Form 3160-3 (September 2001)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0136 Expires January 31, 2004

*	APPLICATI	ON FOR PER	MIT TO DRILL (OR REENTE	R) 5.	Lease Serial No.	414		
a. Type of Work	X D	RILL	REENTE	₹	eng province a district district		6. If Indian, Allotee or Tribe Name			
o. Type of Well	Oil Well	Gas Well	Other	Single Zone		7	Unit or CA Agre	ement Nar	ne and No.	
Name of Operator				Ų,		i, i 8.	Lease Name and	Well No.		
CTO Energy Inc	c			2h Dhom	e No. Orichide area co	3	Federal Ga	s Com "	1" #3	
. Address					Charle mar west A	723 9.	API Well No.	- 3 7	2001	
2700 Farmingt	On Ave., Blo	lg. K. Ste 1	Farmington, rdance with any State	NM C	3 // 4	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	30045			
	· •	•	sec 20, T32N,	· \(\(\infty \)	0,7 2002		Field and Pool, o	tland C	bal	
At proposed prod.	zone			15.16	Company of	\overline{p}	Sec., T., R., M., Sec 20, T3		-	
Distance in miles an		•		7 - Plas		c 12/	County or Parish	13.S	tate	
. Distance from pro		cated 12 no	rtheast of the	16.No. of Ac	(4)) .	I CA mad	ng Unit dedicated	to this we		
location to neares				10.140. 01 AC	£6.8 L	T Spaci	ng Omi ucuicale(i to this we	-11	
property or lease 1 (Also to nearest d	ine, ft. rg. unit line, if any	665'			536.84	:	320	N/2		
Distance from pro to nearest well, dr	illing, completed,		19. Proposed Depth 20. B			/BIA Bond No.	on file			
applied for, on thi	s lease, ft.	75'		2	350 '					
.Elevations (Show v	whether DF, KDB,	RT, GL, etc.		22. Approxin	ate date work will sta	rt*	23. Estimated duration			
/ 5,941' ung	raded groun	d level		l s	ummer, 2004		1 week			
Well plat certified A Drilling Plan A Surface Use Pla	by a registered su	rveyor. s on National For	est System Lands, the	4. Boolter 5. Op	No. 1, shall be attached and to cover the operat m 20 above). Berator certification. The other site specific in the other site officer.	ions unless	covered by an e	J	,	
Cienustura		$\overline{\gamma}$	Tar	····	· · · · · · · · · · · · · · · · · · ·		I no			
Signuature	$\bigcirc i$	V Patto		ame (<i>Printed/T</i> Jeffrey W.			Da		/13/04	
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Drilling En			1							
oproved by (Signaut)	Ma	ukee id	\bigcap	ame (<i>Printed/I</i>	(yped)		Da	te 7-2 2	2-14	
tle	1		0	ffice			-			
nduct operations the	ereon.		applicant holds lega	l or equitable t	itle to those rights in	the subject	t lease which wo	uld entitle	the applicant	
Conditions of approva	l, if any, are attach	3 U.S.C. Section	1212, make it a crime esentations as to any i	e for any persor matter within it	knowlingly and willfu	ılly to mak	e to any departm	ent or ager	ncy of the	

*(Instructions on Reverse)

APD/ROW

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO DOMINIANCE WITH ATTACHED *GENERAL FEGUREMENTS*,

RWOCD

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

DISTRICT I 1825 N. French Dr., Hobbs, N.M. 88240,

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised August 15, 2000

DISTRICT II 811 South First, Artesia, N.M. 88210

B.L.M. 1952

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

DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

Submit to Appropriate District Office

Certificate Number

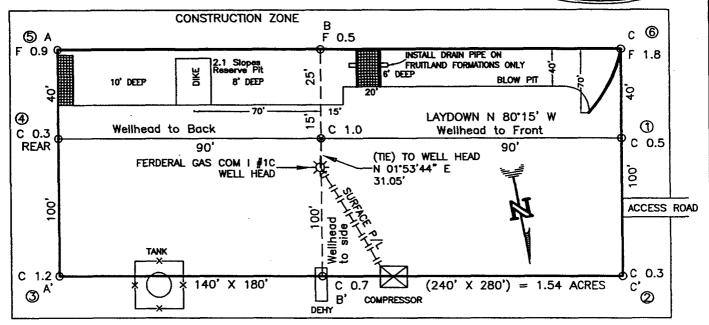
State Lease — 4 Copies Fee Lease — 3 Copies

☐ AMENDED REPORT

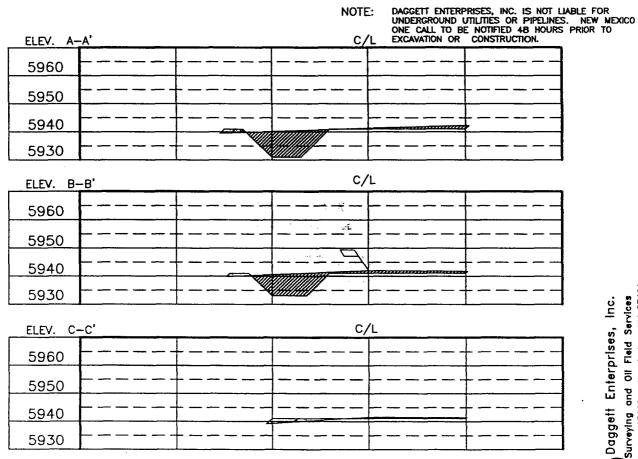
**Property Code
FEDERAL GAS COM 1 *Corridor Name *Corridor Name *TO ENERGY INC. *Corridor Name *To ENERGY INC. *To Energy
TO GRID No. **Operator Name **Devotion 5941 **TO ENERGY INC. 5
TO Surface Location UL or lot no. Section Township Range Lot Idn Feet from the 1090' NORTH 665' WEST SAN JUAN
UL or lot no. Section Township Range Lot Idn Feet from the 1090' NORTH 665' WEST SAN JUAN 11 Bottom Hole Location If Different From Surface UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County 12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No. 15 Dedicated Acres 15 Joint or Infill 15 Completion Until ALL Interests have Been consolidated on A Non-Standard Unit has Been approved by The Division 16 N 88-33-48/E 4999.0' M) 17 OPERATOR CERTIFICATION Interests to the best of my knowledge and balled is true and complete to the best of my knowledge and balled 15 Decided to the best of my knowledge and balled 15 Decided to the best of my knowledge and balled 16 Decided to the best of my knowledge and balled 16 Decided to the best of my knowledge and balled 16 Decided to the best of my knowledge and balled 16 Decided to the best of my knowledge and balled 17 Decided to the best of my knowledge and balled 17 Decided to the best of my knowledge and balled 17 Decided to the best of my knowledge and 18 Decided to the best of my knowledge and 18 Decided to the best of my knowledge and 18 Decided to the best of my knowledge and 18 Decided to the best of my knowledge and 18 Decided to the best of my knowledge and 18 Decided to the best of my knowledge and 18 Decided to the best of my knowledge and 18 Decided to the best of my knowledge and 18 Decided to the best of my knowledge and 18 Decided to the best of my knowledge and 18 Decided to the best of my knowledge and 18 Decided to the De
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11 Bottom Hole Location If Different From Surface UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County Dedicated Acres 13 Joint or Infil 14 Consolidation Code 18 Order No. No Allowable Will Be Assigned to this completion Unit has been approved by the DIVISION
UL or lot no. Section Township Range Lot idn Feet from the North/South line Feet from the East/West line County **Dedicated Acres** 13 Joint or Infili** 14 Consolidation Code 15 Order No.
Poedicated Acres 3
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 18 N 88-33-48/E 4999.0' M) FD 1/2" REBARY WITH 1" CAP STAMPED "LS 8894" 17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION 16 N 88-33-48 E 4999.0' (M) FD 1/2" REBART WITH 1" CAP STAMPED "LS 8894" FD 3 1/4" BC B.L.M. 1952 FD 3 1/4" BC
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION 16 N 88-33-48 E 4999.0' (M) FD 1/2" REBART WITH 1" CAP STAMPED "LS 8894" FD 3 1/4" BC B.L.M. 1952 FD 3 1/4" BC
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FD 3 1/4" BC B.L.M. 1952
B.L.M. 1952
665
E LAT: 36/58/33" N. (NAD 83) LONG: 108'07'29" W. Signature
Printed Name Driving Assistant Title
8/18/03
≥ 18 SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat
1 hereby certify that the well location shown on this plot was plotted from field notes of actual surveys made by me or under my supervisor, my defined to the baset of my defined to t
and correct to the best of my belief.
18 SURVE YOR CERTIFICATION 1 hereby certify that the well location shown on this plot 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 beller. Date it survey. Signature and Seef of Professional Surveyor:
Date of Survey CN ME CO Surveyor: Standure and Sed of Professional Surveyor:
14827
FD 3 1/4" BC

XTO ENERGY INC. 665' FWL FEDERAL GAS COM 4 #3, 1090' FNL SECTION 20, T32N, R12W, N.M.P.M., SAN JUAN COUNTY, N.M. GROUND ELEVATION: 5941', DATE: AUGUST 5, 2003

LAT. = 36°58'33" N. LONG. = $108^{\circ}07'29"$ W. (NAD83)



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: 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.

DRAWN BY: BS

ROW#: CR231

CADFILE: CR231CF8

DATE: 8/11/03

Daggett Enterprises, Inc.

d Oll Fleid Services Farmington, NM 87401 772 Fax (505) 326—6019

Surveying and 0 0, Box 15068 Fe 1e (505) 326-1772

euo4c

XTO ENERGY INC.

DRILLING PROCEDURE

Federal Gas Com "1" #3 Basin Fruitland Coal April 13, 2004

Location: 1,090' FNL & 665' FWL, Sec 20, T32N, R12W County: San Juan State: New Mexico

PROJECTED TOTAL DEPTH: 2,350' OBJECTIVE: Fruitland Coal GR ELEV: 5,941'

1. MUD PROGRAM:

INTERVAL	0'-200'	200'-TD
HOLE SIZE	8-3/4"	6-1/4"
MUD TYPE	FW/Native	FW/Polymer
MUD WEIGHT, ppg	8.6-9.0	8.6-9.1
VISCOSITY, sec/qt	28-32	28-33
WATER LOSS, cc	NC	NC

Remarks: Drill the surface hole with fresh water. Run and cement 7" surface casing, circulating cement to surface. NU and test BOP equipment, then drill out with fresh water. Use polymer sweeps as needed for hole cleaning. At TD, sweep the hole prior to TOH to log.

2. CASING PROGRAM:

Surface Casing: 7" casing to be set at ± 200 ' in 8.8 ppg mud.

	7											
					Coll	Burst						
		Wt			Rating	Rating	Jt Str	ID	DD	SF	SF	SF
Interval	Length	(ppf)	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Tension
0'-200'	200'	20#	J-55	STC	2,270	3,740	234	6.456	6.331	9.99	4.59	58.5

Optimum makeup torque for 7" 20#, J-55, STC casing is **2,340 ft-lbs** (Min - 1,760 ft-lbs, Max - 2,930 ft-lbs).

Production Casing: 4-1/2" casing to be set at $\pm 2,350$ ' in 8.8 ppg mud.

1						Coll	Burst						
			Wt			Rating	Rating	Jt Str	ID	DD	SF	SF	SF
l	Interval	Length	(ppf)	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Tension
	0'-TD	2,350'	10.5#	J-55	STC	4,010	4,790	132	4.052	3.927	3.57	3.33	5.24

Optimum makeup torque for 4-1/2", 10.5#, J-55, casing is 1,320 ft-lbs (Min - 990 ft-lbs, Max - 1,650 ft-lbs).

Capacity of 7", 20# casing is: 0.04048 bbl/ft Capacity of 4-1/2", 10.5# casing is: 0.01595 bbl/ft

3. WELLHEAD:

Casinghead: Larkin Fig 92 (or equivalent) 2,000 psig WP (4,000 psig test) with 7", 8rd pin on

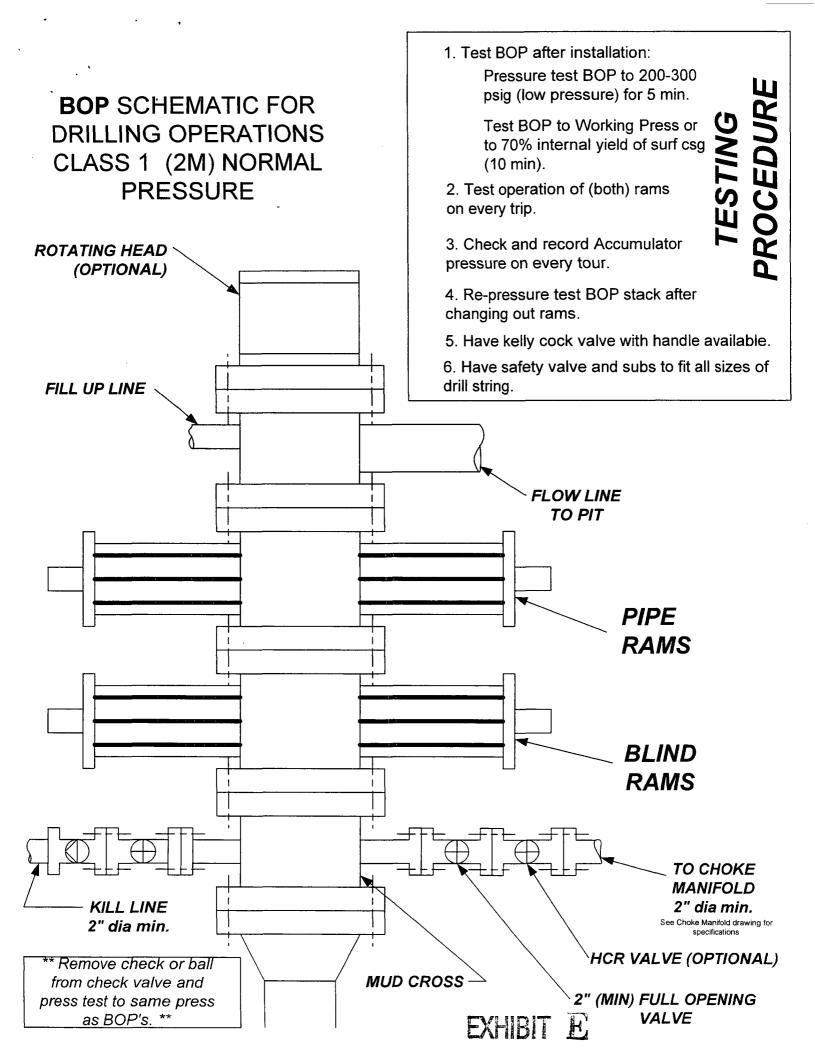
bottom and 8-5/8" API Modified 8rd thread on top.

Tubinghead: Larkin Model 612 (or equivalent) 2,000 psig WP (4,000 psig test) with 4-1/2", 8rd

bottom thread and 8-5/8" 8rd API Modified top body thread, 4.090" minimum bore.

F. A trash trailer will be provided on each location. Keep trash picked up and the location as clean as possible. All drilling line, oil filters, etc., should be hauled away at the Drilling Contractor's expense. At the conclusion of the drilling operations, the contents of the trash trailer will be disposed of into a commercial landfill. The reserve pit will be lined with a 6 mil plastic liner in order to contain the drill cuttings and drilling fluids. At the conclusion of the drilling operation, all fluid in the reserve pits should be hauled away to a commercial disposal well. The contents of the reserve pit will be buried in place and the pit covered with the original topsoil as much as possible.

J.W. Patton 4/13/04



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

