PORM APPROVED Form 3160-3 OMB No. 1004-0136 (August 1999) Expires November 30, 2000 **UNITED STATES** 5. Lease Serial No. DEPARTMENT OF THE INTERIOR NMSF-077384 **BUREAU OF LAND MANAGEMENT** 6 of Indian, Allottee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER! N/A 7. If Unit or CA Agreement, Name and No. RECEIVED la. Type of Work: DRILL □ REENTER N/A 070 FARMINGTON 8. Lease Name and Well No. Gas Well Other Oil Well Single Zone ☐ Multiple Zone M N Galt H 2 1b. Type of Well: Name of Operator 9. API Well No. XTO Energy Inc. 30-045- 32578 3a. Address 2700 Farmington Ave., Bldg K-1 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory **Basin Dakota** (505) 324-1090 Farmington, NM 87401 11. Sec., T., R., M., or Blk. and Survey or Area Location of Well (Report location clearly and in accordance with any State requirements.*) 2400' FNL & 900' FWL At surface 1-27n-10w NMPM At proposed prod. zone Same 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* NM San Juan 10 air miles SE of Bloomfield Distance from proposed* 17. Spacing Unit dedicated to this well 16. No. of Acres in lease location to nearest property or lease line, ft. ≈W2 (320.90 acres) 900' 2.108.35 (Also to nearest drig. unit line, if any) 20. BLM/BIA Bond No. on file 19. Proposed Depth 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 680'* **BLM** nation wide: 57 91 73 6.950 22. Approximate date work will start* 23. Estimated duration 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6 weeks 6,031' ungraded **Upon Approval** 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. 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 2. A Drilling Plan. Operator certification. 3. A Surface Use Plan (if the location is on National Forest System Lands, the Such other site specific information and/or plans as may be required by the SUPO shall be filed with the appropriate Forest Service Office). authorized officer. Comments *to XTO's M N Galt F 1 R, a Pictured Cliffs gas well APD/ROW (Williams) c: BLM (& OCD), Patton 25. Signature Name (Printed/Typed) Date 9-6-04 **Brian Wood** Title Consultant Phone: 505 466-8120 FAX: 505 466-9682 Approved by (Signature) Date DEC 0 8 2004 Name (Printed/Typed) Original Signed: Stephen Mason Title Office Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would emitte the applicant to conduct operations thereon Conditions of approval, if any, are attached

procedural review pursuant to 43 CFR 3165.3 DECHIREMENTS"

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

This action is subject to technical and

and appeal pursuant to 43 CFR 3165.4

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 departments of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED DISTRICT 1 1625 N. French Dr., Hobbs, N.M. 88240

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

DISTRICT #

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION State Lease - 4 Copies

1220 South St. Francis Dr.

CED N & 2004 Fee Lease - 3 Copies

Certificate Number

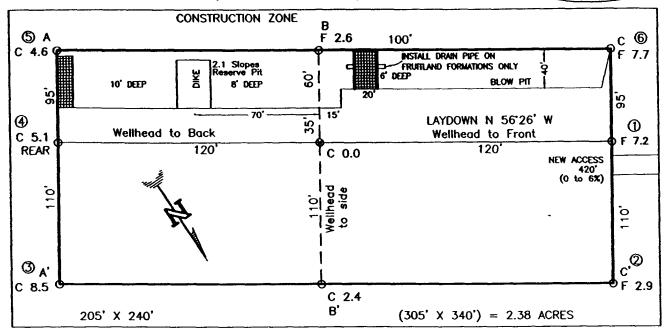
Form C-102

Revised June 10, 2003

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XTO ENERGY INC.
M N GALT H No. 2, 2400' FNL 900' FWL
SECTION 1, T27N, R10W, N.M.P.M., SAN JUAN COUNTY, N. M.
GROUND ELEVATION: 6031', DATE: APRIL 5, 2004

LAT. = 36'36'17" N. LONG. = 107'51'08" W NAD 1927

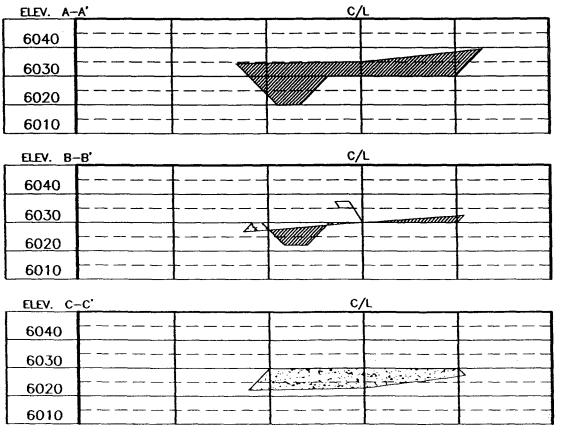


RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE). BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT.

NOTE: DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.

Surveying and Oil Fleid Services P. O. Box 15068 • Farmington, NM 87401 Phome (506) 326-1772 • Fα (505) 326-8019

Daggett 1



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.
M N Galt H 2
2400' FNL & 900' FWL
Sec. 1, T. 27 N., R. 10 W.
San Juan County, New Mexico

Drilling Program

1. ESTIMATED FORMATION TOPS

Formation Name	GL Depth	KB Depth	<u>Elevation</u>
Nacimiento Fm	000'	12'	+6,031'
Ojo Alamo Sandstone	906'	918'	+5,125'
Kirtland Shale	1,146'	1,158'	+4,885'
Fruitland Coal	1,701'	1,713'	+4,330'
Pictured Cliffs Ss	1,986'	1.998'	+4,045'
Chacra Sandstone	2,911'	2,923'	+3,120'
Mesa Verde Sandstone	3,541'	3,553'	+2,490'
Mancos Shale	4,651'	4,663'	+1,380'
Gallup Sandstone	5,491'	5,503'	+540'
Greenhorn Limestone	6,271'	6,283'	-240'
Graneros Shale	6,366'	6,378'	-335'
Dakota Sandstone	6,451'	6,463'	-420'
Morrison	6,651'	6,663'	-620'
Total Depth (TD)*	6,950'	6,962'	-919'

^{*} all elevations reflect the ungraded ground level of 6,031'

2. NOTABLE ZONES

Gas & Oil Zones	Water Zones	Coal Zones
Fruitland	Nacimiento Nacimiento	Fruitland
Pictured Cliffs	Kirtland	Menefee
Cliff House	Fruitland	
Menefee		
Point Lookout		
Dakota		

Water zones will be protected with casing, cement, and weighted mud. Fresh



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M N Galt H 2
2400' FNL & 900' FWL
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San Juan County, New Mexico

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 2,000 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:

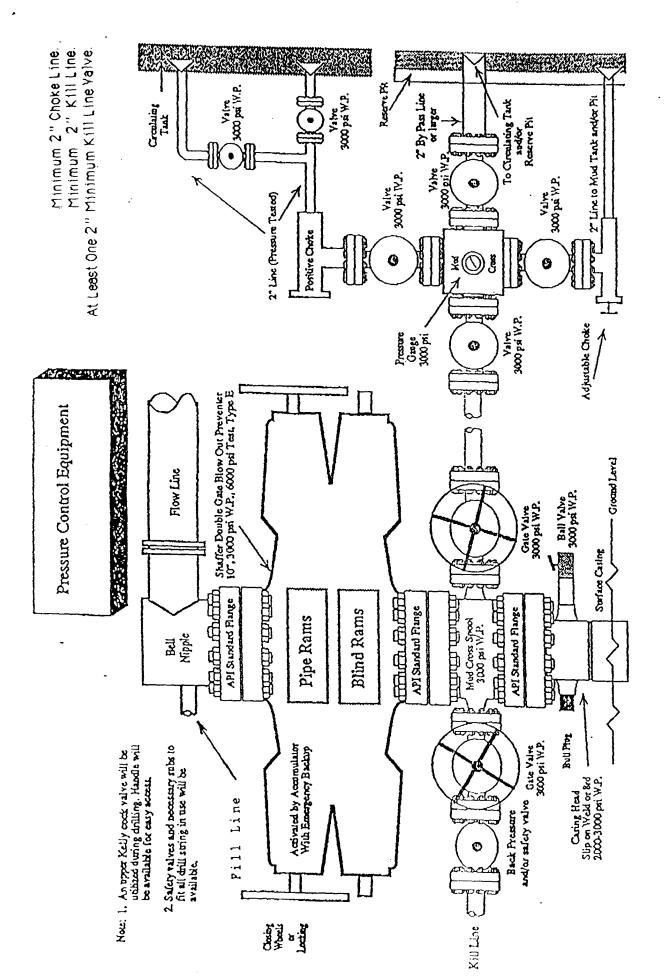
- 1) installed
- 2) anytime a pressure seal is broken (test only affected equipment)
- 3) at least every 30 days
- 4) blind & pipe rams will be activated each trip, but no more than daily

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 is ≈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	GL Setting Depth
12-1/4"	8-5/8"	24	J-55	New {	3 rd, S T & C	325'
7-7/8"	4-1/2"	11.6	K-55	New 8	3 rd, L T & C	6,950'





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 caried out per standard. 2,000 psi equipment can be substituted in the drawing to meet minimum requirements per standard.

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2400' FNL & 900' FWL
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Surface casing will be cemented to surface with \approx 270 cubic feet (\approx 230 sacks) Class B Neat + 1/4 pound per sack cello-flake + 2% CaCl₂. Yield = 1.27 cubic feet per sack. Weight = 15.2 pounds per gallon.

Conventional centralizers will be set on the bottom two joints and every fourth joint to surface.

Production casing hole will be cemented to surface as follows. DV @ ≈4,000'.

First stage Lead will be cemented to $\approx 4,000$ ' with ≈ 840 cubic feet (≈ 609 sacks) 50:50 Poz + 5 pounds per sack gilsonite + 2% gel + 1/4 pounds per sack cello-flake, dispersant, and FLA. Yield = 1.38 cubic feet per sack. Weight = 13.5 pounds per gallon. Excess = 25%.

Second stage Lead will be cemented to surface with $\approx 1,440$ cubic feet (≈ 500 sacks) Class B or H + 10 pounds per sack gilsonite + 4% gel + 1/2 pounds per sack cello-flake + 3% Econolite. Yield = 2.88 cubic feet per sack. Weight = 11.4 pounds per gallon. Excess = 50%

Second stage Tail will be cemented to $\approx 3,600$ ' with ≈ 126 cubic feet (≈ 100 sacks) Class B or H Neat + 1/4 pounds per sack cello-flake + 2% CaCl2. Yield = 1.26 cubic feet per sack. Weight = 15.2 pounds per gallon. Excess = 10%.

Conventional centralizers will be set on the bottom two joints, every second joint to $\approx 6,000$ ' and every fourth joint from $\approx 2,000$ ' to surface.

5. MUD PROGRAM

<u>RANGE</u>	MUD TYPE	WEIGHT	VISCOSITY	WATER LOSS	<u>ADDITIVES</u>
0' - 350'	Fresh-Spud	8.5-8.8	30	NC	Gel, lime
350' - 4,000'	Fresh Water	8.5-8.8	28	NC	Gel, lime sweeps
4,000' - TD	Fresh Water	8.5-8.8	35	10 cc	Gel, soda ash, LCM

