

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007


APPLICATION FOR PERMIT TO DRILL OR REENTER


| | | |
|--|--|---|
| 1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER | | 5. Lease Serial No. NM 012200 |
| 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 |
| 2. Name of Operator Energex Resources Corporation | | 7. Unit or CA Agreement Name and No. |
| 3a. Address 2198 Bloomfield Highway Farmington, New Mexico 87401 | | 8. Lease Name and Well No. Federal 28-8-28 #2S |
| 3b. Phone No. (include area code) (505) 325-6800 | | 9. API Well No. 30-045-32821 |
| 4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 1075' FSL, 490' FEL At proposed prod. zone | | 10. Field and Pool, or Exploratory Basin Fruitland Coal |
| 14. Distance in miles and direction from nearest town or post office* Approximately 10.5 miles southeast of Blanco, NM | | 11. Sec., T., R., M., or Blk. and Survey or Area P-Sec. 28, T28N, R08W NMEM |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 490' | 16. No. of Acres in lease 960.00 | 12. County or Parish San Juan |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 850' | 19. Proposed Depth 2375' | 13. State NM |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5818' GL | 22. Approximate date work will start* 03/25/05 | 17. Spacing Unit dedicated to this well South 1/2 |
| | | 20. BLM/BIA Bond No. on file |
| | | 23. Estimated duration 14 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) Nathan Smith | Date 01/10/05 |
|---|---|-------------------------|

| | | |
|--|------------------------------------|-----------------------|
| Approved by (Signature)  | Name (Printed/Typed) AFM | Date 2-7-05 |
| Title Drilling Engineer | Office FEO | |

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.

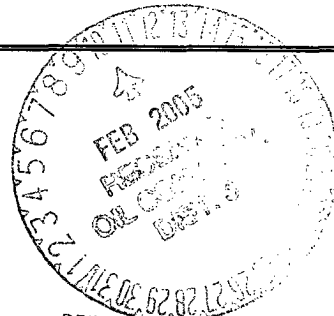
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

HOLD C104 FOR NSL

NMOCD

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".

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

2005 JAN 11 AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | | |
|----------------------------|--|--------------------|-----------------------------------|
| API Number 30-045-32821 | | Pool Code 71629 | Pool Name BASIN FRUITLAND COAL |
| Property Code 300436 | Property Name FEDERAL 28-8-28 | | Well Number 2S |
| GRID No. 162928 | Operator Name ENERGEN RESOURCES CORPORATION | | Elevation 5818' |

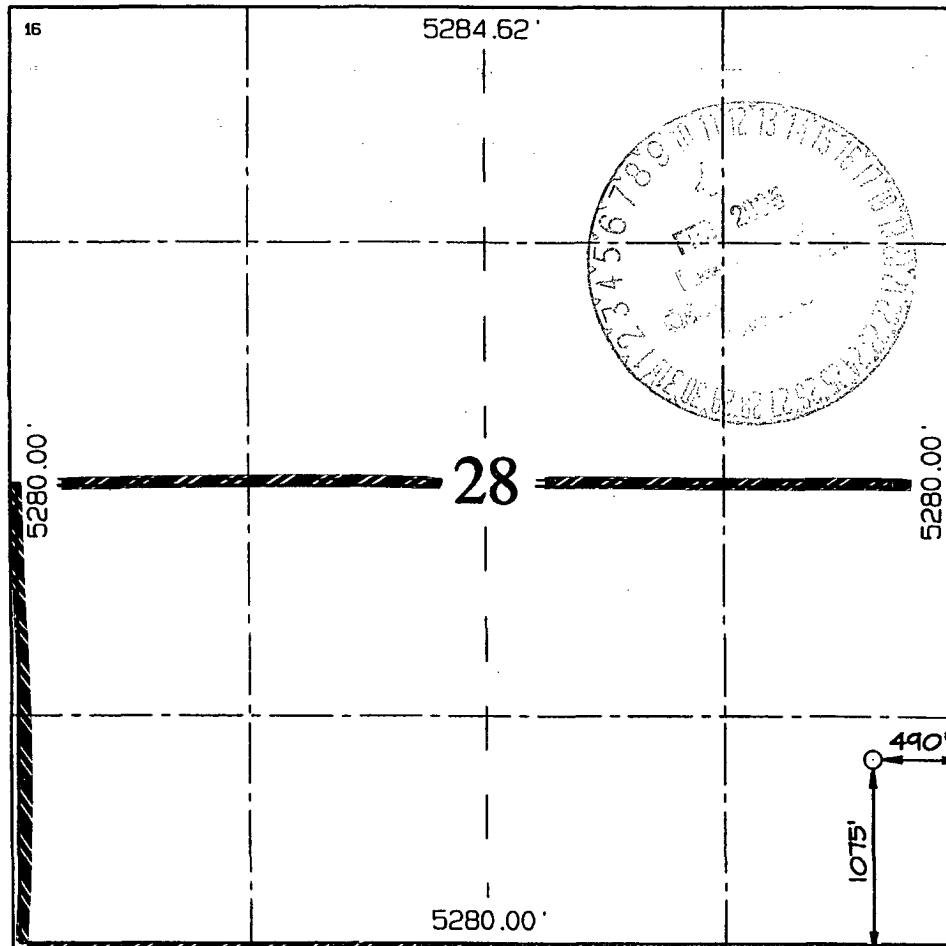
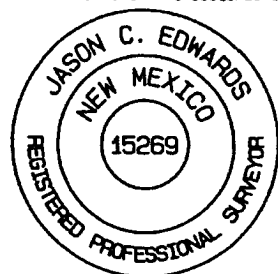
10 Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| P | 28 | 28N | 8W | | 1075 | SOUTH | 490 | EAST | SAN JUAN |

11 Bottom Hole Location If Different From Surface

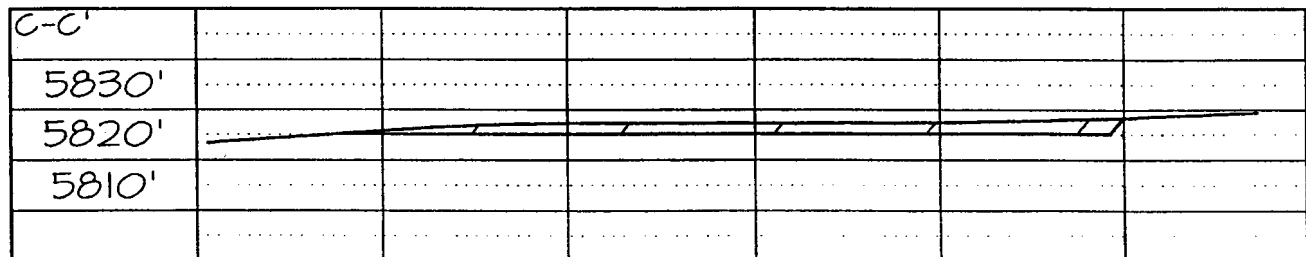
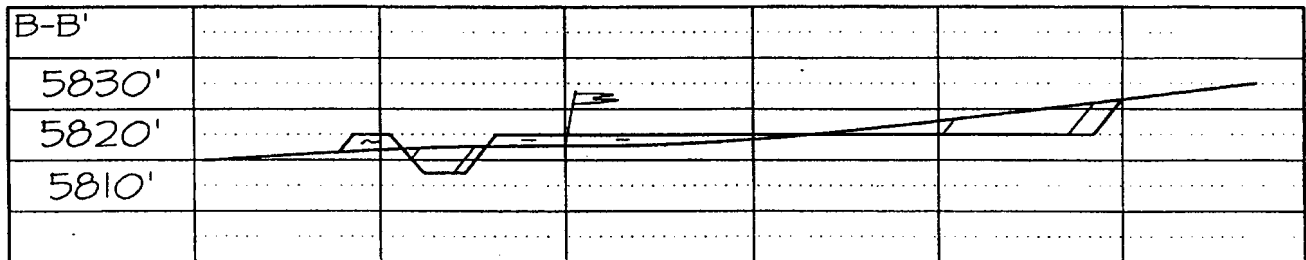
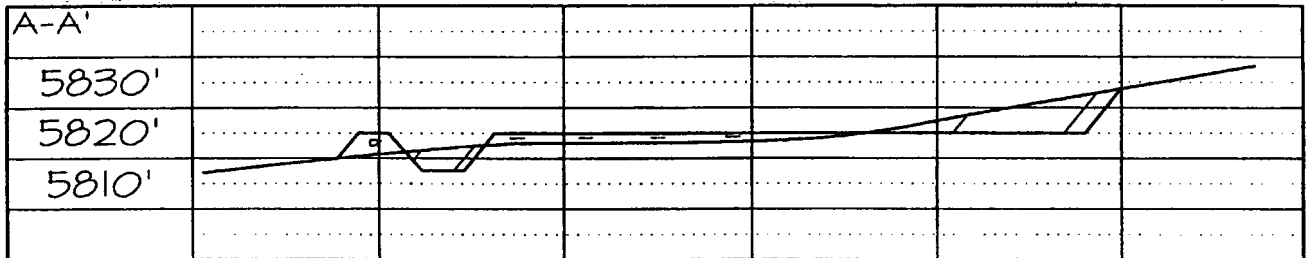
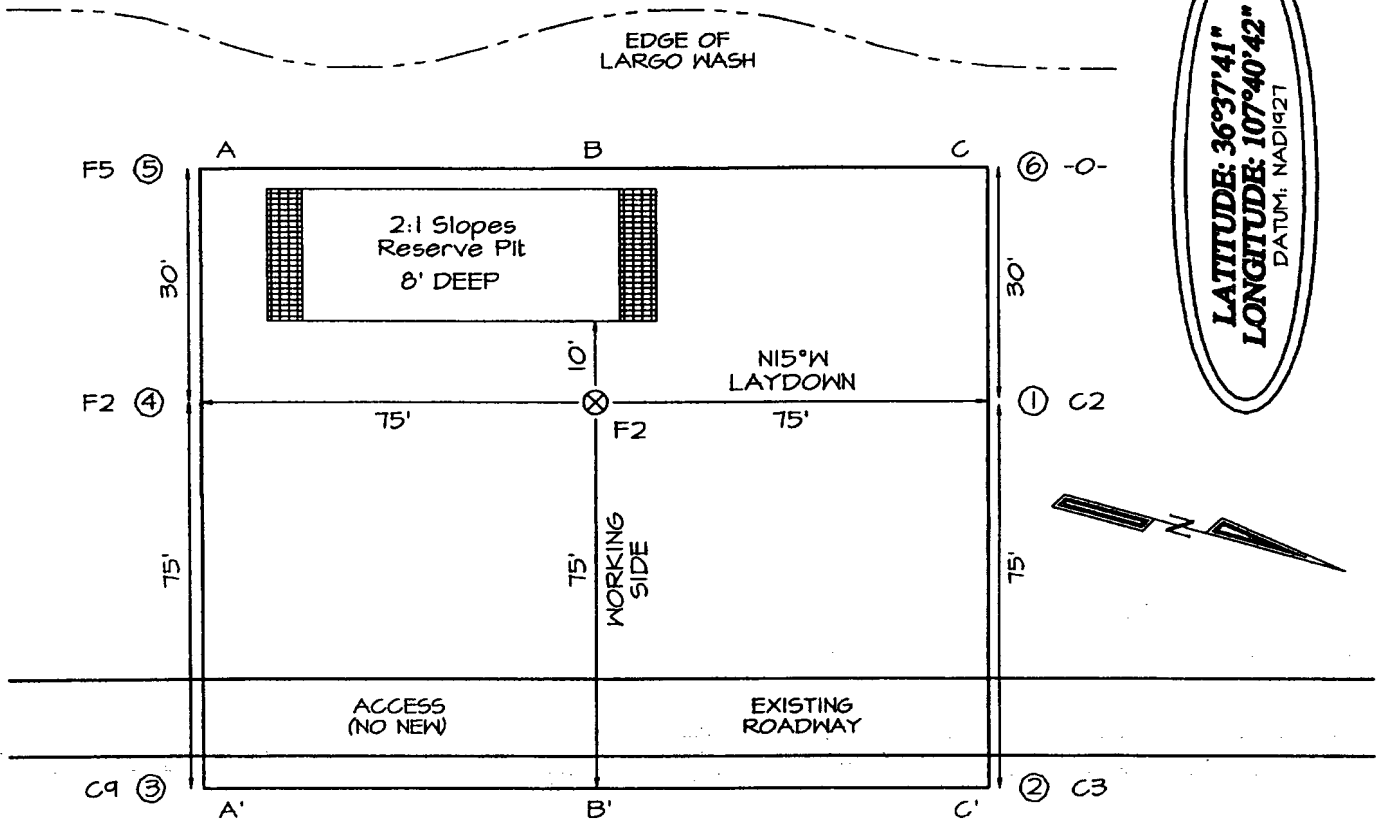
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|--|---------|----------|-------|---------|-----------------|--------------------|---------------|----------------|--------|
| Dedicated Acres 320.0 Acres - (S/2) | | | | | Joint or Infill | Consolidation Code | 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

| | | | |
|---|---|-----------------|-----------------|
|  | <p>16</p> | <p>5284.62'</p> | <p>5280.00'</p> |
| | <p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Doug Thomas</i> Signature Doug Thomas Printed Name Drilling Superintendant Title 1/11/05 Date</p> | | |
| <p>18 SURVEYOR CERTIFICATION</p> <p>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.</p> <p>Survey Date: DECEMBER 2, 2004</p> <p>Signature and Seal of Professional Surveyor</p> <p> <i>JASON C. EDWARDS</i> Certificate Number 15269</p> | | <p>5280.00'</p> | <p>490'</p> |

ENERGEN RESOURCES CORPORATION FEDERAL 28-8-28 #2S
1075' FSL & 490' FHL, SECTION 28, T28N, R8W, NMPM
SAN JUAN COUNTY, NEW MEXICO GROUND ELEVATION: 5818'

LATITUDE: 36°37'41"
LONGITUDE: 107°40'42"
 DATUM: NAD1927



Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction

Operations Plan

December 30, 2004

Federal 28-8-28 #2S

General Information

| | |
|---------------------|---|
| Location | 1070' fsl, 0490' fel sese S28, T28N, R08W San Juan County, New Mexico |
| Elevations | 5818' GL |
| Total Depth | 2375' (MD) |
| Formation Objective | Basin Fruitland Coal |

Formation Tops

| | |
|--------------------|--------------|
| Nacimiento | Surface |
| Ojo Alamo Ss | 1215' |
| Kirtland Sh | 1340' |
| Fruitland Fm | 1880' |
| Top Coal | 1985' |
| Bottom Coal | 2175' |
| Pictured Cliffs Ss | 2180' |
| Total Depth | 2375' |

Drilling

The 12 1/4" wellbore will be drilled with a fresh water mud system.

The 7 7/8" wellbore will be drilled with a low solids fresh water/polymer mud system. Weighting materials will be drill cuttings and if needed barite. Mud density is expected to range from 8.3 ppg to 8.9 ppg.

Blowout Control Specifications:

A 2000 psi minimum double ram or annulus BOP stack (figure 1) will be used following nipple up of casing head. A 2" nominal, 2000 psi minimum choke manifold will also be used. An upper Kelly Cock valve handle and drill string valve should be available to fit each drill string and be available on the rig floor during drilling operations.

Logging Program:

Open hole logs: Induction/Gamma Ray and Density Logs

Coring: None

Natural Gauges: None

Tubulars

Casing, Tubing, & Casing Equipment:

| String | Interval | Wellbore | Casing | Csg Wt | Grade |
|------------|------------|----------|--------|----------|-----------|
| Surface | 0'-300' | 12 ¼" | 8 5/8" | 24.0 ppf | J-55 ST&C |
| Production | 300'-2375' | 7 7/8" | 5 ½" | 15.5 ppf | J-55 LT&C |
| Tubing | 0'-2325' | | 2 3/8" | 4.7 ppf | J-55 |

Casing Equipment:

Surface Casing: Depending on wellbore conditions, a Texas Pattern Guide Shoe on bottom. Casing centralization with standard bow spring centralizers to achieve optimal standoff.

Production Casing: Depending on wellbore conditions, a Cement nose guide shoe with self fill insert float collar on top of bottom joint and casing centralization with standard bow spring centralizers to optimize standoff. Two turbolating centralizers at the base of the Ojo Alamo are recommended.

Wellhead

8 5/8" 2000 x 5 ½" Larkin casing head. 5 ½" 2000 x 2" tubing head.

Cementing

Surface Casing: 225 sks Std (class B) with 2.0 % CaCl₂ and ¼ #/sk Flocele (15.6 ppg, 1.18 ft³/sk 247 ft³ of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 1000 psi for 30 min.

Production Casing: Before cementing, circulate hole at least 1 ½ hole volumes of mud and reduce funnel viscosity to minimum to aide in hole cleanout. Depending on wellbore conditions, cement may consist of 330 sks 65/35 with 6.0 % Bentonite, 2.0 % CaCl₂, 10 #/sk Gilsonite, and ½ #/sk Flocele (12.3 ppg, 1.96 ft³/sk) and a tail of 145 sks of Standard (Class B) cement with 5.0 #/sk Gilsonite, and ¼ #/sk Flocele (15.2ppg, 1.24 ft³/sk). (823.2 ft³ of slurry, 100 % excess to circulate to surface).

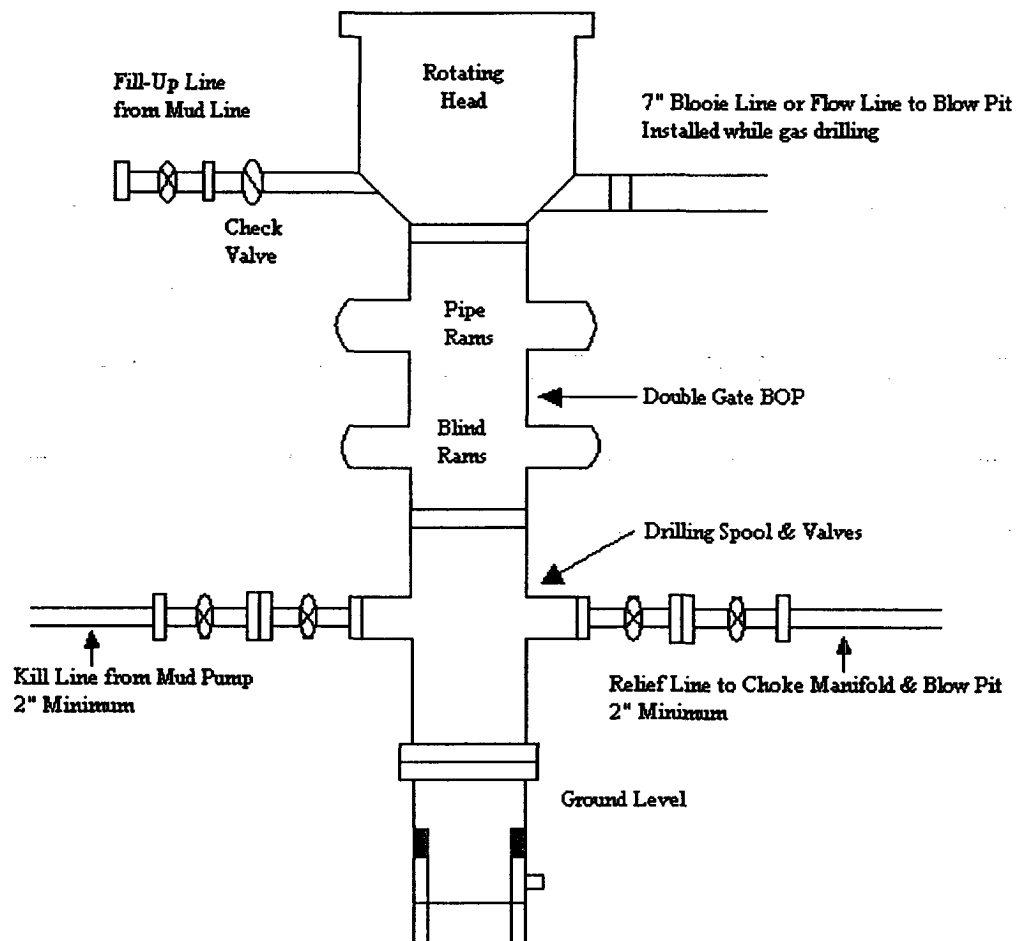
Pump 30 sks of flyash scavenger spacer consisting of 15.0 % Benonite and 0.15 % HR-5 ahead of cement

Other Information

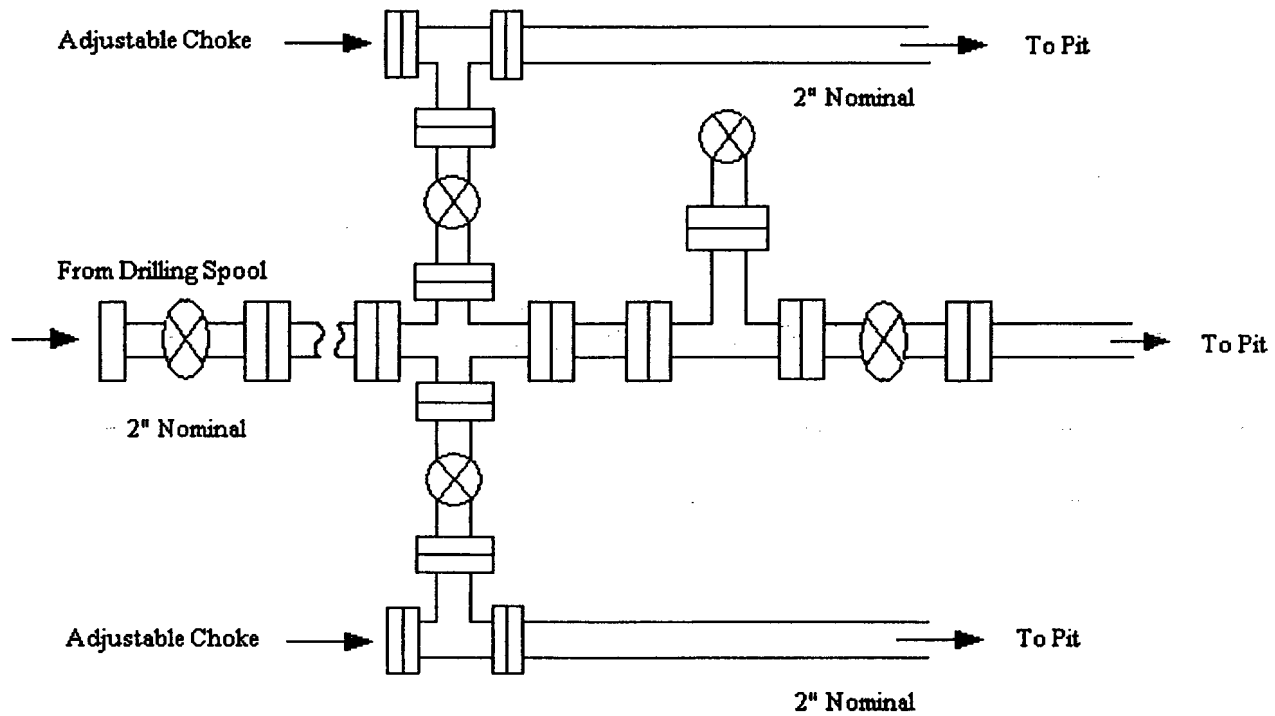
- 1) This well will be cased and the Basin Fruitland Coal fracture stimulated.
- 2) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control. The production string may need to be cemented in multiple stages with a slurry design deviated from that listed above.
- 3) If high reservoir pressures or water flows are encountered slurry design may need to be deviated to from those listed above to satisfy wellbore and formation conditions.
- 4) No abnormal temperatures or pressures are anticipated.
- 5) This gas is dedicated.

Energen Resources Corporation

Typical BOP Configuration for Gas Drilling



Energen Resources Corporation
Typical 2000 psi Choke Manifold Configuration



Choke manifold installed from surface to TD