Form 3160-3 (April 2004)

UNITED STATES DEPARTMENT OF THE INTERIORY -3 M 10: 52 BUREAU OF LAND MANAGEMENT

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

5. Lease Serial No.

		NOO-C				
i	6.	If Indian,	Allotee	or	Tribe	Name

APPLICATION	FOR	DERMIT	TΩ	DRILL	OR REENTER
APPLICATION	run	LEUMIN	10	DUILL	OUTERINGEN

APPLICATION FOR PERMIT TO DRILL OR(REENTER					E CLEN NEP PAH NMM m - 7591		
la. Type of work: DRILL REENTE	R 210 F	AREA PAR	(1)	7. If Unit or CA Agr	eement, Nam	ne and No.	_
lb. Type of Well: Oil Well Gas Well Other	√ Si₁	ngle Zone Multip	ole Zone	8. Lease Name and PAH 1-E	Well No.		_
2. Name of Operator XTO ENERGY INC.	,	•		9. API Well No. 30-045- 3	4322		
3a. Address 2700 FARMINGTON AVE., BLDG. K-1 FARMINGTON, NM 87401		(include area code) 24-1090		10. Field and Pool, or BASIN DAK			_
			11. Sec., T. R. M. or I		ey or Area	· ·	
14. Distance in miles and direction from nearest town or post office* 18 AIR MILES SOUTH OF BLOOMFIELD				12. County or Parish SAN JUAN	1	13. State NM	_
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 820'	16. No. of ac	cres in lease		g Unit dedicated to this 3 & 4, S2NW4, & SV		12 32	- 20.4
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1,085'	19. Proposed 6,150'	Depth		BIA Bond No. on file NATIONWIDE 1043			_
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,271' GL	22. Approxim	nate date work will star 08/10/2007	rt*	23. Estimated duration 4 WEEKS	n .		_
	24. Attac						_
The following, completed in accordance with the requirements of Onshore	Oil and Gas	Order No.1, shall be at	tached 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 shall be filed with the appropriate Forest Service Office).	Lands, the	Item 20 above). 5. Operator certific	ation specific info	ns unless covered by ar prmation and/or plans a	J	·	
25. Signature	i	(Printed/Typed) BRIAN WOOD			Date 04/30)/2007	
Title CONSULTANT	PHON	E: (505) 466-8120	FAX	X: (505) 466-9682			_
Approved by (Signature) Original Signed: Stephen Mason	Name	(Printed/Typed)		,	Date JUI	L 1 4 200	03
Title AFM	Office	FFO					
Application approval does not warrant or certify that the applicant holds conduct operations thereon. Conditions of approval if any are attached.	legal or equit	able title to those righ	ts in the sub	ject lease which would	entitle the ap	plicantto	

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)

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.

SEE ATTACHED FOR **CONDITIONS OF APPROVAL**

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT

NMOCD

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

This action is subject to technical and procedural review pursuant to 43 CFR 3165 3 and appeal pursuant to 43 CFR 3165.4

1625 N French Dr., Hobbs, NM 88240

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised October 12, 2005

DISTRICT ()
1301 W. Grand Ave., Arlesia, N.M. 88210

OIL CONSERVATION DIVISION MAY -3 AM 10:562 Leose - 4 Copies

Santo Fe, NM 87505

Fee Lease - 3 Copies

DISTRICT III 1000 Rio Brozos Rd. Azlec, NM 87410

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

RECEIVED ☐ AMENDED REPORT BLH CATION PLAT

WELL LOCATION AND ACREAGE DED BASIN DAKOTA Nome 30-045-34322 71599 Well Number *Property Code ⁵Property Nome 22969 5 PAH 1E ⁸Operator Name Elevation XTO ENERGY INC. 6271 167067

™ Surface Location UL or lot no Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County NORTH D 3 25-N 1.1 - W835 820 WEST SAN JUAN "Bottom Hole Location If Different From Surface Feet from the North/South line UL or let no Section Range Lot Idn Feet from the East/West line County Dedicated Acres *Consolidation Code 15 Order No 13 Joint or Intil C 320.43

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

16	OR A NON-STANDARD UNIT HAS E	BEEN APPROVED BY	THE DIVISION
820' LOT 4	S 89-56-03 E FD 2 1/2" BC. 2642 1' (M) 1930 G L.0 LOT 3 LOT 2	LOT 1	OPERATOR CERTIFICATION I hereby certify that the information contained hereo 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 note location or has a right to drait this well at this location pursuant to a controct with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretoface entered by the
2651.3 (M)	LAT: 36.43500° N. (NAD 83) LONG: 107.99765° W. (NAD 83) LAT: 36'26'05.9" N. (NAD 27) LONG: 107'59'49 3" W. (NAD 27)		4-30-07 Signature BRIAN WOOD Printed Name (505) 466-8120
FD. 2 1/2" BC. 1932 GLO.			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. OCHERIC BORDES Date at Survey Signature and Secretar Males Solds Serveyor
			Signature of Secretary Sec

Drilling Program

1. ESTIMATED FORMATION TOPS

Formation Name	· <u>GL Depth</u>	KB Depth	<u>Elevation</u>
Nacimiento	000'	12'	+6,271'
Fruitland	501'	513'	+5,770'
Pictured Cliffs	1,286'	1,298'	+4,985'
Mesa Verde	2,131'	2,143'	+4,140'
Cliff House	2,801'	2,813'	+3,470'
Point Lookout	['] 3,761'	3,773'	+2,510'
Gallup	4,796'	4,808'	+1,475'
Greenhorn	5,691'	5,703'	+580'
Dakota	5,851'	5,863'	+420'
Morrison	5,961'	5,973'	+310'
Total Depth (TD)*	6,150'	6,162'	+121'

2. NOTABLE ZONES

Gas & Oil Zones	<u>Water Zones</u>	<u>Coal Zone</u>
Fruitland	Nacimiento	Fruitland
Pictured Cliffs	Ojo Alamo	1
Gallup	Fruitland	
Dakota		

Water zones will be protected with casing, cement, and weighted mud. Fresh water found while drilling will be recorded. Oil or gas shows will be tested for commercial potential based on the geologist's recommendations.



3. PRESSURE CONTROL

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. (A typical 2,000 psi model is on PAGE 3.) An 8-5/8" x 11" 2,000 pound double ram BOP system with a choke manifold and mud cross will be tested to 200 psi and then to 1,000 psi. Upper and lower Kelly cocks with valve handle and subs to fit all drill string connections which are in use will be available on the rig floor.

Tests will be run when:

- 1) installed
- 2) anytime a pressure seal is broken (test only affected equipment)
- 3) at least every 30 days
- 4) blind & pipe rams will be activated each trip, but no more than daily

BOP systems will be consistent with API RP 53. Blowout preventers will be installed and tested before drilling surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated daily to ensure good mechanical working order and this inspection recorded on the daily drilling report. Preventers and casing will be pressure tested before drilling casing cement plugs. Maximum expected bottom hole pressure will be $\approx 2,800$ psi. BOP and mud system will control pressure.

4. CASING & CEMENT

Hole Size	<u>O. D.</u>	Weight (lb/ft)	<u>Grade</u>	<u>Age</u>	Connections	Setting Depth
12-1/4"	8-5/8"	24	J-55	New	ST&C	360'
7-7/8"	5-1/2"	15.5	J-55	New	ST&C	6,150'

Surface casing will be cemented to the surface with ≈ 375 cubic feet (≈ 270 sacks) Type V cement + 1/4 pound per sack cello-flake + 2% CaCl₂. Yield = 1.39 cubic feet per sack. Weight = 14.5 pounds per gallon. Excess: >100%.



Centralizers will be set on the bottom two joints of the surface casing and every fourth joint to the surface.

Production casing will be cemented to the surface with $\approx 50\%$ excess as follows. DV tool will be set @ $\approx 4,250$ '.

First stage lead will consist of ≈ 302 cubic feet (≈ 150 sacks) of Type III (or its equivalent) + 2% CaCl₂ + 1/4 pound per sack cello flake + 0.2% dispersant + 0.5% fluid loss control + 2% LCM additives mixed at 12.5 pounds per gallon and 2.01 cubic feet per sack.

First stage tail will consist of \approx 222 cubic feet (\approx 150 sacks) Type III (or its equivalent) + 5% bonding additive + 1/4 pound per sack cello flake + 0.3% dispersant + 0.2% fluid loss control + 2% LCM additives mixed at 14.2 pounds per gallon and 1.48 cubic feet per sack.

Second stage lead will consist of ≈ 975 cubic feet (≈ 375 sacks) Type III (or its equivalent) + 1/4 pound per sack cello flake + 8% gel + 2% LCM mixed at 11.9 pounds per gallon and 2.6 cubic feet per sack.

Second stage tail will consist of ≈139 cubic feet (≈100 sacks) Type III Neat mixed at 14.5 pounds per gallon and 1.39 cubic feet per sack.

Centralizers will be set on the bottom two joints, every second joint to $\approx 5,000$ ', and every fourth joint from $\approx 2,000$ ' to the surface.

5. MUD PROGRAM

Ī	RANGE	MUD TYPE	<u>WEIGHT</u>	<u>VISCOSITY</u>	WATER LOSS	<u>ADDITIVES</u>
	0' - 360'	Fresh-Spud	8.6-9.0	28-32	NC	Gel, lime
	360' - 2,500	'Fresh-Poly	8.4-8.8	28-32	NC	Gel, lime sweeps
í	2,500' - TD	Fresh Water	8.6-9.2	45-60	8-10 cc	Gel, soda ash, LCM



6. CORES, TESTS, & LOGS

No cores or drill stem tests are planned. Mud logger will arrive at $\approx 3,000$ ' and collect samples every ≈ 10 ' from there to TD. These open hole logs will be run:

Array Induction/SFL/GR/SP from TD to ≈ 360 ' Neutron/Lithodensity/Pe/GR/Cal from TD to $\approx 3,000$ '

7. DOWN HOLE CONDITIONS

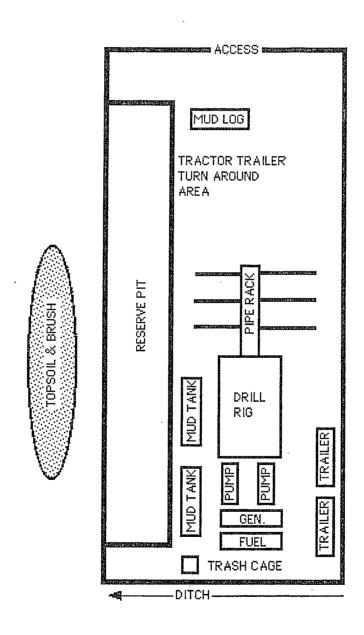
No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum expected bottom hole pressure will be $\approx 2,460$ psi.

8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take about four weeks to drill and complete the well.









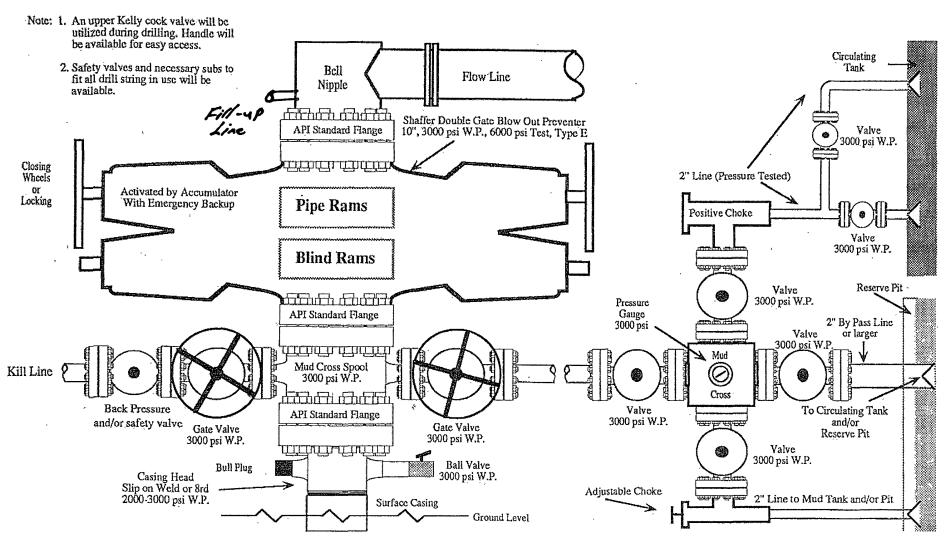
NAD 83 *XTO ENERGY INC. LAT. = 36.43500° N PAH No. 1E, 835 FNL 820 FWL LONG. = 107.99765* SECTION 3, T25N, R11W, N.M.P.M., SAN JUAN COUNTY, N.M. NAD 27 GROUND ELEVATION: 6271' LAT. = 36'26'05.9" N DATE: OCTOBER 20, 2006 IONG = 107.59'49.3"В (5) 6 F 6.8 C 6.2 4.3 PIT: 82 200' x 60' 8' DEEP 20 12' DEEP 120, LAYDOWN S 80'19' E 35, (4) Wellhead to Back (1) Wellhead to Front REAR F 1.3 145 F 1.6 145 C 2.6 **NEW ACCESS** 1176 FT. 35 3 2 C 7.9 3.4 С В' 255' X 290' C 4.2 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 UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO NOTE: EXCAVATION OR CONSTRUCTION. ELEV. A-A' 6280 6270 6260 6250 ELEV. B-B 6280 6270 6260 Enterprises, Inc. 8894 6250 Oil Field 5) 326-1772 · Fax (5) MEXICO L S. No ELEV. C-C C/L Surveying and 6280 Daggett Box 15 2 (505) NEW M 6270 Ö

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.

6260

6250

2,000 PSI BOP SYSTEM



Note: This equipment is designed to meet requirements for a 2-M rating standard per 43 CFR part 3160 (amended). Proper operation and testing of equipment will be carried out per standard, 2,000 psi equipment can be substituted in the drawing to meet minimum requirements per standard.