

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

Form 3160-3  
(April 2004)

RECEIVED

OCT 16 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

Lease Serial No.  
NMSF 077386

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		6. If Indian, Allottee or Tribe Name N/A
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		7. If Unit or CA Agreement, Name and No. NM NMNM-73555-DIC
2. Name of Operator XTO Energy, Inc.		8. Lease Name and Well No. JOHNSON GAS COM B #1F
3a. Address 382 CR 3100 Aztec NM 87410	3b. Phone No. (include area code) 505-333-3100	9. API Well No. 30-045-34831
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 385' FNL x 1860' FEL At proposed prod. zone same		10. Field and Pool, or Exploratory Basin Dakota/Basin Mancos
14. Distance in miles and direction from nearest town or post office* Approximately 11 miles southeast of Bloomfield, NM post office		11. Sec., T. R. M. or Blk. and Survey or Area (B) SEC 21, T27N, R10W
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. unit line, if any) 385'	16. No. of acres in lease 160	17. Spacing Unit dedicated to this well DK/MC: E/2 320
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 593'	19. Proposed Depth 6700'	20. BLM/BIA Bond No. on file UTB-000138
21. Elevations (Show whether DF, KDB, RT, GL, etc.) Ground Elevation 6070'	22. Approximate date work will start* 12/15/2008	23. Estimated duration 2 weeks

24. Attachments

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

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
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)
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
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) Kyla Vaughan	Date 10/15/2008
Title Regulatory Analyst		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) AFM	Date 12/30/08
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

HOLD C104 FOR NSL

Ch. dedication FWH/E For Basin Mancos  
to 320 AC E/2

ACT  
OPERATOR FROM  
AUTHORIZATION REQUIRED FOR OPERATIONS  
ON FEDERAL AND INDIAN LANDS

JAN 07 2009

NMOCD

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

APD/ROW

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

DISTRICT I  
1625 N. Fench 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 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 87504-2088

Form C-102

Revised October 12, 2005

Instructions on back

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 30-045-34831	<sup>2</sup> Pool Code 71599	<sup>3</sup> Pool Name BASIN DAKOTA
<sup>4</sup> Property Code 22749	<sup>5</sup> Property Name JOHNSON GAS COM B	<sup>6</sup> Well Number 1F
<sup>7</sup> GRID No. 5380	<sup>8</sup> Operator Name XTO ENERGY INC.	<sup>9</sup> Elevation 6070

<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
B	21	27-N	10-W		385	NORTH	1860	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 E/2 320			<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<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

<p>16</p> <p>FD. 2 1/2" BC. 1913 G.L.O.</p> <p>N 89°46'48" W 2636.55'</p> <p>385'</p> <p>1860'</p> <p>S 00°05'25" E 2636.64'</p> <p><u>SURFACE LOCATION</u> LAT: 36.56693° N. (NAD 83) LONG: 107.89829° W. (NAD 83) LAT: 36°34'00.9" N (NAD 27) LONG: 107°53'51.6" W. (NAD 27)</p>	<p>17</p> <p>OPERATOR CERTIFICATION</p> <p>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.</p> <p><u>Kyla Vaughan</u> 10/15/08 Signature Date <u>Kyla Vaughan</u> Printed Name</p>

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Revised October 12, 2005  
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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 30-045-34831	<sup>2</sup> Pool Code 97232	<sup>3</sup> Pool Name BASIN MANCOS
<sup>4</sup> Property Code 22749	<sup>5</sup> Property Name JOHNSON GAS COM B	<sup>6</sup> Well Number 1F
<sup>7</sup> GRID No 5380	<sup>8</sup> Operator Name XTO ENERGY INC.	<sup>9</sup> Elevation 6070

<sup>10</sup> Surface Location

UL or lot no B	Section 21	Township 27-N	Range 10-W	Lot Idn	Feet from the 385	North/South line NORTH	Feet from the 1860	East/West line EAST	County SAN JUAN
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<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 E/2 320		<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<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

16	FD 2 1/2" BC 1913 GLO	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. Kyla Vaughan 10/15/08 Signature _____ Date _____ Printed Name Kyla Vaughan
SURFACE LOCATION LAT 36 56693" N. (NAD 83) LONG 107.89829" W (NAD 83) LAT 36°34'00.9" N (NAD 27) LONG. 107°53'51.6" W (NAD 27)		18	
21		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 knowledge and belief. FEBRUARY 18, 2008 Date of Survey Signature and Seal of Professional Land Surveyor 8894 Certificate Number	

# XTO ENERGY INC.

Johnson Gas Com B #1F

APD Data

October 15, 2008

Location: 385' FNL x 1860' FEL Sec 21, T27N, R10W County: San Juan State: New Mexico

GREATEST PROJECTED TD: 6700'  
APPROX GR ELEV: 6070'

OBJECTIVE: Basin Dakota / Basin Mancos  
Est KB ELEV: 6082' (12' AGL)

## 1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 2500'	2500' to 6700'
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 ( $\pm$ 6700') 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'-6700	6700'	15.5#	J-55	ST&C	4040	4810	202	4.950	4.825	1.26	1.50	1.95

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 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  $\pm 6700'$  in 7.875" hole. DV Tool set @  $\pm 4250'$

1<sup>st</sup> Stage

LEAD:

$\pm 181$  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:

$\pm 355$  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 1635 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 (6700') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (6700') to 1,000'.

6. FORMATION TOPS:

Est. KB Elevation: 6082'

FORMATION	Sub-Sea	MD	FORMATION	TV Sub-Sea	MD
Ojo Alamo SS	5219	863	Gallup	678	5404
Kirtland Shale	5060	1022	Greenhorn	-138	6220
Farmington SS			Graneros	-197	6279
Fruitland Formation	4703	1379	Dakota 1*	-224	6306
Lower Fruitland Coal	4237	1845	Dakota 2*	-259	6341
Pictured Cliffs SS	4219	1863	Dakota 3*	-326	6408
Lewis Shale	4045	2037	Dakota 4*	-369	6451
Chacra SS	3293	2789	Dakota 5*	-412	6494
Cliffhouse SS*	2656	3426	Dakota 6*	-448	6530
Menefee**	2571	3511	Burro Canyon	-482	6564
Point Lookout SS*	1791	4291	Morrison*	-511	6593
Mancos Shale	1513	4569	<b>TD</b>	-618	<b>6700</b>

\* Primary Objective

\*\* Secondary Objective

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

7. COMPANY PERSONNEL:

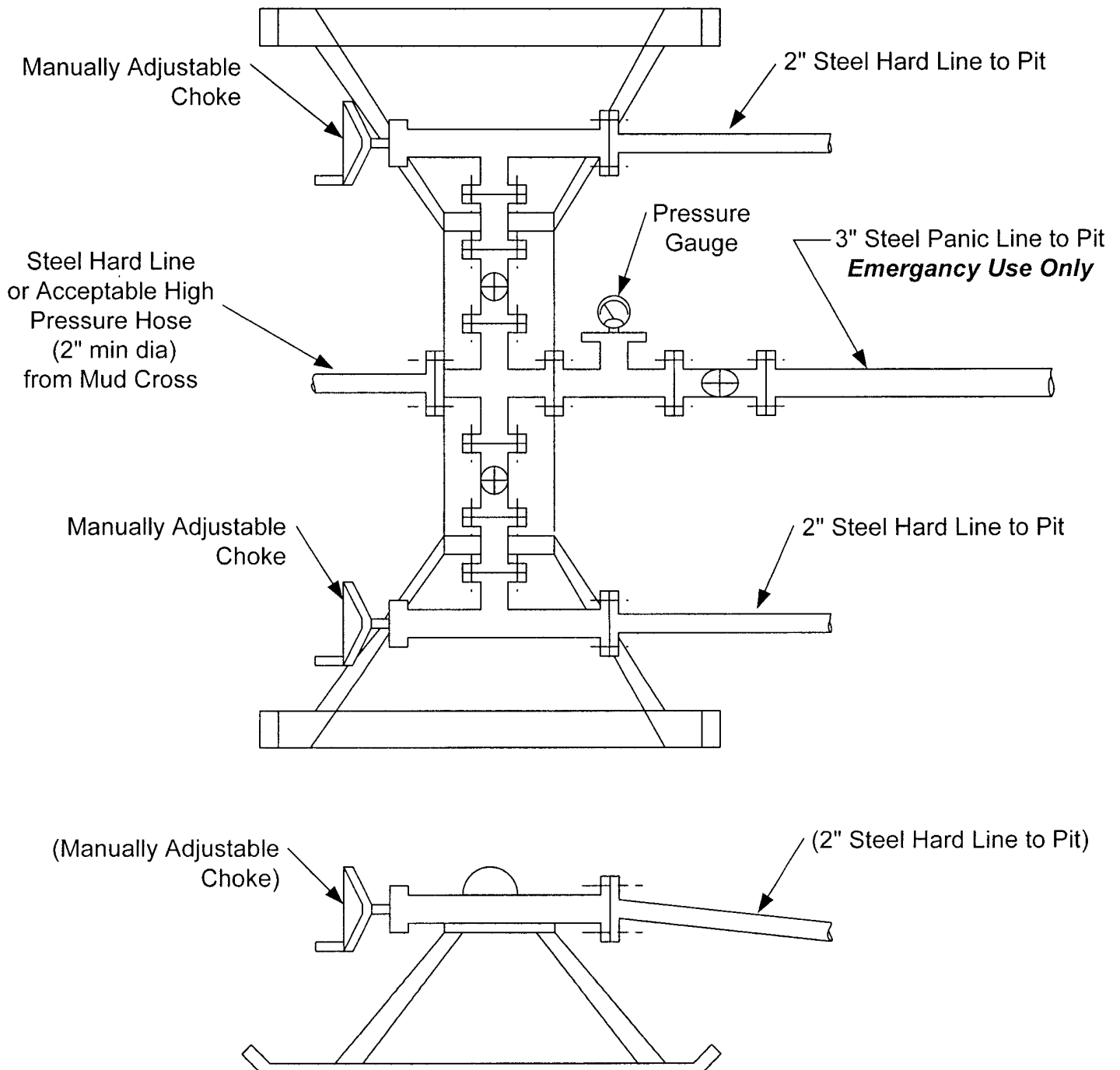
Name	Title	Office Phone	Home Phone
Justin Niederhofer	Drilling Engineer	505-333-3199	505-320-0158
Jerry Lacy	Drilling Superintendent	505-333-3177	505-320-6543
John Klutsch	Project Geologist	817-885-2800	--

JDN  
10/15/08

# 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



# 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.

