Form 3160-3
(April 2004)

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

5. Lease Serial No.
NM-021126

1a. Type of Work [x] DRILL [ ] REENTER

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

1b. Type of Well [ ] Oil Well [x] Gas Well [ ] Other [x] Single Zone [ ] Multiple Zone

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

2. Name of Operator
XTO Energy Inc.

8. Lease Name and Well No.
Ohio F Government #2

3a. Address
2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM

3b. Phone No. (include area code)
505-324-1090

9. API Well No.
30045 32673

4. Location of Well (*Report location clearly and in accordance with any State equirements*)*

At surface 990' FNL x 1680' FWL in Sec 20, T31N, R12W

At proposed prod. zone same

10. Field and Pool, or Exploratory
Basin Fruitland Coal

11. Sec., T., R., M., or Blk. and Survey or Area
C Sec 20, T31N, R12W

14. Distance in miles and direction from nearest town or post office*
Approx 12 air miles NW of Farmington NM Post Office

12. County or Parish
San Juan

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any)	16. No. of Acres in lease	17. Spacing Unit dedicated to this well
990'	395.95	320 N/2
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No. on file**
100'	2450'	
21. Elevations (Show whether DF, KDB, RT, GL, etc.	**22. Approximate date work will start***	**23. Estimated duration**
6001' Ground Level	winter 2004	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.
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.

25. Signature	Name (*Printed/Typed*)	Date
Kyla Vaughan	Kyla Vaughan	11/05/04
Title: Regulatory Compliance Tech		
Approved by (Signature)	Name (*Printed/Typed*)	Date
		6-27-05
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 knowlingly 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)

NMOCD

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

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

DISTRICT II
1301 W. Grand Avenue, 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 87504-2088

Form C-102
Revised June 10, 2003
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-045-32763	71629	Basin Fruitland Coal

4 Property Code	5 Property Name	6 Well Number
30330	OHIO F GOVERNMENT	2

7 OGRID No.	8 Operator Name	9 Elevation
167067	XTO ENERGY INC.	6001

10 Surface Location

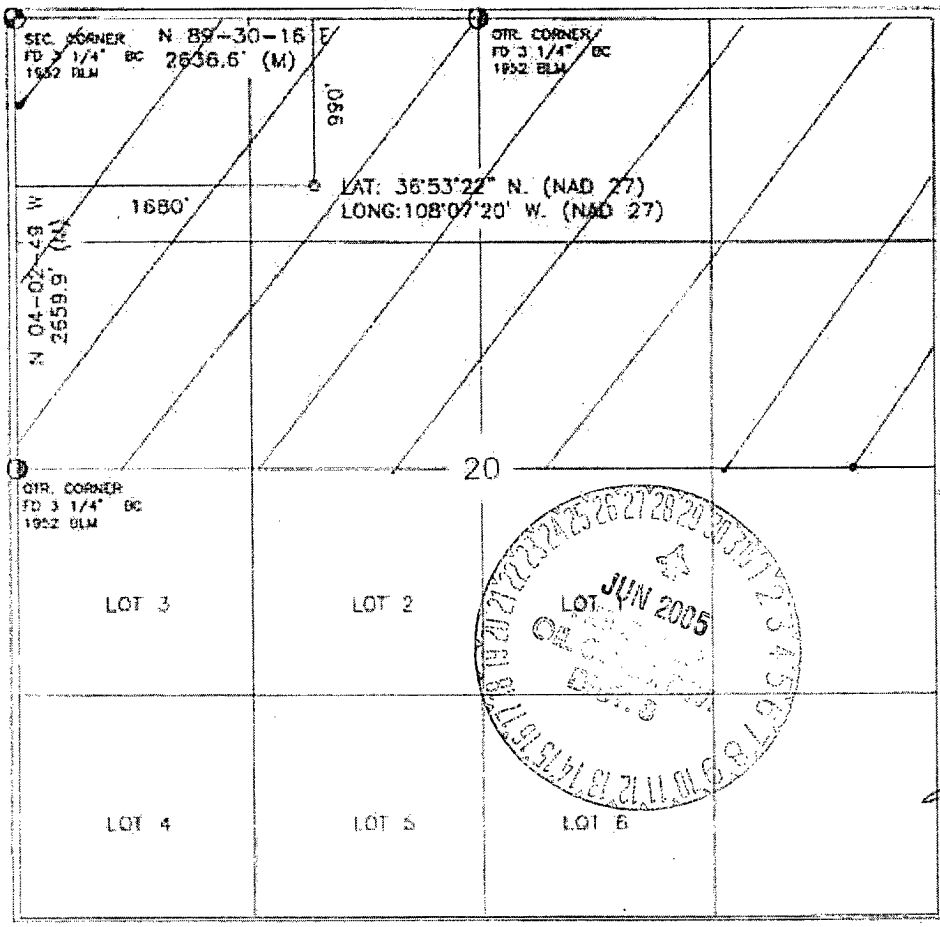
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	20	31-N	12-W		990	NORTH	1680	WEST	SAN JUAN

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	13 Joint or Infill	14 Consolidation Code	15 Order No.
320 N/2	I		

16 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 and complete to the best of my knowledge and belief

Signature: Kelly B Small

Printed Name: Kelly B Small

Title: Drilling Assistant

Date: 10/13/04

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.

AUGUST 31, 2004

Date of Survey

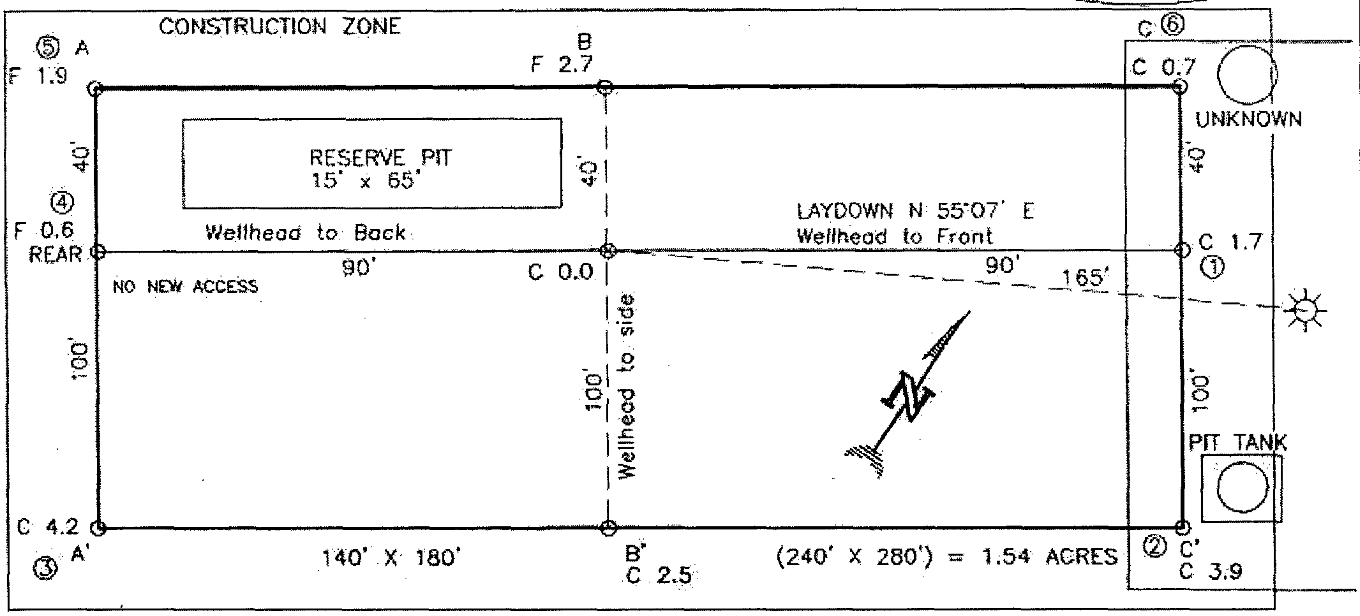
Signature and Seal of Professional Surveyor

NEW MEXICO
14831
REGISTERED PROFESSIONAL SURVEYOR

Certificate Number

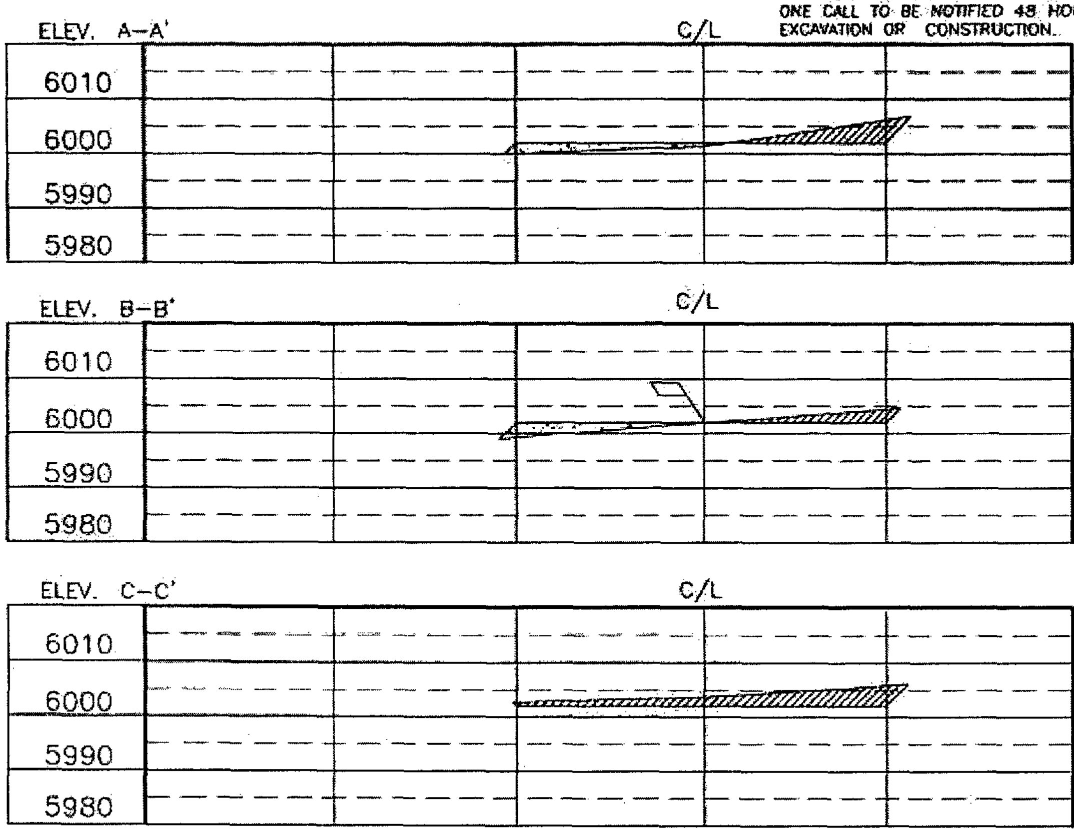
XTO ENERGY INC.
OHIO F GOVERNMENT No. 2, 990 FNL 1680 FWL
SECTION 20, T31N, R12W, N.M.P.M., SAN JUAN COUNTY, N. M.
GROUND ELEVATION: 6001, DATE: AUGUST 25, 2004

LAT: 36°53'22" N.
LONG: 108°07'20" 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.

REVISION: | DATE: | REVISED BY:

Daggett Enterprises, Inc.
Surveying and Oil Field Services
P. O. Box 15068 • Farmington, NM 87401
Phone (505) 326-1772 • Fax (505) 326-6019
NEW MEXICO L.S. No. 14831

DRAWN BY: A.C.
ROW#: CR376
CADFILE: CR376CFB
DATE: 09/27/04

EXHIBIT C

XTO ENERGY INC.

DRILLING PROCEDURE
Ohio "F" Government #2
Basin Fruitland Coal
November 5, 2004

Location: 990' FNL & 1,680' FWL, Sec 20, T31N, R12W **County**: San Juan **State**: New Mexico

PROJECTED TOTAL DEPTH: 2,450' OBJECTIVE: Fruitland Coal GR ELEV: 6,001'

1. MUD PROGRAM:

INTERVAL	0'-200'	200'-TD
HOLE SIZE	8-3/4"	6-1/4"
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 ± 200' 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'-200'	200'	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 ± 2,450' 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	2,450'	15.5#	J-55	STC	4,040	4,810	~~222~~ 202	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 7", 8rd pin on bottom and 8-5/8" API Modified 8rd thread on top.

Tubinghead: Larkin Model 612 (or equivalent) 2,000 psig WP (4,000 psig test) with 4-1/2", 8rd bottom thread and 8-5/8" 8rd API Modified top body thread, 4.090" minimum bore.

EXHIBIT 3

4. CEMENT PROGRAM:

A. Surface: 8-5/8", 24#, J-55, STC casing at ± 200'.

Lead: 150 sx Type III cement (or equivelent) containing ¼ pps celloflake, 2% $CaCl_2$ (mixed at 14.6 ppg, 1.39 ft^3/sk, 6.67 gal wtr/sk).

Total slurry volume is ~~104.25~~ 208 ft^3, 250% excess of calculated annular volume required to circulate cement to surface.

B. Production: 5-1/2", 15.5#, J-55, STC casing at ± 2,450'.

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

Tail: 100 sx Type III cement containing 1% CaCl2, 1/4 pps Celloflake & 2% Phenoseal (mixed at 14.5 ppg, 1.41 ft3/sk, 6.72 gal wtr/sx).

Total estimated slurry volume is 649 ft^3 , ±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_2S or other Poisonous Gases: No formations known to contain H_2S 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	TD to bottom of surf csg.
DSN/Spectral Density/GR/Cal/Pe	TD to bottom of surf csg.

EXHIBIT

7. **FORMATION TOPS:**

Formation	Subsea Depth	Well Depth
Fruitland Fm	+3970'	2037'
Lower Fruitland Coal	+3770'	2237'
Pictured Cliffs SS	+3670'	2337'
T.D.	+3570'	±2450'

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.

EXHIBIT D

BOP SCEMATIC 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.

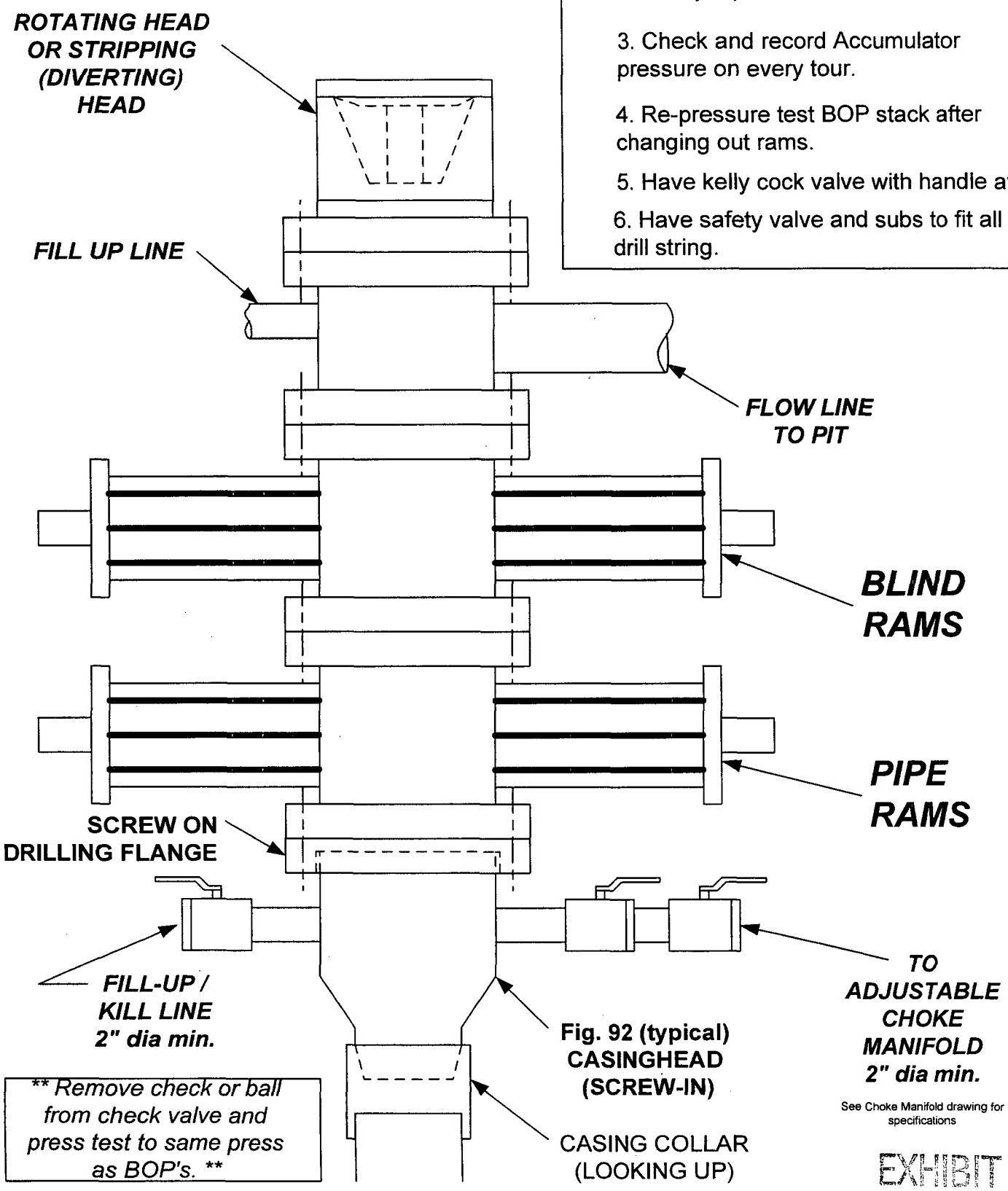


Fig. 92 (typical) CASINGHEAD (SCREW-IN)

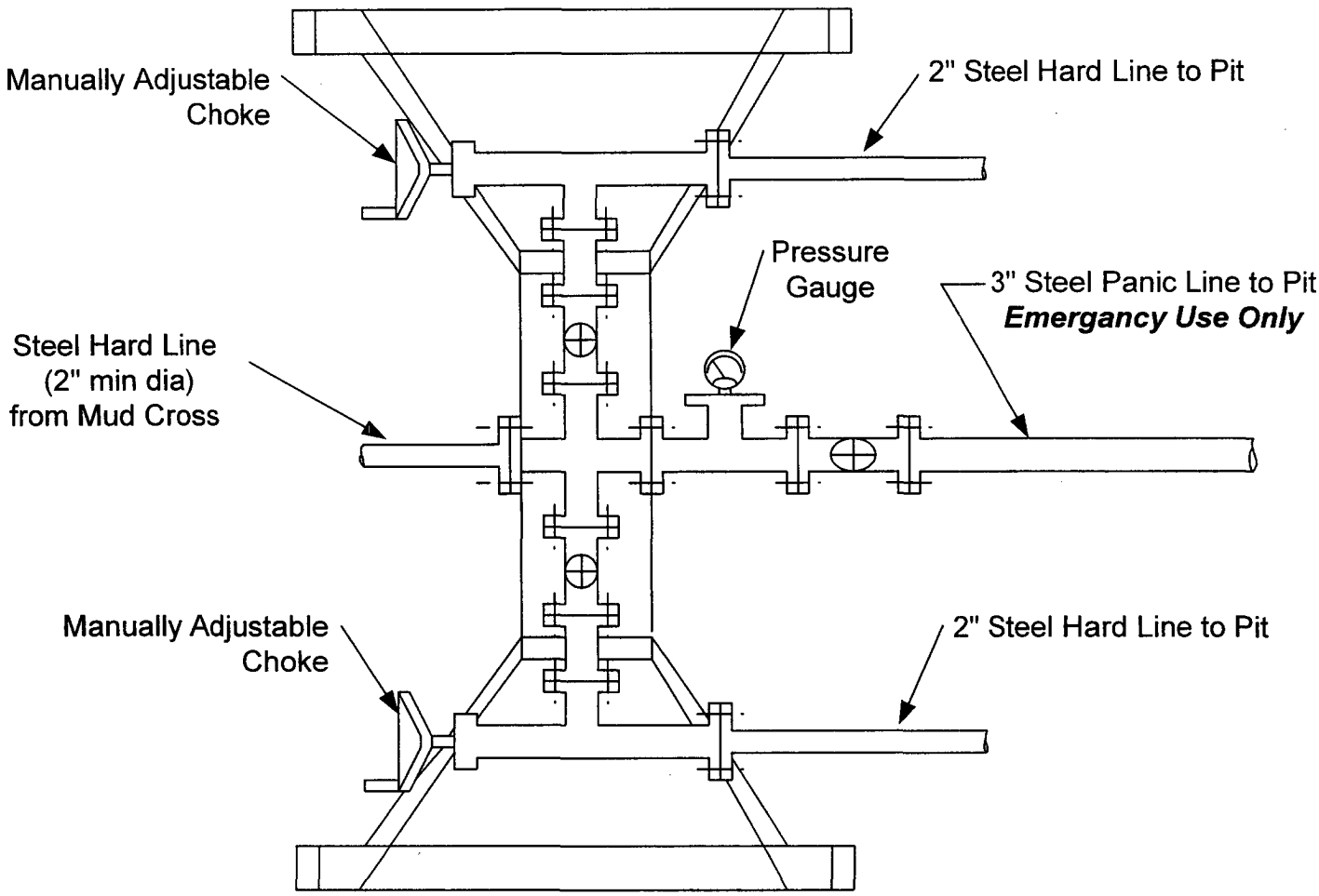
*** Remove check or ball from check valve and press test to same press as BOP's. ***

EXHIBIT D

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

TESTING PROCEDURE

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



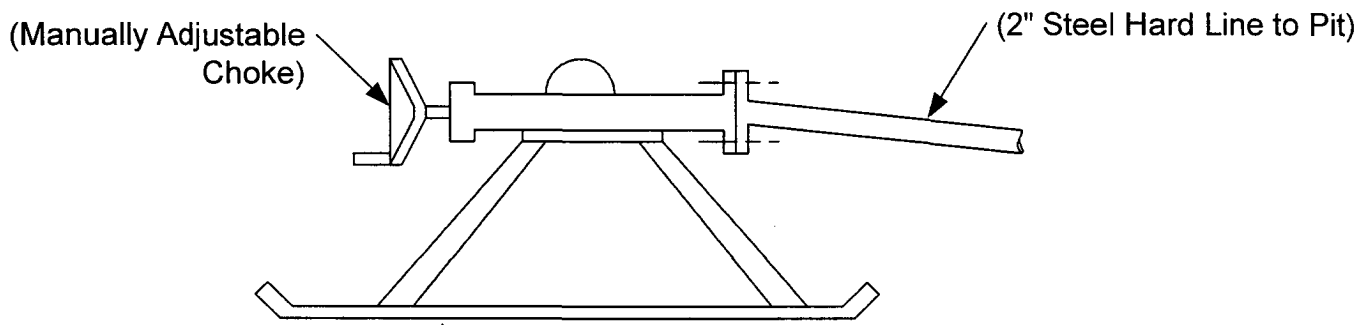


EXHIBIT D