Form 3160-3 April 2004)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

	APPLICATION I	OR PERMIT TO DRII	LL OR REENTER		5. Lease Serial		,
la. Type of Work	DRILL	T REEN	TER		6. If Indian, A		Tribe Name
	136	– – (765 JUL 18 AM 9 1		N/A		
1b. Type of Well	Oil Well	Gas Well Other	Single Zone Multiple	Zone		Agreeme	ent Name and No.
2. Name of Oper	ator		THEOLITES		N/A 8. Lease Name	and We	Il No.
3a. Address	Inc.		3b. Phone No. (include are		TC KETT		
	ngton Ave., Bldg. K	. Ste 1 Farmingto	`		9. API Well N	SUC	- <i>3</i> 3239
	ell (Report location clearly				10. Field and Po		
At surface	665' FSL x 1970' F	EL in Sec 5, T30N,	R12W		BASIN D	AKOTA	· ·
At proposed pro	od. zone			1		-	Blk. and Survey or Area
14 Distance in mile	es and direction from nearest	town or nost office*			OS5, T30 12. County or F		13.State
		•	lora Vista, NM Post Offi		San Juan		NM
1.7. Distance from	proposed*		16. No. of Acres in lease		cing Unit dedi	cated to	
location to nea		665'					,·
	st drg. unit line, if any)		2410.24		E/2	2 29	7.89
	proposed location*		19. Proposed Depth	20.BL	M/BIA Bond	No. on f	ile
applied for, on	l, drilling, completed, this lease, ft.	10001	70001				
		1200'	7000'		,		
•	w whether DF, KDB, RT, C	L, etc.	22. Approximate date work wil	start*	23. Estima	ited dura	tion
5868' G	round Elevation	· · · · · · · · · · · · · · · · · · ·	fall 2005			2	weeks
•			24. Attachments				
The following, con	npleted in accordance with the	ne requirements of Onshore	Oil and Gas Order No. 1, shall be atta	ched to this	form:		
		•	1				
Well plat certi A Drilling Plan	fied by a registered surveyor n	•	4. Bond to cover the op Item 20 above).	erations unic	ess covered by	an existi	ng bond on the (see
3. A Surface Use	Plan (if the location is on N		, the 5. Operator certification				
SUPO shall be	filed with the appropriate F	orest Service Office).	 Such other site specification authorized officer. 	ic informatio	on and/or plans	as may	be required by the
25. Signuature	1/0 1/	<u> </u>	Name (Printed/Typed)			Date	
23.516.11.11.10	Kula Vau	Jahan	Kyla Vaughan				07/15/05
Title	· you vou		Kyra vauguan			L	07/15/05
	y Compliance Tech						*/*
Approved by (Sign			Name (Printed/Typed)			Date	
	Tim Jalah	•				<u>_</u>	Fluston
Title	h		Office	 		<u> </u>	21,00
41	Ac La Mana	ser - Meneral					
	val does not warrant or cert		legal or equitable title to those rights	in the subj	ect lease which	h would	entitle the applicant to
conduct operations Conditions of appr	s thereon. oval, if any, are attached.	7					
					-		
States any false, fic	ction 1001 and 1 file 43 U.S. ctitious or fraudulent stateme	C. Section 1212, make it a cents or representations as to a	rime for any person knowlingly and v any matter within its jurisdiction.	vilituily to m	ake to any dep	artment	or agency of the United
*(Instructions	poe 2)	TIONS AUTHORIZED ARE	This action is subj procedural review	pursuant to) 43 CFH 3165	.3	
	SUBJECT TO COL	MPLIANCE WITH ATTACHED	and appeal pursu	ant to 43 CF	R 3165.4		
SEP OF	GENERAL REQU				A I		
TO THE CENT							
OIL CONS. I	Dr. 783						
ST. 3	or of the state of			N W			
(C)	1				W		NCD
SEP 20 SEP 20 OI CONS. I DIST. 3	S. C. L.		-		-		2 A 0 A B 5 5 5 5 11 1
ALA	-		•				

DISTRICT) 1825 H. French Dr., Hobby, N.M. 88240

State of New Mexico
Energy, Minerals & Notural Resources Department

Form C-102 Revised June 10, 2003

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

OIL CONSERVATION DIVISION 18

Submit to Appropriate District Office State Lease - 4 Copies

DASTRICI III 1000 RB6 Brazos Rd., Aztec, N.M. 87410

1220 South St. Francis Dr. Sonta Fe, NM 87505

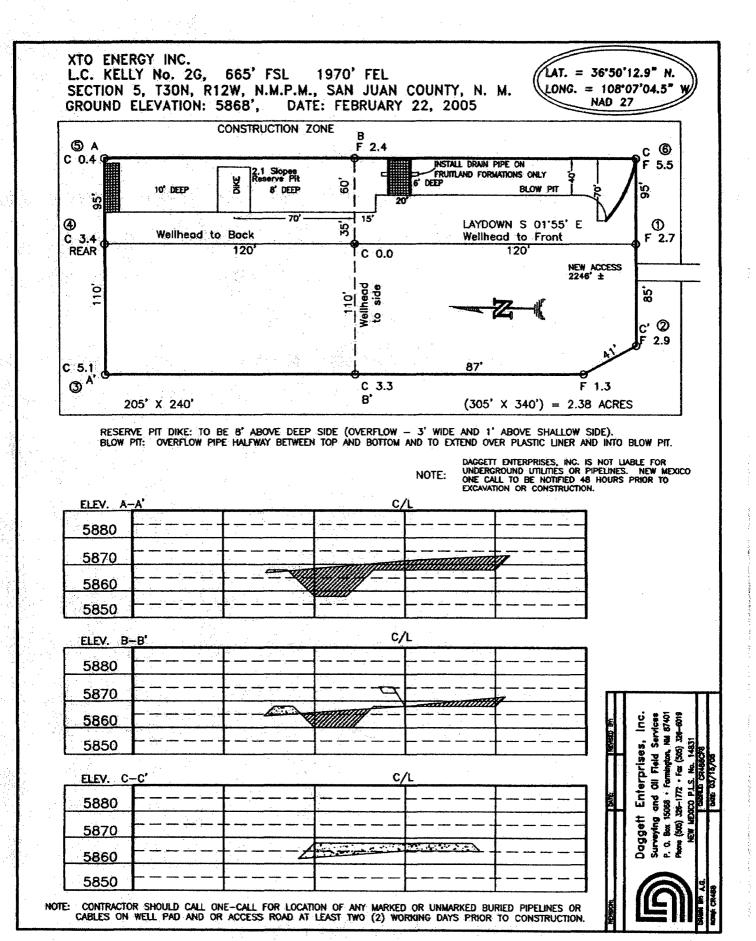
Fee Leose - 3 Copies

DISTRICT IV 1220 South St. Francis De.; Santo Fe, HM 87505

☐ AMENDED REPORT CTO EACHINGT

WELL LOCATION AND ACREAGE DEDICATION PLAT API Number 20-045 *Property Code Well Numbe Property Name 2020 L.C. KELLY 2G OCRID No. *Operator Name Elevation XTO ENERGY INC. 5868 Surface Location UL or lot no. Section Lot Ide North/South line Feet from the Feet from the Enal /Wast line County SAN JUAN SOUTH 5 12-W 665 EAST 0 30-N 19 1970 "Bottom Hole Location II Different From Surface UL or lot no. Lot Idn Feet from the North/South line Section Feet from the Range East/West line County Declinated Acres Joint or In18 * Consolidation Code 18 Order No. 297 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 ets to the best of my knowledge and belief LOT 5 LOT 8 LOT 7 LOT 6 Kelly K. Small **LOT 12** Drilling Assistant Date: 3/70/05 LOT 10 LOT LOT 9 OUARTER COR. FD 3 1/4" BC 1976 BLM SURVEYOR CERTIFICATION OT 13 LOT 15 **LOT 14 LOT 16** LOT 19 LAT: 36'50'12.9" N. (NAD 27) LONG: 108'07'04.5" W. (NAD 27) LOT 80 1970 **LOT 18** LOT 17 GUARTER COR. FO 3 1/4" BC 1976 BLM N 89-59-27 W 2633.70' (M) SECTION COR FD 3 1/4" BC 1976 BLM N 89-39

Submit 3 Copies To Appropriate District Office	State of New M Energy, Minerals and Nat			Form C-103 May 27, 2004
District I 1625 N. French Dr., Hobbs, NM 87240 District II 1301 W. Grand Ave., Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	OIL CONSERVATIO 1220 South St. F Santa Fe, NM	rancis Dr.	5. Indicate Type of STATE 6. State Oil & Gas	FEE 🗆
SUNDRY NOTICE (DO NOT USE THIS FORM FOR PROPO DIFFERENT RESERVOIR. USE "APPLIC, PROPOSALS.)		OR PLUG BACK TO A	7. Lease Name or LC KELLY	Unit Agreement Name:
1. Type of Well:			8. Well Number	
Oil Well Gas Well X 2. Name of Operator	Other	, , , , , , , , , , , , , , , , , , ,	#2 9. OGRID Number	
XTO Energy Inc.			9. OGRID Number	
3. Address of Operator			10. Pool name or V	
2700 Farmington Ave., Bldg	. K. Ste 1 Farmington,	NM 87401	BASIN DAKOTA	
4. Well Location Unit Letter 0 : Section 5	feet from theSON	Range 12W	1970 feet from	n the EAST line County SAN JUAN
	11. Elevation (Show whether		c.)	
Pit or Below-grade Tank Application	or Closure []	5868' >(VOO'		1200/2/000/
Pit type DRILL Depth to Groundwater _			stance from nearest surfa	, ,
Pit Liner Thickness: 12 mil	Below-Grade Tank: Volum			
12. Check A NOTICE OF INTE PERFORM REMEDIAL WORK TEMPORARILY ABANDON PULL OR ALTER CASING	ppropriate Box to Indicate NTION TO: PLUG AND ABANDON CHANGE PLANS MULTIPLE COMPLETION		SEQUENT REF	
OTHER: PIT	X	OTHER:		
 Describe proposed or completed of starting any proposed work). or recompletion. XTO Energy proposed to in	SEE RULE 1103. For Multip	le Completions: Attach	wellbore diagram of	f proposed completion
with NMOCD guidelines when	work is completed.			
I hereby certify that the information ab	osed according to NMOCD guideling	nes 😠 , a general permit	or an (attached) alte	certify that any pit or below- rnative OCD-approved plan
SIGNATURE TOTAL				DATE <u>07/15/05</u>
Type or print name Kyla Vaughan				
1		-mail address: ky:	la_vaughan@xtoene Telep	ergy.com hone No. 505-564-6726
For State Use Only		-mail address:	Telep	



XTO ENERGY INC.

LC Kelly #2G **APD Data** July 12, 2005

Location: 665' FSL x 1,970' FEL Sec 5, T30N, R12W

County: San Juan

State: New Mexico

GREATEST PROJECTED TD: 7,000'

OBJECTIVE: Basin Dakota

APPROX GR ELEV: 5,868'

Est KB ELEV: <u>5,880' (12' AGL)</u>

MUD PROGRAM:

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						
l l					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 ($\pm 7,000$ ') in 7-7/8" hole filled with 9.0 ppg mud.

					Coll	Burst				TFO		
					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	7,000'	15.5#	J-55	STC	4040	4810	202	4.950	4.825	1.25	1.48	1.88

WELLHEAD:

- 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 ft³/sk, & 6.70 gal wtr/sk.

Total slurry volume is 297 ft³, 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 $\pm 7,000$ ' in 7-7/8" hole. DV Tool set @ $\pm 4,000$ '

1st Stage

LEAD:

±225 sx of Premium Lite HS (or equivalent) with salt, dispersant, fluid loss & LCM mixed at 12.5 ppg, 2.01 ft³/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.

2nd Stage

LEAD:

±500 sx of Type III cement (or equivalent) with gel & LCM mixed at 11.9 ppg, 2.54 ft³/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 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.

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 (7,000') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (7,000') to 2,000'.

6. FORMATION TOPS:

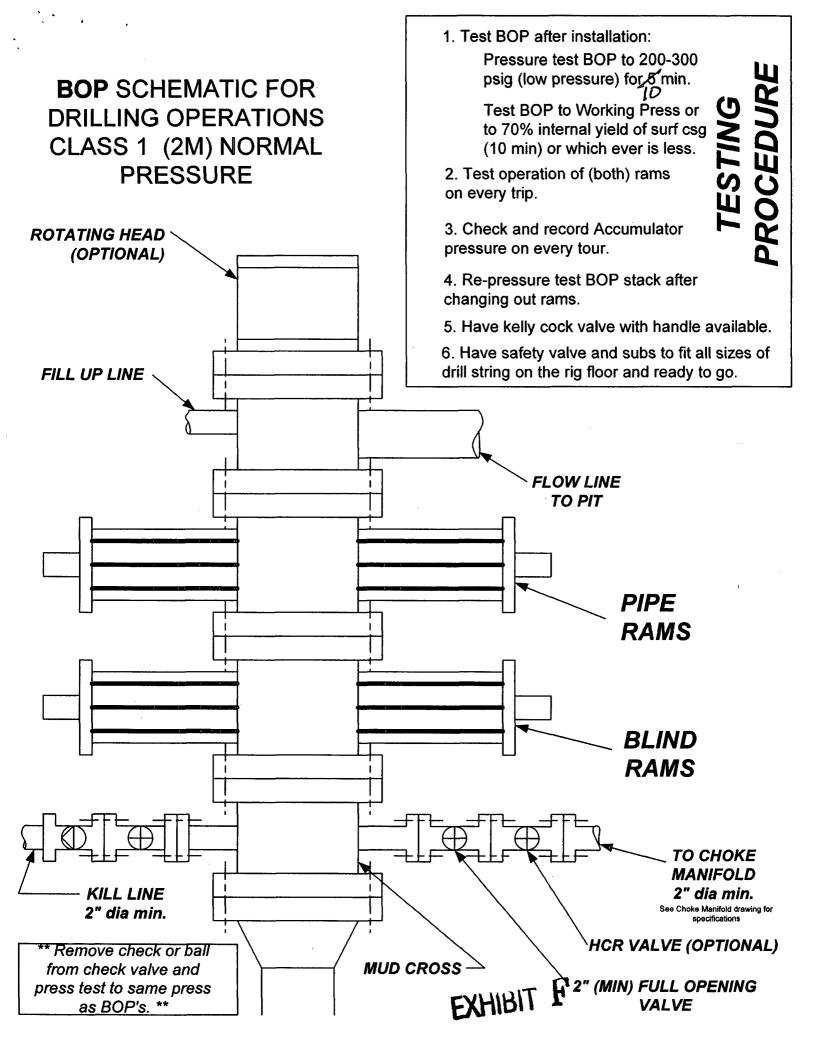
Est. KB Elevation: 5,880'

Formation	Subsea Depth	Well Depth
Ojo Alamo SS	+5300'	580'
Kirtland Shale	+5214'	666'
Farmington SS	+5090'	790'
Fruitland Formation	+4201'	1679'
Lower Fruitland Coal	+4001'	1879'
Pictured Cliffs SS	+3801'	2079'
Lewis Shale	+3650'	2230'
Chacra	+2728'	3152'
Cliffhouse SS	+2156'	3724'
Menefee	+2008'	3872'
Point Lookout SS	+1432'	4448'
Mancos Shale	+1232'	4648'
Gallup SS	+152'	5728'
Greenhorn Limestone	-610'	6490'
Graneros Shale	-664'	6544'
1 st Dakota SS	-733'	6613'
2 nd Dakota SS	n/a	n/a
3 rd Dakota SS	-776'	6656'
4 th Dakota SS	n/a	n/a
5 th Dakota SS	-822'	6702'
6 th Dakota SS	-856'	6736'
Burro Canyon SS	-920'	6800'
Morrison Shale	-960'	6840'
Project TD	-1120'	7000'

**** 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



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

