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OIL CONS. DIV. DIST. 3

FORM APPROVED

Form 3160-3 (February 2005)

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FEB 0 2 2008

OMB No. 1004-0137 Expires March 31, 2007 UNITED STATES

DEPARTMENT OF THE INTERIOR Bureau of Land Manage 13,01 Lease Serial No.

Sermination Field Offile NMNM 14923 UNITED STATES BUREAU OF LAND MANAGEMENT Farmington Field Office 6. If Indian, Allotee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7 If Unit or CA Agreement, Name and No la. Type of work: ✓ DRILL REENTER 8. Lease Name and Well No. Oil Well / Gas Well Other ✓ Single Zone Multiple Zone Ib. Type of Well: **VALENCIA CANYON #46A** 9. API Well No Name of Operator XTO Energy, Inc. 30-045- 0 39 - 3/X 3a. Address 382 CR 3100 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory AZTEC, NM 87410 505-333-3100 BLANCO MESAVERDE 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk and Survey or Area 700' FNL x 665' FEL "A" At surface (A) SEC 35, T28N, R4W At proposed prod. zone same 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* Approximately 43 miles West of Bloomfield, NM post office RIO ARRIBA NM 15. Distance from proposed 17. Spacing Unit dedicated to this well 16. No. of acres in lease location to nearest property or lease line, ft.
(Also to nearest drig unit line, if any)

665 640 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 19. Proposed Depth 20. BLM/BIA Bond No. on file NONE 6830 UTB-000138 Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 7380' GROUND ELEVATION 2 weeks 05/05/2008 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form 1. Well plat certified by a registered surveyor. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 2 A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). Such other site specific information and/or plans as may be required by the RLM. Name (Printed/Typed) 25. Signature Date Kyla Vaughan 01/31/2008 Title Approved by (S) Name (Printed/Typed) Date Title Office 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 CONDITIONS OF APPROVALENERAL REQUIREMENTS".

NOTIFY AZTEC OCD 24 HRS PRIOR TO CASING & CEMEN





DISTRICT I 1625 N. French Dr., Hobbs, N.M. 88240

1301 .W. Grand Ave , Artesia, N.M. 88210

DISTRICT UI 1000 Rio Brazos Rd, Aztec, NM 87410

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

State of New Mexico RECEIVED Energy, Minerals & Natural Resources Depa

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. FEB 02 2008

Santa Fe, NM 87505

Submit to Appropriate District Office

State Lease - 4 Copies

☐ AMENDED REPORT

Revised October 12, 2005

Fee Lease - 3 Copies

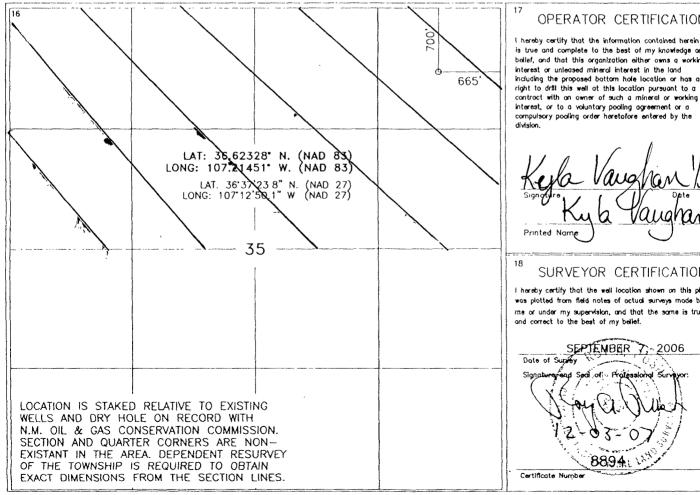
Form C-102

Bureau of Land Management Farmington Field Office

WELL LOCATION AND ACREAGE DEDICATION PLAT 30-039-30477 LANCO Well Number ⁸Property Name VALENCIA CANYON 46A 35797 Operator Name OGRID No Elevation XTO ENERGY INC. 7380 Surface Location UL or lot no Feet from the North/South line East/West line Section Township Range Lot Idn Feet from the County 35 28-N 700 NORTH 665 **EAST** RIO ARRIBA

"Bottom Hole Location If Different From Surface Feet from the Lot Idn North/South line Feet from the Ul or lot no Section Fast/West line Township County 13 Joint or Infill 14 Consolidation Code ² Dedicated Acres 15 Order No. 320

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



OPERATOR CERTIFICATION

is true and complete to the best of my knowledge and ballef, 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 drift 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.

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.

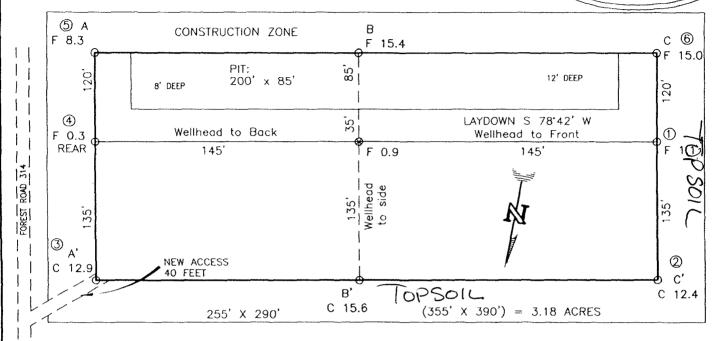
SEPTEMBER ን;~ 2006

Cartificate Number

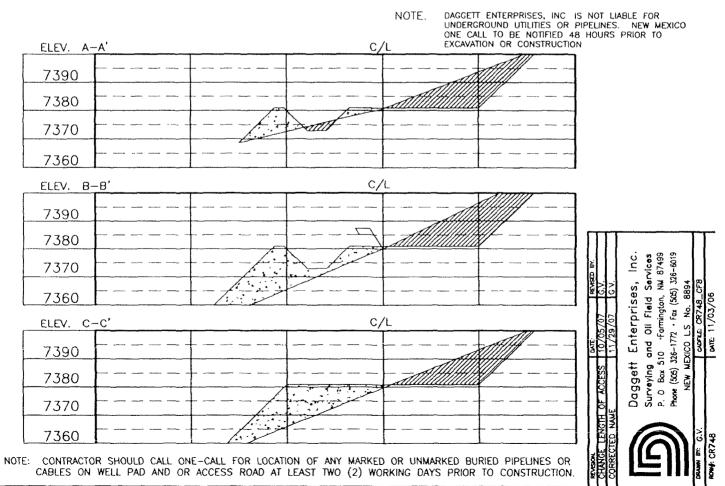
Submit 3 Copies To Appropriate District Office District I	State of New Me Energy, Minerals and Natur			Form C-103 May 27, 2004
District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV.	OIL CONSERVATION 1220 South St. Fra Santa Fe, NM 8	ncis Dr.	WELL API NO. 5. Indicate Type of I STATE	FEE 🗌
1220 S. St. Francis Dr., Santa Fe, NM 87505	,		6. State Oil & Gas L	ease No.
SUNDRY NOTIO (DO NOT USE THIS FORM FOR PROPO DIFFERENT RESERVOIR. USE "APPLIC PROPOSALS.)	ES AND REPORTS ON WELDSALS TO DRILL OR TO DEEPEN CATION FOR PERMIT (FORM C-10	OR PLUG BACK TO A	VALENCIA CANYON	nit Agreement Name:
1. Type of Well: Oil Well Gas Well X	Othor		8. Well Number	
Oil Well Gas Well X 2. Name of Operator	Other	· · · · · · · · · · · · · · · · · · ·	# 467 9. OGRID Number	1
XTO Energy Inc.			5380)
3. Address of Operator			10. Pool name or W	ildcat
382 CR 3100 AZTEC, 4. Well Location	NM 87410 505-333-310	00	BLANCO MESAVERDE	
Unit Letter A :	700 feet from the NO	TH line and	665 feet from	the EAST line
Section 35	Township 28N	Range 4W	NMPM NMPM	County SAN JUAN
	11. Elevation (Show whether		c.)	
Pit or Below-grade Tank Application 🔯	or Closure	NO ELEVATION		
Pit typeDRILL Depth to Groundwater		waterwell <u>>1000</u> Dis	tance from nearest surface	e water >1000
Pit Liner Thickness: 12 mil	Below-Grade Tank: Volume.	8000 bbls; Construction	on Material	
NOTICE OF INTERPRETATION TEMPORARILY ABANDON DULL OR ALTER CASING	PLUG AND ABANDON CHANGE PLANS MULTIPLE COMPLETION	REMEDIAL WORK COMMENCE DRILLI CASING TEST AND CEMENT JOB	SEQUENT REPO	ALTERING CASING PLUG AND ABANDONMENT
OTHER: PIT	X	OTHER:		
Describe proposed or completed of starting any proposed work). or recompletion. XTO Energy plans to const.		Completions: Attach	-	•
I hereby certify that the information algrade tank has been/will be constructed or c SIGNATURE Type or print name Kyla Vaughan For State Use Only APPROVED BY Conditions of Approval, if any:	TIT. E-n	x, a general permit Regulatory	or an (attached) alternor compliance La_vaughan@xtoener Telepha Gas Inspector, ct #3	ative OCD-approved plan
				IJ

XTO ENERGY INC.
VALENCIA CANYON No. 46A, 700 FNL 665 FEL
SECTION 35, T28N, R4W, N.M.P.M., RIO ARRIBA, N.M.
GROUND ELEVATION: 7380' DATE: SEPTEMBER 7, 2006

NAD 83 LAT. = 36.62328° N LONG. = 107.21451° W NAD 27 LAT. = 36°37'23.8" N LONG. = 107°12'50.1" W



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.



XTO ENERGY INC.

Valencia Canyon #46A APD Data January 31, 2008

Location: 700' FNL x 665' FEL Sec 35, T28N, R4W

County: San Juan

State: New Mexico

GREATEST PROJECTED TD: 6830'

OBJECTIVE: Blanco Mesaverde

APPROX GR ELEV: 7680'

Est KB ELEV: 7692' (12' AGL)

1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 4475'	4475' to 6830
HOLE SIZE	12.25"	8.75"	8.75" 6.125"
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 12.25" hole filled with 9.20 ppg mud

											٥		
ı						Coll	Burst						
1			l			Rating	Rating	Jt Str	ID	Drift	SF	SF	SF
ı	Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Ten
Ì												-	
	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 4475' in a 8-3/4" 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'-4475'	4475'	23.0#	J-55	ST&C	3270	4360	284	6.366	6.241	1.53	2.03	2.76

Production Casing: 4.5" casing to be set at TD (±6830') in 6-1/8" hole filled with 9.20 ppg mud.

ſ						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
Ĺ	0'-6830	6830'	11.6#	J-55	ST&C	4960	5350	154	4.000	3.875	1.53	1.65	1.96

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.

EXHIBIT F

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 ft³/sk, & 6.70 gal wtr/sk.

Total slurry volume is 225 ft³, 100% excess of calculated annular volume to 360'.

B. Intermediate: 7", 23.0#, J-55 (or K-55), ST&C casing to be set at ± 4475 ' in 8.75" hole.

LEAD:

±384 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.

Total estimated slurry volume for the 7" production casing is 926 ft³.

C. <u>Production:</u> 4.5", 11.6#, J-55 (or K-55), ST&C casing to be set at ± 6830 ' in 6.125" hole.

±124 sx of Premium Lite (Type III/Poz/Gel) or equivalent, with dispersant, fluid loss, glass beads, & LCM mixed at 9.7 ppg, 2.96 ft³/sk, 7.75 gal wtr/sx.

Total estimated slurry volume for the 4.5" production casing is 365 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 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.
- B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (6830') to the bottom of the intermediate csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (6830') to 4475'.



6. FORMATION TOPS:

Est. KB Elevation: 7378'

FORMATION	Sub-Sea	<u>MD</u>
Ojo Alamo SS	3672	3720
Kirtland Shale		
Farmington SS		
Fruitland Formation	3538	3854
Pictured Cliffs SS	3220	4172
Lewis Shale	2915	4477
Chacra SS**	2123	5269
Cliffhouse SS*	1331	6061
Menefee**	1230	6162
Point Lookout SS*	954	6438
Mancos Shale	587	6805
TD	562	6830

^{*} Primary Objective ** Secondary 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 1/31/08

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



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Farmington Field Office 1235 La Plata Highway, Suite A Farmington, New Mexico 87401

Attachment to Application for Permit to Drill or Reenter

Well: Valencia Canyon #46A

CONDITIONS OF APPROVAL:

Centralize 9 5/8" surface, 7.0" intermediate and 4 ½ " production casing strings as per Onshore Oil and Gas Order No. 2 and NTL-FRA 90-1.

Wayne Townsend – (505) 599-6359 Jim Lovato – (505) 599-6367 Steve Mason – (505) 599-6364

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

