

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. <b>USA NM-090867A 09867A</b>
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 <b>N/A</b>
2. Name of Operator <b>XTO Energy Inc.</b>		7. Unit or CA Agreement Name and No. <b>N/A</b>
3a. Address <b>2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM</b>		8. Lease Name and Well No. <b>Butte #4</b>
3b. Phone No: (include area code) <b>505-324-1090</b>		9. API Well No. <b>30-045-33888</b>
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface <b>480' FSL x 440' FWL in Sec 18, T30N, R13W</b> At proposed prod. zone <b>SAME</b>		10. Field and Pool, or Exploratory <b>Basin Fruitland Coal</b>
14. Distance in miles and direction from nearest town or post office* <b>Approximately 5.75 miles Northwest of Farmington, NM post office</b>		11. Sec., T., R., M., or Blk. and Survey or Area <b>(N) Sec 18, T30N, R13W</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) <b>440'</b>	16. No. of Acres in lease <b>2395.24</b>	17. Spacing Unit dedicated to this well <b>S/2 252.20</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>210'</b>	19. Proposed Depth <b>1720'</b>	20. BLM/BIA Bond No. on file <b>UTB-000138</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>5806' Ground Elevation</b>	22. Approximate date work will start* <b>September 2006</b>	23. Estimated duration <b>2 weeks</b>

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 <b>Kyla Vaughan</b>	Name (Printed/Typed) <b>Kyla Vaughan</b>	Date <b>08/03/06</b>
Title <b>Regulatory Compliance Tech</b>		
Approved by (Signature) <b>[Signature]</b>	Name (Printed/Typed) <b>[Signature]</b>	Date <b>9/14/06</b>
Title <b>AFM FEO</b>		

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)



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  
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II  
1301 W. Grand Ave., Artesia, N.M. 88210

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

DISTRICT IV  
1220 South St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102

Revised June 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-045-33888		2 Pool Code 71629		3 Pool Name Basin Fruitland Coal	
4 Property Code 167067		5 Property Name 32604 BUTTE		6 Well Number 4	
7 OGRD No. 167067		8 Operator Name XTO ENERGY INC.		9 Elevation 5806	

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
N	18	30-N	13-W		480	SOUTH	440	WEST	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 S/2 252.20					13 Joint or In RM		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

	<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>Signature: <u>Kyla Vaughan</u></p> <p>Printed Name: <u>Kyla Vaughan</u></p> <p>Title: <u>Regulatory Compliance</u></p> <p>Date: <u>3/23/06</u></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>AUGUST 11, 2005</p> <p>Date of Survey</p> <p>Signature: <u>JOHN A. VUKONICH</u></p> <p>Professional Surveyor Seal: <u>14831</u></p> <p>Certificate Number</p>

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. <b>30-045-33888</b>
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. <b>USA NM-090867A</b>
7. Lease Name or Unit Agreement Name: <b>Butte</b>
8. Well Number <b>#4</b>
9. OGRID Number <b>167067</b>
10. Pool name or Wildcat <b>Basin Fruitland Coal</b>

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
**5806' Ground Elevation**

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 **>1000**

Pit Liner Thickness: **12** mil Below-Grade Tank: Volume \_\_\_\_\_ bbls; Construction Material \_\_\_\_\_

**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 ☐ Gas Well ☒ Other \_\_\_\_\_

2. Name of Operator  
**XTO Energy Inc.**

3. Address of Operator  
**2700 Farmington Ave., Bldg. K, Ste 1 Farmington, NM 87401**

4. Well Location  
Unit Letter **N** : **480** feet from the **South** line and **440** feet from the **West** line  
Section **18** Township **30N** Range **13W** NMPM **NMPM** County **SAN JUAN**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
**5806' Ground Elevation**

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 **>1000**

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:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐  
CASING TEST AND CEMENT JOB ☐

OTHER: **PIT**

☒

OTHER:

☐

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.

**XTO Energy intends to install a pit on location for drilling.**

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 Kyla Vaughan TITLE Regulatory Compliance Tech DATE 08/03/06

Type or print name Kyla Vaughan

E-mail address: kyla\_vaughan@xtoenergy.com

Telephone No. 505-564-6726

For State Use Only

APPROVED BY [Signature]

DEPUTY OIL & GAS INSPECTOR, DIST. #8

SEP 18 2006

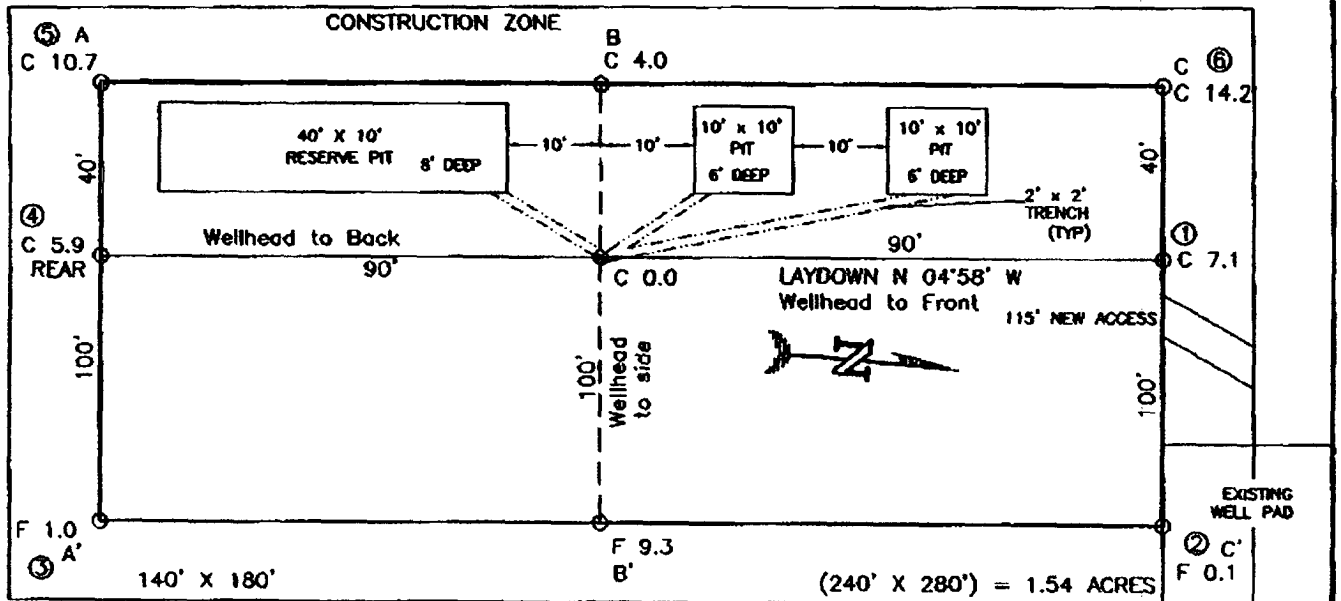
Conditions of Approval, if any:

TITLE \_\_\_\_\_ DATE \_\_\_\_\_

EXHIBIT D

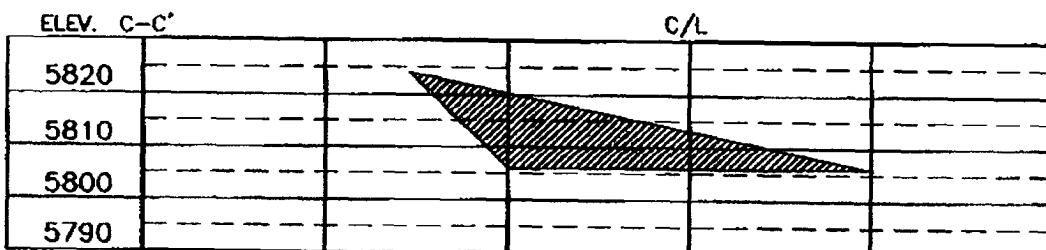
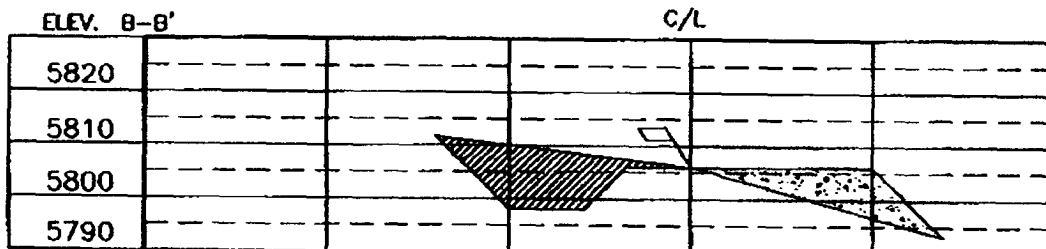
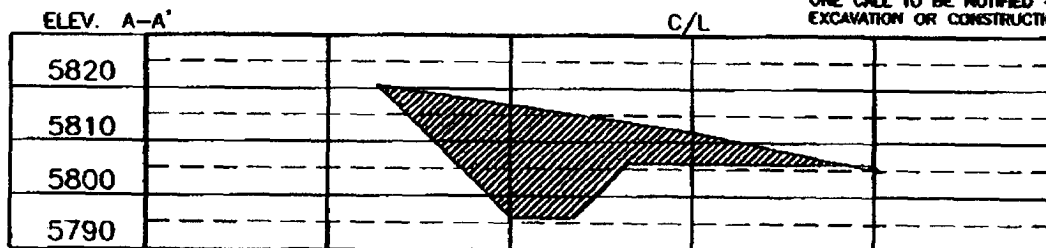
XTO ENERGY INC.  
 BUTTE No. 4, 480' FSL 440' FWL  
 SECTION 18, T30N, R13W, N.M.P.M., SAN JUAN COUNTY, N. M.  
 GROUND ELEVATION: 5806', DATE: AUGUST 11, 2005

LAT. = 36°48'26.3" N.  
 LONG. = 108°14'59.3" W  
 NAD 27



RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).  
 BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT.

NOTE: DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.



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.

Daggett Enterprises, Inc.  
 Surveying and Oil Field Services  
 P. O. Box 15068 • Farmington, NM 87401  
 Phone (505) 338-1772 • Fax (505) 338-4019  
 NEW MEXICO P.L.S. No. 14831  
 Survey CR5112378



EXHIBIT E

# XTO ENERGY INC.

Butte #4

APD Data

August 2, 2006

Location: 480' FSL x 440' FWL Sec 18, T30N, R13W

County: San Juan

State: New Mexico

GREATEST PROJECTED TD: 1720'  
APPROX GR ELEV: 5806'

OBJECTIVE: Fruitland Coal  
Est KB ELEV: 5812' (12' AGL)

## 1. MUD PROGRAM:

INTERVAL	0' to 225'	225' to 1720'
HOLE SIZE	12.25"	7.875"
MUD TYPE	FW/Spud Mud	FW/Polymer
WEIGHT	8.6-9.0	8.4-8.8
VISCOSITY	28-32	28-32
WATER LOSS	NC	NC

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as needed for hole cleaning. Raise viscosity at TD for logging. Reduce viscosity after logging for cementing purposes.

## 2. CASING PROGRAM:

Surface Casing: 8.625" casing to be set at  $\pm 225'$  in a 12-1/4" hole filled with 9.20 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-225'	225'	24.0#	J-55	ST&C	1370	2950	244	8.097	7.972	12.73	27.41	45.19

Production Casing: 5.5" casing to be set at TD ( $\pm 1720'$ ) in 7-7/8" hole filled with 9.20 ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-1720	1720'	15.5#	J-55	ST&C	4040	4810	202	4.950	4.825	4.91	5.85	7.58

## 3. WELLHEAD:

- Casing Head: Larkin Fig 92 (or equivalent), 9" nominal, 2,000 psig WP (4,000 psig test) with 8-5/8" 8rnd thread on bottom and 11-3/4" 8rnd thread on top.
- Tubing Head: Larkin Fig 612 (or equivalent), 6.456" nominal, 2,000 psig WP (4,000 psig test), 5-1/2" 8rnd female thread on bottom (or slip-on, weld-on), 8-5/8" 8rnd thread on top.

**EXHIBIT F**

**4. CEMENT PROGRAM (Slurry design may change slightly, but the plan is to circulate cement to surface on both casing strings):**

A. Surface: 8.625", 24.0#, J-55, ST&C casing to be set at  $\pm 225'$  in 12-1/4" hole.

134 sx of Type III cement (or equivalent) typically containing accelerator and LCM, mixed at 14.5 ppg, 1.39 ft<sup>3</sup>/sk, & 6.70 gal wtr/sk.

*Total slurry volume is 186 ft<sup>3</sup>, 100% excess of calculated annular volume to 225'.*

B. Production: 5.5", 15.5#, J-55 (or K-55), ST&C casing to be set at  $\pm 1720'$  in 7.875" hole.

LEAD:

$\pm 131$  sx of Premium Lite HS (Type III/Poz/Gel) with 2% salt, 1/4 pps cello, 0.2% dispersant, 0.5% fluid loss & 2% LCM mixed at 12.5 ppg, 2.01 ft<sup>3</sup>/sk, 10.55 gal wtr/sx.

TAIL:

100 sx Type III with 5% bonding additive, 1/4 pps cello, 2% LCM, 0.3% dispersant & 0.2% fluid loss mixed at 14.2 ppg, 1.54 cuft/sx, 8.00 gal/sx.

*Total estimated slurry volume for the 5-1/2" production casing is 423 ft<sup>3</sup>.*

*Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined from the caliper logs plus 40%. It will be attempted to circulate cement to the surface.*

**5. LOGGING PROGRAM:**

A. Mud Logger: The mud logger will come on at 2,900' and will remain on the hole until TD. The mud will be logged in 10' intervals.

B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (1720') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (1720') to 3,000'.

**6. FORMATION TOPS:**

Est. KB Elevation: 5812'

<u>FORMATION</u>	<u>Sub-Sea Elev.</u>	<u>WELL DEPTH</u>
Fruitland Formation	4542	1,270
Lower Fruitland Coal*	4342	1,470
Pictured Cliffs SS	4242	1,570
<b>Total Depth</b>	<b>4092</b>	<b>1,720</b>

\* Primary Objective

\*\* Secondary Objective

\*\*\*\* Maximum anticipated BHP should be <2,000 psig ( <0.30 psi/ft) \*\*\*\*\*

**EXHIBIT F**

# BOP SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE

## TESTING PROCEDURE

### 1. Test BOP after installation:

Pressure test BOP to 200-300  
psig (low pressure) for 10 min.

Test BOP to Working Press or  
to 70% internal yield of surf csg  
(10 min) or which ever is less.

### 2. Test operation of (both) rams on every trip.

### 3. Check and record Accumulator pressure on every tour.

### 4. Re-pressure test BOP stack after changing out rams.

### 5. Have kelly cock valve with handle available.

### 6. Have safety valve and subs to fit all sizes of drill string on the rig floor and ready to go.

ROTATING HEAD  
(OPTIONAL)

FILL UP LINE

FLOW LINE  
TO PIT

PIPE  
RAMS

BLIND  
RAMS

KILL LINE  
2" dia min.

TO CHOKE  
MANIFOLD  
2" dia min.

See Choke Manifold drawing for  
specifications

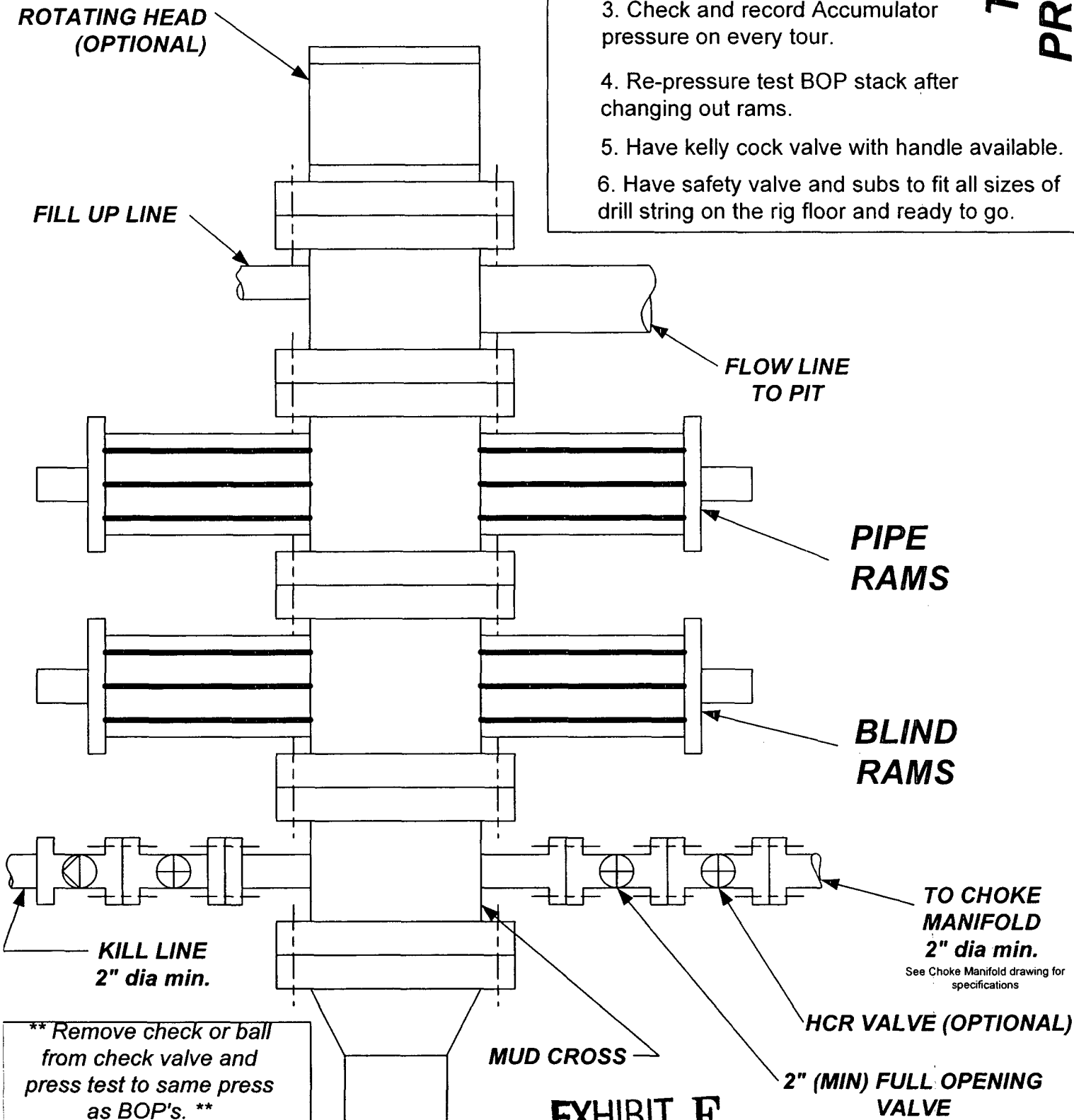
HCR VALVE (OPTIONAL)

2" (MIN) FULL OPENING  
VALVE

\*\* Remove check or ball  
from check valve and  
press test to same press  
as BOP's. \*\*

MUD CROSS

EXHIBIT F



# **CHOKE MANIFOLD SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE**

1. Stake all lines from choke manifold to pit.
2. Pressure test choke manifold after installation.
3. Pressure test manifold at the same time with the BOP Stack. Test manifold to the same test pressures.

## **TESTING PROCEDURE**

