

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. <b>SF-077382</b>
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 <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>		3b. Phone No. (include area code) <b>505-324-1090</b>	8. Lease Name and Well No. <b>Federal F #1F</b>
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface <b>680' ENL x 1690' EEL</b> At proposed prod. zone <b>SAME</b>			9. API Well No. <b>30-045-33365</b>
14. Distance in miles and direction from nearest town or post office* <b>Approx 7.5 miles Southeast of Bloomfield, NM Post Office</b>			10. Field and Pool, or Exploratory <b>Basin Dakota/Basin Mancos</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) <b>680'</b>			11. Sec., T., R., M., or Blk. and Survey or Area <b>(B) Sec 16, T27N, R10W</b>
16. No. of Acres in lease <b>2523.52</b>			12. County or Parish <b>San Juan</b>
17. Spacing Unit dedicated to this well <b>DK-E/2 320 MC-NE/4 160</b>			13. State <b>NM</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>265'</b>			20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>6090' 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 <i>Kyla Vaughan</i>	Name (Printed/Typed) <b>Kyla Vaughan</b>	Date <b>09/22/05</b>
Title <b>Regulatory Compliance Tech</b>		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) <b>[Name]</b>	Date <b>10/26/05</b>
Title <b>AFM</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.

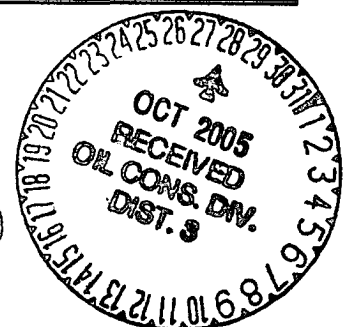
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

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".

NMOCD



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

Form C-102  
Revised June 10, 2003  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies  
RECEIVED  
070 FARMINGTON NM  
☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

*API Number <b>30-045-33365</b>		*Pool Code <b>71599</b>	*Pool Name <b>Basin Dakota</b>
*Property Code <b>22701</b>	*Property Name <b>FEDERAL F</b>		*Well Number <b>1F</b>
*OGED No. <b>167067</b>	*Operator Name <b>XTO ENERGY INC.</b>		*Elevation <b>6090'</b>


**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>B</b>	<b>16</b>	<b>27-N</b>	<b>10-W</b>		<b>680</b>	<b>NORTH</b>	<b>1690</b>	<b>EAST</b>	<b>SAN JUAN</b>

**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
*Dedicated Acres <b>E12 320</b>			*Joint or Infill		*Consolidation Code		*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

<b>15</b>	FD. 2 1/2" B.C. 1913 U.S.G.L.O.	N 89-49-55 W 2643.7' (M)	<b>16</b>	FD. 2 1/2" B.C. 1913 U.S.G.L.O.	<b>17 OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature: <u>Kerry L Small</u> Printed Name: <u>Kerry L Small</u> Title: <u>Drilling Assistant</u> Date: <u>5/18/05</u>
	LAT. 36°34'50.2"N (NAD 27) LONG. 107°53'49.4" W (NAD 27)			FD. 2 1/2" B.C. 1913 U.S.G.L.O.	<b>18 SURVEYOR CERTIFICATION</b> 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: <u>May 3, 2005</u> Signature: <u>[Signature]</u> Title: <u>Surveyor</u>   Certificate Number: <u>14520</u>

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., Artesia, 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  
070 FARMINGTON  
☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

*API Number <b>30-045-33365</b>		*Pool Code <b>97232</b>	*Pool Name <b>WC Basin Mancos</b>
*Property Code	*Property Name <b>FEDERAL F</b>		*Well Number <b>1F</b>
*OGRD No. <b>167067</b>	*Operator Name <b>XTO ENERGY INC.</b>		*Elevation <b>6090'</b>


**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>B</b>	<b>16</b>	<b>27-N</b>	<b>10-W</b>		<b>680</b>	<b>NORTH</b>	<b>1690</b>	<b>EAST</b>	<b>SAN JUAN</b>

**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
*Dedicated Acres <b>NE 1/4 160</b>			*Joint or Infill		*Consolidation Code		*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

16	FD. 2 1/2" B.C. 1913 U.S.G.L.O.	N 89° 48' 33" W 2643.7' (N)	17	<b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  <i>Kelly K. Small</i> Kelly K. Small Drilling Assistant Date: <b>5/18/05</b>
	LAT. 36° 34' 50.2" N (NAD 27) LONG. 107° 53' 49.4" W (NAD 27)	FD. 2 1/2" B.C. 1913 U.S.G.L.O. 1690'		
16			18	<b>SURVEYOR CERTIFICATION</b> 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.   Certificate Number: _____

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

Form C-103  
May 27, 2004

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

WELL API NO <b>30-045-33365</b>
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. <b>SF-077382</b>
7. Lease Name or Unit Agreement Name: <b>Federal F</b>
8. Well Number <b>#1F</b>
9. OGRID Number <b>167067</b>
10. Pool name or Wildcat <b>Basin Dakota/Basin Mancos</b>

**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 <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other
2. Name of Operator <b>XTO Energy Inc.</b>
3. Address of Operator <b>2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401</b>
4. Well Location Unit Letter <b>B</b> : <b>680</b> feet from the <b>NORTH</b> line and <b>1690</b> feet from the <b>EAST</b> line Section <b>16</b> Township <b>27N</b> Range <b>10W</b> NMPM <b>NMEM</b> County <b>SAN JUAN</b>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) <b>6090'</b>
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure <input type="checkbox"/>
Pit type <b>DRILL</b> Depth to Groundwater <b>&gt;100</b> Distance from nearest fresh water well <b>&gt;1000</b> Distance from nearest surface water <b>&gt;1000</b>
Pit Liner Thickness: <b>12</b> 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:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPLETION <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: <b>PIT</b> <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

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.

**XTO Energy proposed to install a pit on location for drilling. The pit will be closed in accordance with NMOCD guidelines when work is completed.**

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 **09/23/05**  
E-mail address: **kyla\_vanahan@xtoenergy.com**  
Type or print name **Kyla Vaughan** Telephone No. **505-564-6726**

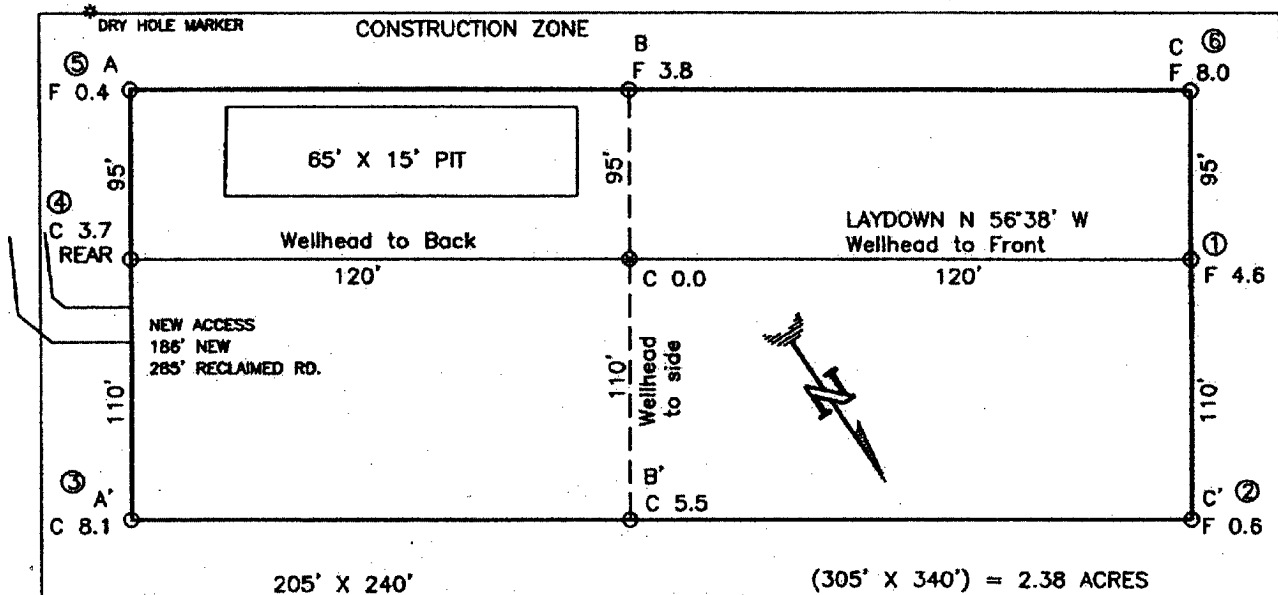
For State Use Only

APPROVED BY **[Signature]** DEPUTY OIL & GAS INSPECTOR, DIST. IV DATE **OCT 28 2005**  
Conditions of Approval, if any: \_\_\_\_\_

EXHIBIT D

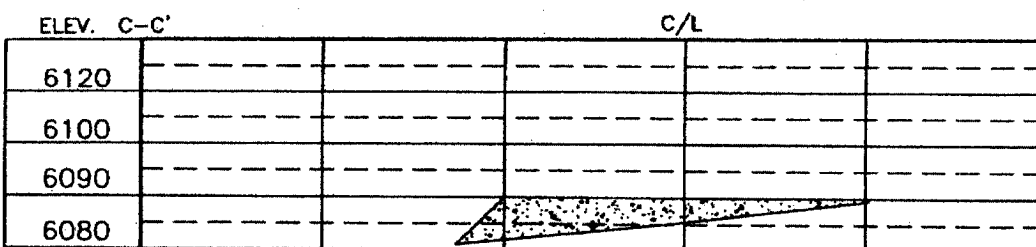
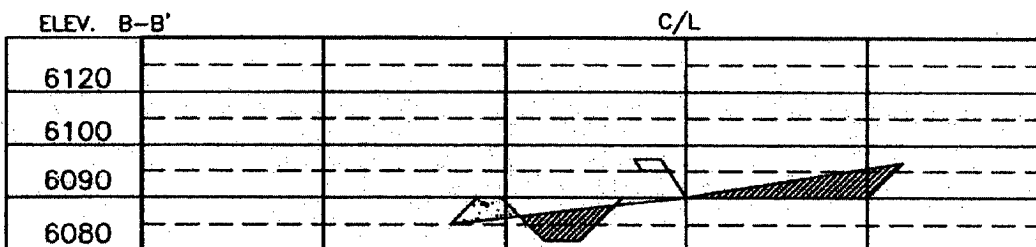
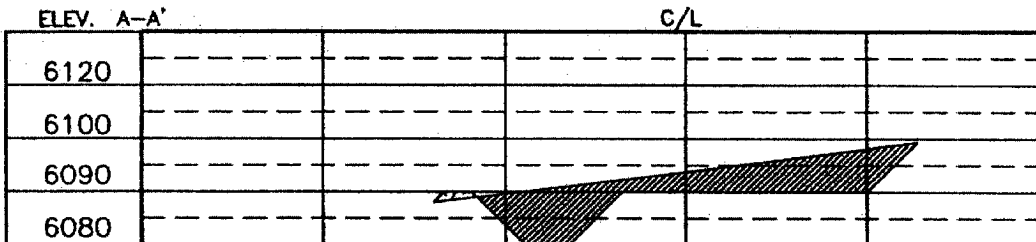
XTO ENERGY INC.  
 FEDERAL F No.1F, 680 FNL 1690 FEL  
 SECTION 16, T27N, R10W, N.M.P.M., SAN JUAN COUNTY, N. M.  
 GROUND ELEVATION: 6090', DATE: FEBRUARY 3, 2005

LAT. = 36°34'50.2" N.  
 LONG. = 107°53'49.4" 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	<p>Daggett Enterprises, Inc.          Surveying and Oil Field Services          P. O. Box 15088 • Farmington, NM 87401          Phone (505) 326-1772 • Fax (505) 326-6010          NEW MEXICO L.S. No. 14831</p>
DATE	REVISION	
DATE	REVISION	
DATE	REVISION	

Drawn by: B.L.  
 Check by: CR419

EXHIBIT E

# XTO ENERGY INC.

Federal F #1F

APD Data

September 16, 2005

Location: 680' FNL x 1690' FEL Sec 16, T27N, R10W County: San Juan State: New Mexico

GREATEST PROJECTED TD: 6710'  
APPROX GR ELEV: 6090'

OBJECTIVE: Basin Dakota / WC Basin Mancos  
Est KB ELEV: 6102' (12' AGL)

## 1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 2800'	2800' to 6710
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 12-1/4" 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 ( $\pm 6710'$ ) in 7-7/8" 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'-6710	6710'	15.5#	K-55	ST&C	4040	4810	222	4.950	4.825	1.26	1.50	2.13

## 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 (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 ft<sup>3</sup>/sk, & 6.70 gal wtr/sk.

*Total slurry volume is 297 ft<sup>3</sup>, 100% excess of calculated annular volume to 360'.*

B. Production: 5.5", 15.5#, K-55 (or K-55), ST&C casing to be set at  $\pm 6710'$  in 7.875" hole.

LEAD:

$\pm 695$  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 ft<sup>3</sup>/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.

*Total estimated slurry volume for the 5-1/2" production casing is 1628 ft<sup>3</sup>.*

*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 2,900' 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/GR/SP fr/TD (6710') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (6710') to 3,000'.

6. **FORMATION TOPS:**

Est. KB Elevation: 6102'

FORMATION	Sub-Sea Elev.	WELL DEPTH	FORMATION	Sub-Sea Elev.	WELL DEPTH
Ojo Alamo SS	5206	896	Gallup Ss	665	5,437
Kirtland Shale	5046	1,056	Greenhorn Ls	-138	6,240
Farmington SS			Graneros Sh	-188	6,290
Fruitland Formation	4660	1,442	1 <sup>ST</sup> Dakota Ss*	-227	6,329
Lower Fruitland Coal			2 <sup>ND</sup> Dakota Ss*	-248	6,350
Pictured Cliffs SS	4182	1,920	3 <sup>RD</sup> Dakota Ss*	-316	6,418
Lewis Shale	4102	2,000	4 <sup>TH</sup> Dakota Ss*	-366	6,468
Chacra SS	3282	2,820	5 <sup>TH</sup> Dakota Ss*	-377	6,479
Cliffhouse SS	2652	3,450	6 <sup>TH</sup> Dakota Ss*	-425	6,527
Menefee	2562	3,540	Burro Canyon Ss*	-495	6,597
Point Lookout SS	1829	4,273	Morrison Fm	-500	6,602
Mancos Shale	1519	4,583	<b>Total Depth</b>	-608	<b>6,710</b>

\* Primary Objective

\*\* Secondary Objective

\*\*\*\* Maximum anticipated BHP should be <2,000 psig ( <0.30 psi/ft) \*\*\*\*

7. **COMPANY PERSONNEL:**

Name	Title	Office Phone	Home Phone
Jeff Patton	Drilling Engineer	505-324-1090	505-632-7882
John Egelston	Drilling Engineer	505-564-6734	505-330-6902
Dennis Elrod	Drilling foreman	505-486-6460	505-326-2024
Red Meek	Project Geologist	817-885-2800	817-427-2475
Barry Voigt	Reservoir Engineer	817-885-2462	817-540-2092

JWP  
9/16/05

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 ~~5~~<sup>10</sup> min.

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

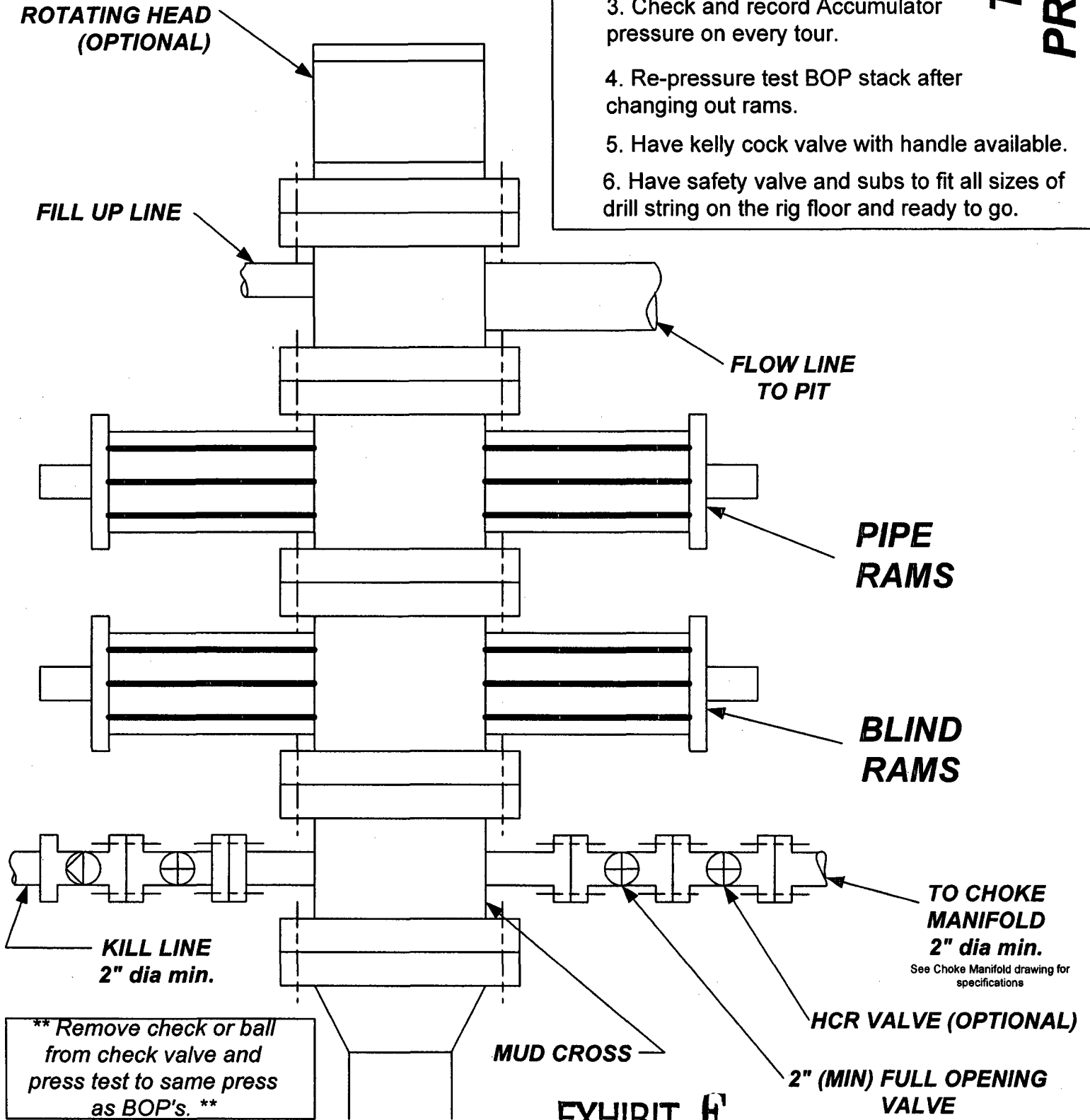
### 2. Test operation of (both) rams on every trip.

### 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.



# **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**

