

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

1a. Type of Work ☒ DRILL ☐ REENTER
1b. Type of Well ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator

Energen Resources Corporation

3a. Address

2198 Bloomfield Highway Farmington, New Mexico 87401 (505) 325-6800

4. Location of Well (Report location clearly and in accordance with any State requirements)*

At surface 1060' FNL. 1170' FWL

At proposed prod. zone

14. Distance in miles and direction from nearest town or post office*

37 miles NE of Gobernador, NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 1060'

16. No. of Acres in lease 1760.00

17. Spacing Unit dedicated to this well

310
112-N2

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1550'

19. Proposed Depth 3979'

20. BLM/BIA Bond No. on file

21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7339' GL

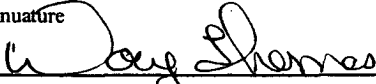
22. Approximate date work will start* 07/04

23. Estimated duration 5 days

24. Attachments

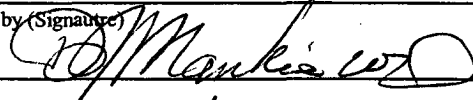
The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan
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).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
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 11/21/03

Title

Drilling & Completion Foreman

Approved by (Signature)  Name (Printed/Typed) AFM Date 1-27-05

Title

Office

FFO

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 approval pursuant to 43 CFR 3165.4

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

NMOC

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 30039 27550		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 34596	*Property Name CARRACAS CANYON UNIT		*Well Number 23A-4
*GRID No. 162928	*Operator Name ENERGEN RESOURCES CORPORATION		*Elevation 7339'

10 Surface Location

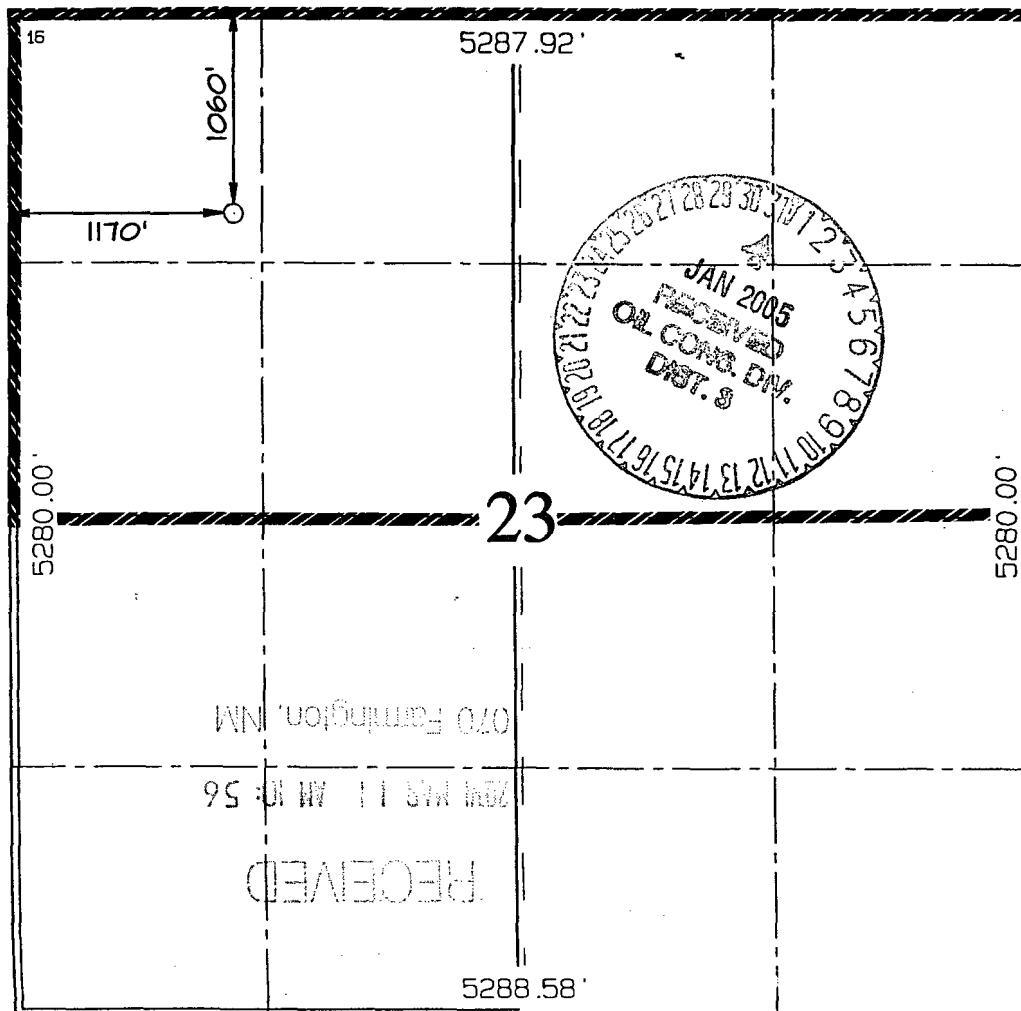
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	23	32N	5W		1060	NORTH	1170	WEST	RIO ARriba

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 - (N/2)	13 Joint or Infill	14 Consolidation Code	15 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



17 OPERATOR CERTIFICATION

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

Don Graham
Signature
Don Graham
Printed Name
Production Superintendant
Title
3-8-04
Date

18 SURVEYOR CERTIFICATION

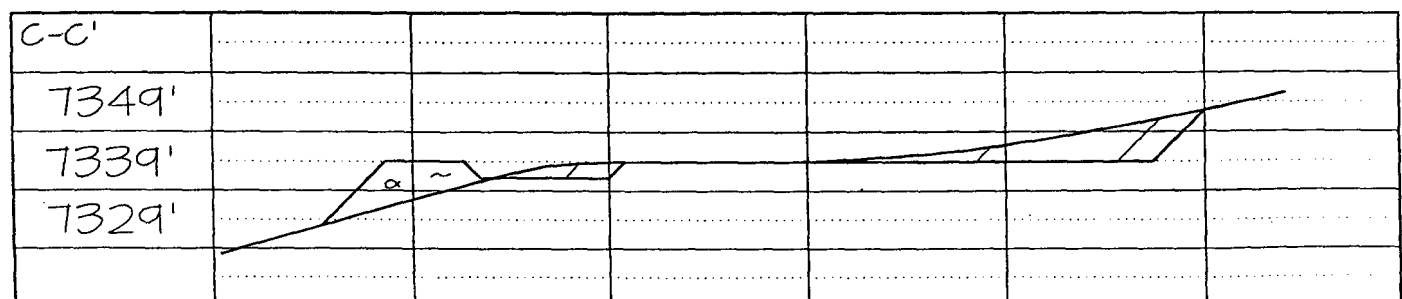
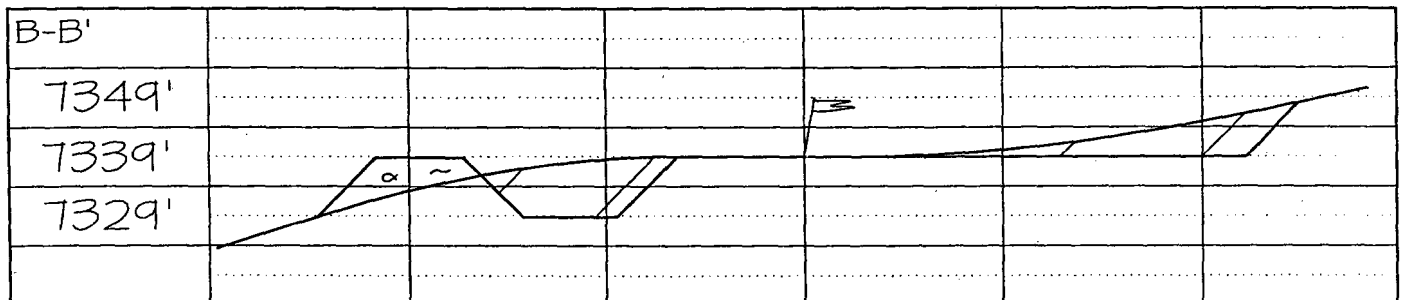
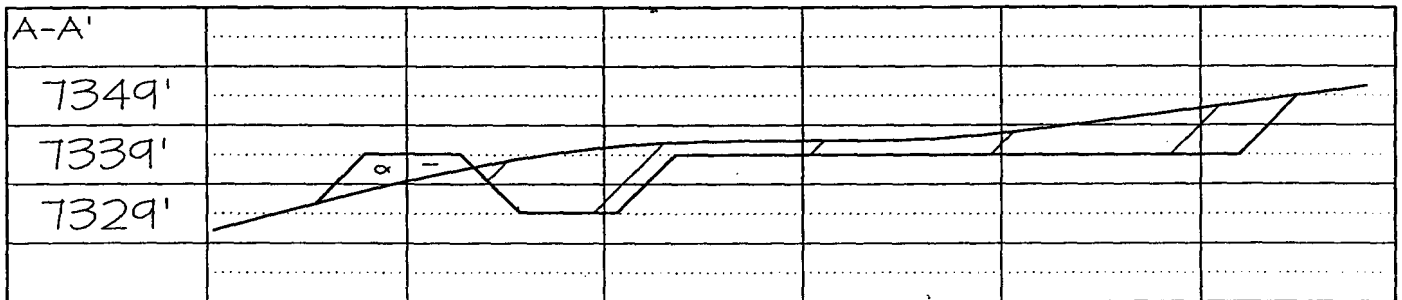
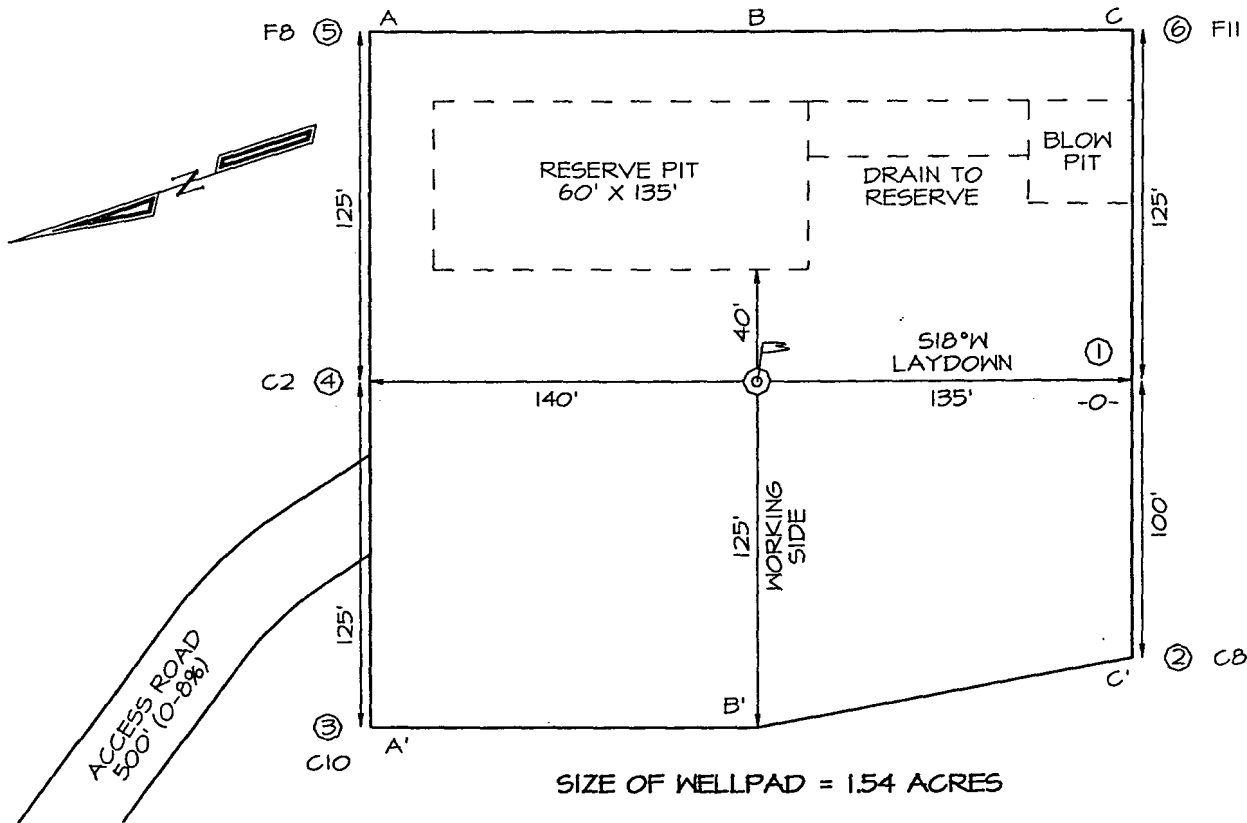
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey: MAY 19, 2003
Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

ENERGEN RESOURCES CORPORATION CARRACAS CANYON UNIT 23A #4
1060' FNL & 1170' FWL, SECTION 23, T32N, R5W, NMPM
RIO ARriba COUNTY, NEW MEXICO ELEVATION: 7339'



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires January 31, 2004

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.

NMNM 59704

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

Carracas 23A 4

9. API Well No.

3003927550

10. Field and Pool, or Exploratory Area
Basin Fruitland Coal

11. County or Parish, State

Rio Arriba NM

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

ENERGEN RESOURCES CORPORATION

3a. Address

2198 Bloomfield Highway, Farmington, NM 87401

3b. Phone No. (include area code)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1060 FNL, 1170 FWL, Sec. 23, T32N, R5W, N.M.P.M.

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☐ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

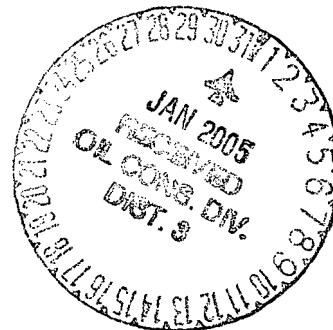
☐ Well Integrity

☒ Other

Dedicated Acres

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

After reviewing parent well status the dedicated acreage is North half instead of the West half as reported earlier. Attached is a new plat.



14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

DQUG THOMAS

Title

Drilling Superintendent

Date 3/9/04

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval of any are attached. Approval of this notice 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.

Office

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

NMOCB

OPERATIONS PLAN

WELL NAME: Carracas 23A #4

LOCATION: 1060' FNL, 1170' FWL, Section 23, T32N, R5W, Rio Arriba County, NM

FIELD: Basin Fruitland Coal

ELEVATION: 7339' GL

FORMATION TOPS:

Surface	San Jose
Nacimiento	1939
Ojo Alamo	3264
Kirtland	3394
Fruitland	3799

Total Depth 3979

LOGGING PROGRAM:

Open Hole Logs:

Surface to intermediate- Yes

Inter TD to total depth: None

Mud Logs: Intermediate 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 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"	32.3#	H-40 – ST&C
8 3/4"	3859'	7"	23#	J-55 – LT&C
6 1/4"	3759'-3979'	5 1/2"	15.5#	J-55 – LT&C

TUBING PROGRAM:

3950'	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. 3 bow type centralizers spaced throughout the string.

7" intermediate casing - cement with 505 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. (1102 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.

Cement nose guide shoe on bottom with a self-fill insert float valve on top of shoe joint. 10 bow spring centralizers spaced every 2nd joint off bottom. Two turbolating centralizers at the base of the Ojo Alamo.

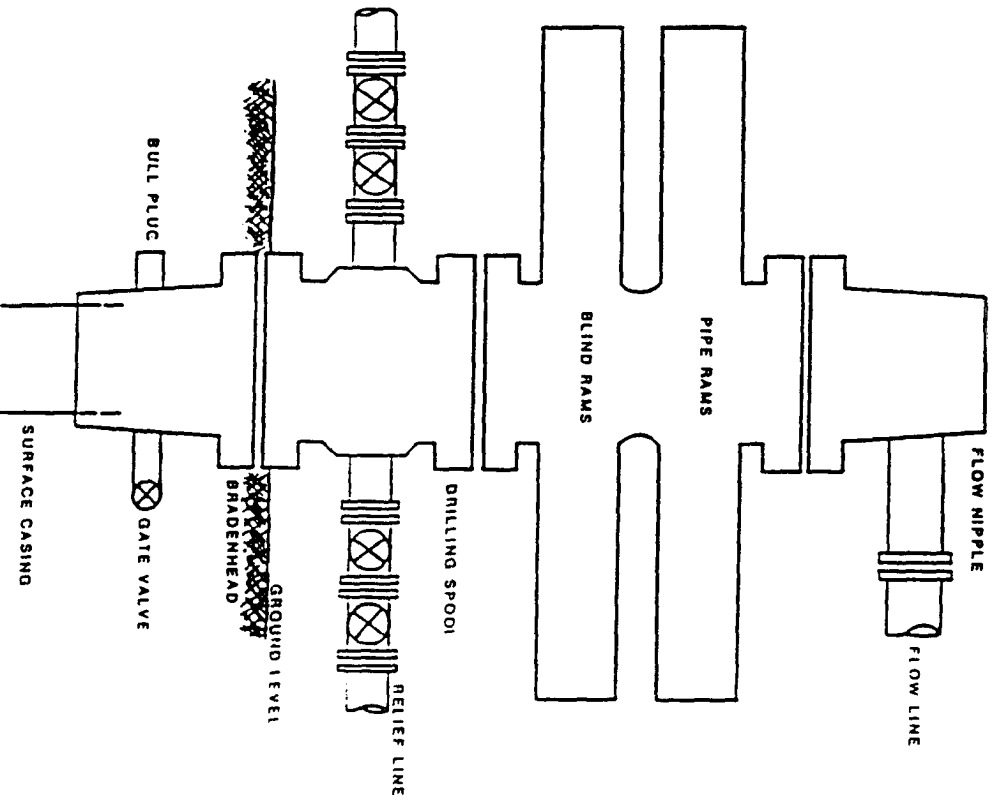
5 1/2" liner - NO CEMENT

OTHER INFORMATION:

- 1) The Basin Fruitland Coal will be completed.
- 2) No abnormal temperatures or pressures are anticipated.
- 3) If lost circulation is encountered sufficient LCM will be added to the mud system to maintain well control.
- 4) This gas is dedicated.
- 5) Anticipated pore pressure for the Fruitland is 700 psi.

Figure #1

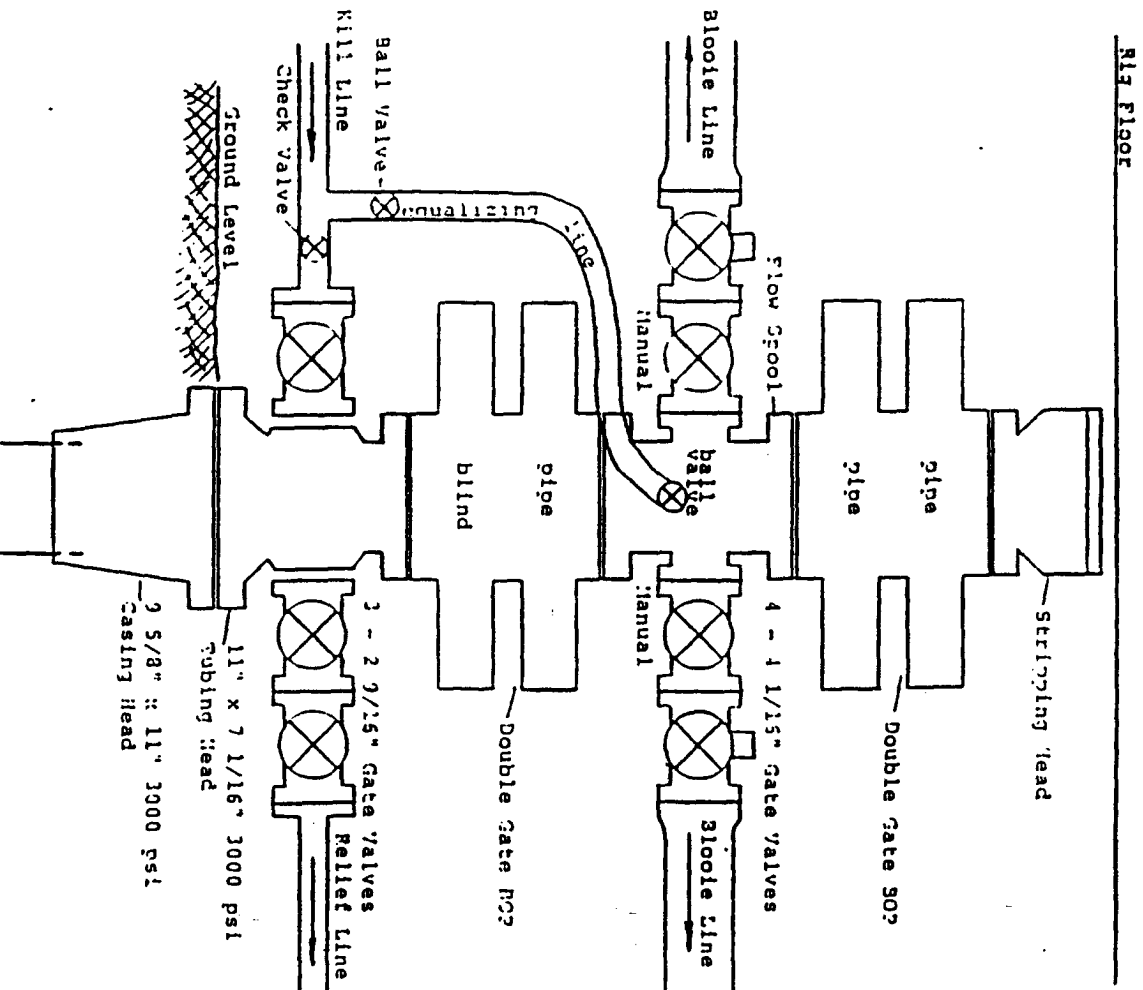
TYPICAL B.O.P.E. INSTALLATION
FOR A FRUITLAND COAL WELL
(to Intermediate TD)



Series 900 double gate BOP
Rated at 3000 psi working pressure

Figure #2

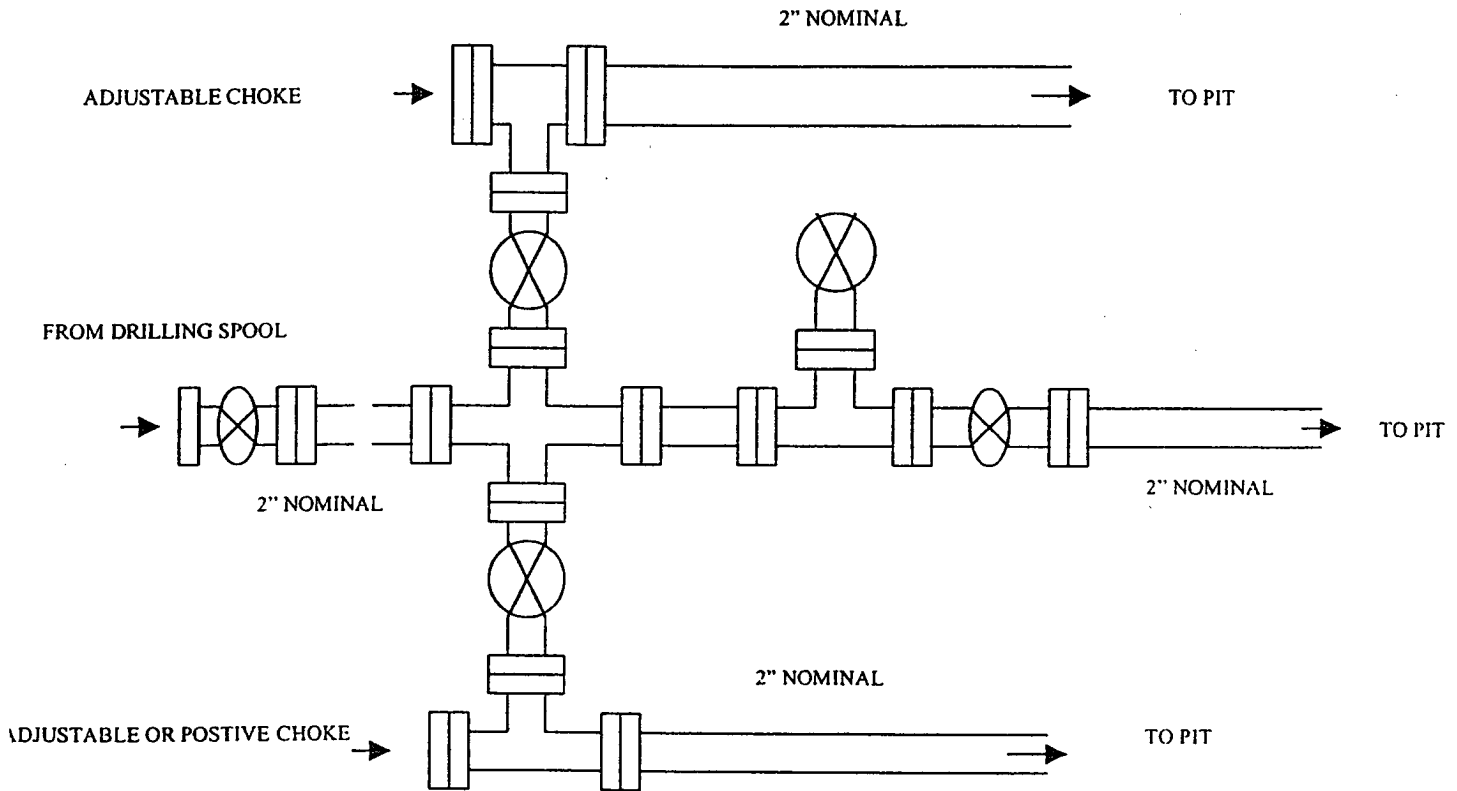
FRUITLAND COAL WELL
TYPICAL BOP CONFIGURATION
7 1/16" 3000 psi (minimum) BOP STACK
(from intermediate to total depth)



9 5/8" x 11" 3000 psi
Casing Head

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.