Form 3160-5 (February 2005)

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR

SUNDRY NOTICES AND REPORTS ON WELLS

## **BUREAU OF LAND MANAGEMENT**

FORM APPROVED
OM B No. 1004-0137
Expires: March 31, 20
12 72 107 1742 217 1, 20

#### 5. Lease Serial No. NMNM-0359212

Do not use this form for proposals to drill or to re-enter an

6. If Indian, Allottee or Tribe Name

abandoned w	abandoned well. Use Form 3160 - 3 (APD)-for such proposals.									
	IPLICATE- Other insti	ructions on rever	ඳුලැ <u>හ</u> ැල්ම.	N/A	CA/Agreement, Name and/or No.  OIL CONS. DIV.					
Oil Well  2. Name of Operator XTO Energy	Gas Well Other	Bureau of Land	n Field Unice	8. Well Nam HENDE	RSON 5 #3 DIS1. 3					
3a. Address	9. API Wei	32588								
4. Location of Well (Footage, Sec.,		505-333-3100	·	BASIN	Pool, or Exploratory Area FRUITLAND COAL					
SH: 965' FNL x 1010' FWL, 5 BH: 1900' FNL x 700' FEL, S					r Parish, State AN, NM					
12. CHECK AI	PPROPRIATE BOX(ES) TO	INDICATE NATUR	E OF NOTICE, RI	EPORT, OR	OTHER DATA					
TYPE OF SUBMISSION		TYF	PE OF ACTION							
Notice of Intent Subsequent Report Final Abandonment Notice	Acidize Alter Casing Casing Repair Change Plans Convert to Injection	Deepen Fracture Treat New Construction Plug and Abandon Plug Back	Production (Star Reclamation Recomplete Temporarily Aba	,	Water Shut-Off Well Integrity Other chg to horizontal drig					
13 Describe Proposed or Complete	ed Operation (clearly state all perti	nent details including estin	nated starting data of an	v nmoseed was	t and approximate duration themself					

If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Upon further review of this well, XTO would like to change the drilling plan from a vertical FC/PC to a horizontal FC. Please see attached revised C102, drilling & horizontal plan.

> CONDITIONS OF APPROVAL Adhere to previously issued stipulations.



HOLD CHOR FUR divectional source & As dvilks

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)				
Kyla Vaughan	Title	Regula	tory Compli	liance
Signature Kryla Vauchan	Date			01/31/2008
THIS SPACE FOR FEDERAL	. OR	STAT	E OFFIC	CE USE
Approved by Troy L. Salvers		Title	PE	Date 2-11-2008
Conditions of approval, if any, are attached. Approval of this notice does not warrar certify that the applicant holds legal or equitable title to those rights in the subject lear which would entitle the applicant to conduct operations thereon.		Office	FFO	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any States any false, fictitious or fraudulent statements or representations as to anymatter	person within	knowing its juris	gly and willfu diction	ully to make to any department or agency of the Unite

(Instructions on page 2)

DISTRICT I 1825 N. Francia Dr., Hobba, N.M. 88240

DISTRICT II 1301 W. Grand Ave., Artesia, H.M. 88210

DISTRICT III 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 Form C-102 Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies
Fee Lease - 3 Copies
RCVD FEB 13 '08

☐ AMENDED REPORT

DISTRICT IV

220 South St. Fra	ncis Or., Sa	nta Fe, NM 87	505					_	_ ,c.	AND WALL		
		W	ELL LO	CATION	A DNA P	CREAGE DED	ICATION PL	_AT	UIL CU	INS. DIV.		
'API	Number		7	Pool Code	(	BASIN F	Pool Name RUITLAN	0	<u> </u>	ŞT. 3		
*Property Co. 3038;	360				<sup>6</sup> Property HENDERS(				#	Number 5		
700R10 но. 538	0	*Operator Name  *Clevation  XTO ENERGY INC.  6179										
					10 Surface	e Location						
UL or let no. D	Section 5	Township 26N	Range 11-W	Lot Idn	Feet from the 965	North/South line NORTH	Feet from the 1010	East/We WE	st line	County SAN JUAN		
		<u></u>	" Botte	om Hole	Location	If Different Fr	om Surface					
UL or lot no. H	Section 5	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	Equt/W	set line	County SAN JUAN		
2 Dedicated Acres		26-N	11-W	1	** Consolidation		Sorder No.	1		JAN JUAN		
N/2	320	$\supset$										
	ABLE V	MILL BE A	SSIGNE	O TO TH	S COMPLE	TION UNTIL ALL	INTERESTS	HAVE F	BEEN C	CONSOLIDATED		
16						BEEN APPROVE						
FD. 3 1/4 <sup>2</sup> BC. 1911 G.L.O.  LOT 4  1010'  W (N) 1010'  FD. 2 1/2° BC. 1930 G.L.O.	965,	LONG: 16 LAT: 36'S LONG: 16	E:52178°   108.0326 51'18.4" N 08'01'55.3  LAT: 36. NG: 108.	N. (NAD 5° W. (NAD 5°	LOT 2 58-54 W 39' (M) 83)	LOT 1	GLO.  I hereby co le true ente belief, and interest or including the right to discontract with interest. Or computerry division.  Printed  Printed  I hereby co was plotted me or under	ritly that the complete to that the complete to that the complete to that the complete proposed it is well at the well at the well at the well at the or other to a votunity positing order.  SURVE	Information the best of enlastion at end interest of end interest of end in the total of end end of end interest	location or hee a in pursuant to a in pursuant to a in pursuant to a in pursuant or a certained by the location of the location of the location of the location of the plot of surveys mode by it the same is true		
PRELIMINARY B.H.L. FOOTAG AND PROVIDED	ES ARE	APPROXIMATE ENERGY INC	: C <u>c</u>				Signology		SEE NON!	u v v v v v v v v v v v v v v v v v v v		

#### XTO ENERGY INC.

#### Henderson 5-3 APD Data January 31, 2008

Location: 965' FNL & 1010' FWL, Sec. 5, T26N, R11W

County: San Juan

State: New Mexico

Bottomhole Location: 1900' FNL & 700' FEL Sec 5, T26N, R11W

GREATEST PROJECTED TVD: 1398'

APPROX GR ELEV: 6179'

GREATEST PROJECTED MD: 4811'

Est KB ELEV: 6191' (12' AGL)

OBJECTIVE: Fruitland Coal

#### 1. MUD PROGRAM:

INTERVAL	0' to 225'	225' to 1677'	1677' to TD
HOLE SIZE	12.25"	8.75"	6.125"
MUD TYPE	FW/Spud Mud	FW/Polymer	Air/Mist
WEIGHT	8.6-9.0	8.4-8.8	NA
VISCOSITY	28-32	28-32	NA
WATER LOSS	NC	NC	NC

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. Use Fruitland Coal produced water as make-up water for mist fluid. Pump enough fluid to dampen vibration at directional BHA. If directional control is not maintainable in air/mist environment convert to polymer mud.

#### 2. CASING PROGRAM:

Surface Casing: 9.625" casing to be set at  $\pm$  225' in a 12-1/4" 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 <sup>1</sup>	Burst <sup>2</sup>	Ten <sup>3</sup>
0'-225'	225'	36.0#	J-55	ST&C	2020	3520	394	8.921	8.765	18.76	32.7	48.6

Intermediate Casing: 7" casing to be set at  $\pm 1677$ ' MD, 1398' TVD in 8.75" hole filled with 9.20 ppg mud.

					Coll	Burst						
j					Rating	Rating	Jt Str	ID	Drift	SF	SF	SF
Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll <sup>1</sup>	Burst <sup>2</sup>	Ten <sup>3</sup>
0'-1677'	1677'	23.0#	J-55	ST&C	3270	4360	284	6.366	6.241	4.08	5.43	7.36

Production Casing: 4.5" casing to be set at ±4810' MD, 1398' TVD in 6.125" hole filled with 8.4 ppg mud.

					Coll	Burst						
			1		Rating	Rating	Jt Str	ID	Drift	SF	SF	SF
Interval	Length	Wt	_Gr_	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst <sup>2</sup>	Ten <sup>3</sup>
1677'-												
4810'	3133'	10.5	J-55	ST&C	4010	4790	132	4.052	3.927	6.57	7.85	4.01

<sup>&</sup>lt;sup>1</sup>Collapse SF is based on evacuated annulus and hydrostatic at TVD.

<sup>&</sup>lt;sup>2</sup>Burst SF is based on evacuated casing and hydrostatic at TVD.

<sup>&</sup>lt;sup>3</sup>Tensile SF is based on hanging air weight of casing in a vertical hole at measured depth.

#### 3. WELLHEAD:

- A. Casing Head: WHI QDF System (or equivalent), 9-5/8" x 7", 3,000 psig WP (4,000 psig test) with 9-5/8" 8rnd thread ST&C pin end on bottom and 4-1/2" slips on top.
- B. Tubing Head: WHI W2F (or equivalent), 7.063" nominal, 5,000 psig WP (5,000 psig test), 5-1/2" slip-on or weld-on.

### 4. <u>CEMENT PROGRAM (Slurry design may change slightly, but the plan is to circulate cement to surface on both casing strings):</u>

A. <u>Surface</u>: 9.625", 36.0#, J-55, ST&C casing to be set at  $\pm$  225' in 12-1/4" hole.

**140** 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 177 ft<sup>3</sup>, 100% excess of calculated annular volume to 225'.

B. Production Casing: 7", 23#/ft, J-55, ST&C casing to be set at  $\pm 1677$ 'MD, 1398' TVD in 8.75" hole.

#### LEAD:

 $\pm$  80 sx of Premium Lite FM or CBM Lite typically containing accelerator, LCM, dispersant, and fluid loss additives at 12.1 ppg, 2.22 ft<sup>3</sup>/sk, & 12.04 gal wtr/sk.

#### TAIL:

± 100 sx of Type III or V cement typically containing accelerator, LCM, dispersant, and fluid loss additives at 14.2 ppg, 1.48 ft<sup>3</sup>/sk, & 7.34 gal wtr/sk.

Total estimated slurry volume for the 7" production casing is 325 ft<sup>3</sup>.

C. <u>Production Liner:</u> 4.5", 10.5#/ft, J-55, ST&C casing is to be set at 4810' MD, 1398' TVD in 6.125" hole.

The production liner will be set using an uncemented liner hanger. The liner may be tied back to surface during the completion of the well.

Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined from the caliper logs (if available) plus 40%. It will be attempted to circulate cement to the surface.

#### 5. LOGGING PROGRAM:

- A. Mud Logger: A geologic consultant or unmanned mud logging unit will begin logging the well once the surface shoe is drilled out and remain on the well to TD.
- B. Open Hole Logs as follows: Gamma Ray from Surface shoe to TD.

#### 6. FORMATION TOPS:

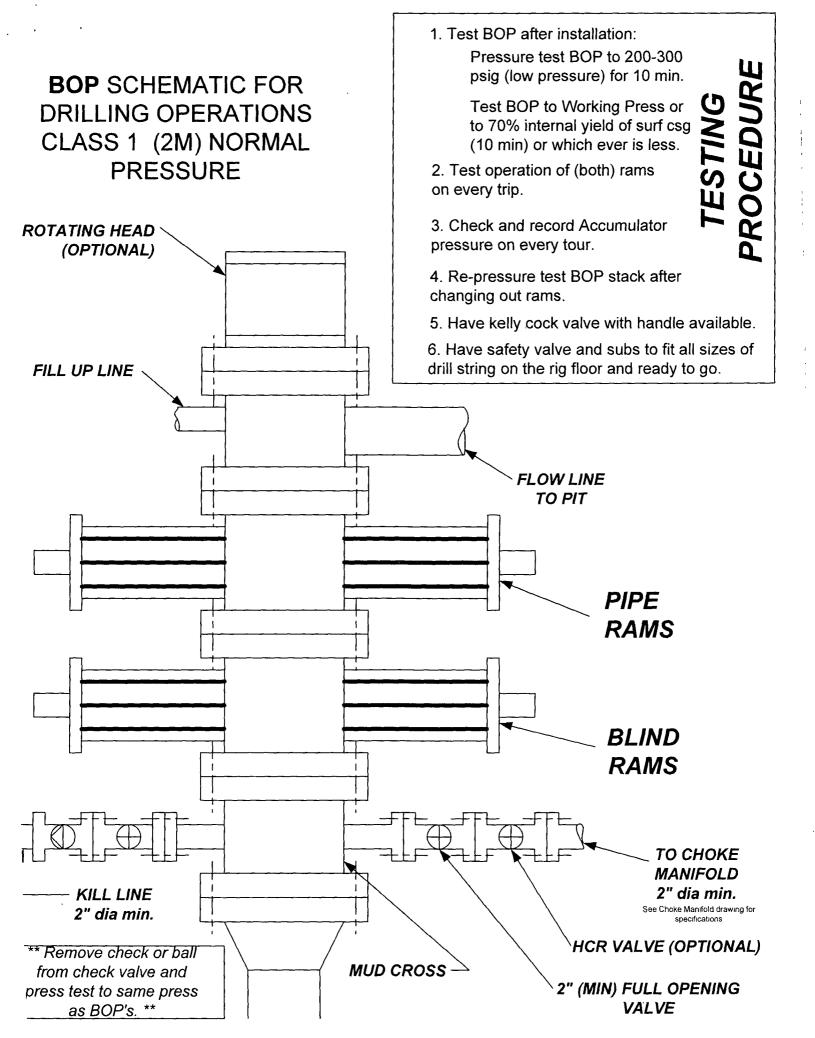
Please see directional plan for anticipated formation tops.

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

#### 7. COMPANY PERSONNEL:

Name	Title	Office Phone	Home Phone
John Egelston	Drilling Engineer	505.333.3163	505.330.6902
Jerry Lacy	Drilling Superintendent	505.333.3100	505.320.6543
John Klutsch	Project Geologist	817.885.2781	

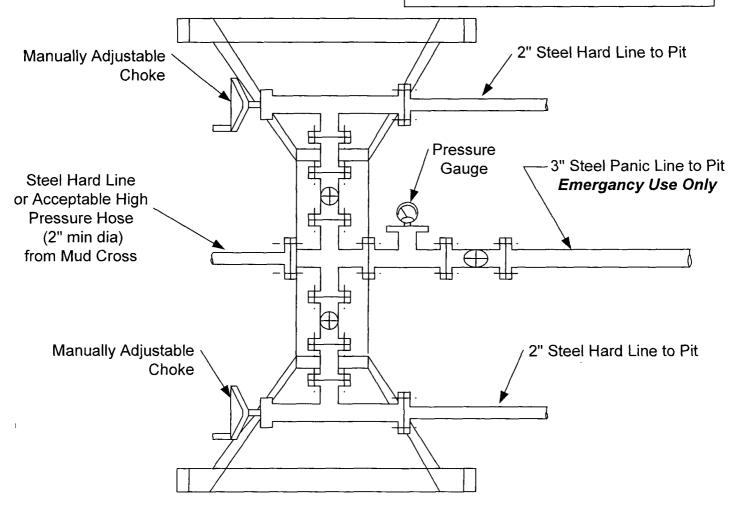
JWE 1/31/08

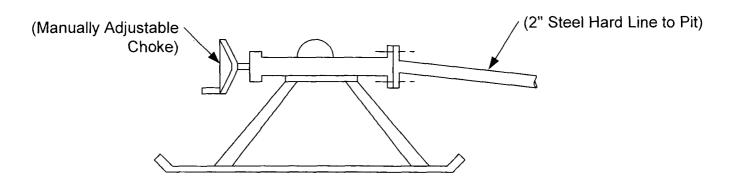


# CHOKE MANIFOLD SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE

- 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





#### XTO Energy, Inc.

#### Planning Report

Local Co-ordinate Reference:

Database:

EDM 2003 14 Single User Db

Company:

Henderson 5-3

Sundry'd Wellbore

Project: Site:

San Juan Basin (NAD 83)

Henderson #5-3 Henderson #5-3

Well: Wellbore: Design:

XTO Energy

MD Reference:

Well Henderson #5-3

TVD Reference:

Rig KB @ 6189 0ft (AWS #507) Rig KB @ 6189 Oft (AWS #507)

North Reference:

Survey Calculation Method:

True

Minimum Curvature

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip Dip Direction (°) (°)	
524 0	524 0	Ojo Alamo SS	Sandstone	0 00	
669 4	669 0	Kırtland Shale	Shale	0 00	
1,110 1	1,085.0	Fruitland Formation		0 00	
1,602 8	1,394 0	Fruitland Coal	Coal	0 00	