Form 3160-3 (August 2007) .

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT



FORM APPROVED OMB NO. 1004-0137 Expires July 31, 2010

Mrs. 2 1 2009

APPLICATION FOR PERMIT TO DRIL		NMSF 079035A
a. Type of Work DRILL REEN	TTER Bureau of Land M	anagement 15 079035A If Indian, Allotee or Tribe Name N/A
T + 107 H		
Type of Well Oil Well Gas Well Other	Single Zone x Multiple Zon	
Name of Operator		N/A
IO Energy Inc.	·	8. Lease Name and Well No.
Address	3b. Phone No. (include area co	ode) Breech A #136G
82 CR 3100 AZTEC, NM 87410	505-333-3100	30.039-30105
Location of Well (Report location clearly and in accordance with any	State equirements)*	10. Field and Pool, or Exploratory
At surface 2055' FNL x 1965' FEL		Basin DK, Blanco MV, S Blanc
A4 mm		11. Sec., T., R., M., or Blk. and Survey or A
At proposed prod. zone SAME		(G) Sec 10,T26N,R6W
Distance in miles and direction from nearest town or post office*		12. County or Parish 13. State
Approximately 32.6 Miles SouthEast of	Bloomfield, NM Post Offic	e RIO ARRIBA NM
Distance from proposed*	16. No. of Acres in lease	17. Spacing Unit dedicated to this well
location to nearest		
property or lease line, ft. 1965' (Also to nearest drg. unit line, if any)	2400	DK/MV: E/2 320, TO:E/2 80 NE/4
	10 Para 1 Pari	
Distance from proposed location* to nearest well, drilling, completed,	19. Proposed Depth	20. BLM/BIA Bond No. on file
applied for, on this lease, ft.		TTTTD000100
1053'	7750'	UTB000138
Elevations (Show whether DF, KDB, RT, GL, etc.	22. Approximate date work will sta	art* 23. Estimated duration
Ground Elevation 6593'	04/15/2009	2 Weeks
This action is subject to technical and		
procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4	24. Attachments DRILLIN	IG OPERATIONS AUTHORIZED ARE IT TO COMPLIANCE WITH ATTACHED
e following, completed in accordance with the requirements of Onshore	Oil and Gas Order No. 1, must be attached	RAL RECIDENTS.
		RCVD MAY 27'11
Well plat certified by a registered surveyor.	,	tions unless covered by an existing bond on file (see
A Drilling Plan.	Itém 20 above).	OTL CONS. DIV.
A Surface Use Plan (if the location is on National Forest System Lands SUPO must be filed with the appropriate Forest Service Office).		nformation and/or plans as may be required by the
501 0 must be filed with the appropriate Potest Service Office).	BLM	DIST. 3
		15
Signature 1 1 11 11	Name (Printed/Typed)	SEE ATTACHED FOR
Lennifer M. Hembry	JENNIFER M. HEMBRY	CONDITION 03/03/2009
<i>k</i>		CONTRIBUTED OF APPROVA
REGULATORY CLERK		
proved by (Signautre) / //	Name (Printed/Typed)	Date /
H 1/1/1 (2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Traine (Frinces Types)	1/20/11
- PS/// Culled lett		5/25/1
tle /	Office	
ATM	170	
oplication 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
nduct operations thereon. Inditions of approval, if any, are attached.		
nuitions of approval, it any, are attached.		
tle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a	crime for any person knowlingly and willf	ully to make to any department or agency of the Uni
ates any false, fictitious or fraudulent statements or representations as to	any matter within its jurisdiction.	
ontinued on page 2)		*(Instructions on page 2)
715	•	
JITHY AZTEC OCD ONLING	Afrika aga a ay kali laga	
OTIFY AZTEC OCD 24 HRS.		
IOR TO CASING & CEMENT		
- OFINE		
II IAI 4 0 0044		
JUN 1 0 2011		

NMOCD

N

1625 N. French Dr., Hobbs, N.M. 88240

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

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

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

MAR 24 2009

Form C-102 Revised October 12, 2005 Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT IV 220 South St. Fra	incis Dr., Sai	nta Fe, NM 8	7505			Bureau	of Land Manag	ennenn] AMEN	IDED REPORT
		٧	VELL LO	OCATIO	N AND AC	REAGE DEDI	CATION PE	n ce AT		
30.03	Number 9 - 30			² Pool Code 5		asin Dat	3D1 M			
Property Co					SProperty N	ome			• W	ell Number
304	749				BREECH	Α			136G	
OGRID No.			Operator Name							
5380)				XTO ENERGY	Y INC.			6593′	
					10 Surface	Location				,
UL or lot no.	Section	Township	Ronge	Lot Idn	Feet from the	North/South line	Feet from the	East/We:	st line	County .
G	10	26N	6-W		2055	NORTH	1965	EA:	ST	RIO ARRIBA
The garage and it was independently become a facility of the control of the contr			" Bott	om Hole	Location I	f Different Fr	om Surface			
UL or lot no.	Section	Township	Ronge	Lot Idn	Feet from the	North/South line	Feet from the	East/We	st line	County
12 Dedicated Acres	s s	L	13 Joint or I) Tisi	14 Consolidation Co) ode	15 Order No.	<u>. </u>		

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

16	OR A NON-STAN	NDARD UNIT HAS E	BEEN APPROVED BY	THE DIVISION
	FD. 3 1/4" BC. 1957 B.L.M.	\$ 89'58'58" 2631.94' (I	M) TOO B.L. M	OPERATOR CERTIFICATION I hereby certify that the information contained herein 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 hade location or has a right to drill this well at this location pursuant to a
		2055,	0.4425" 0.7763" (M)	contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.
LONG: 107.4526	SURFACE: 57° N. (NAD 83) 65° W. (NAD 83) 2.87" N. (NAD 27) 19.54" W. (NAD 27)		1965 FD. 3 1/4" BC. 1957 B.M.	J. Hembry 3/2/09 Signature Pate Jennifer M. Hembry Printed Nome
				18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of octual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.
				SEPARABLER 82, 2008 Date of Survey 2011 A. 17 C. Signature and Sear of Marketing Surveyor: (8894)
				Certificate Number Scional July

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

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

DISTRICT III 1000 Rio Brozos Rd., Aztec, N.M. 87410 State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-102 Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

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

		V		OCATION	N AND AC	REAGE DEDI	CATION PL	_AT		
	Number	ショクス	7	Pool Code 7 3 1 9	Γρ	planco 1	Pool Name	rde		
Property Con				-011	⁵ Property N		1CSt VC	Well Number		/ell Number
3047	749	l			BREECH	A.				136G
OGRID No.			Operator Name							Elevation
5380	C		XTO ENERGY INC.							6593'
		· · · · · ·		·	10 Surface		T			
UL or lot no.	Section 10	Township 26-N	Range 5W	Lot Idn	Feet from the 2055	North/South line NORTH	Feet from the	Eost/We:		County RIO ARRIBA
		_ Z0-N		om Hole		If Different Fr	L	L		INIO ANNIDA
UL or lot no.	Section	Township	Ronge	Lot Idn	Feet from the	North/South line	Feet from the	East/We	st line	County
¹² Dedicated Acres			U Joint or Ir	fil)	¹⁴ Consolidation C	ode	15 Order No.			
15/2-	320) , . I						*		
NO ALLOW	VABLE V					ON UNTIL ALL			EEN C	ONSOLIDATED
16		OR A N	ION-ST	4		EEN APPROVE	D BY THE DI	VISION		
LONG: 10	07.4526 36°30'12		0 83) 0 27)		S 89-58'58" 2631.94" (I	M) 1957	I hereby cer is true and belief, and I interest or a including the right to dral contract will interest, or compulsory division. BC. Signatur Printed B.L.M.	tify that the complete to that this organ unleased mine e proposed by this well at the an owner cot a voluntar pooling order	information the best of nization eith croil interest to the state of t	ICATION contained herein my knowledge and er owns a working in the land ocation or has a n pursuant to a ineral or working preement or a entered by the 3/2/09 Pate 1 Hembr
							i hereby ceri was plotted me or under	tify that the introm field not my supervisite to the best o	vell location ies of octual on, and that	shown on this plat surveys mode by the same is true dage and belief. 2, 2008

DISTRIGT I 1625 N. French Dr., Hobbs, N.M. 88240

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☐ AMENDED REPORT

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

	WELL LO	CATION AN	ND AC	REAGE DEDI	CATION PL	AT		
1 API Number		Pool Code		South F	Pool Name	Tac	:+0	
Property Code	100 06	460	5 Property No	ome	Dianco	<u> 100</u>	Well	Number
304749				1,36G				
OGRID No.			^B Operator N					evation
5380		XTC) ENERGY	Y INC.			6	593'
		10 S	urface	Location	<u>, , , , , , , , , , , , , , , , , , , </u>			
1 1	wnship Range 6-N 6-W	i i	rom the — 055	North/South line	Feet from the 1965	Eost/West EAST	Į.	County RIO ARRIBA
0 10 2	"Bottor			f Different Fro	L	L CA31		· ·
UL or lot no. Section To			rom the	North/South line	Feet from the	East/West	1in e	County
Dedicated Acres	Joint or Infil	1 Cons	solidation Co	ode ·	15 Order No.	•		
W/2-11/4-8	30							
NO ALLOWABLE WILL	BE ASSIGNED R A NON-STAN						EN COI	VSOLIDATED
16					17	V131014		
	FD. 3 1/4" BC. 1957 B.L.M.	S 2/9'	58'58"/\ 1,94% (M	W FD. 3 1/4 1) 1957 (B.L.M. OPER	ATOR C		
		///		:	is true and	tify that the infi complete to the	e best of my	knowledge and
					interest or u	hat this organiz Inleosed mineral I proposed batto	interest in	the land
				:	right to drill contract with	this well at this ton owner of s	is location pu	ursuant to a
					interest, or compulsory	to a voluntary p pooling order he	pooling agree	ment or o
					including the right to drill contract will interest, or compulsory division.			
	SURFACE:		/ /	(7	[A	-11
LAT: 36.50357° N LONG: 107.45265° V					M. K	lomb	bry	3/2/09
LAT: 36'30'12.87" LONG: 107'27'09.54"	' N. (NAD 27)	// -	//	1965	Signatur	e , ()	()	Date
10000. 107.27 03.34	W. (NAU 27)		//	FD. 3 1/4	. BC Jer	aniter	W.	Hembry
	1	6//		1957		Name		,
	•	1		•	18	LIRVEYO	B CEB.	TIFICATION
			·]		[]	tify that the well		
			.]			from field notes my supervision,		
			- 1		and correct	to the best of n	ny knowledge	and belief.
					Date of S	SEPTEME	ER 82	2008
					Signature	1.6	TOTAL SERVICE	Sur leyor:
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						700 8:	Total LAN	
					Certificate	Number	101101	

XTO ENERGY INC.

Breech A #136G APD Data February 25, 2009

Location: 2055' FNL x 1965' FEL Sec 10, T26N, R6W County: Rio Arriba State: New Mexico

GREATEST PROJECTED TD: 7750'

OBJECTIVE: Basin Dakota / Tocito / Mesaverde

APPROX GR ELEV: 6593'

Est KB ELEV: <u>6605' (12' AGL)</u>

1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 2500'	2500' to 7750'
HOLE SIZE	12.25"	7.875"	7.875"
MÚD TYPE	FW/Spud Mud	LSND	LSND
WEIGHT	8.6-9.0	8.4-8.8	8:6- 9.8
VISCOSITY	28-32	28-32	45-70
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. <u>CASING PROGRAM:</u>

Surface Casing: 8.625" casing to be set at \pm 360' in a 12.25" hole filled with 9.20 ppg mud

1		- Y				C 11	ъ .	T T					
١					·	Coll	Burst						
						Rating	Rating	Jt Str	ID	Drift	SF	SF	SF
ı	Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Ten
١													
	0'-360'	360'	24.0#	J-55	ST&C	1370	2950	244	8.097	7.972	7.950	17.13	28.24

Production Casing: 5.5" casing to be set at TD (±7750') in 7.875" hole filled with 9.20 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'-7750	7750'	15.5#	J-55	ST&C	4040	4810	202	4.950	4.825	1.09	1.30	1.68

3. 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 (or slip-on, weld-on), 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:

8.625", 24.0#, J-55, ST&C casing to be set at \pm 360' in 12-1/4" hole.

214 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> 5.5", 15.5#, J-55 (or K-55), ST&C casing to be set at ± 7750 ' in 7.875" hole. DV Tools set @ ± 6300 ' and @ ± 3200 '.

1st Stage

LEAD:

±99 sx of Premium Lite HS (Type III/Poz/Gel) or equivalent, with dispersant, fluid loss, accelerator, & LCM mixed at 12.5 ppg, 2.01 ft³/sk, 10.55 gal wtr/sx.

TAIL:

100 sx Type III or equivalent cement with bonding additive, LCM, dispersant, & fluid loss mixed at 14.2 ppg, 1.54 cuft/sx, 8.00 gal/sx.

2nd Stage

LEAD:

±242 sx of Type III or equivalent cement with 8% gel & LCM mixed at 11.9 ppg, 2.54 ft³/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.

3rd Stage:

LEAD:

±244 sx of Type III or equivalent cement with 8% gel & LCM mixed at 11.9 ppg, 2.54 ft³/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 1863 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: None.

B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (7750') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (7750') to +/- 2500'.

6. FORMATION TOPS:

Est. KB Elevation: 6593'

FORMATION	Sub-Sea	MD	FORMATION	TV Sub-Sea	MD
Ojo Alamo SS	4262	2343	Gallup	245	6360
Kirtland Shale	4065	2540	Greenhorn	-567	7172
Farmington SS			Graneros	-625	7230
Fruitland Formation	3951.	·2654	Dakota 1*	-653	7258
Lower Fruitland Coal	3589	3016	Dakota 2*	-708	7313
Pictured Cliffs SS	3568	3037	Dakota 3*	-754	7359
Lewis Shale	3441	3164	Dakota 4*	-792	7397
Chacra SS	2666	3939	Dakota 5*	-827	7432
Cliffhouse SS*	1869	4736	Dakota 6*	-867	7472
Menefee**	1831	4774	Burro Canyon	-920	7525
Point Lookout SS**	1332	5273	Morrison*	-964	7569
Mancos Shale	983	5622	TD	-1145	7750

^{*} Primary Objective

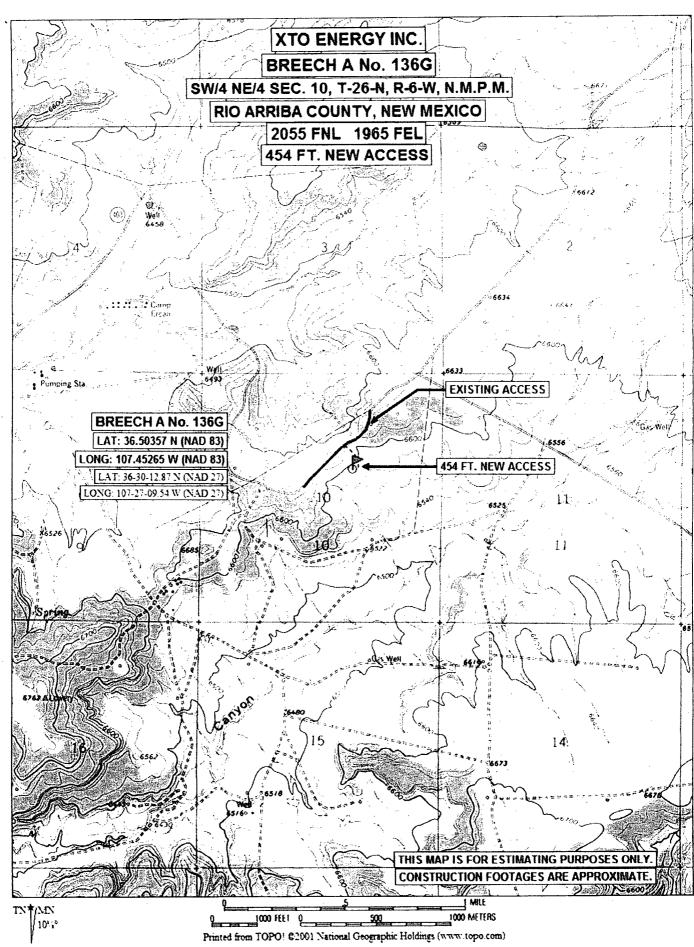
7. <u>COMPANY PERSONNEL:</u>

Name	Title	Office Phone	Home Phone
Justin Niederhofer	Drilling Engineer	505-333-3199	505-320-0158
Bobby Jackson	Drilling Superintendent	505-333-3224	505-486-4706
John Klutsch	Project Geologist	817-885-2800	

JN 2/25/09

^{**} Secondary Objective

^{****} Maximum anticipated BHP should be <2,500 psig (<0.30 psi/ft) *****



DRILLING CONDITIONS OF APPROVAL

Operator:

XTO Energy

Lease No.:

NMSF-079035-A

Well Name:

Breech A #136G

Well Location:

Sec.10, T26N, R6W; 2055' FNL & 1965' FEL

1) As a requirement, approximately 750ft of 5.5" 17lbf/ft J-55 casing must be integrated in the production casing design to meet the minimum collapse design factor of 1.125.

CHOKE MANIFOLD

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

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

TESTING PROCEDURE

