DRILLING PLAN: BLM COMPLIANCE
(Supplement to BLM 3160-3)

XTO Energy Inc.
Severus 31 Federal COM 2H
Projected TD: 19018' MD / 11362' TVD
SHL: 130' FSL & 2262.5' FEL, SECTION 30, T20S, R34E
BHL: 2401.3' FNL & 1650' FWL, SECTION 5, T21S, R33E
Lea County, NM

1. GEOLOGIC NAME OF SURFACE FORMATION:

A. Quaternary

2. ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Formation	Well Depth (TVD)	Water / Oil / Gas
Rustler	1562'	Water
Top of Salt	1913'	
Base of Salt	3158'	
Yates	3345'	Water
Seven Rivers	3577'	Water
Delaware	5634'	Water
Brushy Canyon	7030'	Water/Oil/Gas
Bone Spring	8671'	Water/Oil/Gas
1st Bone Spring Ss	9665'	Water/Oil/Gas
2nd Bone Spring Ss	10496'	Water/Oil/Gas
3rd Bone Spring Ss	11112'	Water/Oil/Gas
Target/Land Curve	11362'	Water/Oil/Gas

*** Hydrocarbons @ Brushy Canyon
*** Groundwater depth 270'.

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13-3/8" casing @ 1883' (30' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9-5/8" casing at 5450' and circulating cement to surface. An 8-3/4" curve and lateral hole will be drilled to MD/TD and 5-1/2" casing will be set at TD and cemented back up to the surface.

3. CASING PROGRAM:

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – ~~1883'~~ 1632	13-3/8"	54.5#	STC	J-55	New	4.2	1.28	5.01
12-1/4"	0' – 5450'	9-5/8"	40#	LTC	J-55	New	1.68	1.22	2.39
8-3/4"	0' – 19018'	5-1/2"	17#	BTC	P-110	New	1.12	1.36	1.76

WELLHEAD:

A. Starting Head: 13-5/8" 3M top flange x 13-3/8" SOW bottom
B. 'B' Section/ Drilling Spool: 13-5/8" 3M bottom flange x 11" 5M top flange
C. Tubing Head: 11" 5M bottom flange x 7-1/16" 10M top flange

4. CEMENT PROGRAM:

A. **Surface Casing:** 13-3/8", 54.5#, NEW J-55, STC casing to be set at ~~± 1883'~~ 1672'.

Lead: 20 bbls FW, then 1112 sx ExtendaCem-CZ (mixed at 13.7 ppg, 1.68 ft^3/sk, 8.72 gal/sx wtr)

Tail: 554 sx HalCem-C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft^3/sk, 6.39 gal/sx wtr)
***All volumes 100% excess in open hole. Cement to surface.

B. **Intermediate Casing:** 9-5/8", 40#, NEW J-55, LTC casing to be set at ± 5450'.

First Stage

Lead: 20 bbls FW, then 433 sx EconoCem-HLC + 5% salt + 5 lbm/sk Kol-Seal (mixed at 12.9 ppg, 1.88 ft^3/sk, 9.61 gal/sx wtr)

Tail: 236 sx HalCem-C (mixed at 14.8 ppg, 1.33 ft^3/sk, 6.34 gal/sx wtr)
***All volumes 100% excess in open hole

If losses are severe, a DV Tool will be placed at + / - 3652' (75' into Seven Rivers).

Second Stage

Lead: 20 bbls FW, then 802 sx EconoCem-HLC + 5% salt + 5 lbm/sk Kol-Seal (mixed at 12.9 ppg, 1.88 ft^3/sk, 9.61 gal/sx wtr)

Tail: 236 sx HalCem-C (mixed at 14.8 ppg, 1.33 ft^3/sk, 6.34 gal/sx wtr)
***All volumes 100% excess in open hole. Cement to surface.

C. **Production Casing:** 5-1/2", 17#, NEW P-110, BTC casing to be set at ± 19018'. Casing will be cemented to surface.

Lead: 20 bbls FW, then 1219 sx Tuned Light + 0.5 lbm/sk CFR-3 + 1.5 lbm/sk salt + 0.1% HR601 (mixed at 10.5 ppg, 2.69 ft^3/sk, 12.26 gal/sx wtr)

Tail: 1842 sx VersaCem PBHS2 + 0.5% LAP-2 + 0.25 lbm/sk D-air 5000 + 0.2% HR 601 (mixed at 13.2 ppg, 1.59 ft^3/sk, 8.29 gal/sx wtr)
***All volumes 30% excess in open hole. Planned top of cement at surface.

5. PRESSURE CONTROL EQUIPMENT:

The blow out preventer equipment (BOP) for this well consists of a 13-5/8" 5M Hydril and a 13-5/8" 5M Double Ram BOP. Max bottom hole pressure should not exceed 5495 psi.

All BOP testing will be done by an independent service company. When nippling up on the 13-5/8" 5M bradenhead and flange, pressure testing BOP will be limited to 5000psi. When nippling up on the 9-5/8", pressure testing BOP will be limited to 5000psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M BOP diagram is attached. Blind rams will be function tested each trip, pipe rams will be function tested each day.

A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test chart will be kept on the rig. Attached is an example of a certification and pressure chart. The manufacturer does not require anchors.

6. PROPOSED MUD CIRCULATION SYSTEM:

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' to 1883'	17-1/2"	FW/Native	8.5 - 8.8	35 - 40	NC
1883' to 5450'	12-1/4"	Brine/Gel Sweeps	9.8 - 10.2	30 - 32	NC
5450' to 19018'	8-3/4"	FW / Cut Brine / Poly-Sweeps	8.6 – 9.3	28 - 32	NC - 20

The necessary mud products for weight addition and fluid loss control will be on location at all times.

Spud with fresh water/native mud. Drill out from under 13-3/8" surface casing with brine solution. A 9.8ppg - 10.2ppg brine mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

A. A Kelly cock will be in the drill string at all times.
B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
C. H2S monitors will be on location when drilling below the 13-3/8" casing.

8. LOGGING, CORING AND TESTING PROGRAM:

Mud Logger: Mud Logging Unit (2 man) on @ 5450'.

Open hole logging to include Density/Neutron/PE/Dual Laterlog/Spectral Gamma from kick-off point to intermediate casing shoe.

9. ABNORMAL PRESSURES AND TEMPERATURES / POTENTIAL HAZARDS:

None anticipated. Max bottom hole pressure should not exceed 5495 psi. BHT of 175 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation is possible in the intermediate hole section but is not expected to be a serious problem in this area. Losses will be treated with LCM as needed. Hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

Road and location construction will begin after Santa Fe and BLM have approved the APD. Anticipated spud date will be as soon after Santa Fe and BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 40 days. If production casing is run, an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.