

RECEIVED

Form 3160-3
(February 2005)

JAN 15 2008

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Bureau of Land Management
Farmington Field Office

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work. <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM 03016
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 N/A
2. Name of Operator XTO Energy, Inc.		7. If Unit or CA Agreement, Name and No N/A unit
3a. Address 382 CR 3100 AZTEC, NM 87410		8. Lease Name and Well No. Huerfano #320
3b. Phone No. (include area code) 505-333-3100		9. API Well No. 30-045-34563
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 765' FNL x 665' FEL At proposed prod. zone same		10. Field and Pool, or Exploratory BASIN DK/WC BASIN MC
11. Sec., T R. M. or Blk and Survey or Area (A) SEC 14, T25N, R9W		12. County or Parish San Juan
13. State NM		14. Distance in miles and direction from nearest town or post office* Approximately 25 miles Southeast of Bloomfield, NM post office
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drng. unit line, if any) 665'	16. No. of acres in lease 1280	17. Spacing Unit dedicated to this well E/2 DK 320 - NE/4 MC 160
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. none	19. Proposed Depth 6800'	20. BLM/BIA Bond No. on file UTB-000138
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6525' GROUND ELEVATION	22. Approximate date work will start* 03/15/2008	23. Estimated duration 2 weeks

24. Attachments

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

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above)
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM.

25. Signature <i>Kyla Vaughan</i>	Name (Printed/Typed) Kyla Vaughan	Date 01/14/2008
Title Regulatory Compliance		
Approved by (Signature) <i>Montee Wey</i>	Name (Printed/Typed) AFM	Date 9/11/08
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)

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS
SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APL

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

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

SEP 19 2008

NMOC

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 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

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Bureau of Land Management
Farmington Field Office

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-34563	² Pool Code 71599	³ Pool Name Basin Dakota
⁴ Property Code 36992	⁵ Property Name HUERFANO Unit	⁶ Well Number 320
⁷ OGRID No 5380	⁸ Operator Name XTO ENERGY INC.	⁹ Elevation 6525'

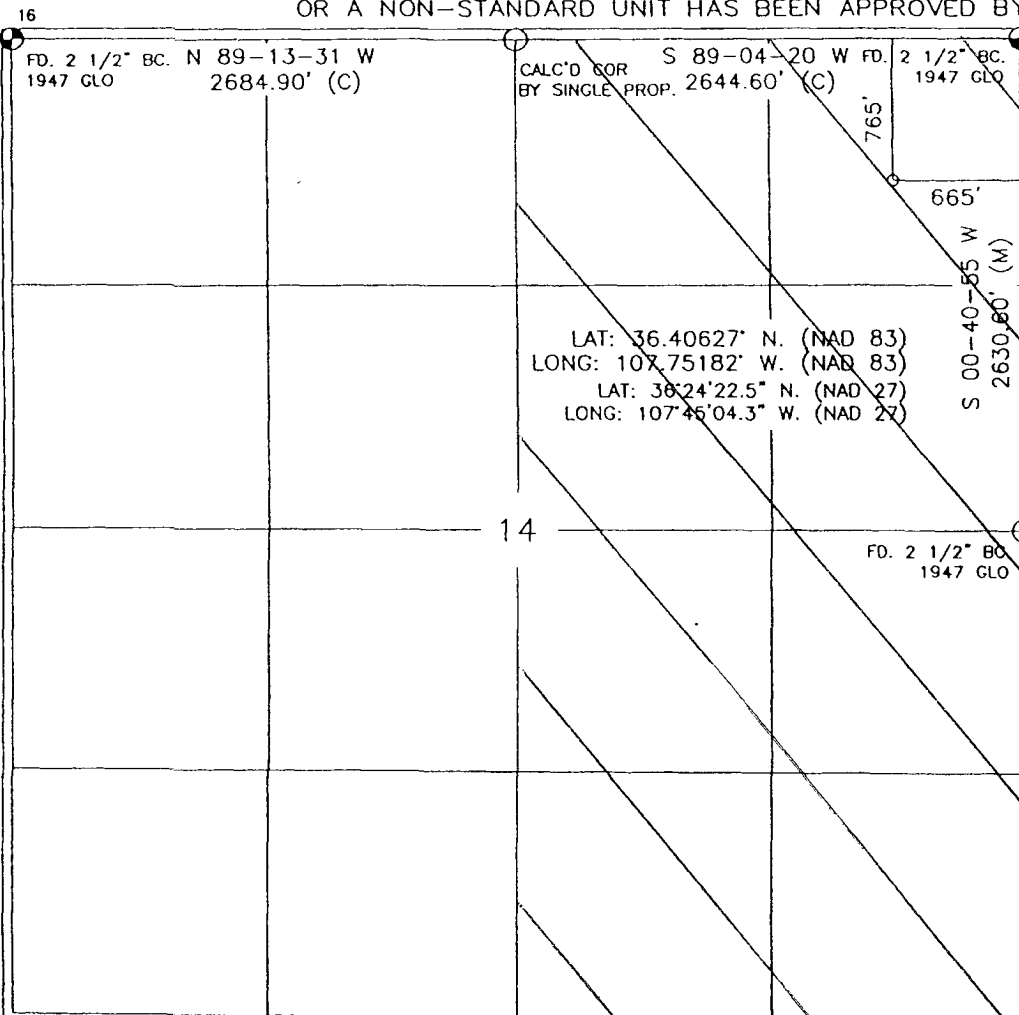
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	14	25-N	9-W		765	NORTH	665	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 9/2 320			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



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and 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: Spil Date: 10/16/07
Printed Name: Johnson

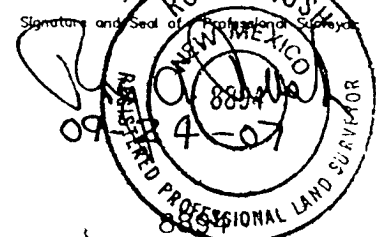
18 SURVEYOR CERTIFICATION

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.

JULY 31, 2007

Date of Survey

Signature and Seal of Professional Surveyor



Certificate Number

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

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Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

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⁴ Property Code 36992	⁵ Property Name HUERFANO Unit	⁶ Well Number 320
⁷ OGRID No 5380	⁸ Operator Name XTO ENERGY INC.	⁹ Elevation 6525'

¹⁰ Surface Location

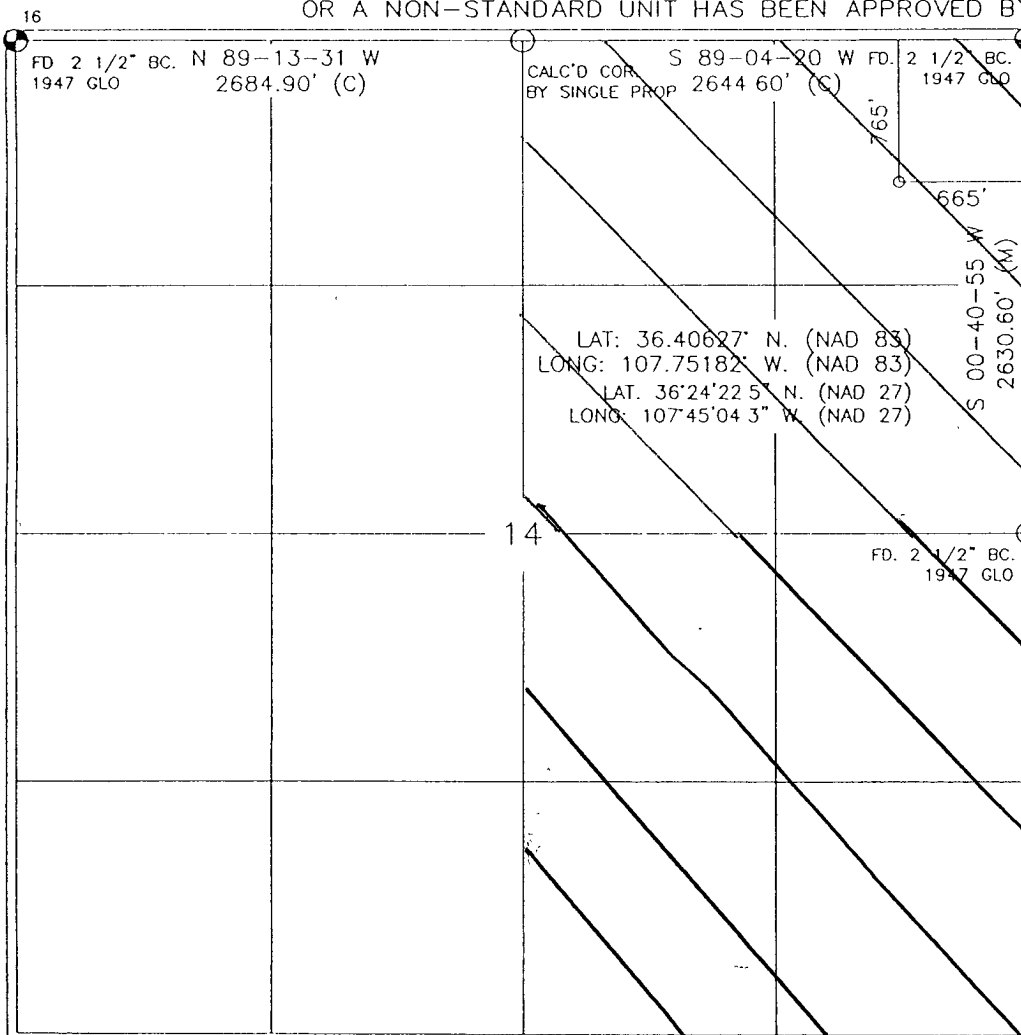
UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	14	25-N	9-W		765	NORTH	665	EAST	SAN JUAN

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 1320 E/2	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



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Signature: *Siobh* Date: 10/16/07
Printed Name: *Johnson*

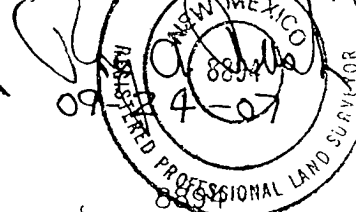
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JULY 31, 2007

Date of Survey

Signature and Seal of Professional Surveyor



Certificate Number

Unit
XTO ENERGY INC.

Huerfano #320

APD Data

January 11, 2008

Location: 765' FNL x 665' FEL Sec 14, T25N, R9W

County: San Juan

State: New Mexico

GREATEST PROJECTED TD: 6800'

OBJECTIVE: Basin Dakota / Basin Mancos

APPROX GR ELEV: 6525'

Est KB ELEV: 6537' (12' AGL)

1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 2500'	2500' to 6800'
HOLE SIZE	12.25"	7.875"	7.875"
MUD TYPE	FW/Spud Mud	FW/Polymer	LSND / Gel Chemical
WEIGHT	8.6-9.0	8.4-8.8	8.6- 9.20
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: 8.625" casing to be set at $\pm 360'$ in a 12.25" 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'-360'	360'	24.0#	J-55	ST&C	1370	2950	244	8.097	7.972	7.950	17.13	28.24

Production Casing: 5.5" casing to be set at TD ($\pm 6800'$) in 7.875" 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'-6800	6800'	15.5#	J-55	ST&C	4040	4810	202	4.950	4.825	1.24	1.48	1.92

3. WELLHEAD:

- A. 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.
- B. 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 $\pm 360'$ in 12-1/4" hole.

214 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: 5.5", 15.5#, J-55 (or K-55), ST&C casing to be set at $\pm 6800'$ in 7.875" hole. DV Tool set @ $\pm 4250'$

1st Stage

LEAD:

± 193 sx of Premium Lite HS (Type III/Poz/Gel) or equivalent, with dispersant, fluid loss, accelerator, & LCM mixed at 12.5 ppg, 2.01 ft³/sk, 10.55 gal wtr/sx.

TAIL:

150 sx Type III or equivalent cement with bonding additive, LCM, dispersant, & fluid loss mixed at 14.2 ppg, 1.54 cuft/sx, 8.00 gal/sx.

2nd Stage

LEAD:

± 355 sx of Type III or equivalent cement with 8% gel & 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 1659 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: None.

B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (6800') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (6800') to 3,000'.

EXHIBIT F

DRILLING CONDITIONS OF APPROVAL

Operator: XTO Energy Inc.
Lease No.: NMNM-03016 *unit*
Well Name: Huerfano#320
Well Location: Sec.14, T25N, R09W; 765' FNL & 665' FEL

- 1) Centralizers must be run on the bottom (3) three joints on the surface casing according to Onshore Order No. 2 *Casing and Cementing Requirements* and NTL – FRA 90-1 *Requirements to Operate on Federal and Indian Leases: Casing and Cementing Requirements*.
- 2) Centralizers to impart a swirling action around the casing (such as turbolators) are required just below and into the base of the lowest usable water zone.

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

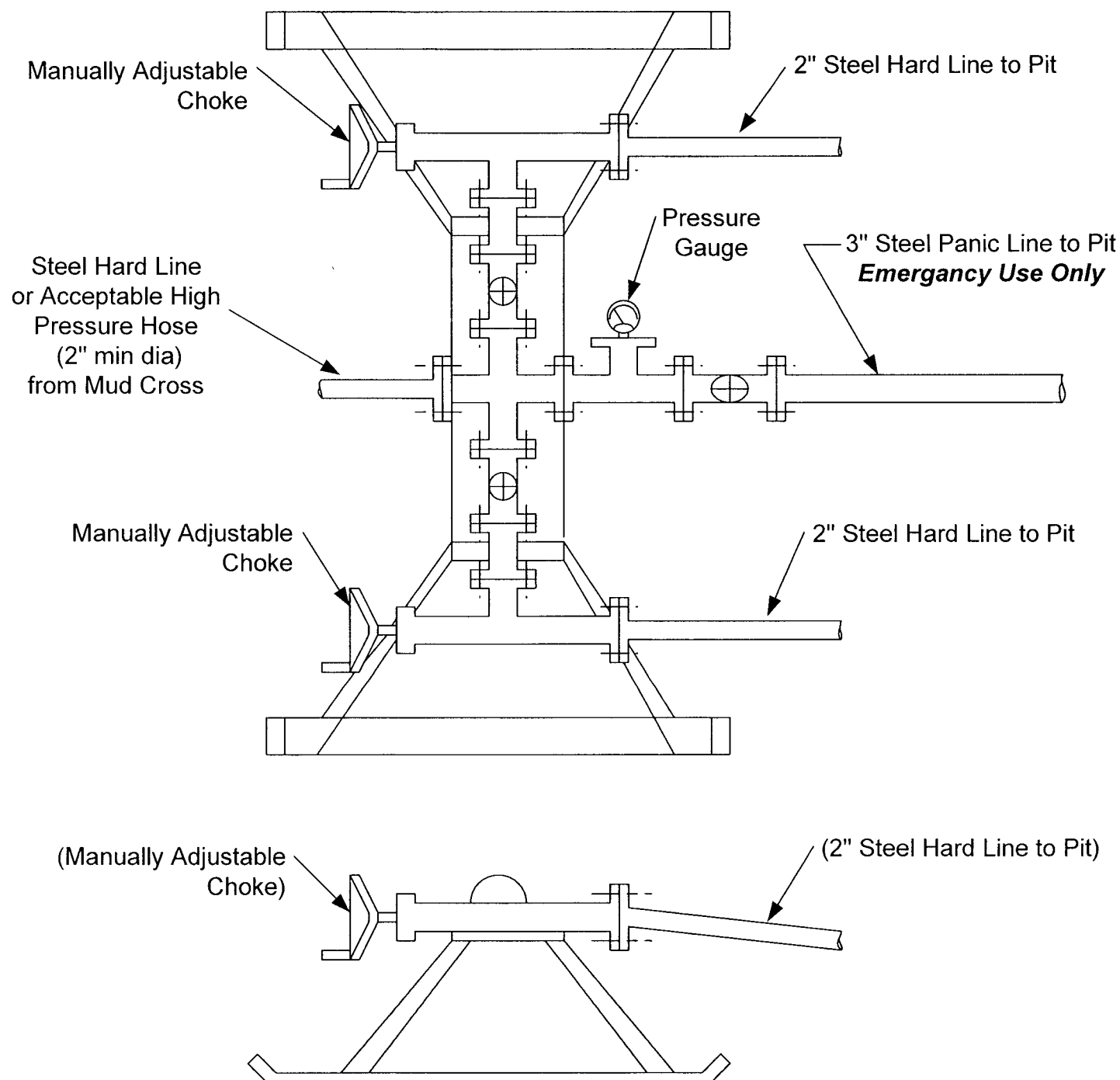


EXHIBIT F

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.

