

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. NMSF-047039B
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 checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator XTO Energy Inc.		7. Unit or CA Agreement Name and No.
3a. Address 2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM	3b. Phone No. (include area code) 505-324-1090	8. Lease Name and Well No. Federal E #1F
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 675 FNL x 1770 FEL in Sec 17, T28N, R10W At proposed prod. zone		9. API Well No. 30-045-32638
14. Distance in miles and direction from nearest town or post office* Approx 6 air miles Southeast of the Bloomfield, NM Post Office		10. Field and Pool, or Exploratory Basin Dakota/Otero Chacra
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 675'	16. No. of Acres in lease 1343.85	11. Sec., T., R., M., or Blk. and Survey or Area 9 Sec 17, T28N, R10W
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1000'	19. Proposed Depth 6800'	12. County or Parish San Juan
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5797' Ground Level	22. Approximate date work will start* winter 2005	13. State NM
23. Estimated duration 2 weeks		

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 <i>Kyla Vaughan</i>	Name (Printed/Typed) Kyla Vaughan	Date 10/15/04
Title Regulatory Compliance Tech		

Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) AFM	Date 1.12.05
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)

NMOCOD

APD/ROW

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. 58240

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 AP's Number 30-045-32638		² Pool Code 71599	³ Pool Name Basin Darnata
⁴ Property Code 22700	⁵ Property Name FEDERAL		⁶ Well Number 1F
⁷ OCRD No. 167067	⁸ Operator Name XTO ENERGY INC.		⁹ Elevation 5797'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lat lon	Feet from the	North/South line	Feet from the	East/West line	County
B	17	28-N	10-W		675	NORTH	1770	EAST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lat lon	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres E 12 320.00	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

<div>16</div> <p>QTR. CORNER FD 5/8" REBAR NO CAP N 89-59-46° W 2648.5' (M)</p> <p>LAT: 36°40'04" N. (NAD 27) LONG: 107°54'55" W. (NAD 27)</p> <p>SEC. CORNER FD 2 1/2" BC U.S.G.L.O. 1913</p> <p>QTR. CORNER FD 2 1/2" BC U.S.G.L.O. 1913</p> <p>S 00-02-48° W 2640.0' (M)</p>	<div>17 OPERATOR CERTIFICATION</div> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>[Signature]</i> Signature Kelli K. Small Printed Name Welling Assistant Title 9/17/04 Date</p>
	<div>18 SURVEYOR CERTIFICATION</div> <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 knowledge and belief.</p> <p><i>[Signature]</i> Signature John A. Vukovich Printed Name 14831 Certificate Number</p>

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-32638		² Pool Code 82329		³ Pool Name OTERO CHACRA	
⁴ Property Code 22700		⁵ Property Name [REDACTED]			⁶ Well Number 1F
⁷ GRID No. 167067		⁸ Operator Name XTO ENERGY INC.			⁹ Elevation 5797'

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
B	17	28-N	10-W		675	NORTH	1770	EAST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

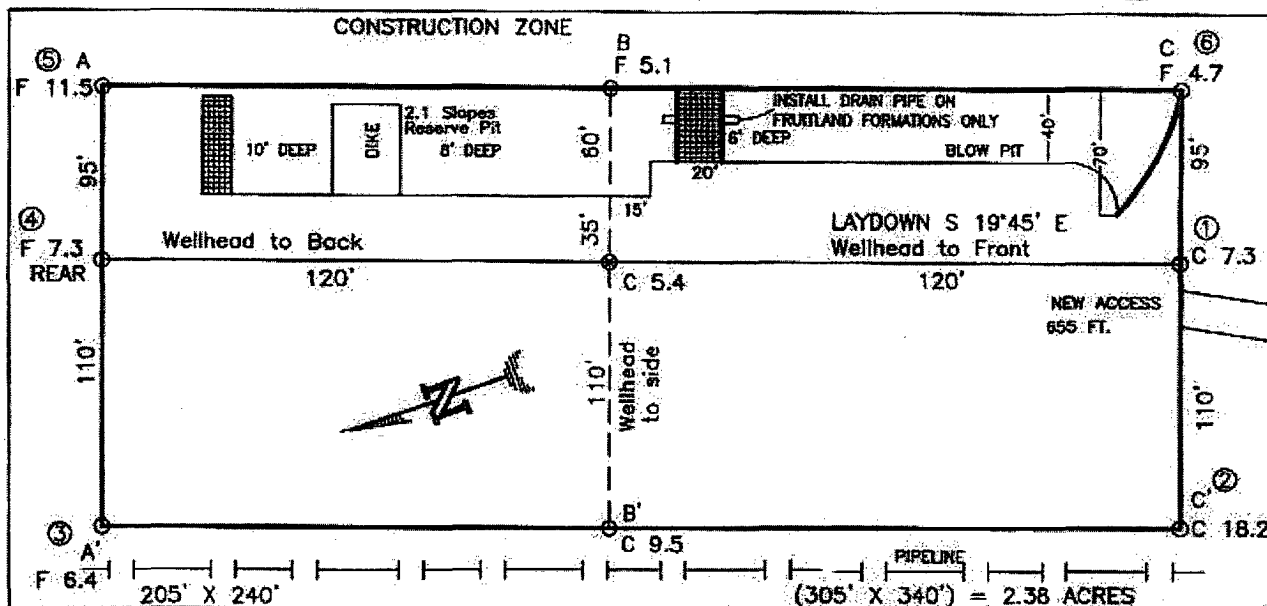
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 160 NE/4			¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.		

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

<p>16</p> <p>QTR. CORNER FD 5/8" REBAR NO CAP</p> <p>N 89-59-46 W 2648.5' (M)</p>	<p>675'</p> <p>1770'</p> <p>LAT: 36°40'04" N. (NAD 27) LONG: 107°54'55" W. (NAD 27)</p> <p>S 00-02-42 W 2640.0' (M)</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>Signature <u>Jeffrey W. Patton</u></p> <p>Printed Name <u>JEFFREY W. PATTON</u></p> <p>Title <u>DRILLING ENGINEER</u></p> <p>Date <u>10-15-04</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 knowledge and belief</p> <p>Date of Survey <u>10-15-04</u></p> <p>Signature and Seal of Professional Surveyor <u>[Signature]</u></p> <p>14831</p> <p>Certificate Number: <u>14831</u></p>	
		<p>QTR. CORNER FD 2 1/2" BC U.S.G.L.O. 1913</p>	

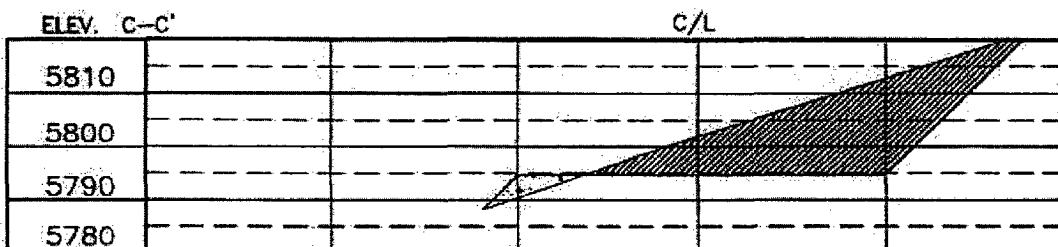
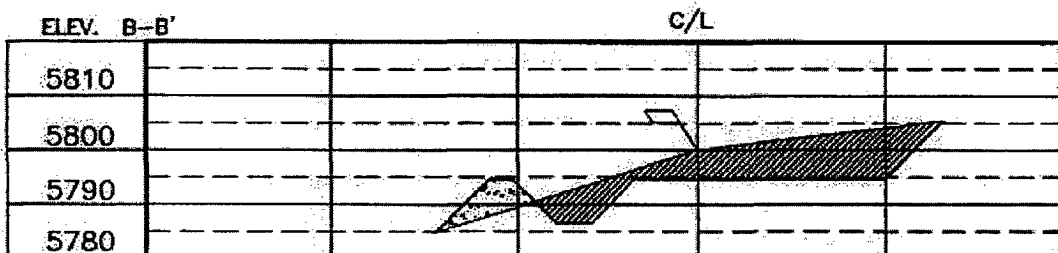
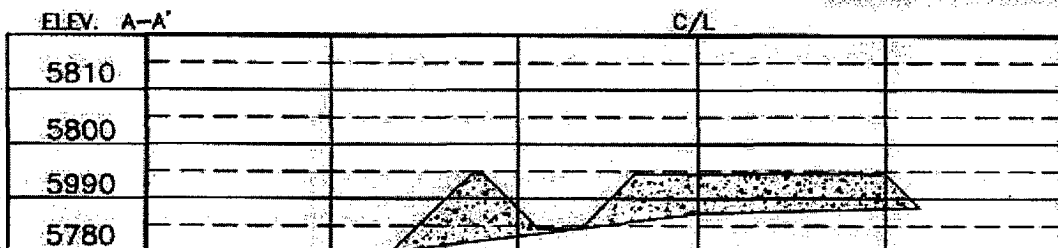
XTO ENERGY INC.
 FEDERAL E #1F, 755' FNL 1410' FEL
 SECTION 17, T28N, R10W, N.M.P.M., SAN JUAN COUNTY, N. M.
 GROUND ELEVATION: 5800', DATE: JUNE 14, 2004

LAT. = 36°40'03" N.
 LONG. = 107°54'51" 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) 324-1772 • Fax (505) 324-6019
 NEW MEXICO L.S. No. 14831
 DATE: 07/19/04
 DRAWN BY: B.L.
 CHECKED BY: C.R.324

XTO ENERGY INC.

Federal "E" #1F

APD Data

October 15, 2004

Location: 675' FNL x 1,770' FEL Sec 17, T28N R10W

County: San Juan

State: New Mexico

GREATEST PROJECTED TD: 6,800'
APPROX GR ELEV: 5,797'

OBJECTIVE: Basin Dakota
Est KB ELEV: 5,809' (12' AGL)

1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 4,000'	4,500' to TD
HOLE SIZE	12-1/4"	7-7/8"	7-7/8"
MUD TYPE	FW/Spud Mud	FW/Polymer	LSND / Gel Chemical
WEIGHT	8.6-9.0	8.4-8.8	8.6-9.0
VISCOSITY	28-32	28-32	45-60
WATER LOSS	NC	NC	8-10

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: 8-5/8" casing to be set at $\pm 360'$ in a 12-1/4" hole filled with 8.8 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'-360'	360'	24.0#	J-55	STC	1370	2950	244	8.097	7.972	7.32	7.95	29.39

Production Casing: 5-1/2" casing to be set at TD ($\pm 6,800'$) in 7-7/8" hole filled with 9.0 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'-TD	6,800'	15.5#	J-55	STC	4040	4810	222	4.950	4.825	1.22	1.45	2.02

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, 8-5/8" 8rnd thread on top.

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

A. Surface: 8-5/8", 24#, J-55, STC casing to be set at $\pm 360'$ in 12-1/4" hole.

210 sx of Type III cement (or equivalent) typically containing accelerator and LCM, mixed at 14.5 ppg, 1.39 ft³/sk, & 6.70 gal wtr/sk.

Total slurry volume is 297 ft³, 100% excess of calculated annular volume to 360'.

B. Production: 5-1/2", 15.5#, J-55 (or K-55), STC casing to be set at $\pm 6,800'$ in 7-7/8" hole. DV Tool set @ $\pm 4,000'$

1st Stage

LEAD:

225 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 ft³/sk, 10.55 gal wtr/sx.

TAIL:

150 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.

2nd Stage

LEAD:

350 sx of Type III with 8% gel, 1/4 pps cello & 2% LCM mixed at 11.9 ppg, 2.54 ft³/sk, 15.00 gal wtr/sx.

TAIL:

100 sx Type III neat mixed at 14.5 ppg, 1.39 cuft/sx, 6.3 gal/sx.

Total estimated slurry volume for the 5-1/2" production casing is 1,711 ft³.

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 2,500' 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/SP/Neutron/Lithodensity/Pe/GR/Cal fr/TD (6,800') to the bottom of the surface csg. Run Formation Micro Imager (FMI) from 6,800' to 6,275'.

6. FORMATION TOPS:

Est. KB Elevation: 5,809'

Formation	Subsea Depth	Well Depth
Ojo Alamo SS	+5028'	784'
Kirtland Shale	+4899'	913'
Farmington SS	+4800'	1012'
Fruitland Formation	+4287'	1525'
Lower Fruitland Coal	+3924'	1888'
Pictured Cliffs SS	+3899'	1913'
Lewis Shale	+3700'	2112'
Chacra	+2963'	2849'
Cliffhouse SS	+2312'	3500'
Menefee	+2218'	3594'
Point Lookout SS	+1591'	4221'
Mancos Shale	+1251'	4561'
Gallup SS	+368'	5444'
Greenhorn Limestone	-389'	6201'
Graneros Shale	-451'	6263'
1 st Dakota SS	-489'	6301'
2 nd Dakota SS	-509'	6321'
3 rd Dakota SS	-572'	6384'
4 th Dakota SS	-634'	6446'
5 th Dakota SS	-665'	6477'
6 th Dakota SS	-714'	6526'
Burro Canyon SS	-759'	6571'
Morrison Shale	-794'	6606'
Project TD	-988'	6800'

KBHP ~ 3000psi

7. COMPANY PERSONNEL:

Name	Title	Office Phone	Home Phone
Jeff Patton	Drilling Engineer	505-324-1090	505-632-7882
Dennis Elrod	Drilling foreman	505-486-6460	505-326-2024
Randy Hosey	Project Geologist	817-885-2398	817-427-2475
Barry Voigt	Reservoir Engineer	817-885-2462	817-540-2092

JWP
10/15/04

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 ~~5~~¹⁰ min.

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

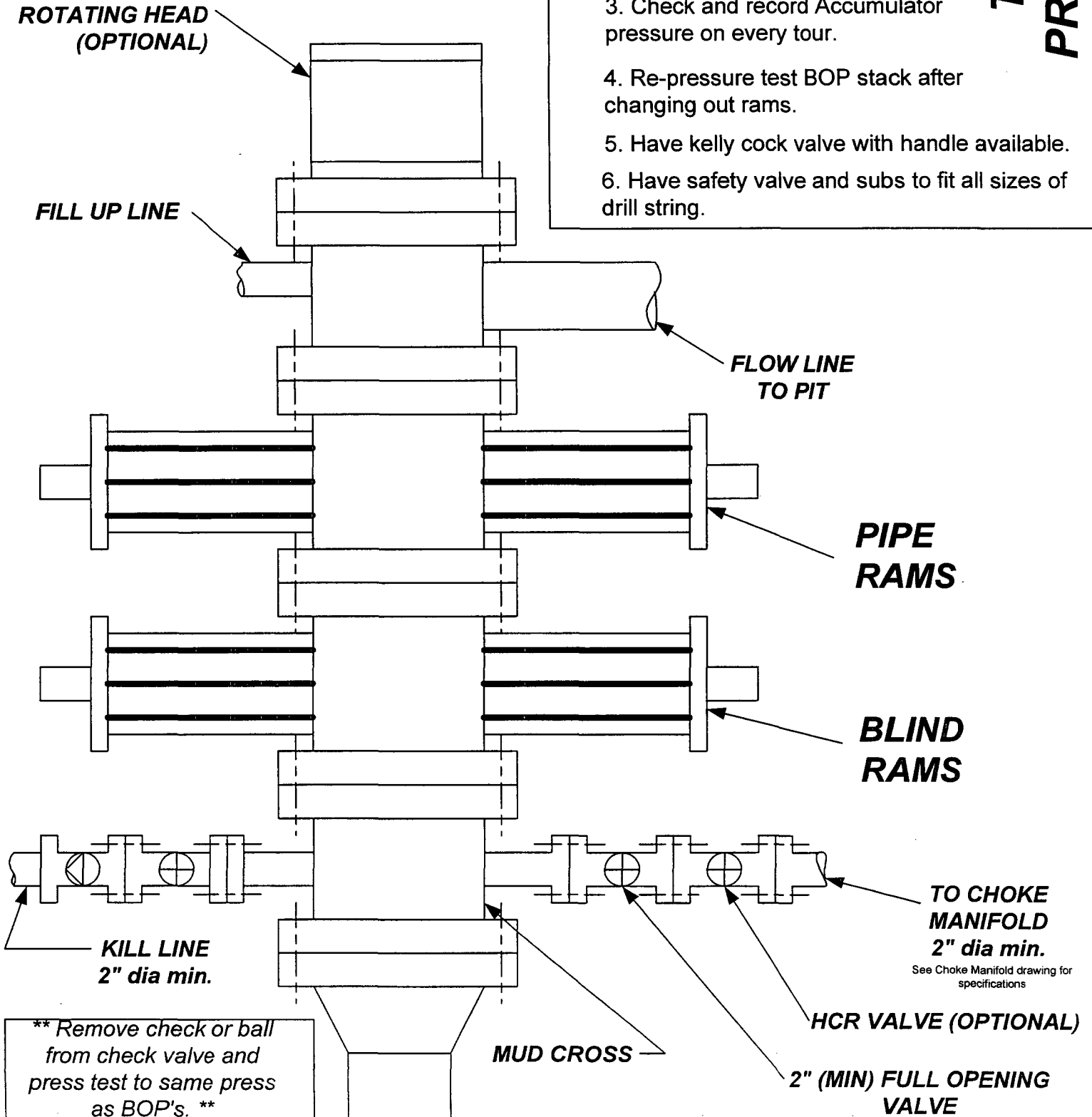
2. Test operation of (both) rams on every trip.

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.



CHOKES 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

