

SEP 29 2009

RCVD FEB 24 '10  
OIL CONS. DIV.  
DIST. 3

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work. <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NOG 05031735	
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 NAVAJO ALLOTMENT	
2. Name of Operator XTO Energy Inc.		7. If Unit or CA Agreement, Name and No. NMNM-123828 PENDING NMNM-123827-DK MC	
3a. Address 382 CR 3100 Aztec, NM 87410		8. Lease Name and Well No. ARBOR #2	
3b. Phone No. (include area code) 505/ 333-3100		9. API Well No. 30-045- 35031	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 920' FSL x 908' FEL At proposed prod zone SAME		10. Field and Pool, or Exploratory BASIN DK/BASIN MC	
11. Sec., T. R. M. or Blk and Survey or Area (P) Sec 26, T25N, R10W		12. County or Parish SAN JUAN	
13. State NM		14. Distance in miles and direction from nearest town or post office* 24 miles SE of Bloomfield P.O.	
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig unit line, if any) 908'	16. No. of acres in lease 160	17. Spacing Unit dedicated to this well DK: S/2 320, MC: S/2 320	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 751'	19. Proposed Depth 6650'	20. BLM/BIA Bond No. on file BIA104312789	
21. Elevations (Show whether DF, KDB, RT, GL, etc ) 6685' Ground Elevation	22. Approximate date work will start* 01/01/2010	23. Estimated duration 2 Weeks	

The action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

24. Attachments

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

- 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 Malia Villers	Name (Printed/Typed) MALIA VILLERS	Date 09/25/2009
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Title  
PERMITTING TECH.

Approved by (Signature) AFM	Name (Printed/Typed) FRO	Date 2/23/2010
Title AFM	Office FRO	

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 USC 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

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

by NMOC

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

MAR 03 2010

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 S. St. Francis Dr., Santa Fe, N.M. 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.  
Santa Fe, N.M. 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

SEP 29 2009

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-045-35031	<sup>2</sup> Pool Code 71599/97232	<sup>3</sup> Pool Name Basin DAKOTA/MANCOS
<sup>4</sup> Property Code 38005	<sup>5</sup> Property Name ARBOR	<sup>6</sup> Well Number 2
<sup>7</sup> OGRID No. 5380	<sup>8</sup> Operator Name XTO ENERGY, INC.	<sup>9</sup> Elevation 6685

<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
P	26	25 N	10 W		920	SOUTH	908	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 S/2, 320± AC	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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> N 89°57'14" E 2642.37'	2638.28'	N 89°58'54" E 2636.80'	<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, 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 9/25/09 Signature Date Maria Villers Printed Name
N 0°02'41" E			S 0°01'26" W
SECTION 26			<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. 8/27/08 Date of Survey Signature and Seal of Professional Surveyor: ROBERT B. BOWEN NEW MEXICO LICENSED PROFESSIONAL SURVEYOR 6846 Certificate Number
2643.53'		2644.29'	
N 0°03'37" E		S 0°02'08" E	
S 89°57'48" W	2640.58'	S 89°58'54" W	2639.89'
NAD 83 LAT: 36.3673380° N LONG: 107.8601910° W			

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

JAN 27 2010

FORM APPROVED  
OMB NO 1004-0137  
Expires July 31, 2010

## SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

Bureau of Land Management  
Flagstaff Field Office

SUBMIT IN TRIPLICATE - Other instructions on page 2

## 1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

## 2. Name of Operator

XTO Energy Inc.

## 3a. Address

382 CR 3100 Aztec, NM 87410

## 3b. Phone No. (include area code)

505/333-3100

## 4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

920' FSL X 908' FEL SEC. 26 (P), T25N, R10W

## 5. Lease Serial No.

NOG 05031735

## 6. If Indian, Allottee or Tribe Name

NAVAJO ALLOTMENT

## 7. If Unit or CA/Agreement, Name and/or No.

PENDING

NMNM-123828-DK

NMNM-123827DK

## 8. Well Name and No.

ARBOR #2

## 9. API Well No.

30-045-35031

## 10. Field and Pool, or Exploratory Area

BASIN DK/BASIN MC

## 11. County or Parish, State

SAN JUAN

NM

## 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

## TYPE OF SUBMISSION

- ☒ Notice of Intent
- ☐ Subsequent Report
- ☐ Final Abandonment Notice

## TYPE OF ACTION

- |   |   |  |  |
|---|---|--|--|
| <input type="checkbox"/> Acidize              | <input type="checkbox"/> Deepen           | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off                  |
| <input type="checkbox"/> Alter Casing         | <input type="checkbox"/> Fracture Treat   | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity                  |
| <input type="checkbox"/> Casing Repair        | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete                | <input checked="" type="checkbox"/> Other <u>REVISED</u> |
| <input type="checkbox"/> Change Plans         | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon       | <u>SURFACE USE PLAN</u>                                  |
| <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back        | <input type="checkbox"/> Water Disposal            |  |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomple horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

Please see revised Surface Use Plan.

RCVD FEB 24 '10

OIL CONS. DIV.

DIST. 3

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

MALIA VILLERS

Title PERMITTING TECH.

Signature

malia villers

Date 1/26/2010

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

AEM

Date

2/23/2010

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

PFO

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes 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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SEP 29 2009

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

## SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

## SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1 Type of Well  
☐ Oil Well ☒ Gas Well ☐ Other2 Name of Operator  
XTO ENERGY INC.3a Address  
382 CR 3100, AZTEC, NM 874103b Phone No (include area code)  
505/333-3100

4 Location of Well (Footage, Sec, T, R, M, or Survey Description)

920' FSL x 908' FEL Sec 26 (P) T25N-R10W

5 Lease Serial No

NOG 05031735

6 If Indian, Allottee or Tribe Name

NAVAJO ALLOTMENT

7 If Unit or CA/Agreement, Name and/or No

PENDING NMNM-123828-MC  
NMNM-123827-DK

8 Well Name and No

ARBOR #2

9 API Well No

30-045-35031

10 Field and Pool, or Exploratory Area

BASIN DK/BASIN MC

11. County or Parish, State

SAN JUAN NM

## 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other ADDITIONAL
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	OIL & GAS
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	ACTION

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

XTO Energy Inc. is requesting additional oil & gas action to access the portion of the pipeline that crosses Federal Lease NMNM120923, for the Arbor #2.  
See attached plats.

RCVD FEB 24 '10  
OIL CONS. DIV.  
DIST. 314 I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

MALIA VILLERS

Title PERMITTING TECH.

Signature

malia villers

Date

09/29/2009

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

AIFM

Date

2/23/2010

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

FFU

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(Instructions on page 2)

NMOC

# XTO ENERGY INC.

Arbor #2

APD Data

September 24, 2009

Location: 920' FSL x 908' FEL Sec 26, T25N, R10W

County: San Juan

State: New Mexico

GREATEST PROJECTED TD: 6650'

APPROX GR ELEV: 6685'

OBJECTIVE: Basin Dakota / Basin Mancos

Est KB ELEV: 6697' (12' AGL)

## 1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 2500'	2500' to 6650'
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 ( $\pm 6650'$ ) 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'-6650	6650'	15.5#	J-55	ST&C	4040	4810	202	4.950	4.825	1.27	1.51	1.96

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

## 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.

**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#, J-55 (or K-55), ST&C casing to be set at  $\pm 6650'$  in 7.875" hole. DV Tool set @  $\pm 4125'$

1<sup>st</sup> Stage

LEAD:

$\pm 190$  sx of Premium Lite HS (Type III/Poz/Gel) or equivalent, with dispersant, fluid loss, accelerator, & LCM mixed at 12.5 ppg, 2.01 ft<sup>3</sup>/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.

2<sup>nd</sup> Stage

LEAD:

$\pm 343$  sx of Type III or equivalent cement with 8% gel & LCM mixed at 11.9 ppg, 2.54 ft<sup>3</sup>/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 1623 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: None.

B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (6650') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (6650') to 3,000'.

6. **FORMATION TOPS:**

Est. KB Elevation: 6697'

FORMATION	Sub-Sea	MD	FORMATION	TV Sub-Sea	MD
Ojo Alamo SS	5859	838	Gallup	1682	5015
Kirtland Shale	5746	951	Greenhorn	595	6102
Farmington SS			Graneros	637	6060
Fruitland Formation	5458	1239	Dakota 1 *	494	6203
Lower Fruitland Coal	5012	1685	Dakota 2 *	457	6240
Pictured Cliffs SS	4996	1701	Dakota 3 *	422	6275
Lewis Shale	4761	1936	Dakota 4 *	351	6346
Chacra SS	4194	2503	Dakota 5 *	322	6375
Cliffhouse SS*	3500	3197	Dakota 6 *	290	6407
Menefee**	3452	3245	Burro Canyon	261	6436
Point Lookout SS*	2518	4179	Morrison*	219	6478
Mancos Shale	2306	4391	<b>TD</b>	47	<b>6650</b>

\* Primary Objective

\*\* Secondary Objective

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

7. **COMPANY PERSONNEL:**

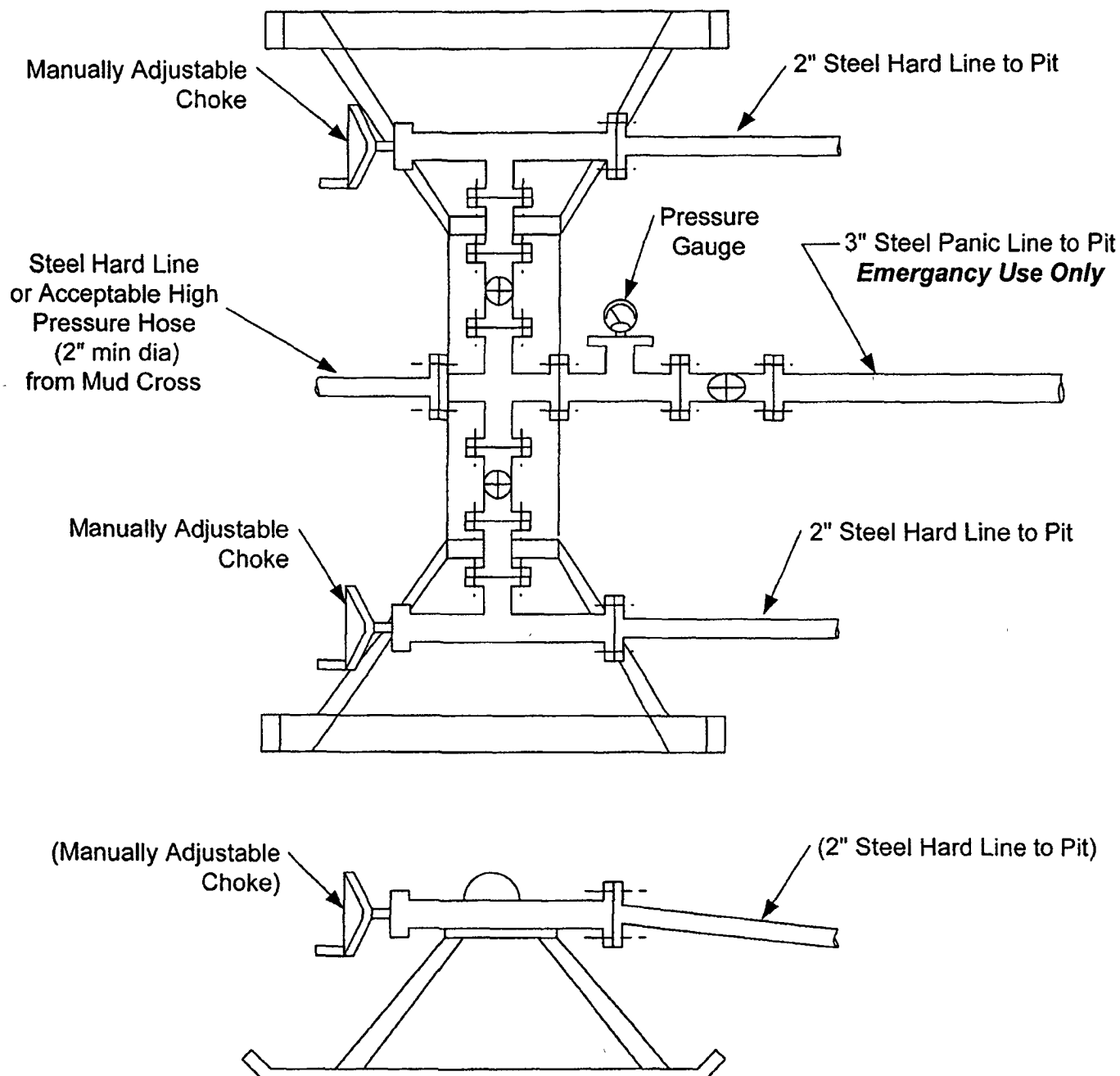
Name	Title	Office Phone	Home Phone
Justin Niederhofer	Drilling Engineer	505-333-3199	505-320-0158
Bobby Jackson	Drilling Superintendent	505-333-3224	505-486-4706
John Klutsch	Project Geologist	817-885-2800	--

JDN  
9/24/09

# **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**





AWS 507

