

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM 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>SF-079232</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>Bolack C #25</b>	
3b. Phone No. (include area code) <b>505-324-1890</b>		9. API Well No. <b>3004532812</b>	
4. Location of Well (Report location clearly and in accordance with any State requirements) At surface <b>665' FSL x 1305' FEL in Sec 31 T27N, R8W</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>Approx 13.8 air miles SouthEast of Bloomfield, NM Post Office</b>		11. Sec., T., R., M., or Blk. and Survey or Area <b>Sec 31, T27N, R8W</b>	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) <b>665'</b>		12. County or Parish <b>San Juan</b>	
16. No. of Acres in lease <b>2552.22</b>		13. State <b>NM</b>	
17. Spacing Unit dedicated to this well <b>320 E/p</b>		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>80'</b>	
19. Proposed Depth <b>2300'</b>		20. BLM/BIA Bond No. on file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>6128' Ground Elevation</b>		22. Approximate date work will start* <b>winter 2005</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>12/30/04</b>
Title <b>Regulatory Compliance Tech</b>		
Approved by (Signature) <b>[Signature]</b>	Name (Printed/Typed) <b>[Signature]</b>	Date <b>5-13-05</b>
Title <b>AFM</b>	Office <b>FFO</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)

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

APD/ROW

NMOC

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

DISTRICT II  
1301 W. Grand Ave., Artesito, 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

RECEIVED  
OIL CONSERVATION DIVISION  
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-045-32812		2 Pool Code 716 L 9		3 Pool Name PRIMA FAULTED COAL	
4 Property Code 28096		5 Property Name BOLACK C			6 Well Number 25
7 OGRID No. 167067		8 Operator Name XTO ENERGY INC.			9 Elevation 6128

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
0	31	27-N	8-W		665	SOUTH	1305	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 7.16	13 Joint or Int'l I	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

16		17 OPERATOR CERTIFICATION	
		I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
		Signature JERRY W. YETTON	
		Printed Name JERRY W. YETTON	
		Title DISTRICT ENGINEER	
Date 11-17-04		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.	
		Signature and Seal of Professional Surveyor JOHN A. VUKOBICH	
		Date 11-17-04	
		Certificate Number 14831	

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

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

Form C-103

May 27, 2004

WELL API NO.

5. Indicate Type of Lease

STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

SF-079232

7. Lease Name or Unit Agreement Name:

Bolack C

8. Well Number

#25

9. OGRID Number

167067

10. Pool name or Wildcat

BASIN FRUITLAND COAL

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 0 : 665 feet from the SOUTH line and 1305 feet from the EAST line

Section 31 Township 27N Range 8W NMPM NMPM County SAN JUAN

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

6128' GL

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type DRILL Depth to Groundwater >100 Distance from nearest fresh water well 1 MILE Distance from nearest surface water 1 MILE

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 ☐

OTHER: RESERVE PIT ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

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.

See Attachment

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 12/30/04

Type or print name Kyla Vaughan

E-mail address: Kyla\_Vaughan@xtoenergy.com

Telephone No. 505-324-1090

For State Use Only

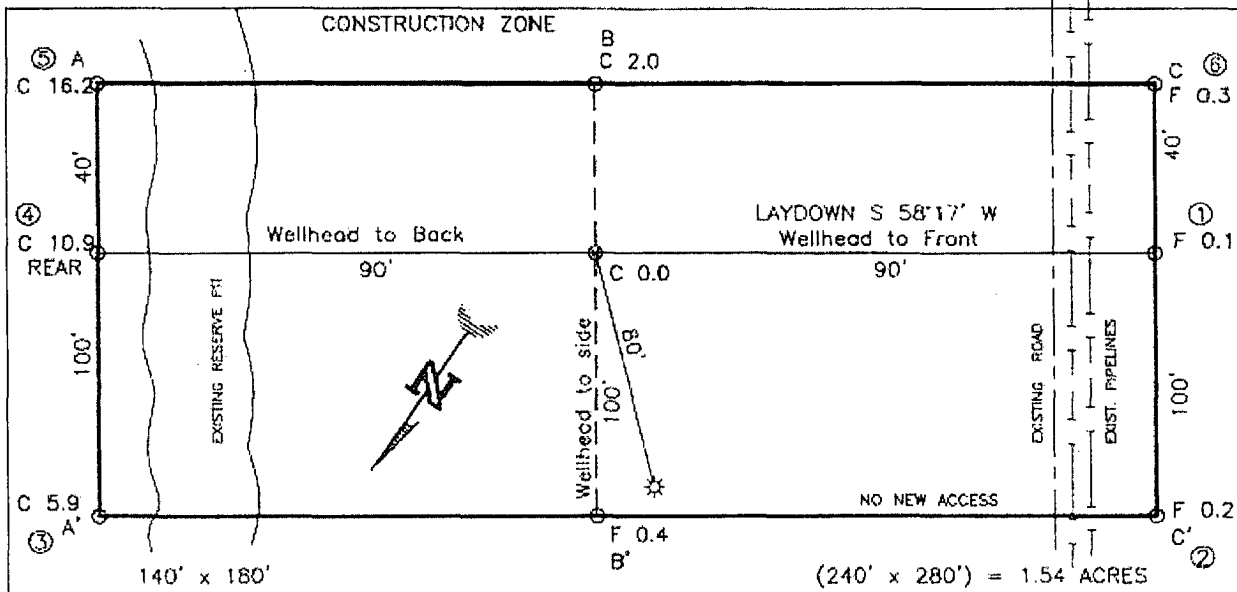
APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR DATE MAY 16 2005

Conditions of Approval, if any:

EXHIBIT E

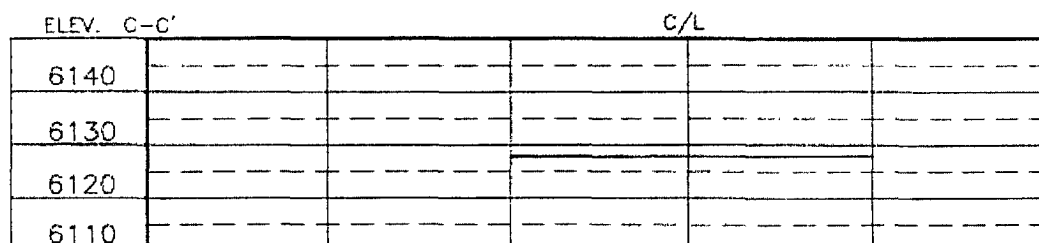
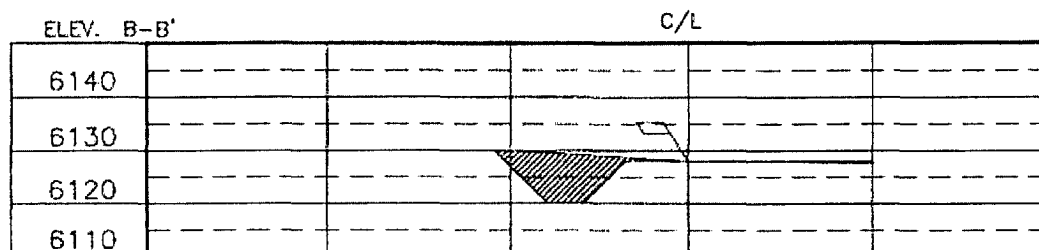
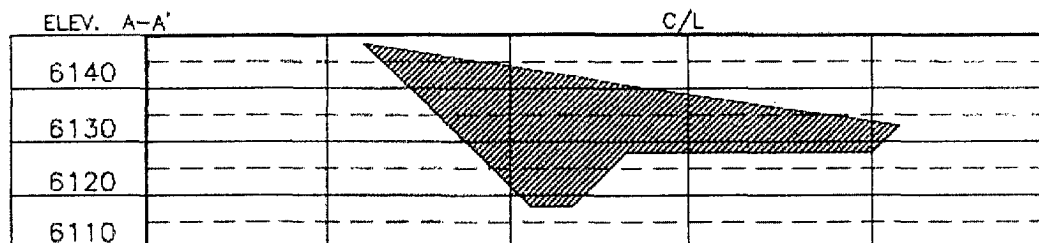
XTO ENERGY INC.  
 BOLACK C #25, 665' FSL 1305' FEL  
 SECTION 31, T27N, R8W, N.M.P.M., SAN JUAN COUNTY, N. M.  
 GROUND ELEVATION: 6128', DATE: MARCH 16, 2004

LAT. = 36°31'31" N.  
 LONG. = 107°43'04" 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

DATE:	10/22/04	Daggett Enterprises, Inc. Surveying and Oil Field Services P. O. Box 15268 • Farmington, NM 87401 Phone (505) 326-1772 • Fax (505) 326-6019 NEW MEXICO L.S. No. 14831 CDRLE CR263CFB DATE: 03/22/04
REVISION:		
BY:		
CHECKED:		

EXHIBIT D

BOLACK C #25

XTO Energy Inc. proposes to install a lined, earthen reserve pit on location for drilling. The pit will be removed from location in accordance with New Mexico Oil Conservation division guidelines when work is completed.

EXHIBIT E

# XTO ENERGY INC.

## DRILLING PROCEDURE

Bolack "C" #25

Basin Fruitland Coal

December 30, 2004

Location: 665' FSL & 1,305' FEL, Sec 31, T27N, R08E County: San Juan State: New Mexico

PROJECTED TOTAL DEPTH: 2,300' OBJECTIVE: Fruitland Coal GR ELEV: 6,128'

### 1. MUD PROGRAM:

INTERVAL	0'-225'	225'-TD
HOLE SIZE	12-1/4"	7-7/8"
MUD TYPE	FW/Native	FW/Polymer
MUD WEIGHT, ppg	8.6-9.0	8.6-9.1
VISCOSITY, sec/qt	28-32	28-33
WATER LOSS, cc	NC	NC

Remarks: Drill the surface hole with fresh water. Run and cement 7" surface casing, circulating cement to surface. NU and test BOP equipment, then drill out with fresh water. Use polymer sweeps as needed for hole cleaning. At TD, sweep the hole prior to TOH to log.

### 2. CASING PROGRAM:

Surface Casing: 8-5/8" casing to be set at  $\pm$  225' in 8.8 ppg mud in 12-1/4" open hole.

Interval	Length	Wt (ppf)	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	DD (in)	SF Coll	SF Burst	SF Tension
0'-225'	225'	24#	J-55	STC	1,370	2,950	244	8.097	7.972	14.64	31.52	50.8

Optimum makeup torque for 8-5/8" 24#, J-55, STC casing is **2,440 ft-lbs** (Min - 1,830 ft-lbs, Max - 3,050 ft-lbs).

Production Casing: 5-1/2" casing to be set at  $\pm$  2,300' in 9.0 ppg mud in a 7-7/8" open hole.

Interval	Length	Wt (ppf)	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	DD (in)	SF Coll	SF Burst	SF Tension
0'-TD	2,300'	15.5#	J-55	STC	4,040	4,810	<del>222</del> 200	4.950	4.825	3.52	4.19	5.84

Optimum makeup torque for 4-1/2", 10.5#, J-55, casing is **1,320 ft-lbs** (Min - 990 ft-lbs, Max - 1,650 ft-lbs).

Capacity of 8-5/8", 20# casing is: 0.0636 bbl/ft

Capacity of 5-1/2", 15.5# casing is: 0.0238 bbl/ft

### 3. WELLHEAD:

Casinghead: Larkin Fig 92 (or equivalent) 2,000 psig WP (4,000 psig test) with 8-5/8", 8rd pin on bottom and 10-3/4" API Modified 8rd thread on top.

Tubinghead: Larkin Model 612 (or equivalent) 3,000 psig WP (6,000 psig test) with 5-1/2", 8rd bottom thread and 8-5/8" 8rd API Modified top body thread, 4.950" minimum bore.

**EXHIBIT A**

4. **CEMENT PROGRAM:**

A. Surface: 8-5/8", 24#, J-55, STC casing at  $\pm 225'$ .

Lead: 150 sx Type III cement (or equivalent) containing ¼ pps celloflake, 2% CaCl<sub>2</sub> (mixed at 14.6 ppg, 1.39 ft<sup>3</sup>/sk, 6.67 gal wtr/sk).

Total slurry volume is ~~104.25~~ <sup>209</sup> ft<sup>3</sup>, 250% excess of calculated annular volume required to circulate cement to surface.

B. Production: 5-1/2", 15.5#, J-55, STC casing at  $\pm 2,300'$ .

Lead:  $\pm 200^*$  sx of Type III cement containing 8% gel, 1/4 pps Celloflake & 2% Phenoseal (mixed at 11.9 ppg, 2.54 ft<sup>3</sup>/sk, 15.00 gal wtr/sk).

Tail: 100 sx Type III cement containing 1% CaCl<sub>2</sub>, 1/4 pps Celloflake & 2% Phenoseal (mixed at 14.5 ppg, 1.41 ft<sup>3</sup>/sk, 6.72 gal wtr/sk).

Total estimated slurry volume is 649 ft<sup>3</sup>,  $\pm 40\%$  excess of calculated annular volume required to circulate cement to surface.

\* Actual cement volumes will be determined using log caliper volume plus 40% excess.

5. **DRILLING HAZARDS:**

- H<sub>2</sub>S or other Poisonous Gases: No formations known to contain H<sub>2</sub>S or any other poisonous gases will be penetrated with this wellbore.
- Abnormal Pressures: No overpressured zones are known to exist or are anticipated to be encountered during the drilling of this well.
- Lost Circulation: Seepage and/or lost circulation may be encountered below surface casing and can be controlled with conventional lost circulation materials added to the mud system.

6. **LOGGING PROGRAM:**

Array Induction/DFL/GR/SP/Cal  
DSN/Spectral Density/GR/Cal/Pe

TD to bottom of surf csg.  
TD to bottom of surf csg.

EXHIBIT F

7. **FORMATION TOPS:**

Formation	Subsea Depth	Well Depth
Ojo Alamo SS	+4979'	1161'
Kirtland Shale	+4869'	1271'
Fruitland Fm	+4520'	1620'
Lower Fruitland Coal	+4219'	1921'
Pictured Cliffs SS	+4163'	1977'
Lewis Shale	+3978'	2162'
T.D.	+3840'	±2300'

**Note:** These depths, indicated above, are approximate. Actual depths of the formation tops will be determined from the well logs.

**Maximum anticipated bottomhole pressure encountered during drilling should not exceed 0.35-0.43 psi/ft.**

8. **COMPANY PERSONNEL:**

Name	Title	Office Phone	Home Phone
Dennis Elrod	Drilling Foreman	505-324-1090 505-486-6460 cellular	505-326-2024
Jeff Patton	Drilling Engineer	505-324-1090 505-330-2957 cellular	505-632-7882
Reed Meek	Project Geologist	817-885-2191	432-687-0615
Robin Tracy	Reservoir Engineer	817-885-2422	

9. **SPECIAL INSTRUCTIONS:**

- A. Daily drilling reports should be called in to the San Juan District office at (505) 324-1090 or faxed to (505) 564-6700 by 8:00 a.m.
- B. Deviation:  
 Surface Hole: Maximum of 1° and not more than 1° change per 100'.  
 Production Hole: Maximum of 4° and not more than 1° change per 100'.  
**Note: Maximum distance between surveys is 500'.**
- C. NU & Pressure Test BOP, choke manifold & surface casing to 250/800 psig for 30 minutes. Report the pressure test on the IADC form as required.
- D. Drill out below surface casing after WOC 12 hours. Drill cement and float equipment with minimum weight and RPM until drill collars are below the bottom of the surface casing. Keep location clean and water usage to a minimum.
- E. Check BOP blind rams each trip and pipe rams each day. Strap the pipe on the last bit trip prior to reaching TD, or on the TOH to log.

# 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~~<sup>10</sup> min.

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

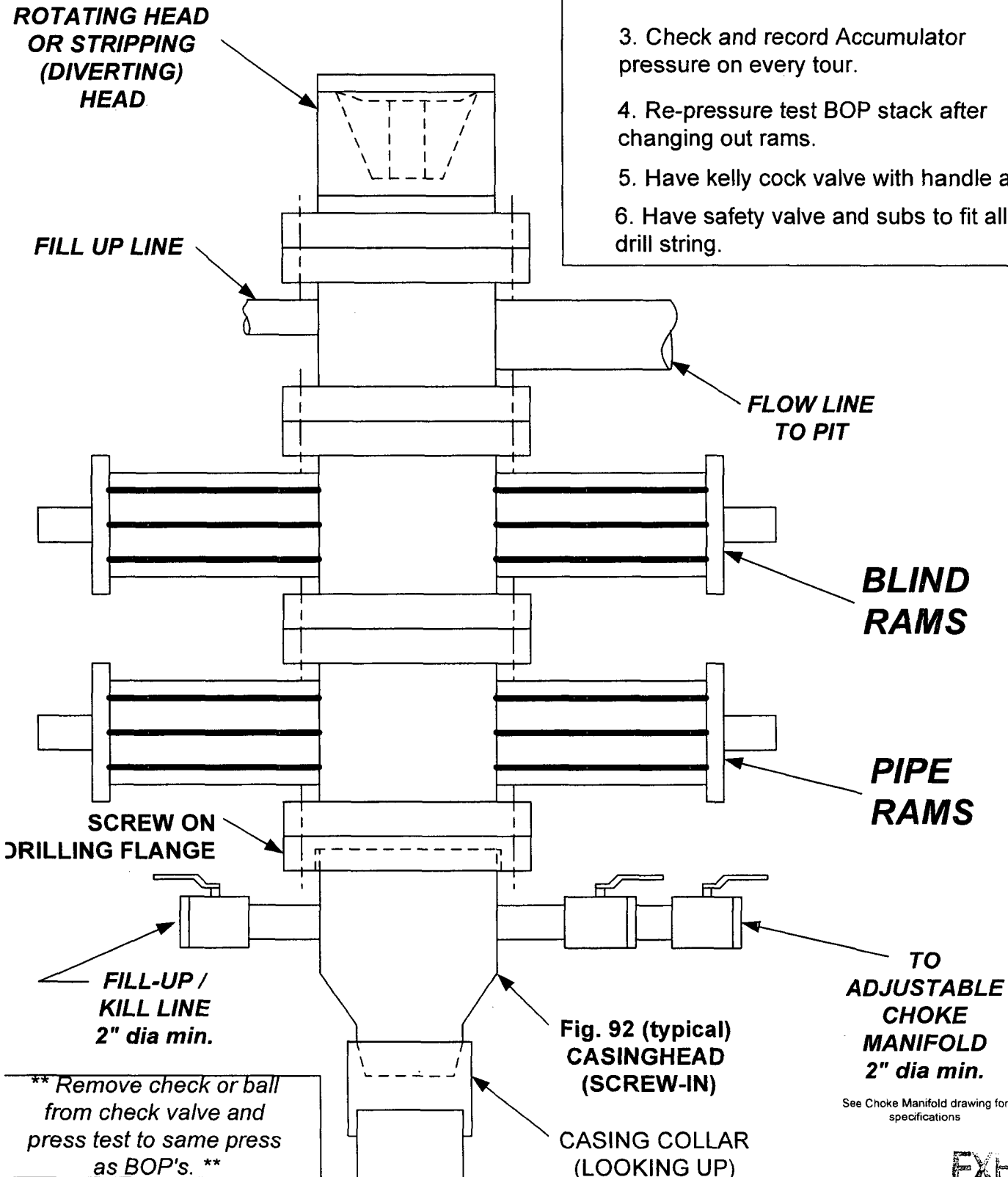
2. Test operation of (both) rams  
on every trip.

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.



# **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**

