FORM APPROVED **UNITED STATES** Form 3160-3 OMB NO. 1004-0137 (April 2004) DEPARTMENT OF THE INTERIOR Expires March 31, 2007 **BUREAU OF LAND MANAGEMENT** APPLICATION FOR PERMIT TO DRILL OR REENTER 5. Lease Serial No. NM-0498 la. Type of Work 6. If Indian, Allotee or Tribe Name | DRILL REENTER 1b. Type of Well Oil Well 7. Unit or CA Agreement Name and No. Gas Well Other Single Zone Multiple Zone.  $\mathbf{x}$ N/A Name of Operator 8. Lease Name and Well No. TO Energy Inc SCHUMACHER #2G Phone No. (include area code) 3a. Address 9. API Well No 30-045-3317 2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM Location of Well (Report location clearly and in accordance with any State equirements) 10. Field and Pool, or Exploratory BASIN DAKOTA 845' FSL x 2590' FKL in Sec 8, T30N, R12W 11. Sec., T., R., M., or Blk. and Survey or Area At proposed prod. zone SAME S8, T30N, R12W 12. County or Parish 13.State 14. Distance in miles and direction from nearest town or post office\* Approx 2.35 air miles northwest of Flora Vista, NM Post Office San Juan Distance from proposed\* 16. No. of Acres in lease 17. Spacing Unit dedicated to this well location to nearest property or lease line, ft. 845' 636.7 S/2 318.4 (Also to nearest drg. unit line, if any) 18. Distance from proposed location\* 19. Proposed Depth 20. BLM/BIA Bond No. on file to nearest well, drilling, completed, applied for, on this lease, ft. 6900' 1850' 21. Elevations (Show whether DF, KDB, RT, GL, etc. 22. Approximate date work will start\* 23. Estimated duration fall 2005 5836' Ground Elevation 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. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan Item 20 above). A Surface Use Plan (if the location is on National Forest System Lands, the Operator certification. SUPO shall be filed with the appropriate Forest Service Office). Such other site specific information and/or plans as may be required by the authorized officer. Date 25. Signuature Name (Printed/Typed) Kyla Vaughan 06/15/05 Title Regulatory Compliance Tech Approved by (Signautre) Name (Printed/Typed) 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 knowlingly 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)

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

APD/ROW

RECEIVED TO FARMINGTON NA

NATIFICA I. 1825 N. Prench Dr., Hobba, N.M. 68840

## State of New Mexico Energy, States & Setural Resources Department

Form C-102 Revised June 10, 2003

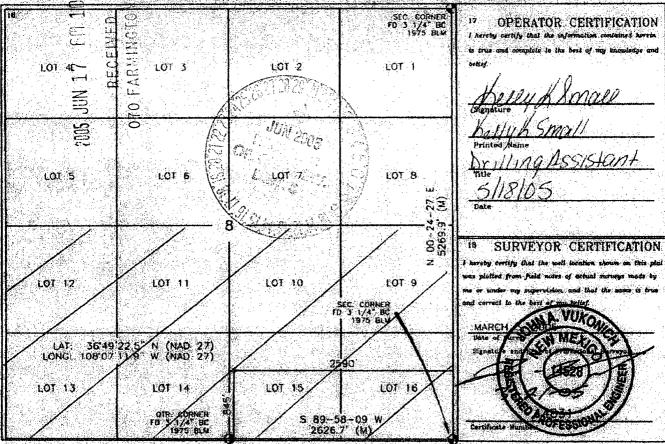
DISTRICT U 1301 V Grand Ave., Artesia, N.M. 88210

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT III 1900 Res Brosse Rd., Asteq. N.M. 87410

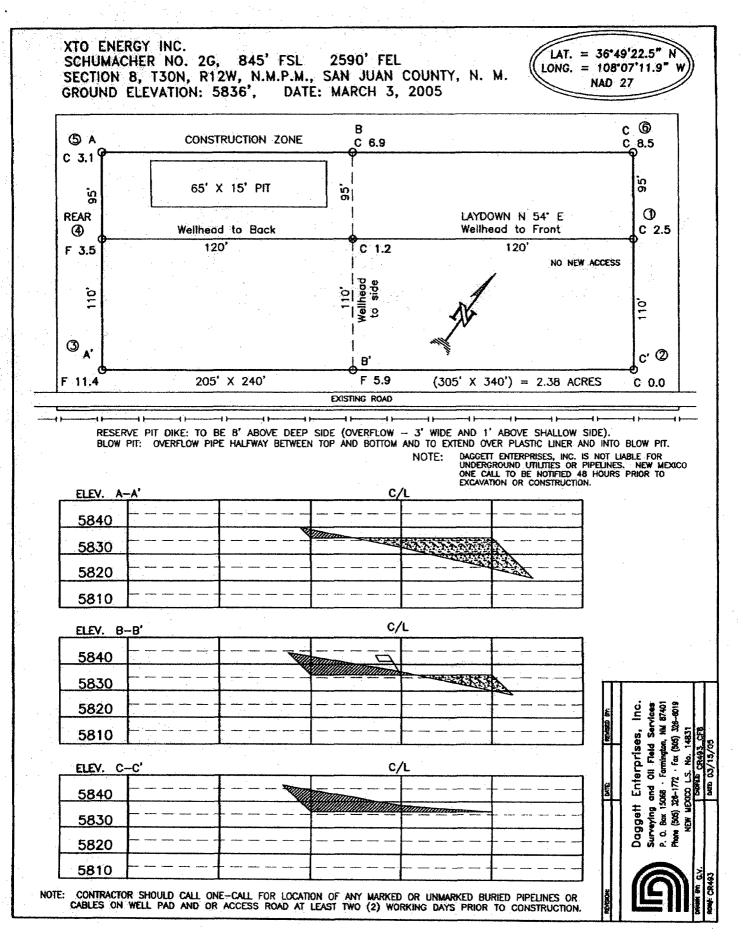
AMENDED REPORT

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			ti di sa		10 Surface	Location			
UL or let no	Section 8	GidenwoT 30 - N	Rotrge 12-W	lot ldn 15	Peet from the 845	North/South line SOUTH	feet from the 2590	East/West line EAST	County SAN JUAN
			" Bott	om Hole	Location I	Different Fro	om Surface		
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Submit 3 Copies To Appropriate District Office Ener	State of New Mexico egy, Minerals and Natural Resources	Form C-103 May 27, 2004
District I 1625 N. French Dr., Hobbs, NM 87240 District II Ol	L CONSERVATION DIVISION	WELL API NO.
1301 W. Grand Ave., Artesia, NM 88210 District III	1220 South St. Francis Dr.	5. Indicate Type of Lease
1000 Rio Brazos Rd., Aztec, NM 87410 District IV	Santa Fe, NM 87505	STATE FEE .
1220 S. St. Francis Dr., Santa Fe, NM 87505		6. State Oil & Gas Lease No.
(DO NOT USE THIS FORM FOR PROPOSALS T DIFFERENT RESERVOIR. USE "APPLICATION	D REPORTS ON WELLS O DRILL OR TO DEEPEN OR PLUG BACK TO A FOR PERMIT" (FORM C-101) FOR SUCH	7. Lease Name or Unit Agreement Name: SCHUMACHER
PROPOSALS.)  1. Type of Well:		8. Well Number
1 '' — — —	Other	#2G
2. Name of Operator		9. OGRID Number
XTO Energy Inc.		167067
3. Address of Operator	<u>.</u>	10. Pool name or Wildcat
2700 Farmington Ave., Bldg. K. S 4. Well Location	Ste 1 Farmington, NM 87401	Dakota
Unit Letter <u>O</u> : 845	feet from theSOUTH line and	2590 feet from the EAST line
Section 8	Township 30N Range 12W	NMPM NMPM County SAN JUAN
	Township 30N Range 12W Elevation (Show whether DR, RKB, RT, GR, etc.	
	5836'	
Pit or Below-grade Tank Application X or Clos	ure 🗀	
Pit typeDRILL_ Depth to Groundwater >100	_ Distance from nearest fresh water well 1 MILE Dis	tance from nearest surface water 1 MILE
Pit Liner Thickness: 12 mil	Below-Grade Tank: Volumebbls; Construction	on Material
NOTICE OF INTENTION PERFORM REMEDIAL WORK PLUC PEMPORARILY ABANDON CHAIN PULL OR ALTER CASING MULT	oriate Box to Indicate Nature of Notice,  ON TO: SAND ABANDON COMMENCE DRILLI TIPLE CASING TEST AND CEMENT JOB	SEQUENT REPORT OF:  ALTERING CASING
OTHER: PIT	X OTHER:	
13. Describe proposed or completed operat of starting any proposed work). SEE R or recompletion.	ions. (Clearly state all pertinent details, and give ULE 1103. For Multiple Completions: Attach	e pertinent dates, including estimated date wellbore diagram of proposed completion
XTO Energy proposed to install with NMOCD guidelines when work		pit will be closed in accordance
`		
Thereby and Calendal in Council and		
grade tank has been/will be constructed or closed acc	true and complete to the best of my knowledge cording to NMOCD guidelines 🔣 , a general permit [	and belief. I further certify that any pit or below- or an (attached) alternative OCD-approved plan
SIGNATURE KULA KUU	TITLE Regulatory Co	ompliance Tech DATE 06/15/05
Type or print name Kyla Vaughan	•	La_vaughan@xtoenergy.com Telephone No. 505-564-6726
For State Use Only	/ DEPOSITE ON A A A A A	MINIO A 200E
APPROVED BY	TITLE	INSPECTOR, DIST. GE JUN 3 0 2005
Conditions of Approval, if any:	IIILE	DATE
	<b>,</b>	Plum m B

EXHIBIT D



#### XTO ENERGY INC.

#### Schumacher #2G **APD Data** June 14, 2005

Location: 845' FSL x 2,590' FEL Sec 8, T30N, R12W

County: San Juan

State: New Mexico

GREATEST PROJECTED TD: 6,900'

OBJECTIVE: Basin Dakota

APPROX GR ELEV: 5,836'

Est KB ELEV: 5,848' (12' AGL)

#### **MUD PROGRAM:** 1.

INTERVAL	0' to 360'	360' to 4,000'	4,000' to TD
HOLE SIZE	12-1/4"	7-7/8"	7-7/8"
MUD TYPE	FW/Spud Mud	FW/Polymer	LSND / Gel Chemical
WEIGHT	8.6-9.0	8.4-8.8	8.6-9.0
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.

#### **CASING PROGRAM:**

Surface Casing:

8-5/8" casing to be set at  $\pm$  360' in a 12-1/4" hole filled with 8.8 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'-360'	360'	24.0#	J-55	STC	1370	2950	244	8.097	7.972	7.32	7.95	29.39

Production Casing:

5-1/2" casing to be set at TD ( $\pm 6,900$ ') in 7-7/8" hole filled with 9.0 ppg mud.

					Coll	Burst						
į					Rating	Rating	Jt Str	ID	Drift	SF	SF	SF
Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Ten
0'-TD	6,900'	15.5#	J-55	STC	4040	4810	202	4.950	4.825	1.25	1.48	1.88

#### **WELLHEAD:** 3.

- 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, 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:

8-5/8", 24#, J-55, STC casing to be set at  $\pm$  360' in 12-1/4" hole.

210 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. <u>Production:</u> 5-1/2", 15.5#, J-55 (or K-55), STC casing to be set at  $\pm 6,900$ ' in 7-7/8" hole. DV Tool set @  $\pm 4,000$ '

1<sup>st</sup> Stage

#### LEAD:

±225 sx of Premium Lite HS (or equivalent) with salt, dispersant, fluid loss & LCM mixed at 12.5 ppg, 2.01 ft<sup>3</sup>/sk, 10.55 gal wtr/sx.

#### TAIL:

150 sx Type III cement (or equivalent) 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:

±500 sx of Type III cement (or equivalent) with gel & LCM mixed at 11.9 ppg, 2.54 ft<sup>3</sup>/sk, 15.00 gal wtr/sx.

#### TAIL:

100 sx Type III cement (or equivalent) 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 2,092 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: The mud logger will come on at 2,900' and will remain on the hole until TD. The mud will be logged in 10' intervals.
- B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (6,900') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (6,900') to 2,000'.



#### 6. FORMATION TOPS:

Est. KB Elevation: 5,848'

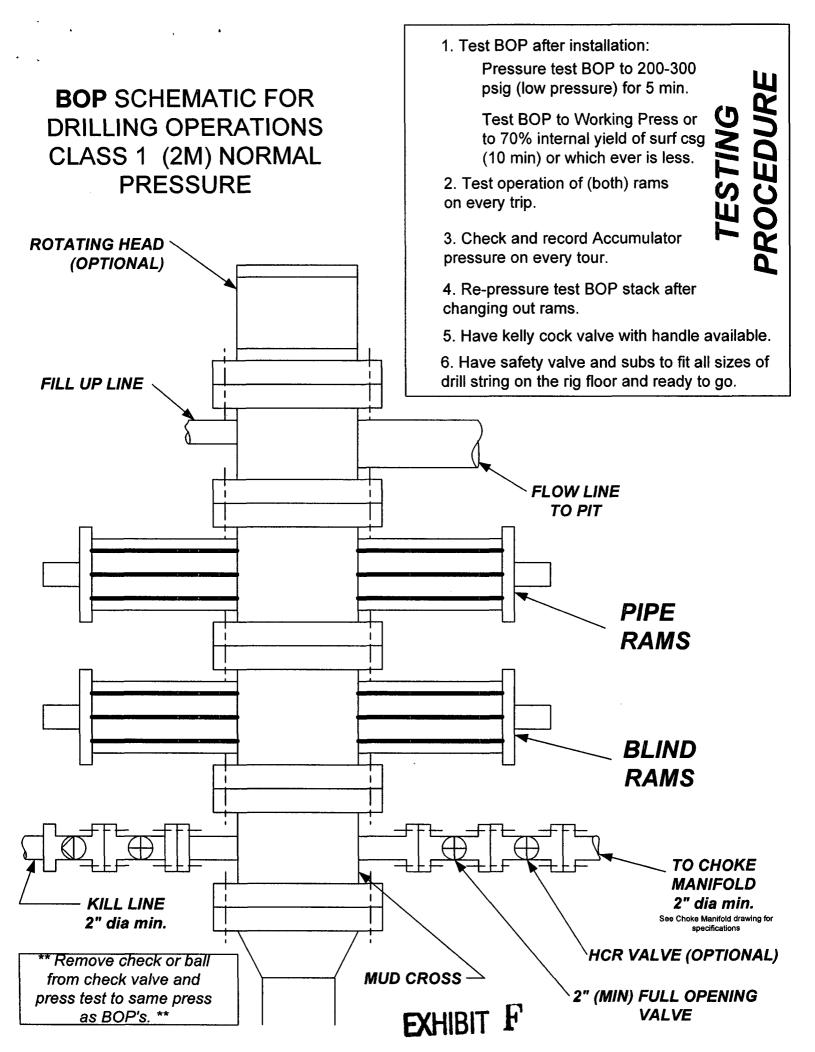
Formation	Subsea Depth	Well Depth		
Ojo Alamo SS	+5392'	456'		
Kirtland Shale	+5262'	586'		
Farmington SS	+5150'	698'		
Fruitland Formation	+4026'	1822'		
Lower Fruitland Coal	+3926'	1922'		
Pictured Cliffs SS	+3826'	2022'		
Lewis Shale	+3634'	2214'		
Chacra	+2782'	3066'		
Cliffhouse SS	+2142'	3706'		
Menefee	+2102'	3746'		
Point Lookout SS	+1452'	4396'		
Mancos Shale	+1149'	4699'		
Gallup SS	+182'	5666'		
Greenhorn Limestone	-563'	6411'		
Graneros Shale	-618'	6466'		
1 <sup>st</sup> Dakota SS	-675'	6523'		
2 <sup>nd</sup> Dakota SS	n/a	n/a		
3 <sup>rd</sup> Dakota SS	-733'	6581'		
4 <sup>th</sup> Dakota SS	n/a	n/a		
5 <sup>th</sup> Dakota SS	-783'	6631'		
6 <sup>th</sup> Dakota SS	-840'	6688'		
Burro Canyon SS	-915'	6763'		
Morrison Shale	-925'	6773'		
Project TD	-1052'	6900'		

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

#### 7. **COMPANY PERSONNEL:**

Name_	Title	Office Phone	Home Phone
Jeff Patton	Drilling Engineer	505-324-1090	505-632-7882
Dennis Elrod	Drilling foreman	505-486-6460	505-326-2024
Red Meek	Project Geologist	817-885-2800	817-427-2475
Barry Voigt	Reservoir Engineer	817-885-2462	817-540-2092

JWP 6/14/05



# CHOKE MANIFOLD SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE

- 1. Stake all lines from choke manifold to pit.
- 2. Pressure test choke monifold after installation.
- 3. Pressure test manifold at the same time with the BOP Stack. Test manifold to the same test pressures.

# TESTING PROCEDURE

