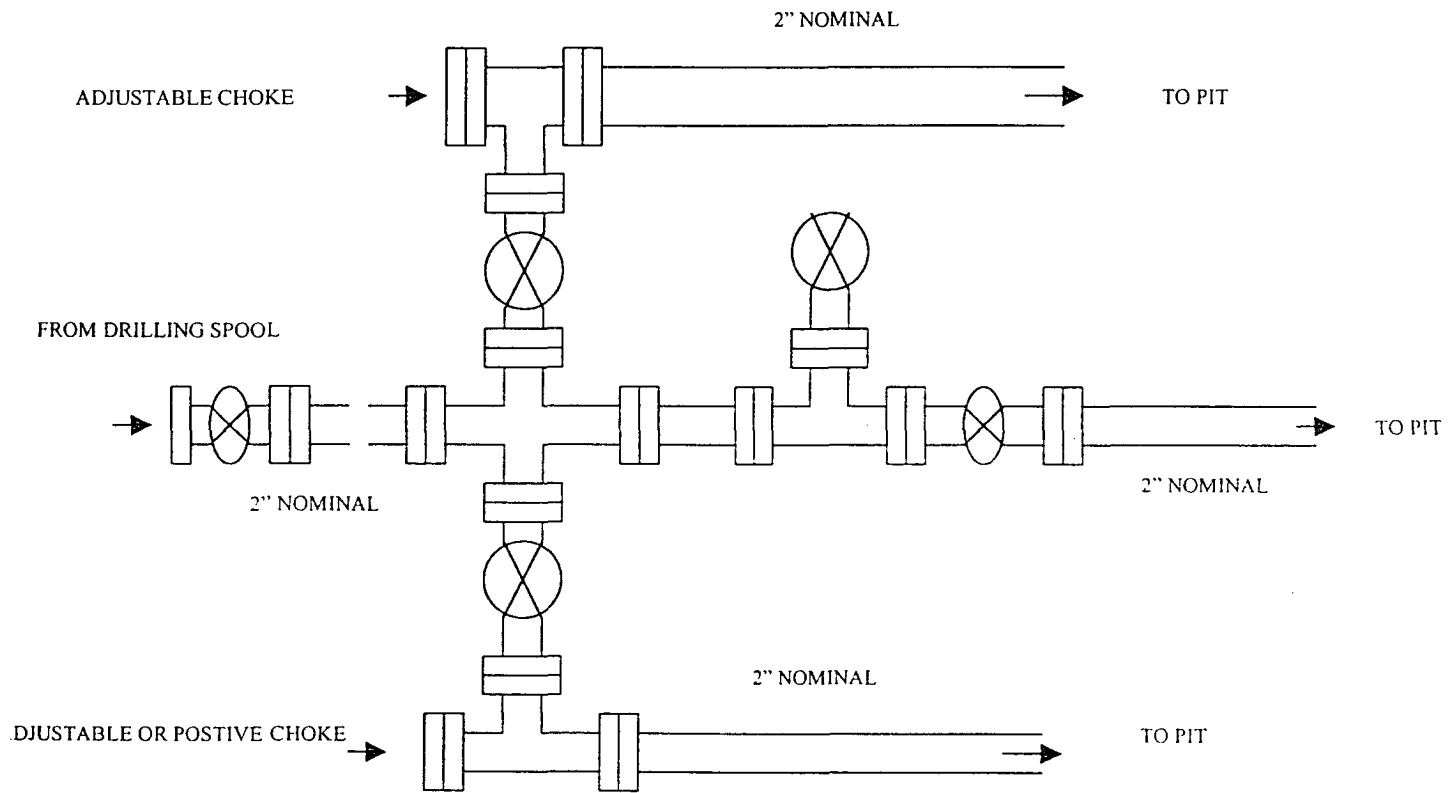
BOP Configuration



Minimum BOP installation for a Mesaverde well from Surface to Total Depth. 11' Bore, 2000 psi 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 2000 psi working pressure or greater.

ENERGEN RESOURCES CORPORATION

Choke Manifold Configuration 2M psi System



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