

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

11/15/00 80113

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>NMNM-080133</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. If Unit or CA Agreement, Name and No. <b>N/A</b>
3a. Address <b>2700 Farmington Ave., Bldg K-1 Farmington, NM 87401</b>	3b. Phone No. (include area code) <b>(505) 324-1090</b>	8. Lease Name and Well No. <b>Hartman 3</b>
4. Location of Well (Report location clearly and in accordance with any State requirements) At surface <b>790' FNL &amp; 890' FEL</b> At proposed prod. zone <b>Same</b>		9. API Well No. <b>30-045- 32504</b>
14. Distance in miles and direction from nearest town or post office* <b>3 air miles SE of Aztec</b>		10. Field and Pool, or Exploratory <b>Basin Dakota</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>430**</b>		11. Sec., T., R., M., or Blk. and Survey or Area <b>A 26-30n-11w NMPM</b>
16. No. of Acres in lease <b>315.77</b>		12. County or Parish <b>San Juan</b> <input checked="" type="checkbox"/> 13. State <b>NM</b>
17. Spacing Unit dedicated to this well <b>=N2 (319.53 acres)</b>		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>360**</b>		20. BLM/BIA Bond No. on file <b>BLM nation wide: 57 91 73</b>
19. Proposed Depth <b>7,100'</b>		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>6,019' ungraded</b>	22. Approximate date work will start* <b>Upon Approval</b>	23. Estimated duration <b>6 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. |

Comments

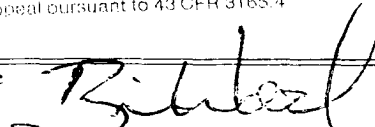
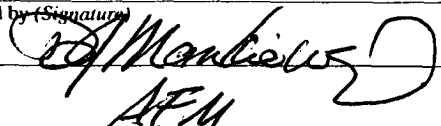
\*430' to closest lease line & 790' to closest communitization boundary  
\*\*to XTO's Hartman 2, a Pictured Cliffs gas well

APD/ROW (GulfTerra)

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

cc: BLM (& OCD), Patton

25. Signature 	Name (Printed/Typed) <b>Brian Wood</b>	Date <b>8-2-04</b>
Title <b>Consultant</b>	Phone: <b>505 466-8120</b>	FAX: <b>505 466-9682</b>
Approved by (Signature) 	Name (Printed/Typed) <b>AFM</b>	Date <b>9-22-04</b>
Title <b>AFM</b>	Office <b>FEO</b>	

Application approval does not warrant or certify the 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.

NMOCD

DISTRICT I  
1825 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

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

<sup>1</sup> API Number 30-045-32504		<sup>2</sup> Pool Code 71599	<sup>3</sup> Pool Name BASIN DAKOTA
<sup>4</sup> Property Code 28116	<sup>5</sup> Property Name HARTMAN		<sup>6</sup> Well Number 3
<sup>7</sup> OCRD No. 167067	<sup>8</sup> Operator Name XTO ENERGY INC.		<sup>9</sup> Elevation 6019


<sup>10</sup> 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	26	30-N	11-W	.	790	. NQRTH	890	. EAST	. SAN JUAN

<sup>11</sup> 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
<sup>12</sup> Dedicated Acres 319.53					<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code C		<sup>15</sup> Order No.

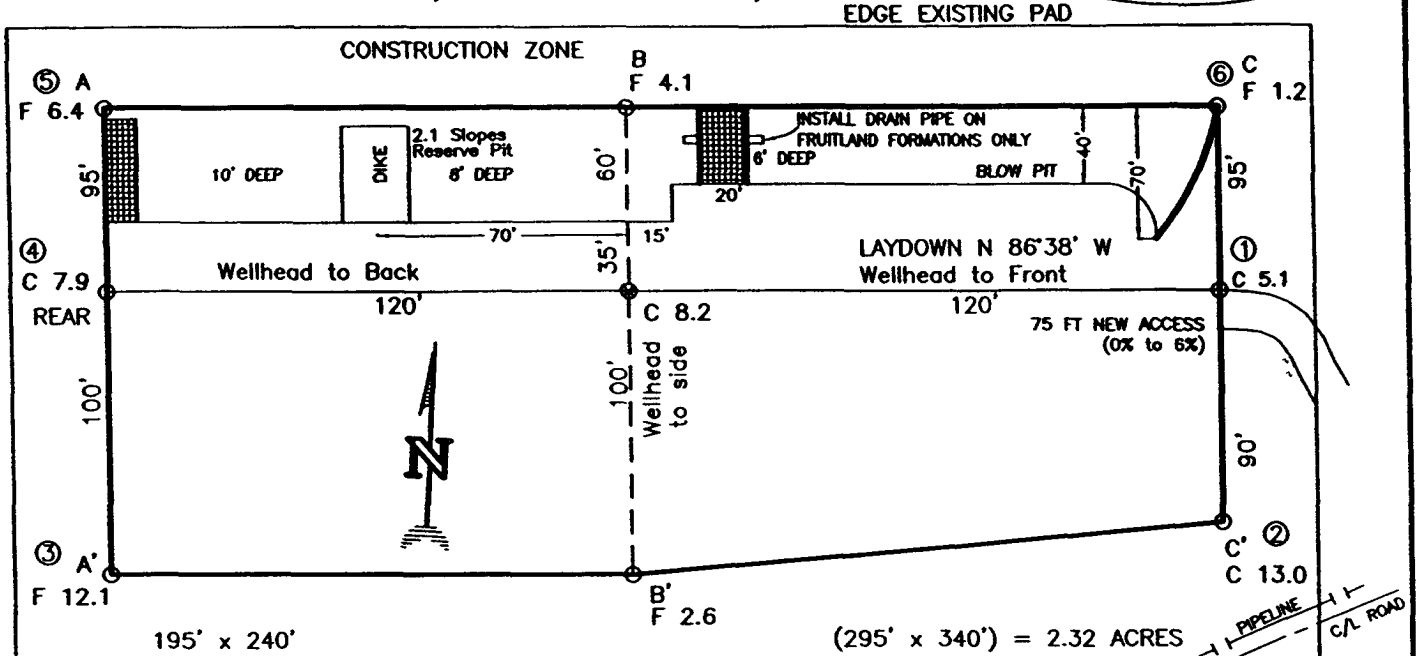
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<sup>16</sup> QTR. CORNER FD 3 1/4" BC BLM 1969		N 89-28-14 W 2626.2' (M)		SEC. CORNER FD 3 1/4" BC BLM 1969		<sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief   Signature BRIAN WOOD Printed Name CONSULTANT Title AUGUST 2, 2004 Date
LOT 1		LOT 2		N 00-04-24 W 2631.3' (M)		
LOT 3		LOT 4		QTR. CORNER FD 3 1/4" BC BLM 1969		
LOT 5		LOT 6		LOT 7		

<sup>18</sup> 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.  
  
  
Date of Survey  
Signature and Seal of Professional Surveyor  
Certificate Number

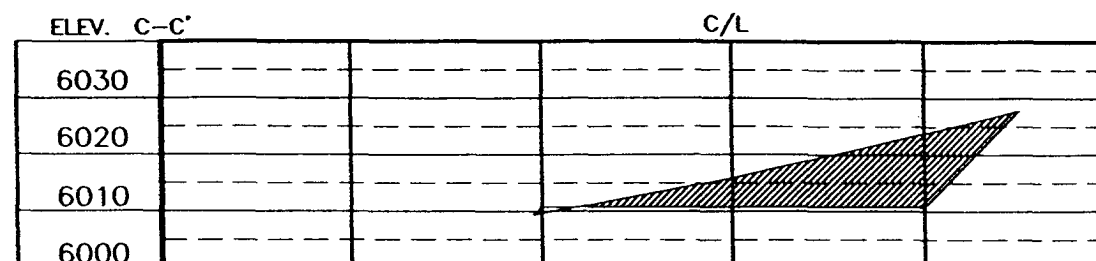
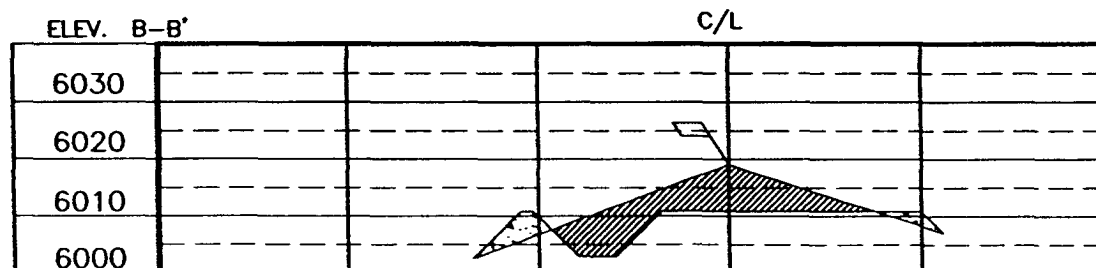
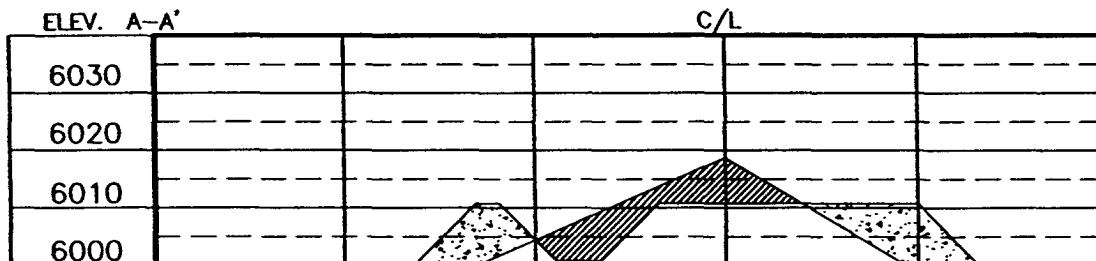
XTO ENERGY INC.  
HARTMAN No. 3, 790' FNL 890' FEL  
SECTION 26, T30N, R11W, N.M.P.M., SAN JUAN COUNTY, N. M.  
GROUND ELEVATION: 6019', DATE: MARCH 17, 2004

LAT. = 36°47'17" N.  
LONG. = 107°57'14" 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	REVISION	REVISION	REVISION

Daggett Enterprises, Inc.  
Surveying and Oil Field Services  
P. O. Box 15068 • Farmington, NM 87401  
Phone (505) 328-1772 • Fax (505) 328-8019  
NEW MEXICO L.S. No. 14831  
COPING CR289CFB  
DATE: 03/22/04  
DRAWN BY: B.L.  
CHECK: CR289

XTO Energy Inc.  
Hartman 3  
790' FNL & 890' FEL  
Sec. 26, T. 30 N., R. 11 W.  
San Juan County, New Mexico

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## Drilling Program

### 1. ESTIMATED FORMATION TOPS

<u>Formation Name</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
Nacimiento Fm	000'	12'	+6,019'
Ojo Alamo Sandstone	1,069'	1,081'	+4,950'
Kirtland Shale	1,194'	1,206'	+4,825'
Fruitland Coal	2,094'	2,106'	+3,925'
Pictured Cliffs Ss	2,429'	2,441'	+3,590'
Cliff House Sandstone	3,994'	4,006'	+2,025'
Menefee Shale	4,129'	4,141'	+1,890'
Pt. Lookout Sandstone	4,739'	4,751'	+1,280'
Mancos Shale	5,119'	5,131'	+900'
Gallup Sandstone	5,959'	5,971'	+60'
Greenhorn Limestone	6,709'	6,721'	-690'
Graneros Shale	6,769'	6,781'	-750'
Dakota Sandstone	6,829'	6,841'	-810'
Morrison	7,069'	7,081'	-1,050'
Total Depth (TD)*	7,100'	7,112'	-1,081'

\* all elevations reflect the ungraded ground level of 6,019'

### 2. NOTABLE ZONES

#### Gas & Oil Zones

Fruitland  
Pictured Cliffs  
Cliff House  
Menefee  
Pt. Lookout  
Dakota

#### Water Zones

Nacimiento  
Kirtland  
Fruitland

#### Coal Zones

Fruitland  
Menefee

XTO Energy Inc.  
Hartman 3  
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San Juan County, New Mexico

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Water zones will be protected with casing, cement, and weighted mud. Fresh water found while drilling will be recorded. Oil or gas shows will be tested for commercial potential based on the geologist's recommendations.

### 3. PRESSURE CONTROL

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. (A typical 2,000 psi model is on PAGE 3.) An 8-5/8" x 11" 2,000 pound double ram BOP system with a choke manifold and mud cross will be tested to 200 psi and then to 2000 psi. Upper and lower Kelly cocks with valve handle and subs to fit all drill string connections which are in use will be available on the rig floor.

Tests will be run when:

- 1) installed
- 2) anytime a pressure seal is broken (test only affected equipment)
- 3) at least every 30 days
- 4) blind & pipe rams will be activated each trip, but no more than daily

BOP systems will be consistent with API RP 53. Blowout preventers will be installed and tested before drilling surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated daily to ensure good mechanical working order and this inspection recorded on the daily drilling report. Preventers and casing will be pressure tested before drilling casing cement plugs. Maximum expected bottom hole pressure is  $\approx$ 2,800 psi. BOP and mud system will control pressure.

### 4. CASING & CEMENT

<u>Hole Size</u>	<u>O. D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>Connections</u>	<u>GL Setting Depth</u>
12-1/4"	8-5/8"	24	J-55	New	8rd, S T & C	325'
7-7/8"	4-1/2"	11.6	K-55	New	8rd, L T & C	7,100'

XTO Energy Inc.  
Hartman 3  
790' FNL & 890' FEL  
Sec. 26, T. 30 N., R. 11 W.  
San Juan County, New Mexico

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Surface casing will be cemented to surface with  $\approx 270$  cubic feet ( $\approx 230$  sacks) Class B Neat + 1/4 pound per sack cello-flake + 2%  $\text{CaCl}_2$ . Yield = 1.27 cubic feet per sack. Weight = 15.2 pounds per gallon.

Conventional centralizers will be set on the bottom two joints and every fourth joint to surface.

Production casing hole will be cemented to surface as follows. DV @  $\approx 4,000'$ .

First stage Lead will be cemented to  $\approx 4,000'$  with  $\approx 903$  cubic feet ( $\approx 655$  sacks) 50:50 Poz + 5 pounds per sack gilsonite + 2% gel + 1/4 pounds per sack cello-flake, dispersant, and FLA. Yield = 1.38 cubic feet per sack. Weight = 13.5 pounds per gallon. Excess = 25%.

Second stage Lead will be cemented to surface with  $\approx 1,440$  cubic feet ( $\approx 500$  sacks) Class B or H + 10 pounds per sack gilsonite + 4% gel + 1/2 pounds per sack cello-flake + 3% Econolite. Yield = 2.88 cubic feet per sack. Weight = 11.4 pounds per gallon. Excess = 50%

Second stage Tail will be cemented to  $\approx 3,600'$  with  $\approx 126$  cubic feet ( $\approx 100$  sacks) Class B or H Neat + 1/4 pounds per sack cello-flake + 2%  $\text{CaCl}_2$ . Yield = 1.26 cubic feet per sack. Weight = 15.2 pounds per gallon. Excess = 10%.

Conventional centralizers will be set on the bottom two joints, every second joint to  $\approx 6,000'$  and every fourth joint from  $\approx 2,000'$  to surface.

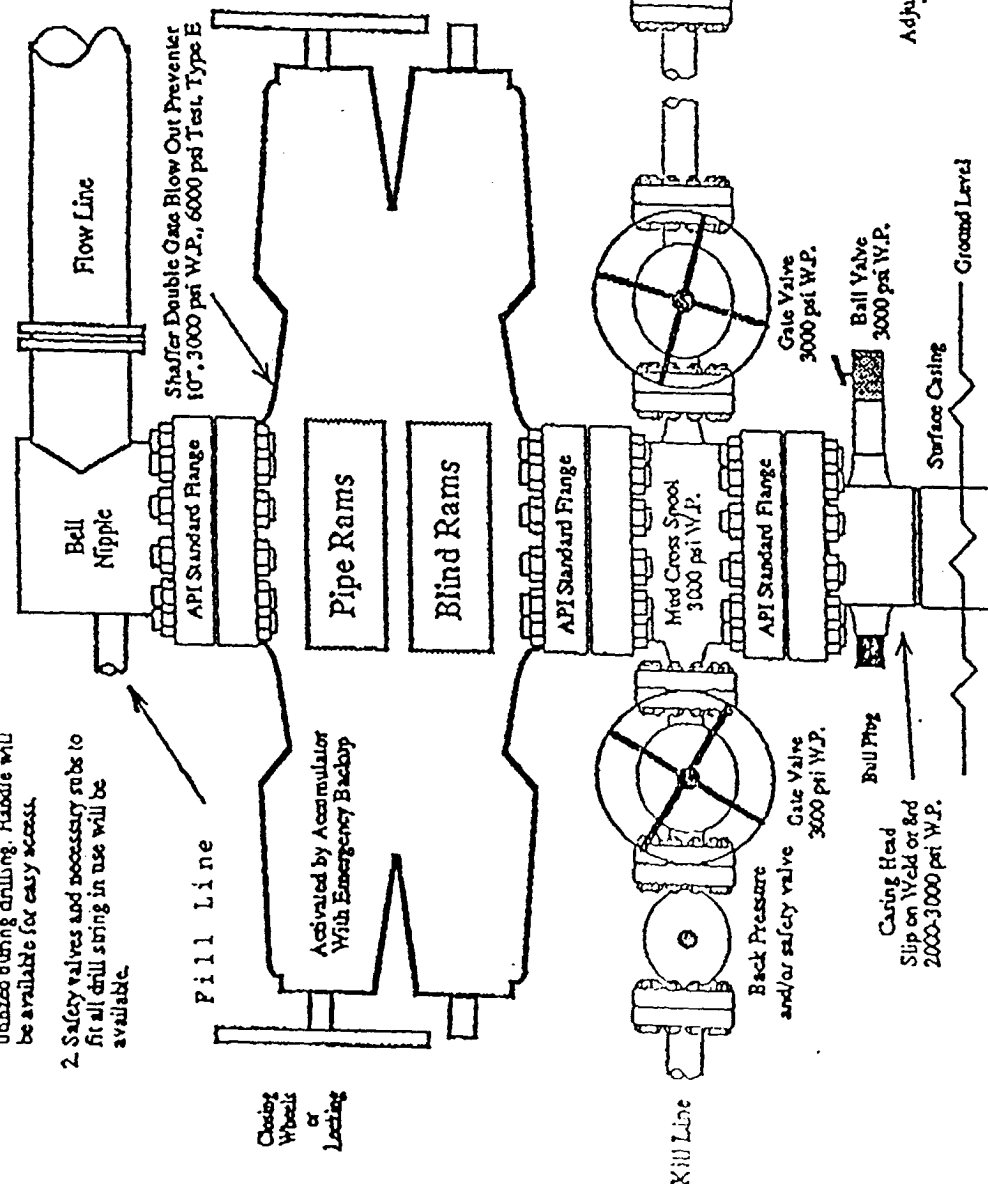
## 5. MUD PROGRAM

<u>RANGE</u>	<u>MUD TYPE</u>	<u>WEIGHT</u>	<u>VISCOSITY</u>	<u>WATER LOSS</u>	<u>ADDITIVES</u>
0' - 350'	Fresh-Spud	8.5-8.8	30	NC	Gel, lime
350' - 4,000'	Fresh Water	8.5-8.8	28	NC	Gel, lime sweeps
4,000' - TD	Fresh Water	8.5-8.8	35	10 cc	Gel, soda ash, LCM

## Pressure Control Equipment

Note: 1. An upper Kelly cock valve will be utilized during drilling. Handle will be available for easy access.

2. Safety valves and necessary sub's to fit all drill string in use will be available.



Note: This equipment is designed to meet requirements for a 2-M rating standard per 43 CFR part 3160 (amended). Proper operation and testing of equipment will be carried out per standard. 2,000 psi equipment can be substituted in the drawing to meet minimum requirements per standard.

Minimum 2" Choke Line.  
Minimum 2" Kill Line.  
At Least One 2" Minimum Kill Line Valve.

