

District I
1625 N French Dr., Hobbs, NM 88240
Phone (505) 393-6161 Fax: (505) 393-0720
District II
811 S First St., Artesia, NM 88210
Phone (505) 748-1283 Fax: (505) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fax (505) 334-6170
District IV
1220 S St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised December 16, 2011

Permit

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address XTO Energy, Inc 382 CR 3100, Aztec NM, 87410 505/333-3100		² OGRID Number 5380
		³ API Number 30-045- 35372
⁴ Property Code 22835	⁵ Property Name SULLIVAN A	⁶ Well No 1F

⁷ Surface Location

UL - Lot L	Section 25	Township 29N	Range 11W	Lot Idn	Feet from 1703	N/S Line S	Feet From 889	E/W Line W	County SAN JUAN
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⁸ Pool Information

BASIN DAKOTA (PRORATED GAS)	71599
OTERO CHACRA (PRORATED GAS)	82329
ARMENTA GALLUP (OIL)	2290

Additional Well Information

⁹ Work Type New Well	¹⁰ Well Type GAS	¹¹ Cable/Rotary	¹² Lease Type Fee	¹³ Ground Level Elevation 5595.5
¹⁴ Multiple Y	¹⁵ Proposed Depth 6450	¹⁶ Formation Dakota	¹⁷ Contractor	¹⁸ Spud Date 5/21/2012
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

¹⁹ Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	12.25	8.625	24	360	214	
Int. 1	7.875	5.5	15.5	6450	246 Lead	
Int. 1	7.875	5.5	15.5	6450	100 Tail	
Int. 2	7.875	5.5	15.5	6450	300 Lead	
Int. 2	7.875	5.5	15.5	6450	100 Tail	

Casing/Cement Program: Additional Comments

Please see attached drilling program BOP and choke manifold diagrams. NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT	RCVD MAY 9 '12 OIL CONS. DIV. DIST 3
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Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
 I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒ a general permit ☐, or an (attached) alternative OCD-approved plan ☒.
 Signature: *maia villers*
 MAY 17 2012 *ca*

OIL CONSERVATION DIVISION

Approved By: *Charles H. ...* 5-16-2012
 Exp 5-16-2014

Printed name MALIA VILLERS		Title: SUPERVISOR DISTRICT #3	
Title PERMITTING TECH.		Approved Date: MAY 16 2012	Expiration Date: MAY 16 2014
E-mail Address: malia_villers@xtocenergy.com			
Date: May 07, 2012	Phone 505/333-3698	Conditions of Approval Attached	

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1220 South St. Francis Dr.
Santa Fe, NM 87505

Revised August 1, 2011
Submit one copy to
appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35372	² Pool Code 71599	³ Pool Name Basin Dakota
⁴ Property Code 22835	⁵ Property Name SULLIVAN A	⁶ Well Number #1F
⁷ GRID No. 5380	⁸ Operator Name XTO ENERGY, INC	⁹ Elevation 5596

¹⁰ Surface Location

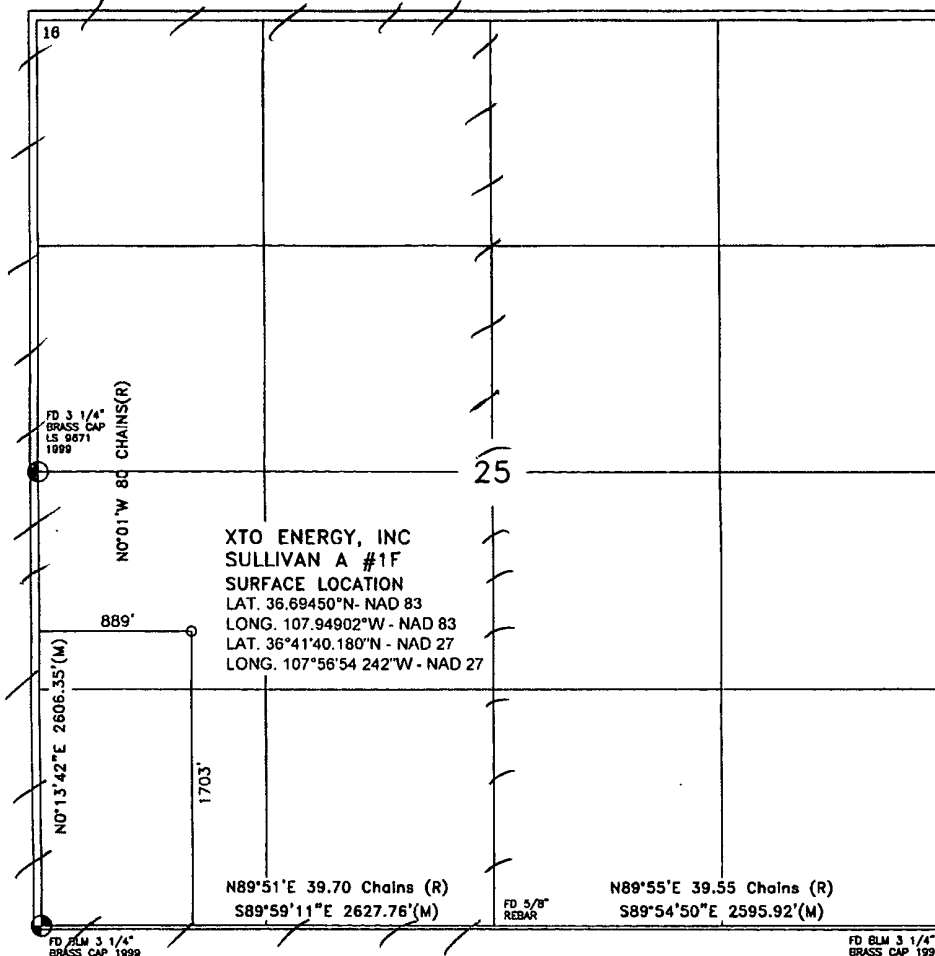
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	25	29-N	11-W		1703'	SOUTH	889'	WEST	SAN JUAN

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 of Infill	Consolidation Code	Order No.
612 320			

No allowable will be assigned to this completion until all interest 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.

Malia Villers 5-7-12
Signature Date
Malia Villers
Printed Name
malia.villers@xtoenergy.com
E-mail Address

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.

FEB 28, 2012
Date of Survey
Signature and Seal of Professional Surveyor:
#8466
WILLIAM E. MAHNKE II
Certificate Number PLS-8466

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WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-35372		*Pool Code 82329	*Pool Name Otero Chacra
*Property Code 22835	*Property Name SULLIVAN A		*Well Number #1F
*OGRID No. 5380	*Operator Name XTO ENERGY, INC		*Elevation 5595.5

10 Surface Location

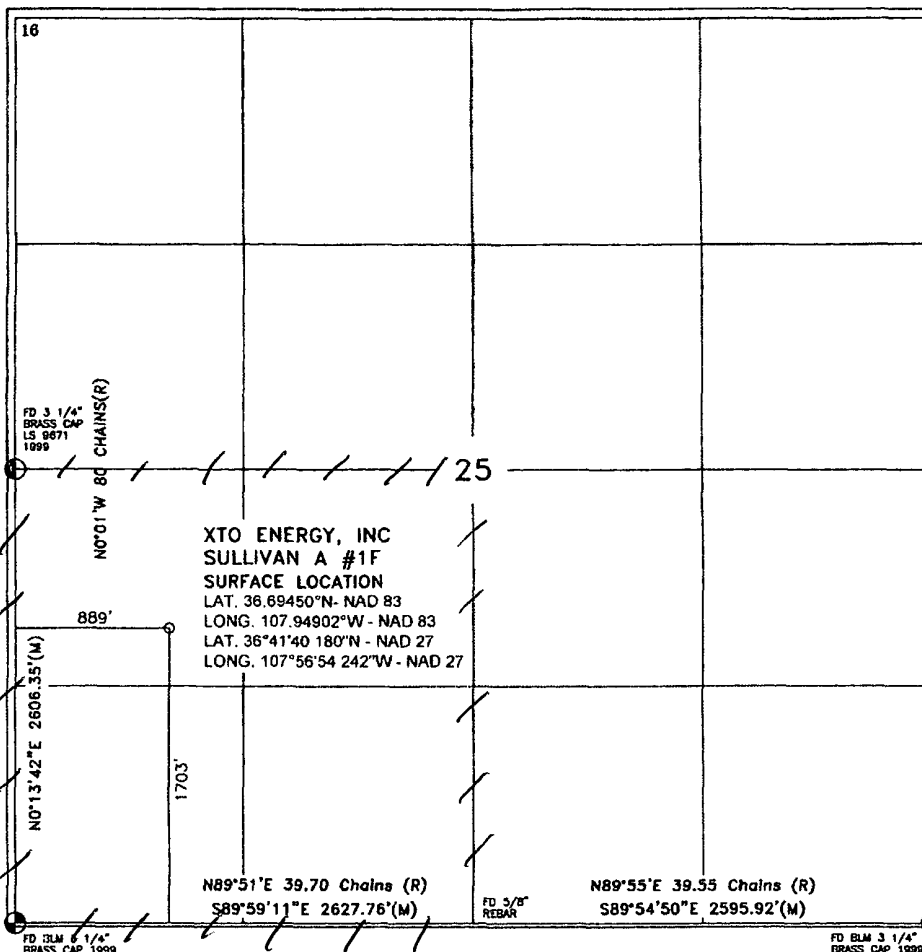
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	25	29-N	11-W		1703'	SOUTH	889'	WEST	SAN JUAN

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

*Dedicated Acres SW/4 160	*Joint of Infill	*Consolidation Code	*Order No.
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No allowable will be assigned to this completion until all interest 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.

Maria Villers 5-7-12
 Signature Date
 Maria Villers
 Printed Name
 maria-villers@xtoenergy.com
 E-mail Address

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.

FEB 28 2012
 Date of Survey
 Signature and Seal of Professional Surveyor
 WILLIAM E. MAHNKE II
 Certificate Number PLS-8466

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WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35372	² Pool Code 2290	³ Pool Name Armenta Gallup
⁴ Property Code 22835	⁵ Property Name SULLIVAN A	
⁶ OGRID No. 5380	⁷ Operator Name XTO ENERGY, INC	⁸ Well Number #1F
		⁹ Elevation 5595.5

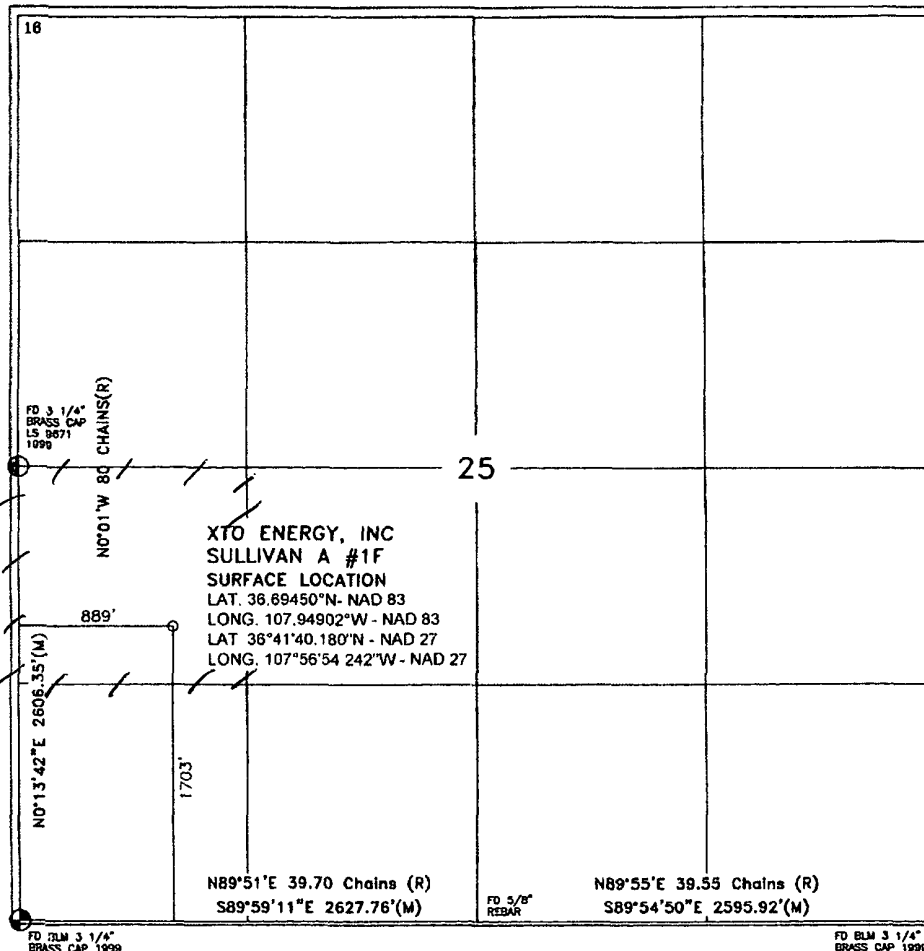
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	25	29-N	11-W		1703'	SOUTH	889'	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 NW 4 SW 4 40		Joint of Infill		Consolidation Code		Order No.			

No allowable will be assigned to this completion until all interest 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 released 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.

main villers 5-7-12
Signature Date

maria Villers
Printed Name

maria-villers@xtoenergy.com
E-mail Address

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.

FEB 28 2012
Date of Survey
Signature and Seal of Professional Surveyor.

WILLIAM E. MAHNKE II
Certificate Number PLS-8466

XTO ENERGY INC.

Sullivan A #1F

APD Data

March 29, 2012

Location: 1703' FSL x 889' FWL Sec 25, T29N, R11W County: San Juan State: New Mexico

GREATEST PROJECTED TD: 6450' OBJECTIVE: Basin Dakota, Armenta Gallup,
Chacra
APPROX GR ELEV: 5595' Est KB ELEV: 5607' (12' AGL)

1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 2500'	2500' to 6450'
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 ($\pm 6450'$) 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'-6450	6450'	15.5#	J-55	ST&C	4040	4810	202	4.950	4.825	1.31	1.56	2.02

Remarks: All Casing strings will be centralized in accordance with Onshore Order #2 and NTL FRA-90-1.

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.

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 $\pm 6450'$ in 7.875" hole. DV Tool set @ $\pm 3775'$

1st Stage

LEAD:

±246 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:

100 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:

±300 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 1550 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 (6450') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (6450') to the bottom of the surface casing.

6. **FORMATION TOPS:**

Est. KB Elevation: 5607'

FORMATION	Sub-Sea	MD	FORMATION	TV Sub-Sea	MD
Ojo Alamo SS	5023	585	Gallup	273	5335
Kirtland Shale	4895	713	Greenhorn	-493	6101
Farmington SS			Graneros	-560	6168
Fruitland Formation	4318	1290	Dakota 1*	-597	6205
Lower Fruitland Coal	3856	1752	Dakota 2*	-617	6225
Pictured Cliffs SS	3833	1775	Dakota 3*	-683	6291
Lewis Shale	3621	1987	Dakota 4*	-745	6353
Chacra SS	2843	2765	Dakota 5*	-764	6372
Cliffhouse SS*	2172	3436	Dakota 6*	-790	6398
Menefee**	2137	3471	Burro Canyon	-817	6425
Point Lookout SS*	1599	4009	Morrison*	-839	6447
Mancos Shale	1133	4475	TD	-842	6450

* Primary Objective

** Secondary Objective

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

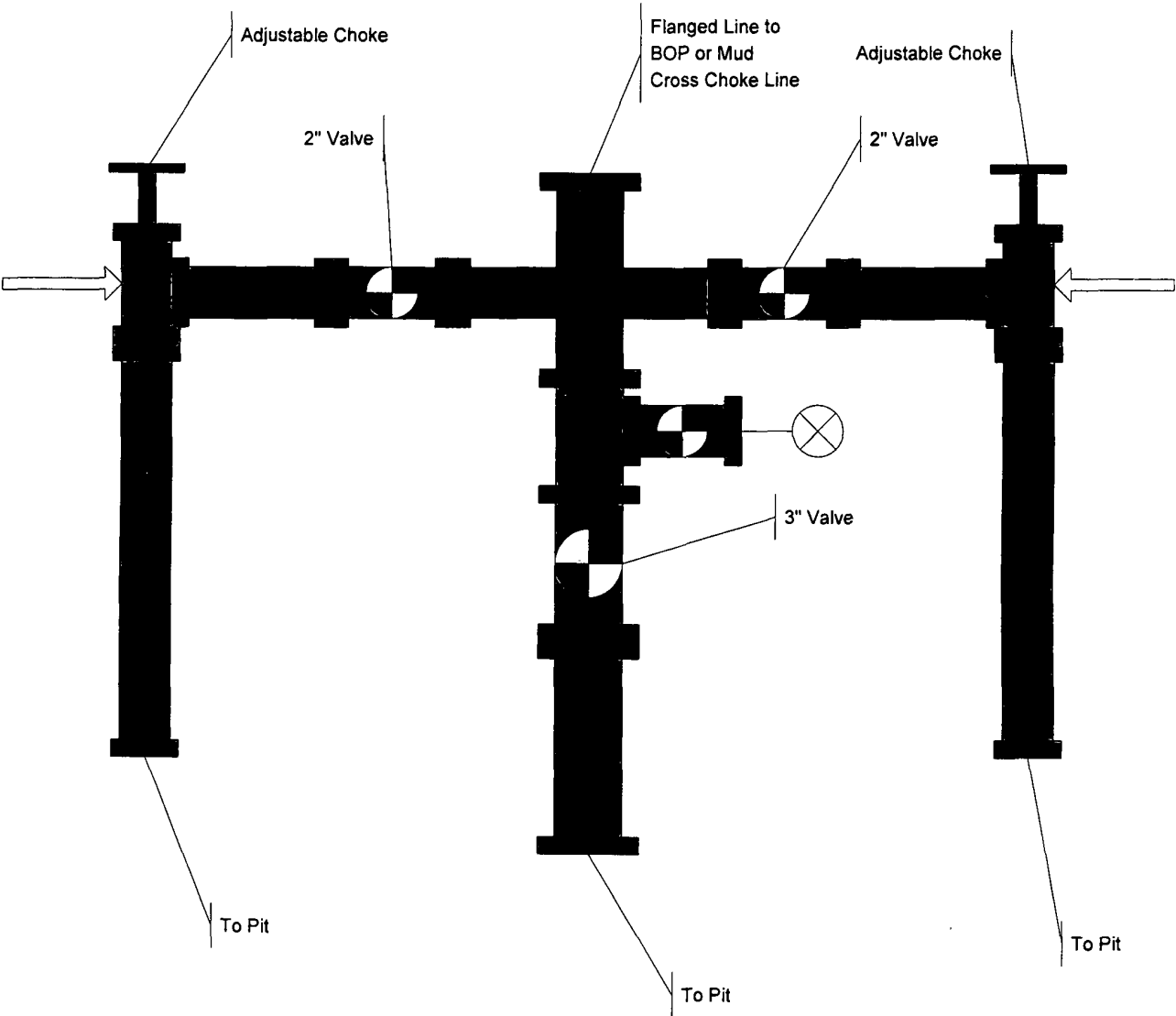
7. **COMPANY PERSONNEL:**

Name	Title	Office Phone	Home Phone
Justin Niederhofer	Drilling Engineer	303-397-3719	505-320-0158
Bobby Jackson	Drilling Superintendent	303-397-3720	505-486-4706
Reed Meek	Project Geologist	817-885-2800	--

JDN
3/29/12

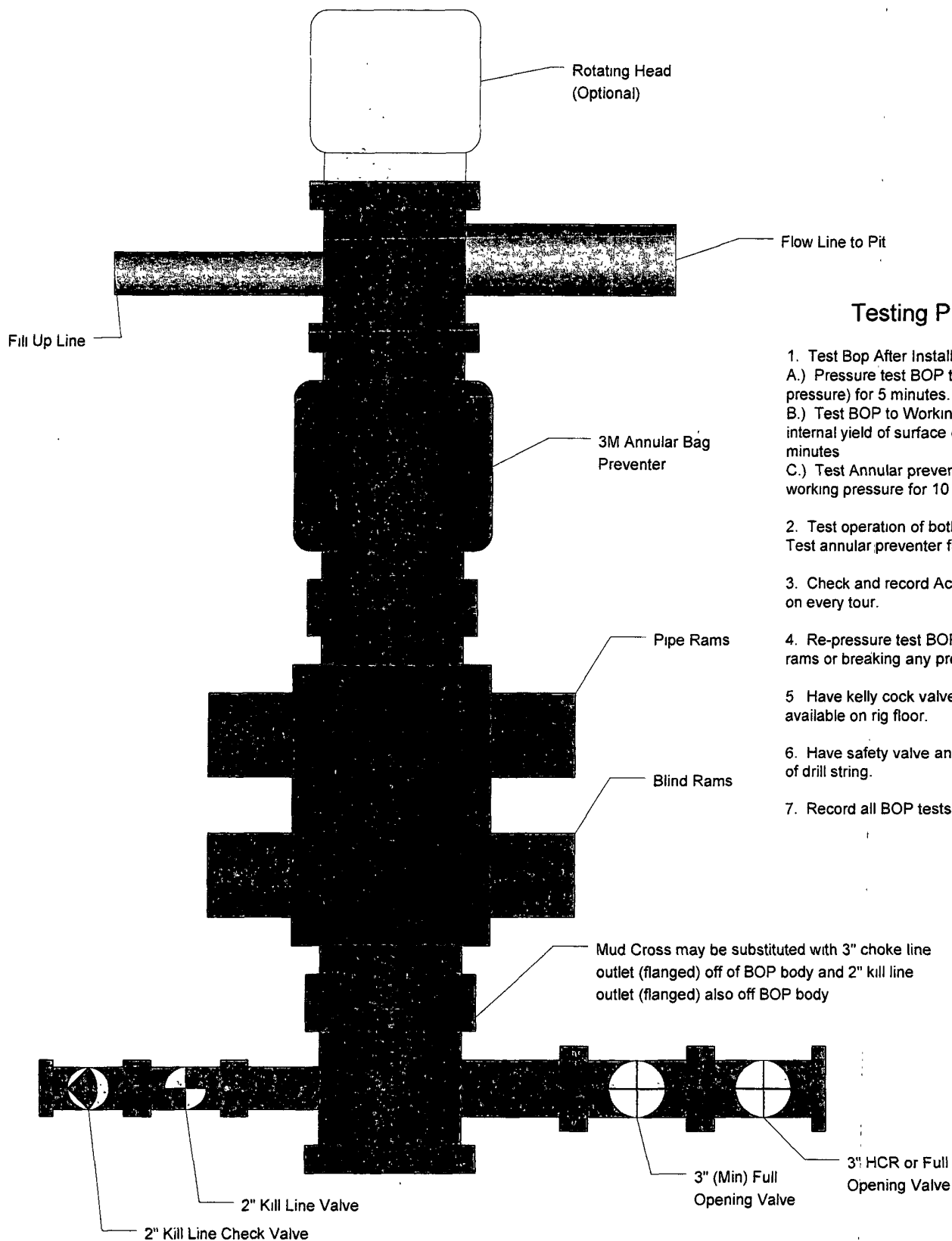
XTO Energy

**3M Choke
Manifold**



XTO Energy

3M BOP Stack



Testing Procedure

1. Test Bop After Installation.
 - A.) Pressure test BOP to 200-300 psig (low pressure) for 5 minutes.
 - B.) Test BOP to Working pressure or 70% internal yield of surface casing for 10 minutes
 - C.) Test Annular preventer to 50% of working pressure for 10 minutes.
2. Test operation of both rams on each trip
Test annular preventer function weekly
3. Check and record Accumulator pressure on every tour.
4. Re-pressure test BOP after changing rams or breaking any pressure tested seal
5. Have kelly cock valve with handle available on rig floor.
6. Have safety valve and subs to fit all sizes of drill string.
7. Record all BOP tests in IADC book.