

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

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

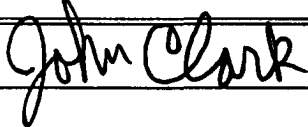
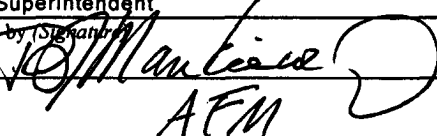
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF-08247A-080247A	
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 NA	
2. Name of Operator Koch Exploration Company LLC		7. If Unit or CA Agreement, Name and No. NA	
3a. Address PO Box 489, Aztec, NM 87410		8. Lease Name and Well No. AB Geren 4A	
3b. Phone No. (include area code) (505) 334-9111		9. API Well No. 3004531823	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1350' FSL & 1000' FEL 1190 FSL 870 FEL At proposed prod. zone 1350' FSL & 1000' FEL		10. Field and Pool, or Exploratory Basin Fruitland Coal	
14. Distance in miles and direction from nearest town or post office* 1/4 miles southeast of Blanco, NM		11. Sec., T., R., M., or Blk. and Survey or Area P S25, T29N, R9W	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) NA		12. County or Parish San Juan	
16. No. of Acres in lease 640		13. State NM	
17. Spacing Unit dedicated to this well 298.15 E/2			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. NA		20. BLM/BIA Bond No. on file 400 GH 0471	
19. Proposed Depth 2565'			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6000 GL 5987		22. Approximate date work will start* September 15, 2003	
		23. Estimated duration 30 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) John Clark	Date 8/6/03
Title District Superintendent		
Approved by (Signature) 	Name (Printed/Typed) AFM	Date 6-1-04
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 appeal pursuant to 43 CFR 3165.4

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

NMOCD

DISTRICT I
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II
811 South First, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Artec, N.M. 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
P.O. 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 30-045-31823		*Pool Code 71629	*Pool Name Basin Fruit Land Coal
*Property Code 18432	*Property Name A.B. GEREN		*Well Number 4A
*OGRID No. 12807	*Operator Name KOCH EXPLORATION		*Elevation 5987

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	25	29 N	9 W		1190	SOUTH	870	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

¹² Dedicated Acres	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

18 N 89°47' W 5219.28'	SECTION 25	Existing Well AB Geren 4 1820' FNL & 910' FEL API #30-045-27332	4862.88'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
				Signature 	
				Printed Name Lance E. Harmon	
				Title Vice President-Land	
N 6°57' E 5222.58'	N 2°55' E 870'	1190'	5147.34'	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 10/2/03	
				Signature and Seal of Professional Surveyor: 	
				Certification Number 11393	

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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.

SF-08247A 080247A

6. If Indian, Allottee or Tribe Name

NA

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

NA

8. Well Name and No.

A B Geren 4A

9. API Well No.

3004531823

10. Field and Pool, or Exploratory Area

Basin Fruitland Coal

11. County or Parish, State

San Juan, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Move well location</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

3. 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 site is ready for final inspection.)

Due to the existence of Brack's Cactus on the original location, we have move this proposed well site. The original footages were 1350' FSL & 1000' FEL (I) in the same section, township, and range.

A new T&E Survey was conducted by B.E.S.T., and an archeological survey by DCA for this new proposed well site. These reports would have been submitted under separate cover from the companies conducting the surveys.

Attached is the revised Form C-102, no other changes were made with regard to the previously submitted APD.

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

John Clark

Title District Superintendent

Signature

Date 11/14/03

Approved by (Signature)

Brie Press

Name

(Printed/Typed) Bill Liess

Title EPS

Conditions of approval, if 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

FFO

Date

5/27/04

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.

(Continued on next page)

NMOCD

A B Geren #4A
Sec. 25, T29N, R9W, 1350' FSL & 1000 FEL
San Juan Co., New Mexico
Lease SF 08247A

Drilling Program

1) Geological name of surface formation -

Estimated tops of important geological markers:

San Jose	Surface
Ojo	1431'
Kirtland Shale	1538'
Fruitland Coal	2149'
Pict. Cliffs	2445'
TD	2565'

2) Estimated depths at which oil, gas, water, and mineral bearing formation will be found:

Fresh Water	0' to 1538'
Salt Water	1539' to 2149'
Oil and Gas	2150' to 2565'

3) Pressure Control Equipment:

- a. 10-inch 900 series or 2,000 psi test double gate hydraulic with 4-1/2" pipe rams and 10-inch series 900 hydril above 10-inch series casinghead and cross spool with flanged outlets. See BOP diagram at **Exhibit F-1** for drawing of choke lines, kill lines and choke manifold. Procedures will include waiting on cement 12 hours, nipple up blowout preventer (BOP) assembly and test to 750 psi maximum. The production casinghead pressure rating will be 3,000 psi or greater.
- b. Type of BOP rams: Blind rams and pipe rams are used as shown on the BOP diagram at **Exhibit F-1**. Occasionally, the position of the rams is reversed depending on the drilling contractor's methods.
- c. The choke manifold and header will have 2-inch choke outlets, a 2-inch straight through the line with 2-inch adjustable chokes installed. The inlet line will be a 2-inch line. All of the above are rated at 2,000 psi working pressure (WP). The choke manifold and header system will have manual control valves; no hydraulic valves will be installed. Casing testing procedure – Surface casing will be tested at 750 psi with 750 psi maximum after cementing in place and before drilling out of shoe. Production casing will be tested to +/- 3,000 psi after cementing in place and after drilling to the required depth. Anticipated frac pressure, 2500# (not to exceed wellhead pressure ratings).
- d. Hydraulic controls to close the BOPs are located on the rig floor; the hydraulic remote control is located in the bottom doghouse. There will be no manual controls on the BOP.
- e. BOP testing procedures and frequency:

1. Hydril (3,000WP) will be tested to 750 psi maximum.

A B Geren #4A

Sec. 25, T29N, R9W, 1350' FSL & 1000 FEL

San Juan Co., New Mexico

Lease SF 08247A

2. Double ram BOPs will be tested 750 psi maximum.
3. BOPs will be tested upon installation, after casing is run and on each bit trip.
- f. Casinghead connections will be 2-inch; these outlets will usually be bull plugged during drilling operations. No pumping through these connections is allowed except in emergency to keep from wearing out the head.
- g. The drilling spool will be a series 900 2,000 psi WP with a 2-inch kill line and a 2-inch outlet.

4) Proposed Casing Program:

Surface Casing Program:

Surface Casing	12 1/4" hole	8 5/8"	24.0#	J-55 STC	New
Production Casing	6 3/4" hole	4 1/2"	10.5#	J-55 LTC	New

Proposed setting depth, amount and type of cement including additives:

Proposed setting depth, amount and type of cement including additives:

8 5/8" Surface Casing – Surface to 150' – Cement with 105 sks Class B (15.6 ppg, slurry yield 1.18 cf/sk) Cement + 2% Calcium Chloride + .25 lbs/sk Cello Flake. Cement Properties: Volume: 123.9.1 cf., includes 100% excess. Three (3) centralizers will be run on the bottom 3 joints, starting at the shoe joint.

4 1/2" Production Casing – Surface to 2565' – Cement volumes will be adjusted to actual setting depths:

Lead with 191 sks Class B (12.5 ppg, slurry Yield 2.09 cf/sk) + 2% Sodium Metasilicate + .25 lb/sk Cello Flake + 3pps Gilsonite + 11.10 gal/sk Fresh Water. Volume: 398.52 cf., includes 50% excess.

Tail with 60.14 sks Class B Cement (14.5 ppg, slurry Yield 1.55 cf/sk) + 4% Bentonite Gel + .25 lb/sk Cello Flake + 2% CaCl. Volume: 93.217cf. includes 35% excess. Volumes will be adjusted to setting depth. Three (3) centralizers will be run on the bottom three joints, then every 10th joint thereafter or (+ or-) 400' and turbolators to impact a swirling action will be placed just below and into the base of the Ojo Alamo.

5) Mud Program:

0' – 150' – Spud mud and water treated with gel lime.

150' – 2565' – Lime mud, water and polymer.

6) Testing, Logging, and Coring Program:

No drill stem tests or cores will be taken.

Logging: Production Casing – First Run – Gamma Ray – Casing Collar Locator – Cement Bond Log. (If cement circulates to surface, no CBL will be run.)
Second Run – Gamma Ray – Gas Spectrum Log; or Gamma Ray-DIL,

A B Geren #4A

Sec. 25, T29N, R9W, 1350' FSL & 1000 FEL

San Juan Co., New Mexico

Lease SF 08247A

Production Casing – First Run – Gamma Ray – Casing Collar Locator –
Cement Bond Log. (If cement circulates to surface, no CBL will be run.)
Second Run – Gamma Ray – Gas Spectrum Log; or Gamma Ray-DIL,
Density Neutron Porosity Caliper, if open hole log was not run

7) Expected Pressures –

Fruitland Fm. 600 psi

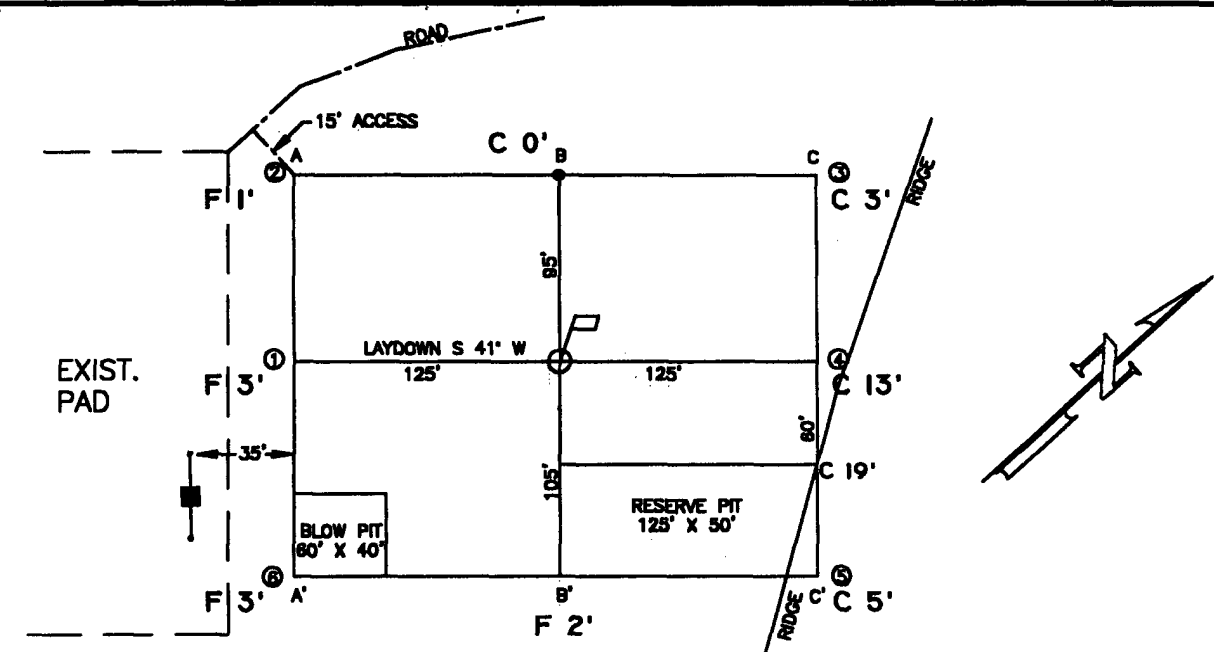
Bottom Hole 200 psi

No abnormal pressures, temperature or poisonous gas anticipated.

8) Drilling Tools: 20 4-3/4" Drill Collars with 3-1/2" IF Connections
3-1/2" Drill Pipe with 3-1/2" IF Connections

Anticipated Spud Date: September 15, 2003

Anticipated Completion Date: September 15, 2003



ELEVATION A-A'

6020					
6010					
6000					
5990					
5980					

B-B'

6020					
6010					
6000					
5990					
5980					

C-C'

6020					
6010					
6000					
5990					
5980					

LEASE: A.B. GEREN #4A

FOOTAGE: 1350' FSL, 1000' FEL

SEC. 25 TWN. 29 N RNG. 9 W N.M.P.M.

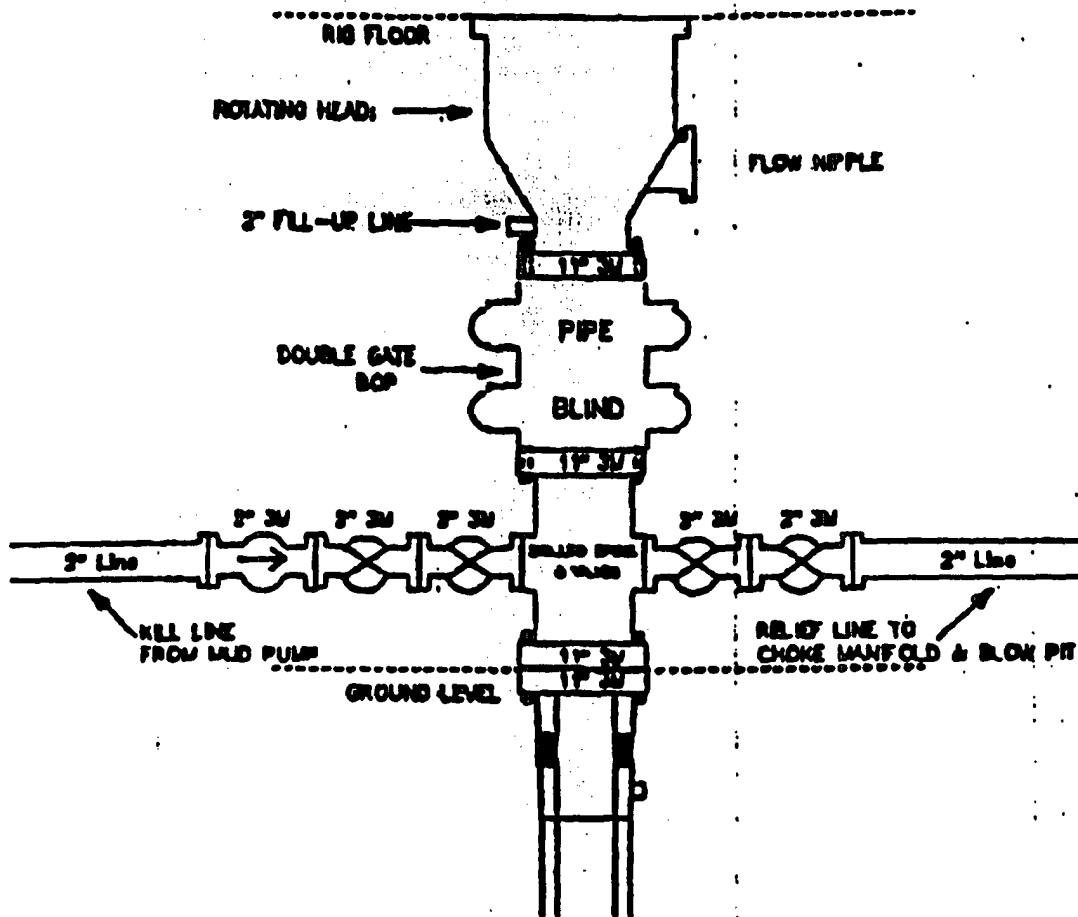
LATITUDE: 36°41'36" LONGITUDE: 107°43'40"

ELEVATION: 6000

KOCH EXPLORATION AZTEC, NEW MEXICO		
SURVEYED: 10/18/02	REV. DATE:	APP. BY H.B.
DRAWN BY: T.G.	DATE DRAWN: 10/25/02	FILE NAME: K0028CF01
UNITED FIELD SERVICES INC.		P.O. BOX 3651 FARMINGTON, NM 87498 OFFICE: (505) 334-0408

P. O. BOX 1067
 8801 U.S. HWY. 84
 FARMINGTON, NEW MEXICO 87408
 TELEPHONE: (505) 336-3371
 FAX: (505) 336-3370

Drilling Rig 3000 psi System

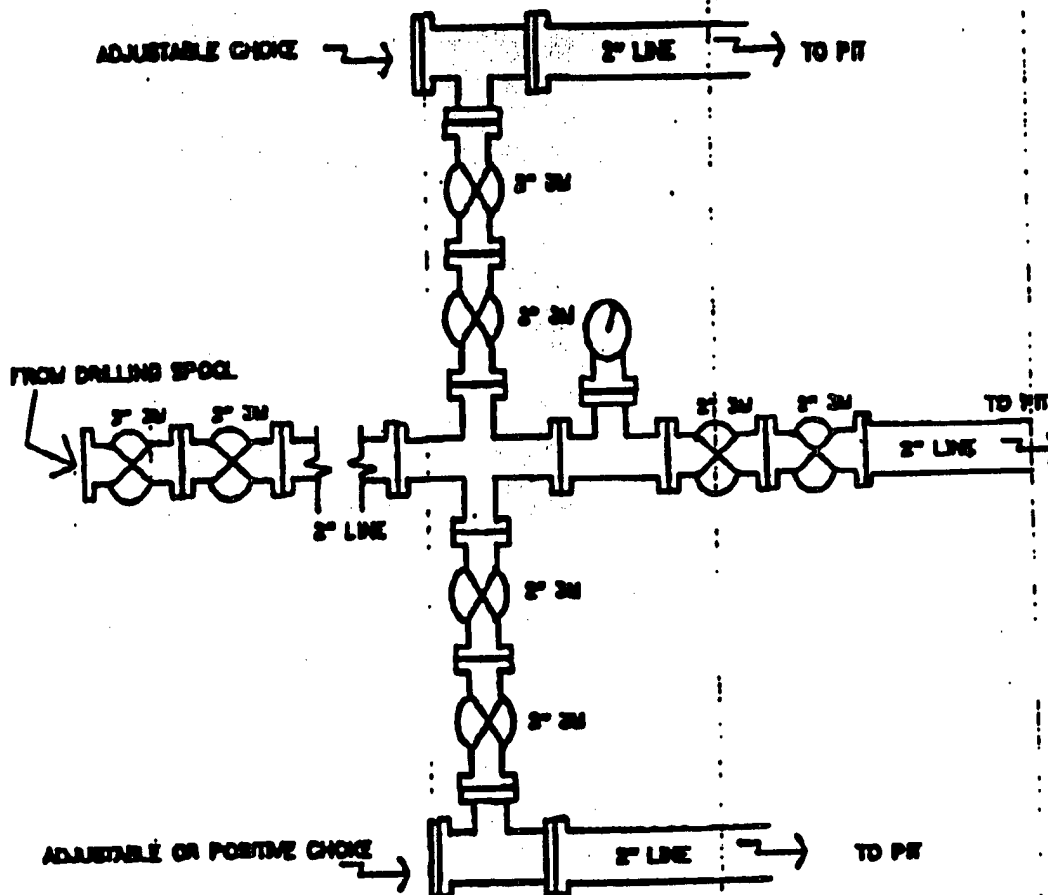


11" Bore (10" Nominal), 3000psi working pressure minimum double gate BOP to be equipped with blind and pipe rams. A rotating head on the top of the rams. All BOP equipment is 3000psi working pressure.

Note: A floor safety valve and upper kelly cock with handle will be available.

Exhibit "F-1"

Drilling Rig Choke Manifold Configuration 3000 psi System



3000psi working pressure equipment with two chokes.

Exhibit "F-2"