## RECEIVED

Form 3160-3 (February 2005) MAR 1 1 2008

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

UNITED STATES DEPARTMENT OF THE II BUREAU OF LAND MANA APPLICATION FOR PERMIT TO D	AGEMENT		lanagem eld Offici	Expires March 3  5 Lease Serial No. NMNM \$14917  6 If Indian, Allotee or Tri			
AFFLICATION FOR FERIVIT TO E	N/A						
ia Type of work: DRILL REENTE	7 If Unit or CA Agreement, N/A	Name and No					
Ib Type of Well OII Well Gas Well Other	8 Lease Name and Well N Valencia Canyon #4	_					
Name of Operator XTO Energy, Inc.	9 API Well No. 30-045- 039 -	3050 l					
3a. Address 382 CR 3100 AZTEC, NM 87410		. (include area code) 3-3100		10 Field and Pool, or Explora Blanco Meseverde			
4 Location of Well (Report location clearly and in accordance with any At surface 720' FNL x 1110' FWL At proposed prod zone same	State requirem	ents*)		11. Sec., T. R M. or Blk and (D) SEC 23, T28N, I	•		
14 Distance in miles and direction from nearest town or post office*  Approximately 42.2 miles East of Bloomfield, NM post offi	ifice			12 County or Parish RIO ARRIBA	13 State NM		
location to nearest property or lease line, ft (Also to nearest drig unit line, if any) 720'	cres in lease		7 Spacing Unit dedicated to this well N/2 320				
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, fi none	19 Proposed 6800'	l Depth		I/BIA Bond No on file 3-000138			
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 7338' Ground Elevation	22 Approxi	mate date work will star	rt*	23 Estimated duration 2 weeks			
7556 Ground Elevation	24. Attac			2 WEEKS			
he following, completed in accordance with the requirements of Onshore			ttached to th	is form			
Well plat certified by a registered surveyor  A Drilling Plan  A Surface Use Plan (if the location is on National Forest System L SUPO must be filed with the appropriate Forest Service Office)	ands, the	Item 20 above) 5 Operator certific	ation	ns unless covered by an existin			
25 Signature Lyla Mughar	. 110 / 101 / 101	Date 03/07/2008					
itle Regulatory Compliance							
Approved by (Signature)		Date	6/24/0				
itle AFM	Office	FF	<u></u>				
Application approval does not warrant or certify that the applicant holds onduct operations thereon Conditions of approval, if any, are attached	legal or equi	table title to those righ	ts in the sub	gect lease which would entitle t	he applicant to		
Fitle 18 USC Section 1001 and Title 43 USC Section 1212, make it a cristates any false, fictitious or fraudulent statements or representations as to	me for any po any matter w	erson knowingly and vithin its jurisdiction	willfully to n	nake to any department or agen	cy of the United		

\*(Instructions on page 2)

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.

NOTIFY AZTEC OCD 24 HRS.

PRIOR TO CASING & CEMENT

This action is subject to technical and JUL 0 2 2008 NMOCD procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

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.

AUTHORIZED ARE NCE WITH ATTACHED ENTS".

DISTRICT I Form C-102 State of New Mexico 1625 N. French Dr., Hobbs, N.M. 88240 Energy, Minerals & Natural Resources Department Revised October 12, 2005
OIL CONSERVATION DIVISION Submit to Appropriate District Office 1301 W. Grand Ave., Artesla, N.M. 88210 State Lease - 4 Copies 1220 South St. Francis Dr. DISTRICT III MAR 11 2008 Fee Lease - 3 Copies Santa Fe, NM 87505 1000 Rio Brazos Rd., Aztec, N.M. 87410 1220 South St. Francis Dr., Santa Fe, NM 87505 Earnington Field Office DEDICATION PLAT WELL LOCATION AND ACREAGE API Numbe Pool Name <sup>6</sup> Well Number <sup>6</sup>Property Name <sup>4</sup>Property Code 35797 VALENCIA CANYON -23NW OGRID No. <sup>8</sup>Operator Name • Elevation XTO ENERGY INC. 7338 <sup>10</sup> Surface Location UL or lot no. Feet from the North/South line Feet from the East/West line Section Township Lot Idn Range County NORTH RIO ARRIBA 4--W 720 1110 WEST D 23 28-N <sup>11</sup> Bottom Hole Location If Different From Surface UL or lot no. Section Range Lot Idn Feet from the North/South line Feet from the East/West line Township County 14 Consolidation Code 15 Order No. <sup>12</sup> Dedicated Acres 13 Joint or Infill 320 NO ÀLLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION OPERATOR CERTIFICATION S 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 110 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 LAT: 36.65324° N. (NAD 83) LONG: 107.82642° W. (NAD 83) LAT: 36'39'11.6", N. (NAD 27) LONG: 107'13'33.0" W. (NAD 27) Printed Name 23 SURVEYOR CERTIFICATION

LOCATION IS STAKED RELATIVE TO EXISTING WELLS AND DRY HOLE ON RECORD WITH N.M. OIL & GAS CONSERVATION COMMISSION. SECTION AND QUARTER CORNERS ARE NON—EXISTANT IN THE AREA. DEPENDENT RESURVEY OF THE TOWNSHIP IS REQUIRED TO OBTAIN EXACT DIMENSIONS FROM THE SECTION LINES.

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

OCTOBER 17, 2007

and correct to the best of my belief.

Date of S

Certificate Number

NAD 83 LAT. = 36.65324° N XTO ENERGY INC. VALENCIA CANYON No. 23NW, 720 FNL 1110 FWL LONG. = 107.22642° W SECTION 23, T28N, R4W, N.M.P.M., RIO ARRIBA COUNTY, N.M. NAD 27 LAT. = 36'39'11.6" N GROUND ELEVATION: 7338' DATE: OCTOBER 17, 2007 LONG. = 107°13'33.0" W c 6 (5) A TOP SOIL/EXCESS DIRT STORAGE CONSTRUCTION ZONE C 23.3 C 27.8 C 24.4 100' BEYOND CONSTRUTION ZONE PIT: 82 20 12' DEEP 200' x 85' 8' DEEP 20, DRAINAGE LAYDOWN N 83'22' E Wellhead to Back Wellhead to Front 1 4 C 5.6 145 C 0.0 145 C 2.5 TANK REAR RA. . Ve∐ SEPARATOR METER VCU No. 14 S 6'03'15"E-99' EFS PIPELINE R.A. C, (2) F 4.3 B, F 10.6  $(355' \times 390') = 3.18 \text{ ACRES}$ 255' X 290' F 6.2 🗡 DRAINAGE 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. DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERCROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION. NOTE: C/L ELEV. A-A 7350 7340 7330 7320 C/L ELEV. B-B' 7350 7340 Services NM 87499 5) 326-6019 7330 Daggett Enterprises, Ir Surveying and Oil Fleid Servic P. O. Box 510 -farmington, NW 87 Phone (505) 326-1772 - Fox (505) 326-1 NEW MEXICO L.S. NO. 8894 7320 C/L ELEV. C-C' 7350 7340 7330 7320

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.

#### XTO ENERGY INC.

Valencia Canyon #49 (aka #23NW) APD Data March 7, 2008

Location: 720' FNL x 1110' FWL Sec 23, T28N, R4W County: Rio Arriba State: New Mexico

GREATEST PROJECTED TD: 6800'

OBJECTIVE: Blanco Mesaverde

APPROX GR ELEV: 7338' Est KB ELEV: 7350' (12' AGL)

#### 1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 4525'	4525' to 6800
HOLE SIZE	12.25"	8.75"	8.75"
MUD TYPE	FW/Spud Mud	FW/Polymer/LSND/ Gel Chemical	Air/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. Switch to LSND/ Gel Chemical mud prior to penetrating the Nacemiento Shale. Air drill production hole unless significant water flows are encountered. Raise viscosity at TD for logging. Reduce viscosity after logging for cementing purposes.

#### 2. CASING PROGRAM:

Surface Casing: 9.625" casing to be set at  $\pm$  360' in a 12-1/4" hole filled with 9.20 ppg mud

					Coll Rating	Burst Rating	Jt Str	ID	Drift	SF	SF	SF
Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Ten
0'-360'	360'	36.0#	J-55	ST&C	2020	3520	394	8.921	8.765	11.73	20.44	30.40

Intermediate Casing: 7" casing to be set at  $\pm$  4525' in a 8-3/4" hole filled with 9.20 ppg mud

					Coll	Burst	)					
	E.				Rating	Rating	Jt Str	ID	Drift	SF	SF	SF
Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Ten
0'-4525'	4525'	23.0#	J-55	ST&C	3270	4360	284	6.366	6.241	1.52	2.03	2.76

Production Casing: 4.5" casing to be set at TD ( $\pm 6800$ ') in 6-1/8" hole filled with 9.20 ppg mud.

					Coll	Burst			-			
					Rating	Rating	Jt Str	ID	Drift	SF	SF	SF
Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Ten
0'-6800	6800'	11.6#	J-55	ST&C	4960	5350	154	4.000	3.875	1.53	1.65	1.96

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

EXHIBIT F

#### 3. WELLHEAD:

- A. Casing Head: Larkin Fig 92 (or equivalent), 9" nominal, 2,000 psig WP (4,000 psig test) with 9-5/8" 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. <u>CEMENT PROGRAM (Slurry design may change slightly, but the plan is to circulate cement to surface on both casing strings):</u>

A. Surface: 9.625", 36.0#, J-55, ST&C casing to be set at  $\pm$  360' in 12-1/4" hole.

162 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 225 ft<sup>3</sup>, 100% excess of calculated annular volume to 360'.

B. <u>Intermediate:</u> 7", 23.0#, J-55 (or K-55), ST&C casing to be set at ±4525' in 8.75" hole.

#### LEAD:

±390 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:

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.

Total estimated slurry volume for the 7" production casing is 931 ft<sup>3</sup>.

C. <u>Production:</u> 4.5", 11.6#, J-55 (or K-55), ST&C casing to be set at  $\pm 6800$ ' in 6.125" hole.

 $\pm 120$  sx of Premium Lite (Type III/Poz/Gel) or equivalent, with dispersant, fluid loss, glass beads, & LCM mixed at 9.7 ppg, 2.96 ft<sup>3</sup>/sk, 7.75 gal wtr/sx.

Total estimated slurry volume for the 4.5" production casing is 363 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 on all strings except 4.5". The 4.5" will be designed for 500' of overlap.

#### 5. LOGGING PROGRAM:

A. Mud Logger: The mud logger, if used, will come on at 2,900' and will remain on the hole until TD. The mud may be logged in 10' intervals.

EXHIBIT F

B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (6800') to the bottom of the intermediate csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (6800') to the intermediate casing shoe.

#### 6. FORMATION TOPS:

Est. KB Elevation: 7350'

<b>FORMATION</b>	Sub-Sea	<u>MD</u>
Nacimiento	4810	2540
Ojo Alamo SS	3764	3586
Kirtland Shale	3552	3798
Fruitland Formation		
Middle Fruitland Coal	3323	4027
Pictured Cliffs SS	3261	4089
Lewis Shale	2827	4523
Chacra SS**	2098	5252
Cliffhouse SS*	1269	6081
Menefee**	1214	6136
Point Lookout SS*	937	6413
Mancos Shale		
TD	550	6800
Point Lookout SS* Mancos Shale	937	6413

<sup>\*</sup> Primary Objective

#### 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	

JN 3/7/08

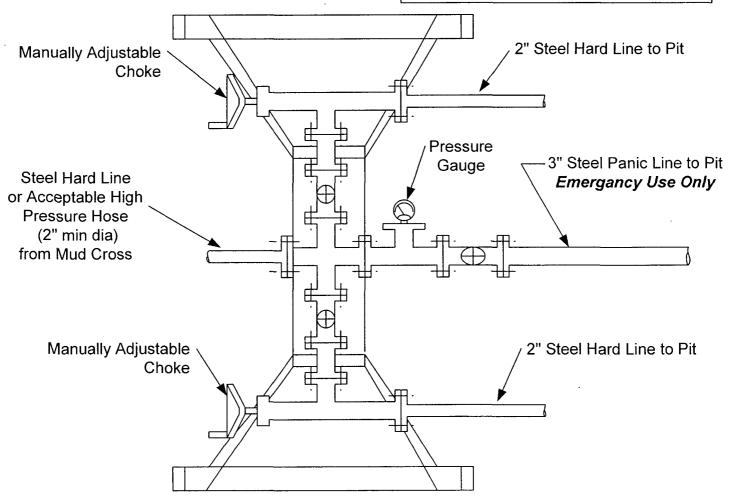
<sup>\*\*</sup> Secondary Objective

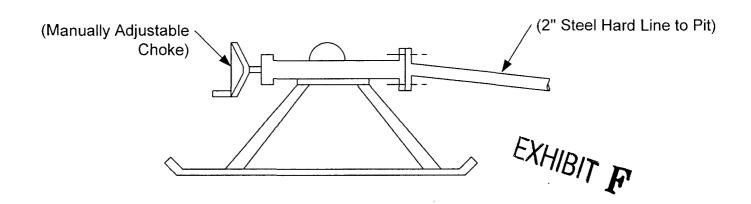
<sup>\*\*\*\*</sup> Maximum anticipated BHP should be <2,000 psig ( <0.30 psi/ft) \*\*\*\*\*

# 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





#### Pressure test BOP to 200-300 psig (low pressure) for 10 min. **BOP SCHEMATIC FOR** Test BOP to Working Press or **DRILLING OPERATIONS** to 70% internal yield of surf csg CLASS 1 (2M) NORMAL (10 min) or which ever is less. **PRESSURE** 2. Test operation of (both) rams on every trip. 3. Check and record Accumulator ROTATING HEAD pressure on every tour. (OPTIONAL) 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. FILL UP LINE **FLOW LINE** TO PIT PIPE RAMS BLIND RAMS TO CHOKE MANIFOLD KILL LINE 2" dia min. See Choke Manifold drawing for 2" dia min. HCR VALVE (OPTIONAL) Remove check or ball **MUD CROSS** from check valve and 2" (MIN) FULL OPENING press test to same press VALVE as BOP's. \*\*

1. Test BOP after installation: