

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM 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. I-149-IND-8182 AIIG 2006
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 Navajo
2. Name of Operator Energen Resources Corporation		7. Unit or CA Agreement Name and No. DIST. 3
3a. Address 2198 Bloomfield Highway Farmington, New Mexico 87401	3b. Phone No. (include area code) (505) 325-6800	8. Lease Name and Well No. Charley Hosh #100
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 660' fnl, 1000' fel At proposed prod. zone		9. API Well No. 30-045-33671
14. Distance in miles and direction from nearest town or post office* Approximately 9.0 miles south southwest of Farmington		10. Field and Pool, or Exploratory Basin Fruitland Coal
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 320.00	11. Sec., T., R., M., or Blk. and Survey or Area A S12, T27N, R13W
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1000'	19. Proposed Depth 1463'	12. County or Parish San Juan
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL 5776'	22. Approximate date work will start* 08/05/06	13. State NM
17. Spacing Unit dedicated to this well E 1/2		
20. BLM/BIA Bond No. on file		
23. Estimated duration 8 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 3/27/06
Title Drilling Engineer		

Approved by (Signature) 	Name (Printed/Typed) AFEA	Date 8/21/06
Title AFEA		

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)

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

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

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

2005 MAR 27 PM 12:15
AMENDED REPORT

RECEIVED

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-33671	*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 35962	*Property Name CHARLIE HOSH	*Well Number 100
*OGAID No. 162928	*Operator Name ENERGEN RESOURCES CORPORATION	*Elevation 5776

10 Surface Location

U. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	12	27N	13W		660	NORTH	1000	EAST	SAN JUAN

11 Bottom Hole Location If Different From Surface

U. 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 - (E/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

15	5282.64'	660'	1000'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief: <u>Nathan Smith</u> Signature <u>Nathan Smith</u> Printed Name <u>Drilling Engineer</u> Title <u>2/28/06</u> Date
5280.00'	12	5280.00'	5281.32'	

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 87240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103

May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. <u>30-045-33071</u>
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. <u>I-149-IND-8182</u>
7. Lease Name or Unit Agreement Name: <u>Charley Hosh</u>
8. Well Number <u>#100</u>
9. OGRID Number <u>162928</u>
10. Pool name or Wildcat <u>Basin Fruitland Coal</u>

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other	7. Lease Name or Unit Agreement Name: <u>Charley Hosh</u>
2. Name of Operator <u>Energen Resources Corporation</u>	8. Well Number <u>#100</u>
3. Address of Operator <u>2198 Bloomfield Highway Farmington, NM 87401</u>	9. OGRID Number <u>162928</u>
4. Well Location	10. Pool name or Wildcat <u>Basin Fruitland Coal</u>

Unit Letter A : 660 feet from the North line and 1000 feet from the East line

Section 12 Township 27N Range 13W NMPM County San Juan

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
5776' GL

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type Drill Depth to Groundwater 100 Distance from nearest fresh water well 1000 Distance from nearest surface water >250'

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume _____ bbls; Construction Material _____

12. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPLETION <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: <u>Build drilling pit</u> <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Energen Resources plans to build a lined pit according to 'OCD Pit and Below Grade Tank Guidelines' as issued on November 1, 2004. Energen anticipates to submit a C-144 for closure of this pit in accordance with BLM and 'OCD Pit and Below Grade Tank Guidelines'.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐ , a general permit ☐ or an (attached) alternative OCD-approved plan ☐

SIGNATURE Nathan Smith TITLE Drilling Engineer DATE 3/27/06

Type or print name Nathan Smith E-mail address: _____

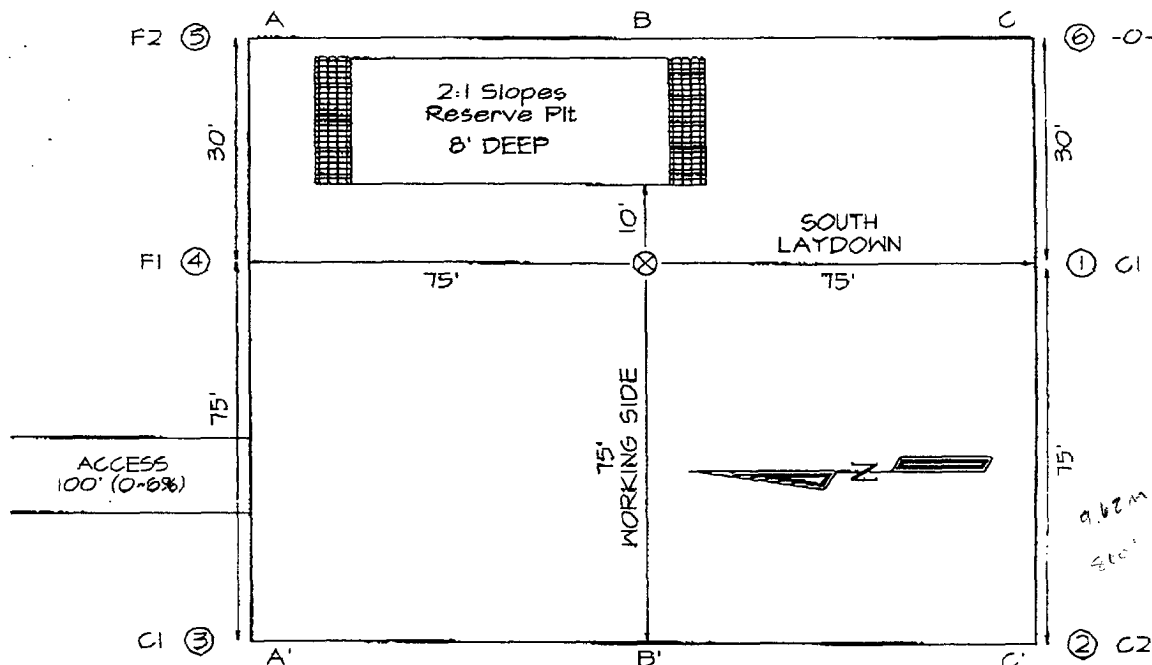
Telephone No. 505.325.6800

For State Use Only

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 63 DATE AUG 23 2006

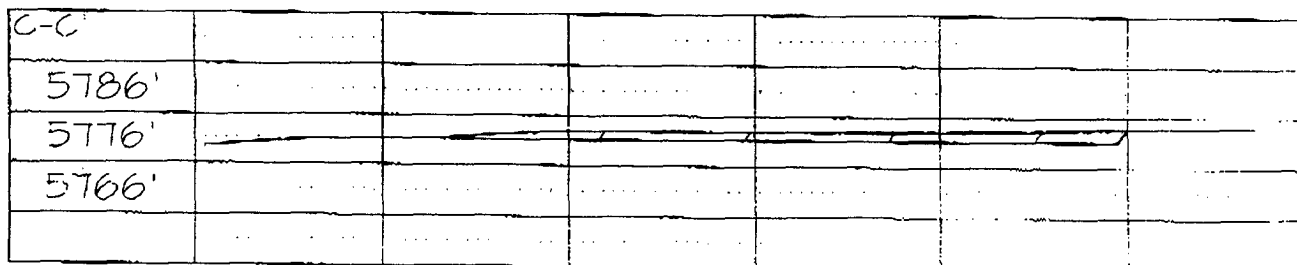
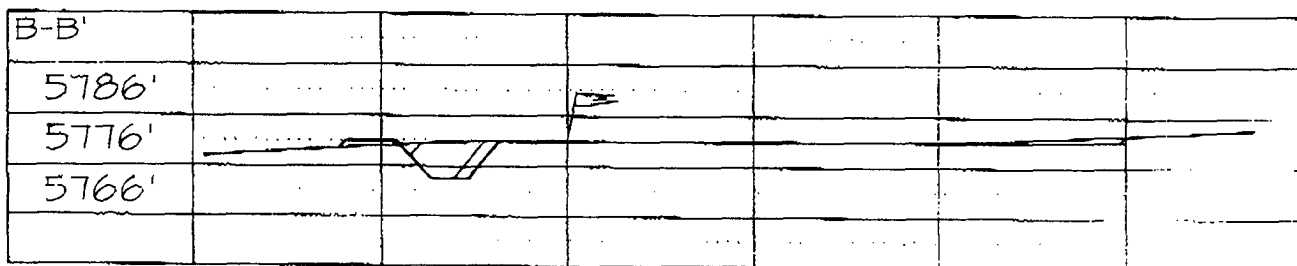
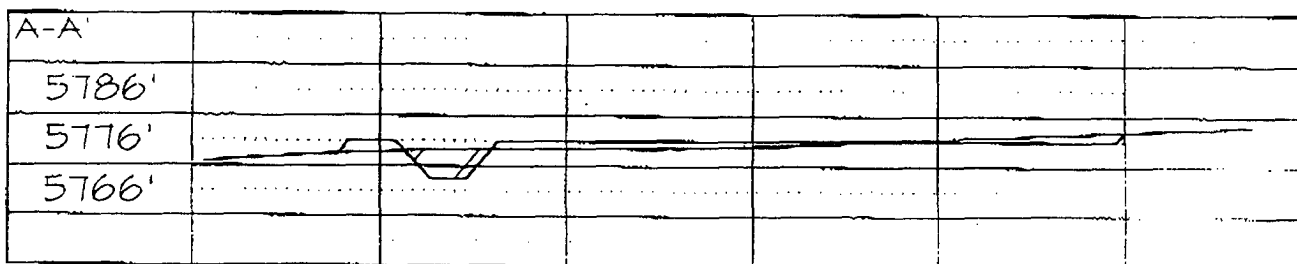
Conditions of Approval, if any:

ENERGEN RESOURCES CORPORATION CHARLIE HOS. #100
660' FNL & 1000' FEL, SECTION 12, T27N, R13W, NMPM
SAN JUAN COUNTY, NEW MEXICO GROUND ELEVATION: 5776'



LATITUDE: 36°35'43"
LONGITUDE: 108°09'52"
 DATUM: NAD1927

N 36.5952717
W 108.1644444



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

March 27, 2006

Charley Hosh #100

General Information

Location	660' fnl, 1000' fel nene S12, T27N, R13W San Juan County, New Mexico
Elevations	5776' GL
Total Depth	1463' (MD)
Formation Objective	Basin Fruitland Coal

Formation Tops

Nacimiento	Surface
Ojo Alamo Ss	47'
Kirtland Sh	193'
Fruitland Fm	943'
Top Coal	1218'
Bottom Coal	1263'
Pictured Cliffs Ss	1278'
Total Depth	1463'

Drilling

The 8 3/4" wellbore will be drilled with a fresh water mud system.

The 6 1/4" 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

Surveys: Surface and/or every 500' to TD

Tubulars

Casing, Tubing, & Casing Equipment:

String	Interval	Wellbore	Casing	Csg Wt	Grade
Surface	0'-150'	8 ¾"	7"	23.0 ppf	J-55 LT&C
Production	150'-1463'	6 ¼"	4 ½"	11.6 ppf	J-55 LT&C
Tubing	0'-1350'		2 3/8"	4.7 ppf	J-55

Casing Equipment:

Surface Casing: Depending on wellbore conditions, a 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.

Cementing

Surface Casing: 50 sks Std (class B) with 2.0 % CaCl₂ and ¼ #/sk Flocele (15.6 ppg, 1.18 ft³/sk 59 ft³ of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 600 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 100 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 85 sks of Standard (Class B) cement with 5.0 #/sk Gilsonite, and ¼ #/sk Flocele (15.2ppg, 1.24 ft³/sk). (301 ft³ of slurry, +100 % excess to circulate to surface).

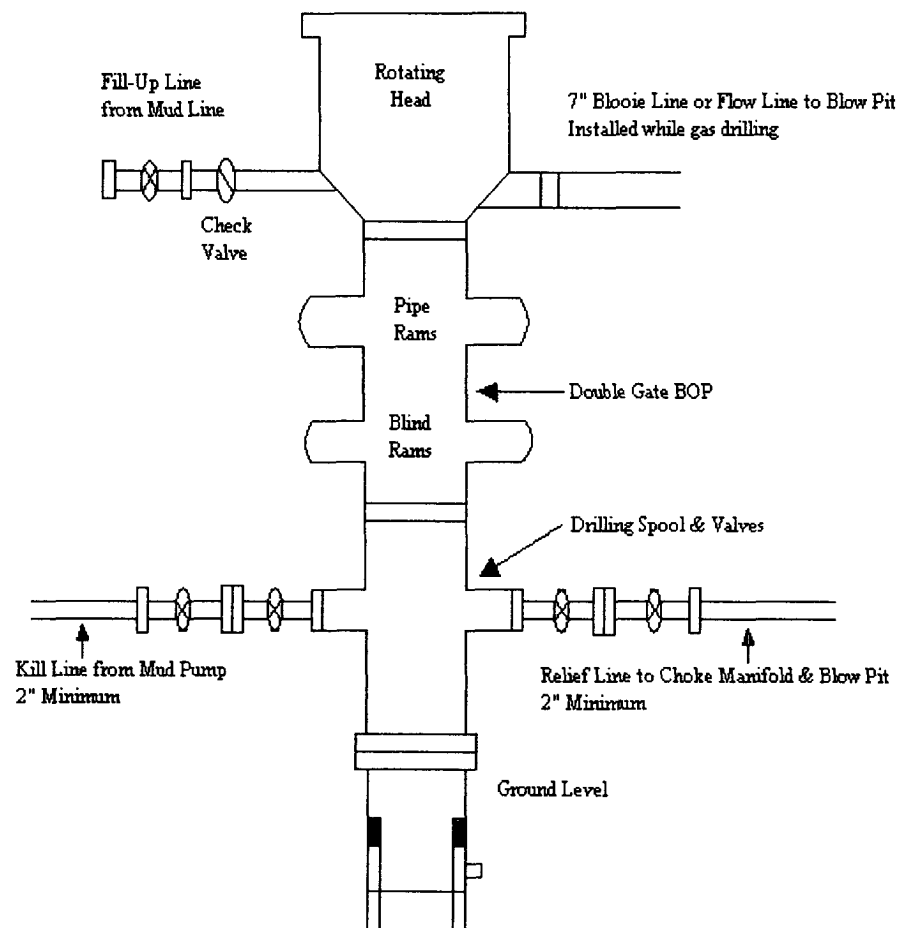
Pump a 10 bbls water, 20 bbls gelled water, 5 bbls water spacer ahead of cement

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.

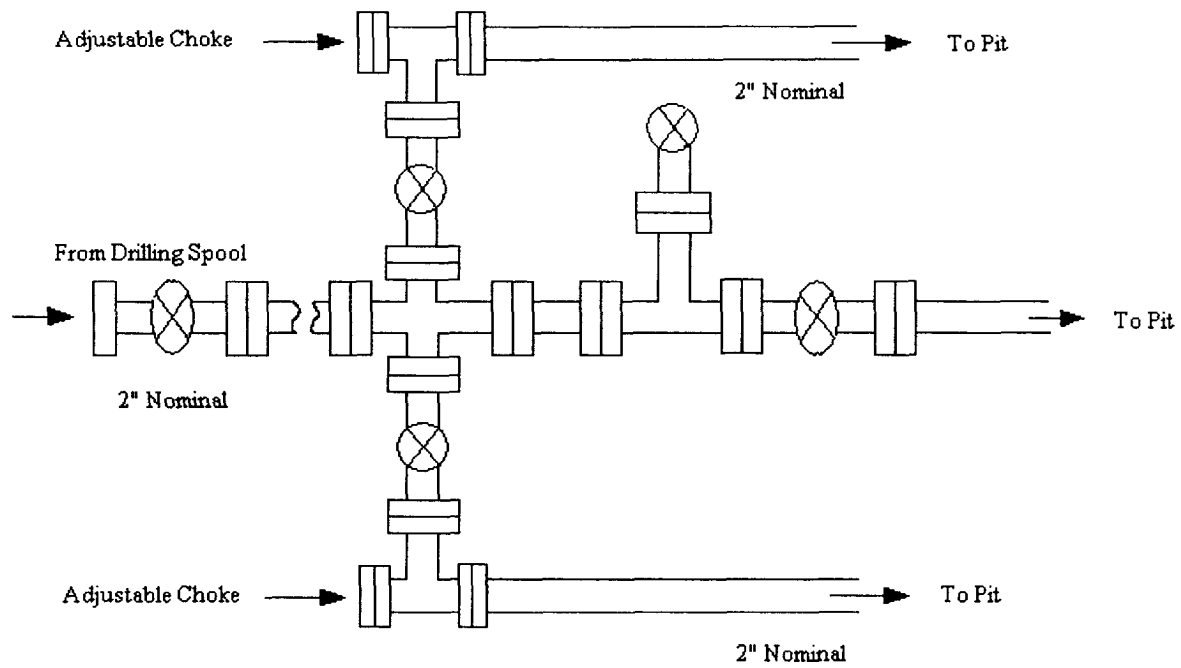
Energen Resources Corporation

Typical BOP Configuration for Gas Drilling



Energen Resources Corporation

Typical 2000 psi Choke Manifold Configuration



Choke manifold installed from surface to TD