Form 3160-3 (April 2004)	UNITED DEPARTMENT OF BUREAU OF LANI	F THE INTERIO			FORM APPROVED OMB NO. 1004-0137 Expires March 31, 2007		
	APPLICATION FOR PERMI		- 169 W 419	5.	Lease Serial No. NMSF-077384		
la. Type of Work	<b>∡</b> DRILL	REENTER	12 96 30 m		If Indian, Allotee or Tribe Name		
1b. Type of Well	Oil Well a Gas Well		N/A Unit or CA Agreement Name and No. N/A				
2. Name of Operator			REVENUED	<u>√</u> 8.	Lease Name and Well No.		
3a. Address	c	<del></del>	3b. Phone No. (mchide)area coo	le)	Kutz J Federal #2G API Well No.		
	on Ave., Bldg. K. Ste 1				30-645-32697		
	(Report location clearly and in accorde			10.	Field and Pool, or Exploratory		
At surface 665	5' FSL x 1860' FEL in Sec	6, T27N, R10	W	11.	Basin Dakota/Basin Mancos Sec., T., R., M., or Blk. and Survey or Are		
At proposed prod.	zone same				Sec 6, T27N, R10W		
14. Distance in miles a	nd direction from nearest town or post	office*		12.	County or Parish 13. State		
	rox 8.5 air miles SouthEa				m Juan NM		
15. Distance from pro- location to neares property or lease	st	4.	16. No. of Acres in lease	17.Spacii	ng Unit dedicated to this well  320.51 DK / 160 MC/		
118. Distance from pro	· · · · · · · · · · · · · · · · · · ·		19. Proposed Depth	20.BLM	BLM/BIA Bond No. on file		
to nearest well, dr applied for, on the	rilling, completed,						
applied for, on all	806'		6800'				
21. Elevations (Show	whether DF, KDB, RT, GL, etc.		22. Approximate date work will star	't*	23. Estimated duration		
6001' Gro	und Level		upon approval		2 weeks		
		24.	Attachments				
The following, comple	eted in accordance with the requiremen	ts of Onshore Oil an	d Gas Order No. 1, shall be attached	to this for	rm:		
	d by a registered surveyor.		•	ions unless	s covered by an existing bond on file (see		
<ol> <li>A Drilling Plan</li> <li>A Surface Use Pl</li> </ol>	lan (if the location is on National Forest	System Lands, the	Item 20 above).  5. Operator certification.				
	led with the appropriate Forest Service	•	1 .	formation	and/or plans as may be required by the		
25. Signuature		Na	me (Printed/Typed)		Date		
_ Kyla	Vaughan	R <sub>2</sub>	yla Vaughan	11/19/04			
Title Regulatory	Compliance Tech						
Approved by (Signator	<del></del>	Na	me (Printed/Typed)		Date 2 - 11 - 45		
Title	AFAI	Off	fice FF				
conduct operations th		oplicant holds legal	or equitable title to those rights in	the subject	t lease which would entitle the applicant to		
	on 1001 and Title 43 U.S.C. Section 12 ious or fraudulent statements or represe			illy to mak	te to any department or agency of the Unite		

\*(Instructions on page 2)

APD/ROW

**NMOCD** 

DISTRICT 1 1625 N. Fench Dr., Hobbs, N.M. 88240 State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102 Revised June 10, 2003 Instructions on back Submit to Appropriate District Office State Lease — 4 Copies Fee Lease — 3 Copies

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

DISTRICT III 1000 Rio Brazos Rd., Aztec. N.K. 87410 OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santo Fe. NM 87504-2088

☐ AMENDED REPORT

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

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

30-04	S-2	269	7	*Pool Code 71599			Pool Name	HKTIL			
Property Cod					Property #	lame			Vel Number		
221	571				KUTZ J FE	DERAL			<b>2</b> G		
7.OGRID No.		· · · · · · · · · · · · · · · · · · ·			*Operator I	larne			* Bevotion		
16701	67				XTO ENERG	Y INC.			6001		
					10 Surface	Location	400				
JL or tot no.	Section 6	Township 27-N	Range 1.0-W	Lot lot	Feet from the 665	North/South line SOUTH	Feet from the	East/West line EAST	County SAN JUAN		
			" Botte	om Hole	Location I	f Different Fro	m Surlage				
UL or lot no.	Section	iownship	Range	Lot lein	Feet from the	North/South line	Feet from the	East/West line	County		
Desicoted Acres	}-	7 0	oint or infill		M Consolidation Co	bde	* Order No.	47.700			

OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

			SEC. CORNER FD 27.1/2 GLO 1913/BC	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein to brush and complete to the best of my innestedge and belief
LOT 4	LOT 3	LOT 2	LOT 1	
101 2 K	FE 2005			Signature  JENER W. PHTDIS  Printed Name
The state of the s	662.02.12.02.00		4 00'05'20" W 5294.1" (M)	Title  //-/9-04  Date  18 SURVEYOR CERTIFICATION
LOT 6			**	I hereby certify that the well location shown on this plot was plotted from field notes of actual surveys made by me or snow my supervision, and that the same is true and correct to the best of manual VUKO
LOT 7	[ <i>J</i>	AT: 36'35'56" N. (NAI ONG:107'56'01' W. (N	27) AD 27) 1860'	Signatur and San Profession of The Profession of
	SEC. CORNER FD 2 1/2* BC 1913 GLO			Cartificate Number

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

State of New Mexico
Energy, Minerals & Natural Resources Department

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OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87504-2088

DISTRICT III 1000 Rio Brazos Rd., Aztec, N.M. 87410

☐ AMENDED REPORT

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

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

30-00	winder 3	7697	7	Pool Code		WC	[2,1,1	Pool Name	WAZO".			
Property Cod	57			And the second s	Property N KUTZ J FE	lame				* W	ell Number 2G	
705RID No.	47		*Operator Name *Bevation  XTO ENERGY INC. 6001									
<sup>10</sup> Surface Location												
UL or tot no.	Section 6	Township 27-N	Range 10-W	Lot loch	Feet from the 665	North/South line SOUTH		from the	East/West EAST		SAN JUAN	
			" Botto	m Hole	Location II	Different From	n Si	rface			THE RESERVE THE PROPERTY OF TH	
Ut or lot no.	Section	Township	Ronge	Lot Idn	Feet from the	North/South line	Feet	from the	East/West	line	County	
Dedicated Acres	La de la companya del companya del companya de la c	4	loint or triffil		* Consolidation Co			er No.				
NO ALLOW	ABLE V					ON UNTIL ALL I EEN APPROVED				N 60	NSOLIDATED	
			And and additional and a second a			SEC. COR FD 2 1 GLO 1913	/2"	1 hereby cortif	y that the inform	iction con	RTIFICATION torred herein in owinidge and bellet	
ŁÓT 4		LOT	3	L.i	LOT 2 LOT 1							
LOT 5				6 —			5284.1' (M)	Printed No	TEGENER :	Độa r	Commence of the commence of th	
LOT 6	en er					700 R	528	18 Si I hereby conti was plotted fi	ily that the wal rom field notes supervision, and	l location al actual f that to	TIFICATION  In shoem on this plot is surveys mode, by me is some is true and	
LOT 7			SEC. CORNER 0 2 1/2" BC 1913 GLO	LAT: 36:3 LONG:107	5'56 N. (NAL '56'01 W. (N W. (N 89'44 2641.4	AD 27) 1860' 147" W FD 2.1/	ORNER 2° 8C 3 GLO	Certificate N	149 70 FE	35		

XTO ENERGY INC. KUTZ J FEDERAL No. 2G, 665 FSL 1860 FEL LAT: 36'35'56" N. LONG:107\*56'01' W. SECTION 6, T27N, R10W, N.M.P.M., SAN JUAN COUNTY, N. M. **NAD 27 DATE: JUNE 8, 2004** GROUND ELEVATION: 6001, CONSTRUCTION ZONE a (5) C 3.2 C 3.0 C (6) C 5.7 INSTALL DRAIN PIPE ON 2.1 Slopes Reserve Pit FRUITLAND FORMATIONS ONLY 景 6, DEEL BLOW PIT ŝ 10' DEEP B' DEEP 0 0 (4) 70 LAYDOWN S 16'35' W F 1.0 j. Wellhead to Back Wellhead to Front REAR C 0.4 110 120 CASTING ROW C 0.0 0 110 0 2 2 A' ③ EXISTING ROAD ¤ | <del>=</del> F 2.8 J≯ В, 2.7 F 3.1 205' X 230  $(305' \times 330') = 2.31 \text{ ACRES}$ EPNG P/L ┪┟═┨┠═┈╏┞**┈╏╎┈═╂┞═┫┠**══╂┞═╂├═╂╎╧**╏**┝ ╼<u>┩┝╌┩┝╌┩┟╌┩┟╌┩┟┈┛╟┈┩┝</u>┈┦┞┈┤╂┈┼╏<u>┾</u>┈╏┟┈┤<sup>┋</sup>╌┈╏╏ 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. 15 NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPEUNES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR. CONSTRUCTION. C/i ELEV. A-A 6010 6000 5990 5980 C/L ELEV. B-B' 6010 6000 5990 Services 1, nW 87401 6) 326-6019 5980 Jaggett Enterprises, Surveying and Oil Floid S P. G. Box 15068 · Furnington, I Phone (505) 326–1772 · Fix (505) C/L ELEV. C-C' MENOD LS. 6010 6000 P. G. Sor 1 Phone (505) NEW W 5990 5980 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. NOTE:

#### XTO ENERGY INC.

#### Kutz "J" Federal #2G **APD Data** November 19, 2004

**Location**: 665' FSL x 1,860' FEL Sec 6, T27N, R10W

County: San Juan

State: New Mexico

GREATEST PROJECTED TD: 6.800'

OBJECTIVE: Basin Dakota / Basin Mancos

APPROX GR ELEV: 6,001'

Est KB ELEV: <u>6,013' (12' AGL)</u>

#### 1. 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.

#### 2. 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						
			i		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 ( $\pm 6.800$ ') in 7-7/8" hole filled with 9.0 ppg mud.

						· / /				110		
					Coll	Burst			·			
					Rating	Rating	Jt Str	${ m I\!D}$	Drift	SF	SF	SF
Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Ten
0'-TD	6,800'	15.5#	J-55	STC	4040	4810	222	4.950	4.825	1.22	1.45	2.02
							· ~ ^					

#### **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 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  $\pm 6,800$ ' in 7-7/8" hole. DV Tool set @  $\pm 4,000$ '

1<sup>st</sup> Stage

#### LEAD:

225 sx of Premium Lite HS (Type III/Poz/Gel) with 2% salt, 1/4 pps cello, 0.2% dispersant, 0.5% fluid loss & 2% LCM mixed at 12.5 ppg, 2.01 ft<sup>3</sup>/sk, 10.55 gal wtr/sx.

#### TAIL:

150 sx Type III with 5% bonding additive, 1/4 pps cello, 2% LCM, 0.3% dispersant & 0.2% fluid loss mixed at 14.2 ppg, 1.54 cuft/sx, 8.00 gal/sx.

2<sup>nd</sup> Stage

#### LEAD:

**375** sx of Type III with 8% gel, 1/4 pps cello & 2% LCM mixed at 11.9 ppg, 2.54 ft<sup>3</sup>/sk, 15.00 gal wtr/sx.

#### TAIL:

100 sx Type III 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 1,775 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 4,800' 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 (6,800') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (6,800') to 4,800'. Run an FMI log from TD (6,800') to 6,250'.

#### 6. FORMATION TOPS:

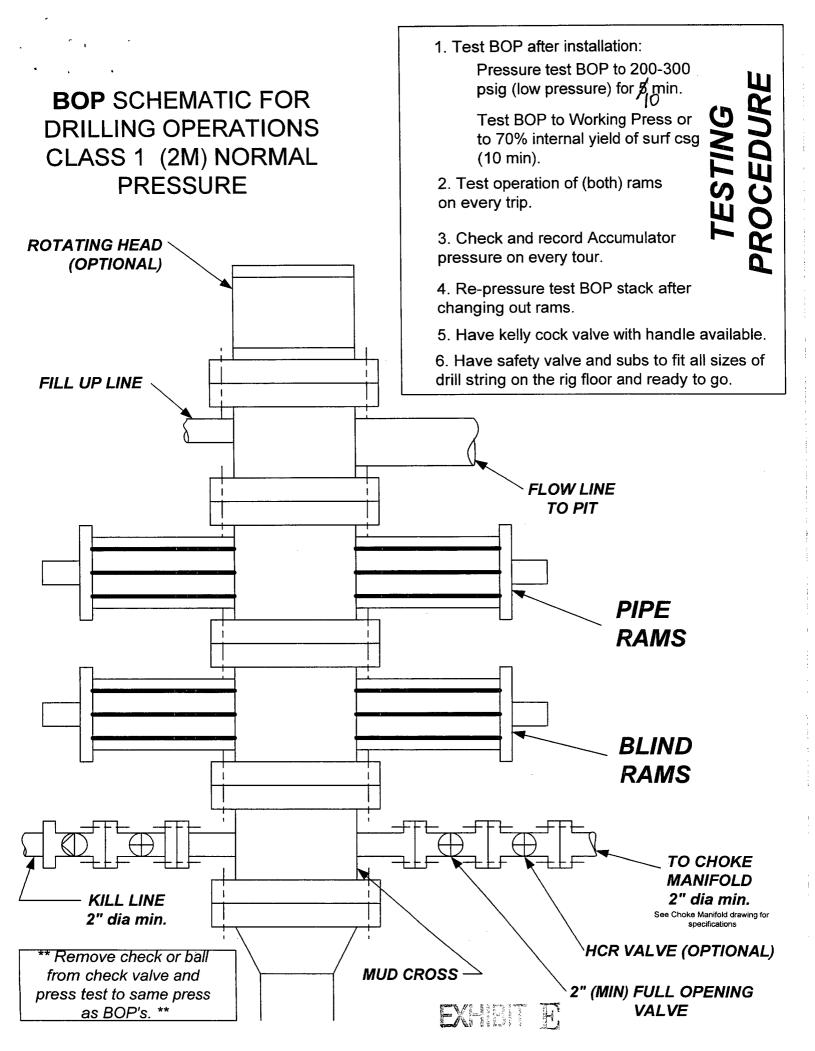
Est. KB Elevation: 6,013'

Formation	Subsea Depth	Well Depth
Ojo Alamo SS	+5206'	810'
Kirtland Shale	+5088'	928'
Farmington SS	+5010'	1006'
Fruitland Formation	+4554'	1462'
Lower Fruitland Coal	+4174'	1842'
Pictured Cliffs SS	+4155'	1861'
Lewis Shale	+4005'	2011'
Chacra	+3250'	2766'
Cliffhouse SS	+2646'	3370'
Menefee	+2510'	3506'
Point Lookout SS	+1807'	4209'
Mancos Shale	+1475'	4541'
Gallup SS	+628'	5388'
Greenhorn Limestone	-161'	6177'
Graneros Shale	-220 <sup>t</sup>	6236'
1 <sup>st</sup> Dakota SS	-249'	6265'
2 <sup>nd</sup> Dakota SS	-274'	6290'
3 <sup>rd</sup> Dakota SS	-329'	6345'
4 <sup>th</sup> Dakota SS	-380'	6396'
5 <sup>th</sup> Dakota SS	-411'	6427'
6 <sup>th</sup> Dakota SS	-453'	6469'
Burro Canyon SS	-528'	6544'
Morrison Shale	-593'	6609'
Project TD	-784'	6800'

#### 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
Randy Hosey	Project Geologist	817-885-2398	817-427-2475
Barry Voigt	Reservoir Engineer	817-885-2462	817-540-2092

JWP 11/19/04



# 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

