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JAN 25 2010

Bureau of Land Management
Farmington Field Office

Form 3160-3
(April 2004)

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM-03551

6. If Indian, Allotee or Tribe Name
N/A

1a. Type of work: ☐ DRILL ☐ REENTER (Deepen)

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

1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other ☐ Single Zone ☑ Multiple Zone

8. Lease Name and Well No.
Breech E 104

2. Name of Operator
XTO Energy Inc.

9. API Well No.
30-039-06644

3a. Address **382 CR 3100**
Aztec, NM 87410

3b. Phone No. *(include area code)*
505/ 333-3100

10. Field and Pool, or Exploratory
Basin Dakota

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface **660'FSL x 660' FEL**
At proposed prod. zone. **Same**

11. Sec., T. R. M. or Blk. and Survey or Area
(P) Sec. 5, T26N, R6W

14. Distance in miles and direction from nearest town or post office*
Approximately 30.9 miles SE of Bloomfield Post Office

12. County or Parish
Rio Arriba

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) **660'**

16. No. of acres in lease
2240

17. Spacing Unit dedicated to this well
DK: S/2 320

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. **254'**

19. Proposed Depth
5352'

20. BLM/BIA Bond No. on file
UTB000138

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
6505'

22. Approximate date work will start*
02/01/2010

23. Estimated duration
2 Weeks

24. Attachments

RCVD MAY 21 '10

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

OIL CONS. DIV.

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.

DIST. 3

25. Signature: Malia Villers
Name *(Printed/Typed)*: **Malia Villers**
Date: **01/19/2010**

Title: **Permitting Tech.**

Approved by *(Signature)*: /s/ Stephen Mason
Name *(Printed/Typed)*:
Date: 5/18/2010

Title: AFM
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 page 2)

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOCD FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOCD PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

NMOCD

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT

MAY 21 2010

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, 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 & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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Farmington Field Office

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
Fee Lease - 3 Copies
State Lease - 4 Copies

☐ AMENDEDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-039-06644	71599	Basin Dakota

[4] Property Code	[5] Property Name	[6] Well Number
304753	BREECH E	104

[7] OGRID No.	[8] Operator Name	[9] Elevation
5380	XTO Energy. Inc.	6505'

[10] Surface Location

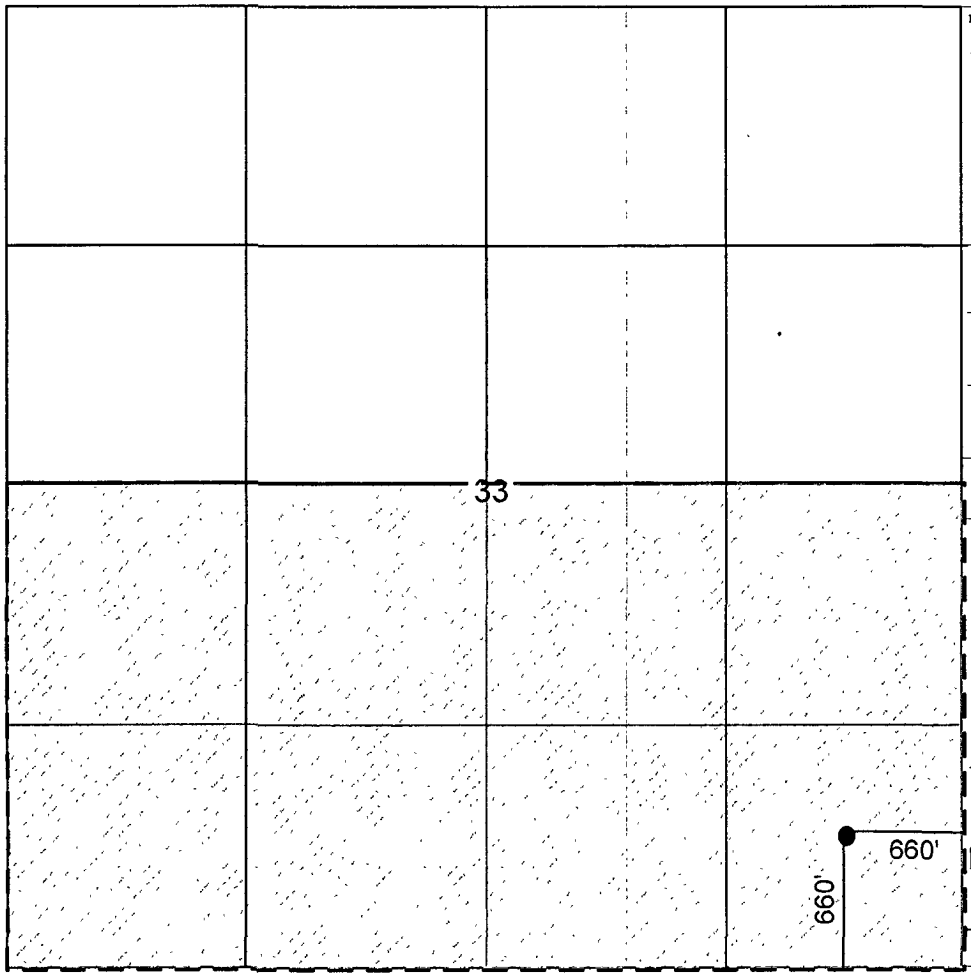
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	5	26N	6W		660'	SOUTH	660'	EAST	RIO ARRIBA

[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
SAME									

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
S/2 320			

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 & complete to the best of my knowledge & belief and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: Malia Villers

Printed Name: Malia Villers

Title: Permitting Tech

Date: 1/19/2010

[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 & correct to the best of my belief.

July 15, 1958
Date of Survey

Original Survey Signed By:
Ernest V. Echohawk

1545
Certificate Number

LWF:_____
TWD:_____
Approve:_____

BREECH E #104
Unit P, Sec. 5, T 26 N, R 6 W
Rio Arriba County, New Mexico

Deepen to Dakota

Formation:	Chacra/Mesaverde
Production	7", 23# J-55 csg @ 6,746'. TOC 3,450' by TS.
Casing:	Cap = 1.6535 gal/ft = 0.0393 bbl/ft.
Tubing:	1-1/4", 2.4#, V-55, NU 10rd tbg. EOT @ 5,102'.
Perforations:	CH: 3,887'-3,897'. MV: 5,034'-5,352' TO: 6,669'-6,711'

1. MIRU PU. Set flowback tank and 2 400 bbls frac tanks. Check and record casing, and bradenhead pressures.

2. Blow well down and kill well with 2% KCl water. ND WH.

3. NU and pressure test BOP's.

4. TOH and LD 1-1/4" tubing.

5. PU and TIH with 2-7/8" work string and string mill to 5,325'. TOH with tubing and string mill. Lay down string mill.

6. MIRU Wireline unit. Run CBL from TOC at approximately 3,450' to surface. RDMO WL unit. The block squeeze's to cover the producing horizons behind the 7" casing will be designed in consultation with the BLM.

7. TIH with 2-7/8" tubing to 5,352'. MIRU Cement equipment. Mix and spot a balanced 50 sx Type III cement from 5,352'-4,950'. TOH with tubing.

8. TIH with 7" packer and tubing to 3,825'. Set packer at 3,825'. Establish IR into Chacra perforations from 3,887'-3,897'. Mix and pump 50 sx Type III cement with 2% CaCl2 down tubing.

9. Release packer. Reverse circulate tubing clean.

10. WOC 12 hours.

11. MIRU WL unit. Perforate 3 squeeze holes at 2,900' (top of Pictured Cliffs at 2,850'). RDMO WL unit.

12. MIRU Cement equipment. TIH with tubing and packer. Set packer at 2,850'. BD squeeze holes and establish circulation to surface. Mix and pump 475 sxs 50/50 Poz cement (mixed @ 13 ppg & 1.44 cu ft/sx yield). Displace cement with 16.2 bbls water. Sting out of retainer and reverse circulate tubing clean. TOH with tubing. If cement is not circulated to surface, run temperature survey to determine top of cement. Report top to Loren Fothergill. A determination will be made in consultation with BLM as to the next action item.

13. WOC 24 hrs.

14. TIH with 6-1/4" bit, 3-1/2" DC's and 2-7/8" tubing. TIH and tag cement. DO cement and clean out to 3,920'. Pressure test casing and perforations to 500 psig for 15". DO cement and clean out to 5,400'. Pressure test casing and perforations to 500 psig for 15". DO cement plugs from 5,490'-5,640' and 6,440'-6,740'. Squeeze as need to shut off water influx.

15. TOH and lay down 2-7/8" tubing, DC's and bit.

16. RDMO PU.

17. MIRU Drilling rig.

18. ND WH. NU and pressure test BOP's.

19. Mix a LSND mud system with mud weight to 9.8 PPG, viscosity from 45-70 cp and water loss from 8-10. Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as need for hole cleaning. Raise viscosity at TD for logging. Reduce viscosity after logging for cementing purposes.

20. PU and TIH with 6-1/4" bit, DC's and DP. Drill new 6-1/4" hole from 6,746' to 7,640'.

21. Circulate and condition hole for logs. TOH with DP, DC's and bit.

22. MIRU Schlumberger logging trucks. Run Schlumberger Platform Express logs from TD to 6,746'. RDMO Schlumberger equipment.

23. TIH with bit, DC's and DP. TOH and lay down DP, DC's and bit.

24. TIH with 4-1/2", 10.5#, J-55, EUE LT&C casing to 7,640' as follows:
    A. Texas Pattern Guide Shoe
    B. One joint 4-1/2"
    C. 4-1/2" Flapper float collar
    D. Weatherford 4-1/2" model 754 hydraulic stage tool set at 4,600'.
    E. 4-1/2", 10.5#, J-55 casing to surface.

25. MIRU Cement trucks. Cement 1st stage with 77 sx Prem lite cement with 8% bentonite, 0.5% CD-32, 0.9% FL-52, 5#/sx LCM-1 and 0.2 % sodium metasilicate (12.1 ppg, 2.09 cuft/sx). Tailed in with 150 sx Prem lite cement with 0.2% CD-32, .9% FL-52 and 5#/sx LCM-1 (12.5 ppg, 1.97 cuft/sx.). Cement 2nd stage with 154 sx perm lite cement with 8% bentonite, 0.5% CD-32, 0.9% FL-52, 5#/sx LCM-1 and 0.2 % sodium metasilicate (12.1 ppg, 2.09 cuft/sx). Tailed in with 100 sx Prem lite cement with 0.2% CD-32, .9% FL-52 and 5#/sx LCM-1 (12.5 ppg, 1.97 cuft/sx.). Displace cement with fresh water. Bump plug to 500 psig over final displacement pressure. Do not over displace.

26. ND BOP. Set slips. Cut off casing

27. RDMO Drilling Rig.

28. A completion procedure will be prepared upon analyzing the open hole logs.

REGULATORY REQUIREMENTS:

1. Pit Permit Required.

2. BLM approval to deepen well to Dakota.

SERVICES:

1. Casing Crews: None specified.

2. Cement: None specified.

EQUIPMENT LIST:

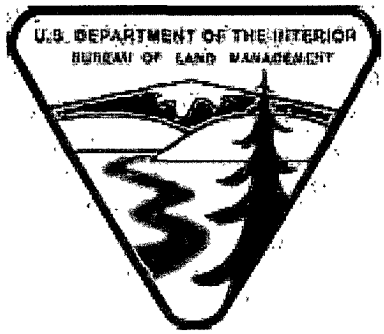
1. 6-1/4" mill and 4 – 3-1/8" DC's.
2. 4-1/2" Weatherford model 1305 Flapper Float shoe, Weatherford 4-1/2" model 754 hydraulic stage tool.
3. 7,640' – 4-1/2", 10.5#, J-55, EUE casing.

DRILLING CONDITIONS OF APPROVAL

Operator:	**XTO Energy**
Lease No.:	**NMNM-03551**
Well Name:	**Breech E #104**
Well Location:	**Sec.5, T26N, R6W; 660' FSL & 660' FEL**

1) Submit hardcopies of all CBL/temperature survey(s) to this office.
2) Consult with this office if remedial work is necessary, follow-up with a Notice of Intent. *Note: Based on BLM-FFO geologic report, top of Nacimiento fm. @ 1080' approx. Therefore, minimum TOC behind 7" casing will be +/- 1030' to meet the minimum Federal requirement.

3) Submit a 3160-4 completion report for the Dakota formation.

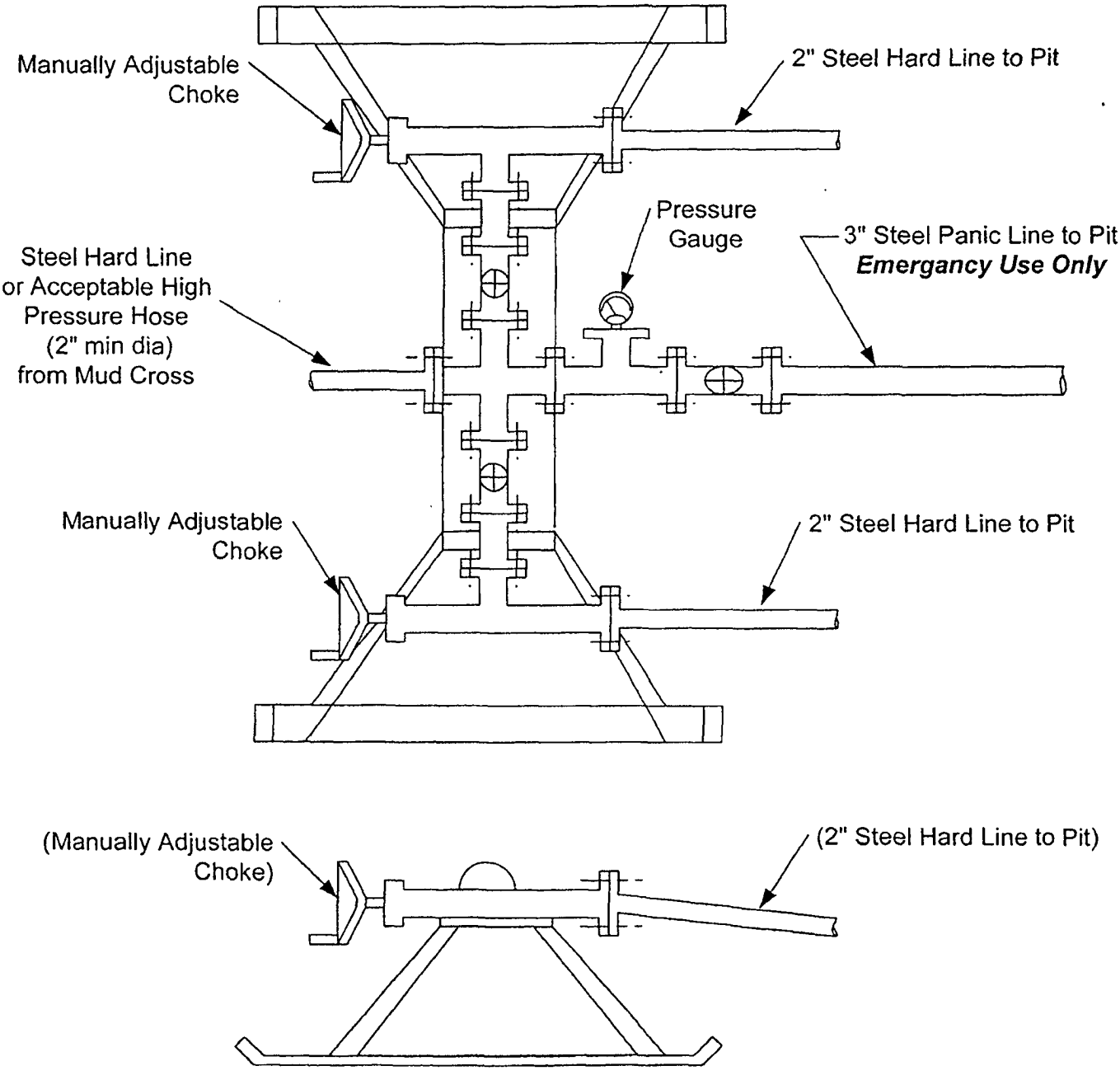


After hour contact: Troy Salyers 505-360-9815

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

TESTING PROCEDURE

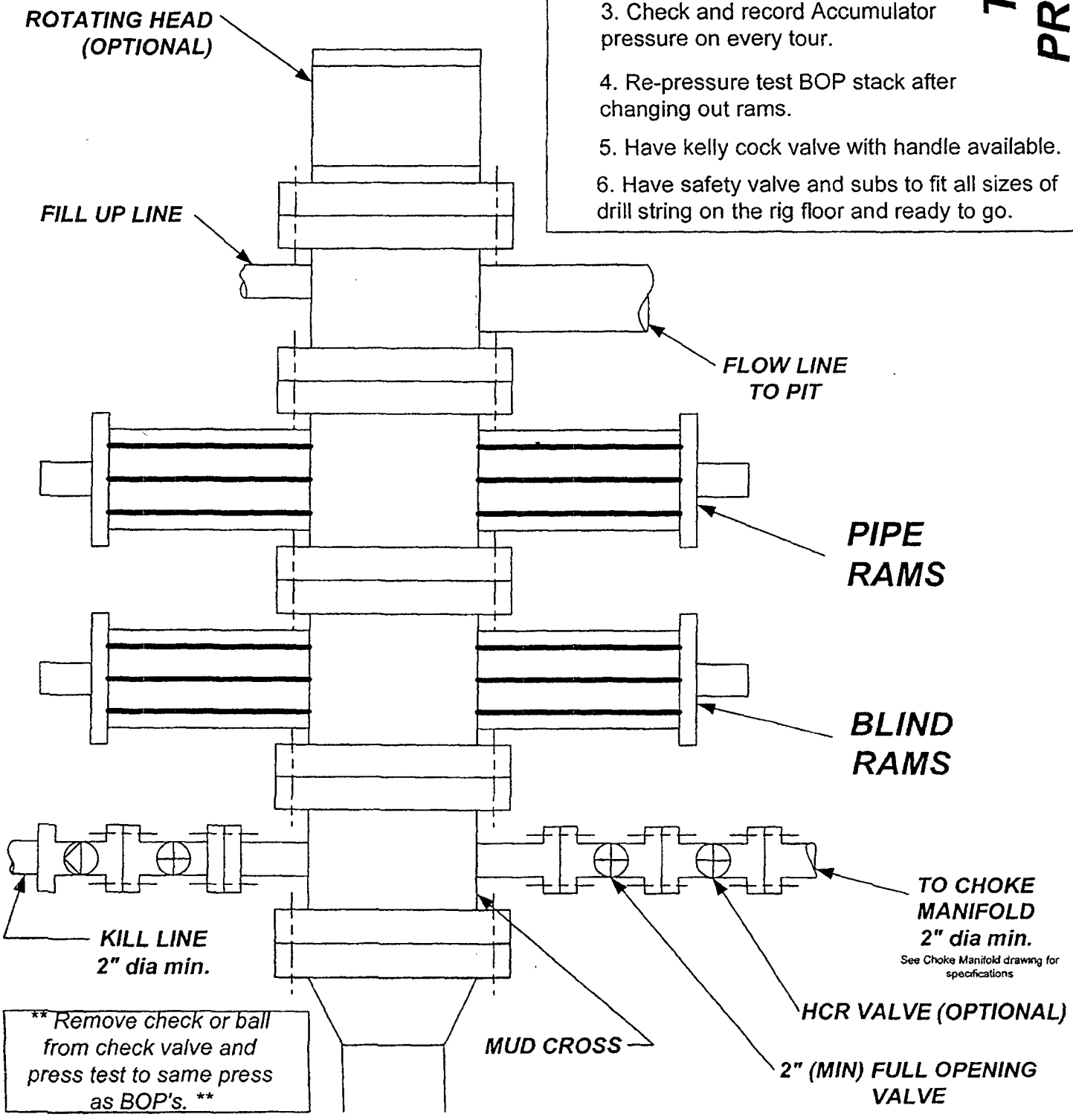
1. Stake all lines from choke manifold to pit.
2. Pressure test choke manifold after installation.
3. Pressure test manifold at the same time with the BOP Stack. Test manifold to the same test pressures.



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.



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