

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

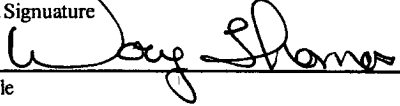
APPLICATION FOR PERMIT TO DRILL OR REENTER

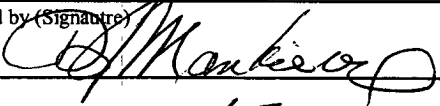
1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF-079485B	
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" 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. San Juan 30-4 Unit	
3a. Address 2198 Bloomfield Highway Farmington, New Mexico 87401		8. Lease Name and Well No. San Juan 30-4 Unit 48	
3b. Phone No. (include area code) (505)325-6800		9. API Well No. 30039 27698	
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 645' FSL, 2425' FEL At proposed prod. zone		10. Field and Pool, or Exploratory East Blanco PC/BASIN FRT COAL	
14. Distance in miles and direction from nearest town or post office* 10 miles Northeast of Gobernador, New Mexico		11. Sec., T., R., M., or Blk. and Survey or Area 0 Sec. 17, T30N, R4W, N.M.P.M.	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 645'		12. County or Parish Rio Arriba	
16. No. of Acres in lease 1280		13. State NM	
17. Spacing Unit dedicated to this well 320 E12-FC 1605E4PC		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1900'	
19. Proposed Depth 4160'		20. BLM/BIA Bond No. on file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7415' GL		22. Approximate date work will start* SEPT 04	
23. Estimated duration 12 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 	Name (Printed/Typed) Doug Thomas	Date 4/2/04
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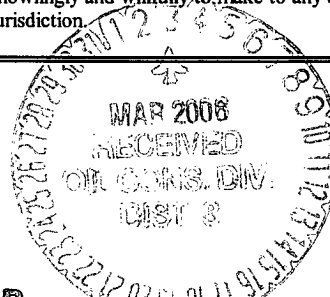
Title Drilling Superintendent		
Approved by (Signature) 	Name (Printed/Typed) AFM	Date 3/1/06
Title AFM	Office PFO	

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)

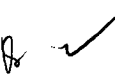
HOLD C104 FOR N 5L



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

NMOCD

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



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

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-27698	*Pool Code 72400 / 71629	*Pool Name EAST BLANCO PICTURED CLIFFS / BASIN FRUITLAND COAL
*Property Code 21994	*Property Name SAN JUAN 30-4 UNIT	*Well Number 48
*GRID No. 162928	*Operator Name ENERGEN RESOURCES CORPORATION	*Elevation 7415'

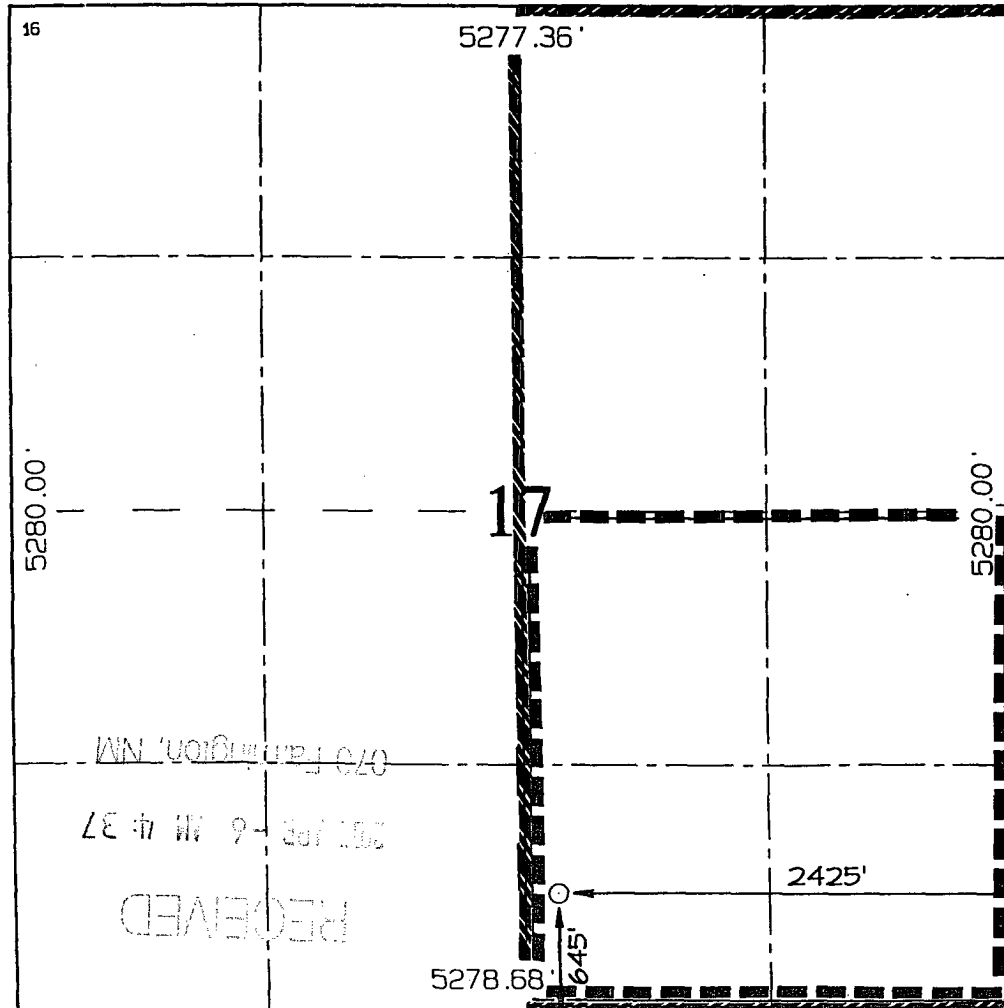
10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	17	30N	4W		645	SOUTH	2425	EAST	RIO ARriba

11 Bottom Hole Location If Different From Surface

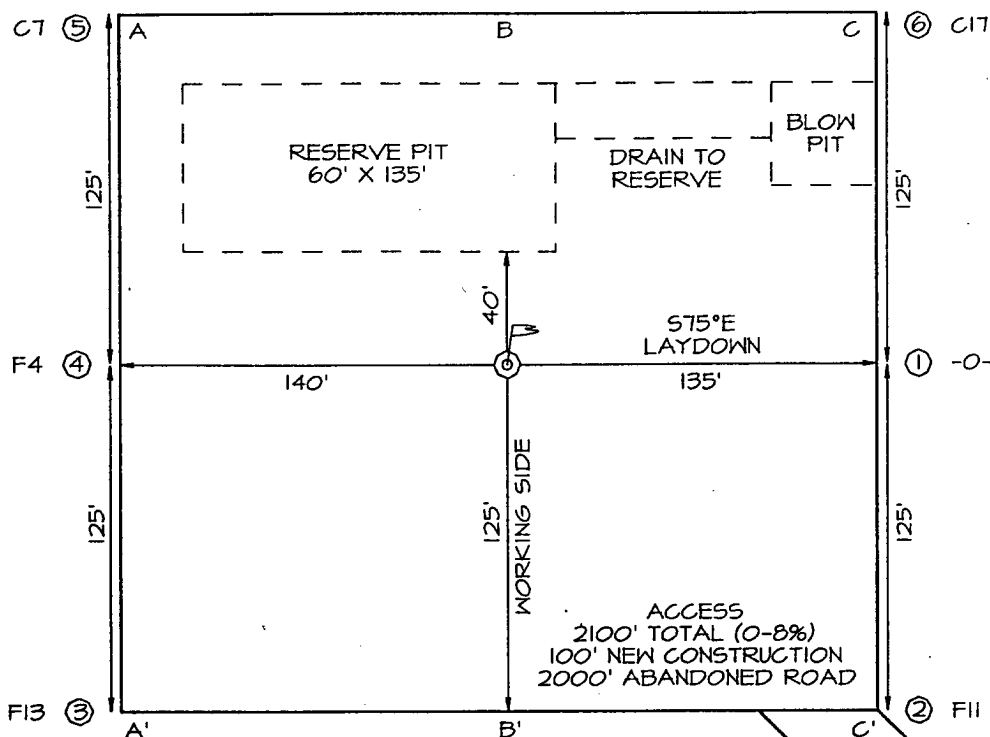
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres 160.0 Acres (SE/4) - PC 320.0 Acres (E/2) - FC					13 Joint or Infill	14 Consolidation Code	15 Order No.		

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

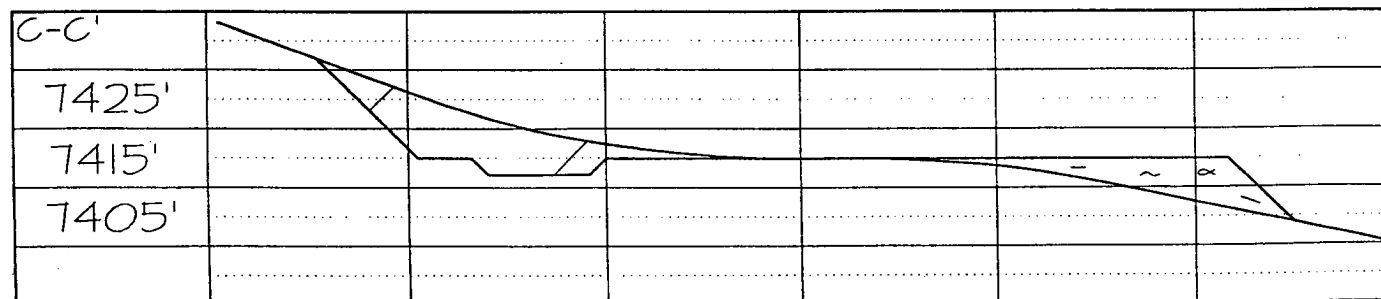
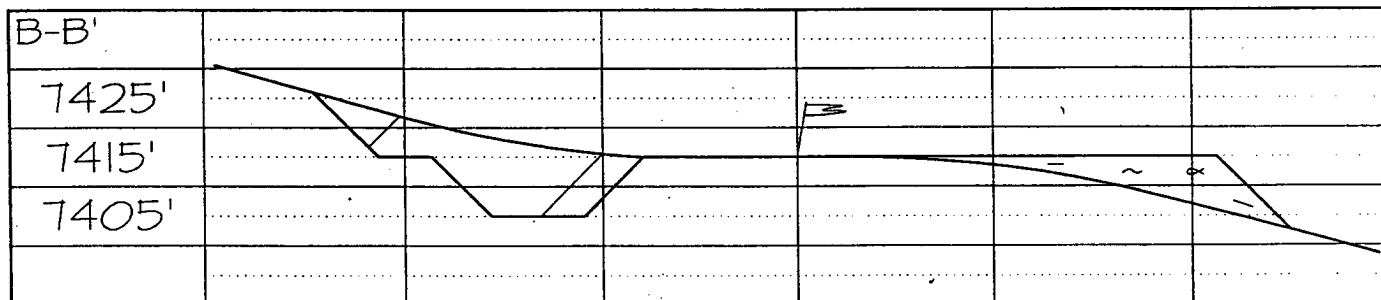
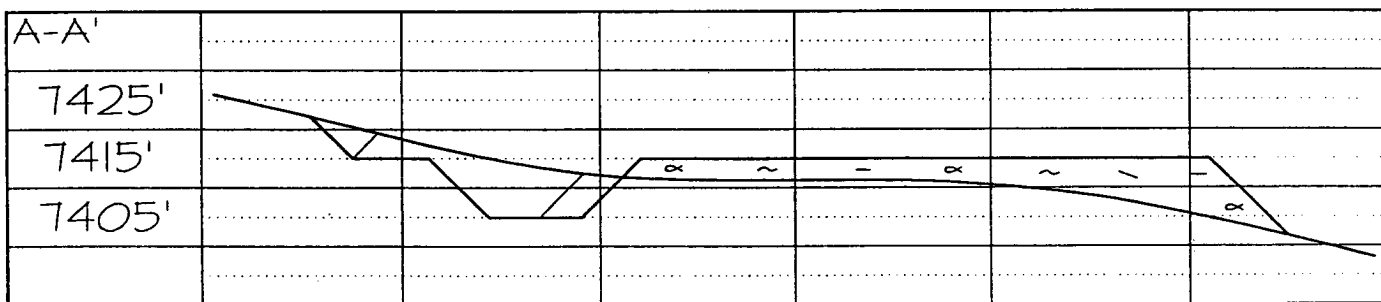
16		17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <i>Doug Thomas</i> Signature Doug Thomas Printed Name Drilling Superintendent Title 4/2/04 Date

ENERGEN RESOURCES CORPORATION SAN JUAN 30-4 UNIT #48
645' FSL & 2425' FEL, SECTION 17, T30N, R4W, NMPM
RIO ARriba COUNTY, NEW MEXICO ELEVATION: 7415'

LATITUDE: 36°48'22"
LONGITUDE: 107°16'37"
 DATUM: NAD1927



ABANDONED ROADWAY NEEDS MINOR IMPROVEMENT



OPERATIONS PLAN

WELL NAME: San Juan 30-4 Unit 48

LOCATION: 645' FSL, 2425' FEL, Section 17, T30N, R4W, Rio Arriba County, NM

FIELD: East Blanco Pictured Cliffs/Basin Fruitland Coal ELEVATION: 7415' GR

FORMATION TOPS:

Surface	San Jose
Nacimiento	2202
Ojo Alamo	3522
Kirtland	3752
Fruitland	3972
Pictured Cliffs	4162

Total Depth **4622**

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.

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"	32.3#	H-40
7 7/8"	4622'	5 1/2"	15.5#	J-55

TUBING PROGRAM:

4600'	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. An upper Kelly Cock valve with handle available and drill string valve to fit each drill string will be available on the rig floor during drilling operations.

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.

5 1/2" production casing:

First Stage - cement with 140 sks Class B with 2% Calcium Chloride, 10% Gilsonite and 1/4# flocele/sks (174 cu. ft. of slurry, 50% excess to circulate stage tool @ 4000).

Second Stage - cement with 695 sks 65/35 Class B Poz with 6% gel, 2% calcium chloride, 10% gilsonite, and 1/4# flocele/sk. Tail with 50 sks Class B w/2% calcium chloride, 10% gilsonite and 1/4# flocele/sk. (1402 cu. ft. of slurry, 50% excess to circulate to surface). WOC 12 hrs.

Cement nose guide shoe on bottom with a self-fill insert float valve on top of shoe joint. 8 bow spring centralizers spaced every 3rd joint off bottom. One bow spring centralizer below and eight above stage tool at 4000. Two turbolating centralizers at the base of the Ojo Alamo.

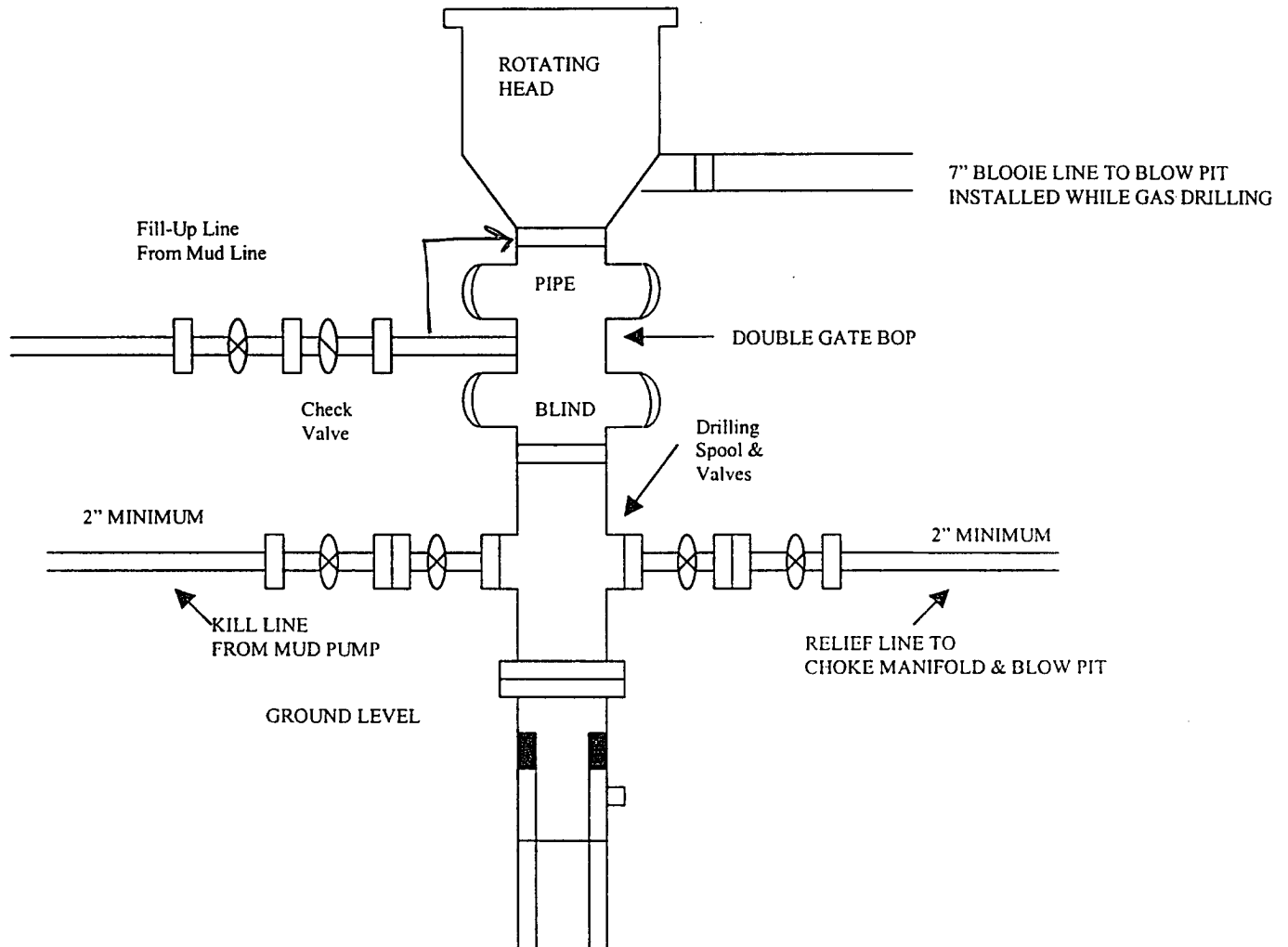
OTHER INFORMATION:

- 1) No abnormal temperatures or pressures are anticipated.
- 2) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control.
- 3) This gas is dedicated.
- 4) Anticipated pore pressure for the Fruitland is 1000 psi and the Pictured Cliffs is 900 psi.

ENERGEN RESOURCES CORPORATION

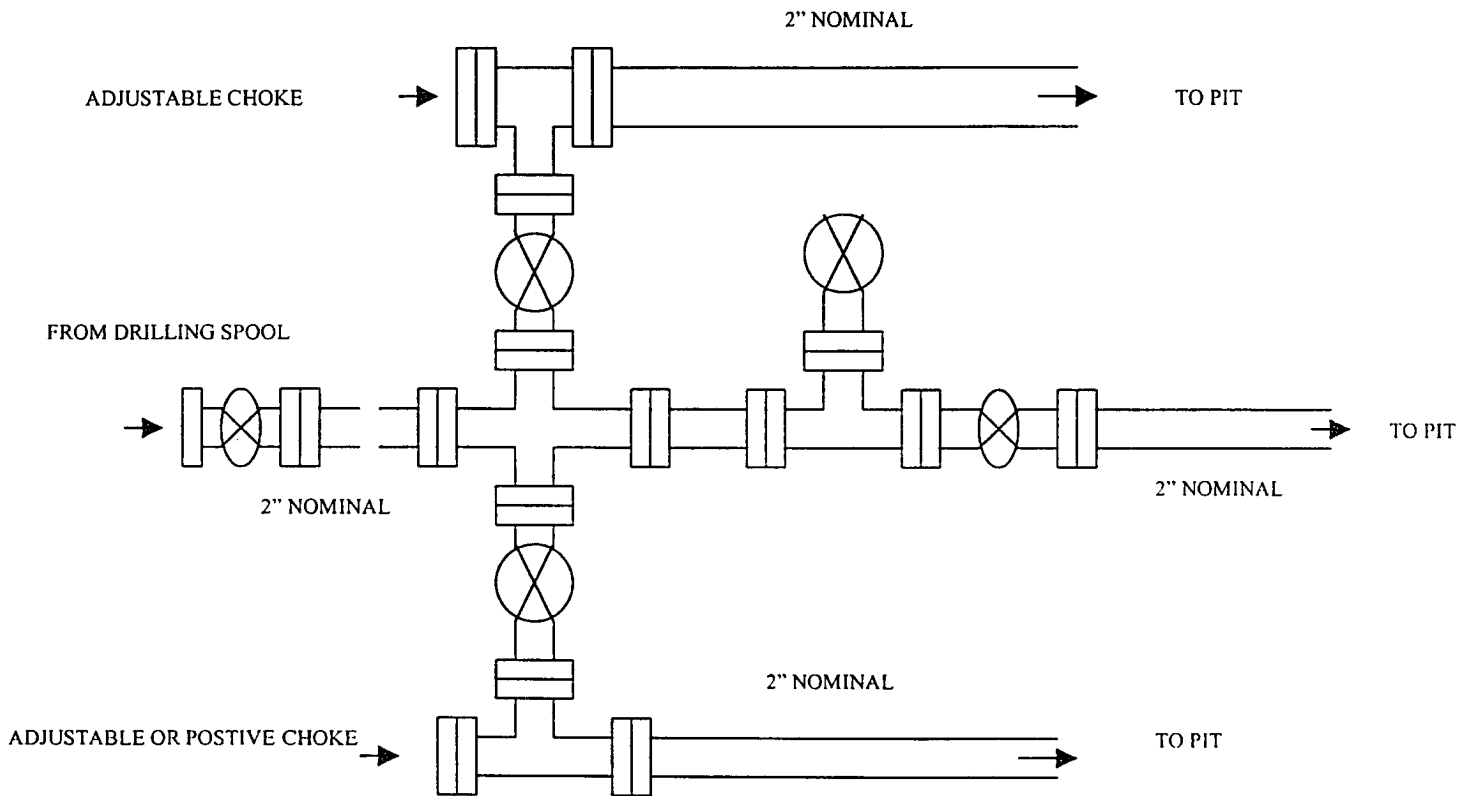
Mesa Verde / Dakota Well

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.