

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.**5. Lease Serial No.  
NMLC061634B

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on page 2**7. If Unit or CA/Agreement, Name and/or No.  
891000303X

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other8. Well Name and No.  
POKER LAKE UNIT 30 BS 103H

2. Name of Operator

XTO PERMIAN OPERATING LLC

Contact: KELLY KARDOS

E-Mail: kelly\_kardos@xtoenergy.com

9. API Well No.

30-015-46936-00-X1

3a. Address

6401 HOLIDAY HILL ROAD BLDG 5  
MIDLAND, TX 79707

3b. Phone No. (include area code)

Ph: 432-620-4374

10. Field and Pool or Exploratory Area  
PURPLE SAGE-WOLFCAMP (GAS)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 30 T25S R31E SENW 2310FNL 1980FWL  
32.102180 N Lat, 103.819626 W Lon

11. County or Parish, State

EDDY COUNTY, NM

## 12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original APD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat 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 recompleat 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.

XTO Permian Operating, LLC requests permission to make the following changes to the original APD:

Change the casing/cement design per the attached drilling program.

Change the BHL from 200FSL &amp; 1980FWL to 200?FSL &amp; 1869FWL

XTO requests the following variances:

Batch drill this well if necessary. In doing so, XTO will set each casing string and ensure that the well is cemented properly and the well is static. With floats holding, no pressure on the csg annulus, and the installation of a 10K TA cap as per GE recommendations, XTO will contact the BLM

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #509293 verified by the BLM Well Information System**  
**For XTO PERMIAN OPERATING LLC, sent to the Carlsbad**  
**Committed to AFMSS for processing by PRISCILLA PEREZ on 04/02/2020 (20PP1886SE)**

Name (Printed/Typed) KELLY KARDOS

Title REGULATORY COORDINATOR

Signature (Electronic Submission)

Date 04/01/2020

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By ALLISON MORENCY

Title PETROLEUM ENGINEER

Date 04/23/2020

Conditions of approval, if any, are attached. Approval of this notice 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 to conduct operations thereon.

Office Carlsbad

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

RWP 5/6/2020

## **Additional data for EC transaction #509293 that would not fit on the form**

### **32. Additional remarks, continued**

to skid the rig to drill the remaining wells on the pad. Once surface and intermediate strings are all completed, XTO will begin drilling the production hole on each of the wells.

A variance is requested to ONLY test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. We will also function test BOP equipment after each nipple up. A full BOP test will be required prior to drilling any production hole.

Attachments:

C102 & Supplement  
Casing/Cement Design  
Multibowl Diagram  
Directional Plan

## Revisions to Operator-Submitted EC Data for Sundry Notice #509293

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	APDCH NOI	APDCH NOI
Lease:	NMLC061634B	NMLC061634B
Agreement:	NMNM71016X	891000303X (NMNM71016X)
Operator:	XTO PERMIAN OPERATING, LLC 6401 HOLIDAY HILL RD BLDG 5 MIDLAND, TX 79707 Ph: 432-620-4374	XTO PERMIAN OPERATING LLC 6401 HOLIDAY HILL ROAD BLDG 5 MIDLAND, TX 79707 Ph: 432.683 2277
Admin Contact:	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com  Ph: 432-620-4374	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com  Ph: 432-620-4374
Tech Contact:	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com  Ph: 432-620-4374	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com  Ph: 432-620-4374
Location: State: County:	NM EDDY	NM EDDY
Field/Pool:	PURPLE SAGE WOLFCAMP	PURPLE SAGE-WOLFCAMP (GAS)
Well/Facility:	POKER LAKE UNIT 30 BS 103H Sec 30 T25S R31E Mer NMP SENW 2310FNL 1980FWL	POKER LAKE UNIT 30 BS 103H Sec 30 T25S R31E SENW 2310FNL 1980FWL 32.102180 N Lat, 103.819626 W Lon

## Kardos, Kelly

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**From:** amorency@blm.gov  
**Sent:** Thursday, April 23, 2020 10:20 PM  
**To:** Kardos, Kelly  
**Subject:** Well POKER LAKE UNIT 30 BS 103H  
**Attachments:** EC509293.pdf

**Categories:** External Sender

External Email - Think Before You Click

The sundry for Change to Original APD you submitted has been approved by the BLM. Your original Electronic Commerce (EC) transmission was assigned ID 509293. Please be sure to open and save all attachments to this message, since they contain important information.

04/23/2020 - AM

All COAs still applies. Shell testing is not approved.

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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 August 1, 2011  
Submit one copy to appropriate  
District Office  
☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-015-46936	<sup>2</sup> Pool Code 98220	<sup>3</sup> Pool Name PURPLE SAGE; WOLFCAMP
<sup>4</sup> Property Code 327328	<sup>5</sup> Property Name POKER LAKE UNIT 30 BS	
<sup>7</sup> OGRID No. 373075	<sup>8</sup> Operator Name XTO PERMIAN OPERATING, LLC.	<sup>6</sup> Well Number 103H
		<sup>9</sup> Elevation 3,382'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	30	25 S	31 E		2,310	NORTH	1,980	WEST	EDDY

<sup>11</sup> 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
N	31	25 S	31 E		200	SOUTH	1,869	WEST	EDDY

<sup>12</sup> Dedicated Acres 479.90	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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.

<p><sup>16</sup></p>	<p>GEODETIC COORDINATES SURFACE LOCATION NAD 27 NME Y= 401,231.2 X= 659,219.3 LAT.= 32.102057°N LONG.= 103.819147°W</p> <p>FIRST TAKE POINT NAD 27 NME Y= 400,534.7 X= 659,107.2 LAT.= 32.100144°N LONG.= 103.819519°W</p>	<p>GEODETIC COORDINATES SURFACE LOCATION NAD 83 NME Y= 401,289.1 X= 700,404.7 LAT.= 32.102181°N LONG.= 103.819626°W</p> <p>FIRST TAKE POINT NAD 83 NME Y= 400,592.6 X= 700,292.7 LAT.= 32.100268°N LONG.= 103.819999°W</p>	<p><sup>17</sup> OPERATOR CERTIFICATION</p> <p>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 hole location or has a right to drill this well at this location pursuant to a 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.</p> <p><i>Kelly Kardos</i> 4-1-20 Signature Date Kelly Kardos Printed Name kelly_kardos@xtoenergy.com E-mail Address</p>								
	<p>CORNER COORDINATES TABLE NAD 83 NME</p> <table border="1"> <tr><td>A - Y= 400,944.7 N, X= 701,070.7 E</td></tr> <tr><td>B - Y= 400,933.8 N, X= 699,752.5 E</td></tr> <tr><td>C - Y= 398,288.0 N, X= 701,058.4 E</td></tr> <tr><td>D - Y= 398,278.5 N, X= 699,727.5 E</td></tr> <tr><td>E - Y= 395,633.7 N, X= 701,071.1 E</td></tr> <tr><td>F - Y= 395,624.6 N, X= 699,742.6 E</td></tr> <tr><td>G - Y= 392,974.7 N, X= 701,083.8 E</td></tr> <tr><td>H - Y= 392,964.1 N, X= 699,750.1 E</td></tr> </table>			A - Y= 400,944.7 N, X= 701,070.7 E	B - Y= 400,933.8 N, X= 699,752.5 E	C - Y= 398,288.0 N, X= 701,058.4 E	D - Y= 398,278.5 N, X= 699,727.5 E	E - Y= 395,633.7 N, X= 701,071.1 E	F - Y= 395,624.6 N, X= 699,742.6 E	G - Y= 392,974.7 N, X= 701,083.8 E	H - Y= 392,964.1 N, X= 699,750.1 E
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<p>CORNER COORDINATES TABLE NAD 27 NME</p> <table border="1"> <tr><td>A - Y= 400,886.8 N, X= 659,885.2 E</td></tr> <tr><td>B - Y= 400,875.9 N, X= 658,567.1 E</td></tr> <tr><td>C - Y= 398,230.1 N, X= 659,872.8 E</td></tr> <tr><td>D - Y= 398,220.6 N, X= 658,542.0 E</td></tr> <tr><td>E - Y= 395,575.9 N, X= 659,885.4 E</td></tr> <tr><td>F - Y= 395,566.8 N, X= 658,557.0 E</td></tr> <tr><td>G - Y= 392,917.0 N, X= 659,898.0 E</td></tr> <tr><td>H - Y= 392,906.4 N, X= 658,564.4 E</td></tr> </table>		A - Y= 400,886.8 N, X= 659,885.2 E	B - Y= 400,875.9 N, X= 658,567.1 E	C - Y= 398,230.1 N, X= 659,872.8 E	D - Y= 398,220.6 N, X= 658,542.0 E	E - Y= 395,575.9 N, X= 659,885.4 E	F - Y= 395,566.8 N, X= 658,557.0 E	G - Y= 392,917.0 N, X= 659,898.0 E	H - Y= 392,906.4 N, X= 658,564.4 E		
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H - Y= 392,906.4 N, X= 658,564.4 E											
<p>LAST TAKE POINT NAD 27 NME Y= 393,240.7 X= 659,100.1 LAT.= 32.080093°N LONG.= 103.819654°W</p> <p>LAST TAKE POINT NAD 83 NME Y= 393,298.4 X= 700,285.8 LAT.= 32.080218°N LONG.= 103.820133°W</p>											
<p>BOTTOM HOLE LOCATION NAD 27 NME Y= 393,110.7 X= 659,100.2 LAT.= 32.079736°N LONG.= 103.819656°W</p> <p>BOTTOM HOLE LOCATION NAD 83 NME Y= 393,168.4 X= 700,285.9 LAT.= 32.079860°N LONG.= 103.820135°W</p>		<p><sup>18</sup> SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>2-26-2020 Date of Survey</p> <p>Signature and Seal of Professional Surveyor:  MARK DILLON HARP 23786 Certificate Number</p>									

RWP 5/6/2020

Intent ☒ As Drilled ☐

API # 30-015-46936			
Operator Name: XTO PERMIAN OPERATING, LLC		Property Name: POKER LAKE UNIT 30 BS	Well Number 103H

Kick Off Point (KOP)

UL F	Section 30	Township 25S	Range 31E	Lot	Feet 2310	From N/S NORTH	Feet 1980	From E/W WEST	County EDDY
Latitude 32.102181					Longitude -103.819626				NAD 83

First Take Point (FTP)

UL K	Section 30	Township 25S	Range 31E	Lot	Feet 2310	From N/S SOUTH	Feet 1869	From E/W WEST	County EDDY
Latitude 32.100268					Longitude -103.819999				NAD 83

Last Take Point (LTP)

UL N	Section 31	Township 25S	Range 31E	Lot	Feet 330	From N/S SOUTH	Feet 1869	From E/W WEST	County EDDY
Latitude 32.080218					Longitude -103.820133				NAD 83

Is this well the defining well for the Horizontal Spacing Unit? ☐ N

Is this well an infill well? ☐ Y

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #			
Operator Name: XTO PERMIAN OPERATING, LLC		Property Name: POKER LAKE UNIT 30 BS	Well Number 122H

KZ 06/29/2018

**Poker Lake Unit 30 BS 103H**  
 Projected TD: 19270' MD / 11517' TVD  
 SHL: 2310' FNL & 1980' FWL , Section 30, T25S, R31E  
 BHL: 200' FSL & 1869' FWL , Section 31, T25S, R31E  
 Eddy County, NM

## Casing Design

The surface fresh water sands will be protected by setting 11-3/4" casing @ 1400' (96' above the salt) and circulating cement back to surface. The 7-5/8" intermediate casing will be set at 10700' and bring TOC back to surface. A 6-3/4 inch curve and lateral hole will be drilled to MD/TD and 5-1/2" x 5-0" casing will be set at TD and cemented back 300' into the 7-5/8" casing shoe.

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
14-3/4"	0' – 1400'	11-3/4"	54	STC	J-55	New	1.11	2.38	7.25
9-7/8"	0' – 10700'	7-5/8"	29.7	BTC	L-80	New	1.83	1.70	2.15
6-3/4"	0' – 10600'	5-1/2"	23	BTC	P-110	New	1.21	2.31	2.78
6-3/4"	10600' - 19270'	5-0"	18	BTC	P-110	New	1.16	2.14	2.23

XTO requests to not utilize centralizers in the curve and lateral

· 7-5/8" Collapse analyzed using 50% evacuation based on regional experience.

· 5-1/2" x 5-0" Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35

· Test on Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less

## WELLHEAD:

*Permanent Wellhead – Multibowl System*

A. Starting Head: 11" 10M top flange x 11-3/4" SOW bottom

B. Tubing Head: 11" 10M bottom flange x 7-1/16" 15M top flange

- Wellhead will be installed by manufacturer's representatives.
- Manufacturer will monitor welding process to ensure appropriate temperature of seal.
- Operator will test the 7-5/8" casing per BLM Onshore Order 2
- Wellhead Manufacturer representative will not be present for BOP test plug installation

## Cement Program

### Surface Casing:

Lead: 510 sxs Halcem-C + 2% CaCl (mixed at 12.8 ppg, 1.87 ft3/sx, 10.13 gal/sx water)

Tail: 190 sxs Halcem-C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

Compressives: 12-hr = 900 psi 24 hr = 1500 psi

### Intermediate Casing:

*ECF/DV Tool to be set at 4600'*

#### 1st Stage

Lead: 1170 sxs Halcem - Class C (mixed at 11.0 ppg, 1.87 ft3/sx, 15.10 gal/sx water)

Tail: 310 sxs Halcem - Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

#### 2nd Stage

Lead: 820 sxs Halcem - Class C (mixed at 11.0 ppg, 1.88 ft3/sx, 10.13 gal/sx water)

Tail: 320 sxs Halcem-Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 5.29 gal/sx water)

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

### Production Casing:

Lead: 20 sxs VersaCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water)

Tail: 800 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 7.20 gal/sx water)

Compressives: 12-hr = 800 psi 24 hr = 1500 psi

## Mud Circulation Program

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 1400'	14-3/4"	FW / Native	8.4-8.8	35-40	NC
1400' - 10700'	9-7/8"	Brine / Cut Brine / Direct Emulsion	8.7-9.2	30-32	NC
10700' to 19270'	6-3/4"	Cut Brine / WBM / OBM	10-10.5	32-36	NC

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

XTO Energy Inc.  
Poker Lake Unit 30 Big Sinks 103H  
Projected TD: 19270' MD / 11517' TVD  
SHL: 2310' FNL & 1980' FWL , Section 30, T25S, R31E  
BHL: 200' FSL & 1869' FWL , Section 31, T25S, R31E  
Eddy County, NM

**1. Geologic Name of Surface Formation**

A. Permian

**2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas**

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	1170'	Water
Top of Salt	1496'	Water
Base of Salt	3972'	Water
Delaware	4139'	Water
Bone Spring	8075'	Water
1st Bone Spring Ss	9075'	Water/Oil/Gas
2nd Bone Spring Ss	9722'	Water/Oil/Gas
3rd Bone Spring Ss	11041'	Water/Oil/Gas
Wolfcamp	11341'	Water/Oil/Gas
Wolfcamp A	11509'	Water/Oil/Gas
Target/Land Curve	11517'	Water/Oil/Gas

\*\*\* Hydrocarbons @ Brushy Canyon

\*\*\* Groundwater depth 40' (per NM State Engineers Office).

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 11-3/4" casing @ 1400' (96' above the salt) and circulating cement back to surface. The 7-5/8" intermediate casing will be set at 10700' and bring TOC back to surface. A 6-3/4 inch curve and lateral hole will be drilled to MD/TD and 5-1/2" x 5-0" casing will be set at TD and cemented back 300' into the 7-5/8" casing shoe.

**3. Casing Design**

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
14-3/4"	0' – 1400'	11-3/4"	54	STC	J-55	New	1.11	2.38	7.25
9-7/8"	0' – 10700'	7-5/8"	29.7	BTC	L-80	New	1.83	1.70	2.15
6-3/4"	0' – 10600'	5-1/2"	23	BTC	P-110	New	1.21	2.31	2.78
6-3/4"	10600' - 19270'	5-0"	18	BTC	P-110	New	1.16	2.14	2.23

- XTO requests to not utilize centralizers in the curve and lateral
- 7-5/8" Collapse analyzed using 50% evacuation based on regional experience.
- 5-1/2" x 5-0" Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35
- Test on Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less

**Wellhead:**

Permanent Wellhead – Multibowl System

A. Starting Head: 11" 10M top flange x 11-3/4" SOW bottom

B. Tubing Head: 11" 10M bottom flange x 7-1/16" 15M top flange

- Wellhead will be installed by manufacturer's representatives.
- Manufacturer will monitor welding process to ensure appropriate temperature of seal.
- Operator will test the 7-5/8" casing per BLM Onshore Order 2
- Wellhead Manufacturer representative will not be present for BOP test plug installation



#### 4. Cement Program

##### **Surface Casing: 11-3/4", 54 New J-55, STC casing to be set at +/- 1400'**

Lead: 510 sxs Halcem-C + 2% CaCl (mixed at 12.8 ppg, 1.87 ft3/sx, 10.13 gal/sx water)

Tail: 190 sxs Halcem-C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

Compressives: 12-hr = 900 psi 24 hr = 1500 psi

TOC: Surface

##### **Intermediate Casing: 7-5/8", 29.7 New L-80, BTC casing to be set at +/- 10700'**

ECP/DV Tool to be set at 4600'

###### 1st Stage

Lead: 1170 sxs Halcem - Class C (mixed at 11.0 ppg, 1.87 ft3/sx, 15.10 gal/sx water)

Tail: 310 sxs Halcem - Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

Compressives: 12-hr = 900 psi 24 hr = 1150psi

###### 2nd Stage

Lead: 820 sxs Halcem - Class C (mixed at 11.0 ppg, 1.88 ft3/sx, 10.13 gal/sx water)

Tail: 320 sxs Halcem-Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 5.29 gal/sx water)

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

TOC: Surface

##### **Production Casing: 5-0", 18 New P-110, BTC casing to be set at +/- 19270'**

Lead: 20 sxs VersaCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water)

Tail: 800 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 7.20 gal/sx water)

Compressives 12-hr = 800 psi 24 hr = 1500 psi

TOC: 300' inside previous shoe

#### 5. Pressure Control Equipment

Once the permanent WH is installed on the 11-3/4" casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M 3-Ram BOP. MASP should not exceed 3755 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M). Also a variance is requested to test the 5M annular to 70% of working pressure at 3500 psi.

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 70% of the working pressure. When nipping up on the 11-3/4", 5M bradenhead and flange, the BOP test will be limited to 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned 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 test chart. The manufacturer does not require anchors.

XTO requests a variance to be able to batch drill this well if necessary. In doing so, XTO will set each casing string and ensure that the well is cemented properly and the well is static. With floats holding, no pressure on the csg annulus, and the installation of a 10K TA cap as per GE recommendations, XTO will contact the BLM on each rig skid on the pad.

A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compainace with API Standard 53. API standard 53 states, that for pad drilling operation, moving from one welhead to another with in 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. We will also function test BOP equipment after each nipple up. A full BOP test will be required prior to drilling any production hole.

## 6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 1400'	14-3/4"	FW / Native	8.4-8.8	35-40	NC
1400' - 10700'	9-7/8"	Brine / Cut Brine / Direct Emulsion	8.7-9.2	30-32	NC
10700' to 19270'	6-3/4"	Cut Brine / WBM / OBM	10-10.5	32-36	NC

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

Spud with fresh water/native mud and set 11-3/4" surface casing, isolating the fresh water aquifer. Drill out from under 11-3/4" surface casing with a brine/oil direct emulsion mud system. 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 11-3/4" casing.

## 8. Logging, Coring and Testing Program

Mud Logger: Mud Logging Unit (2 man) below intermediate casing.

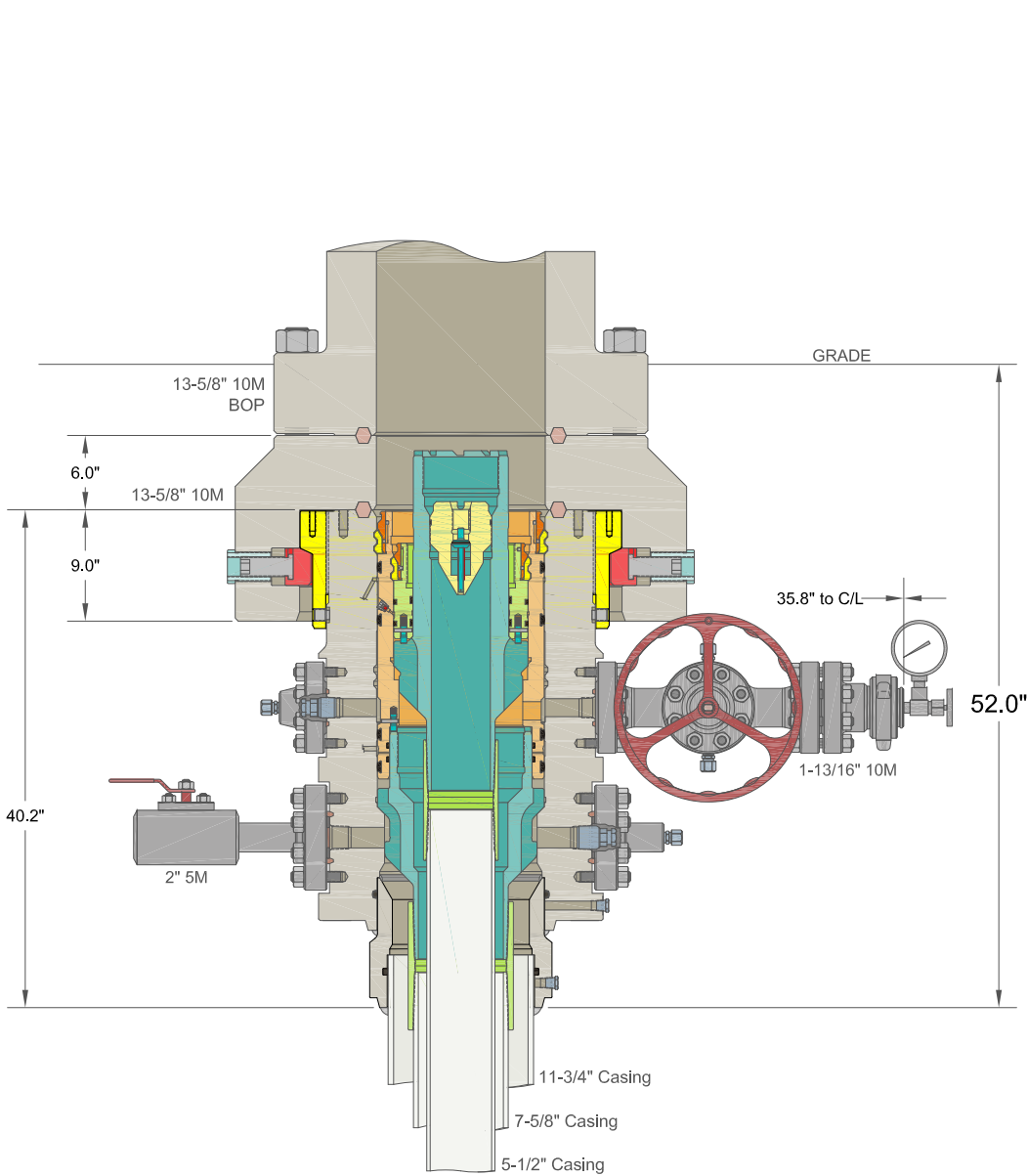
Open hole logging will not be done on this well.

## 9. Abnormal Pressures and Temperatures / Potential Hazards

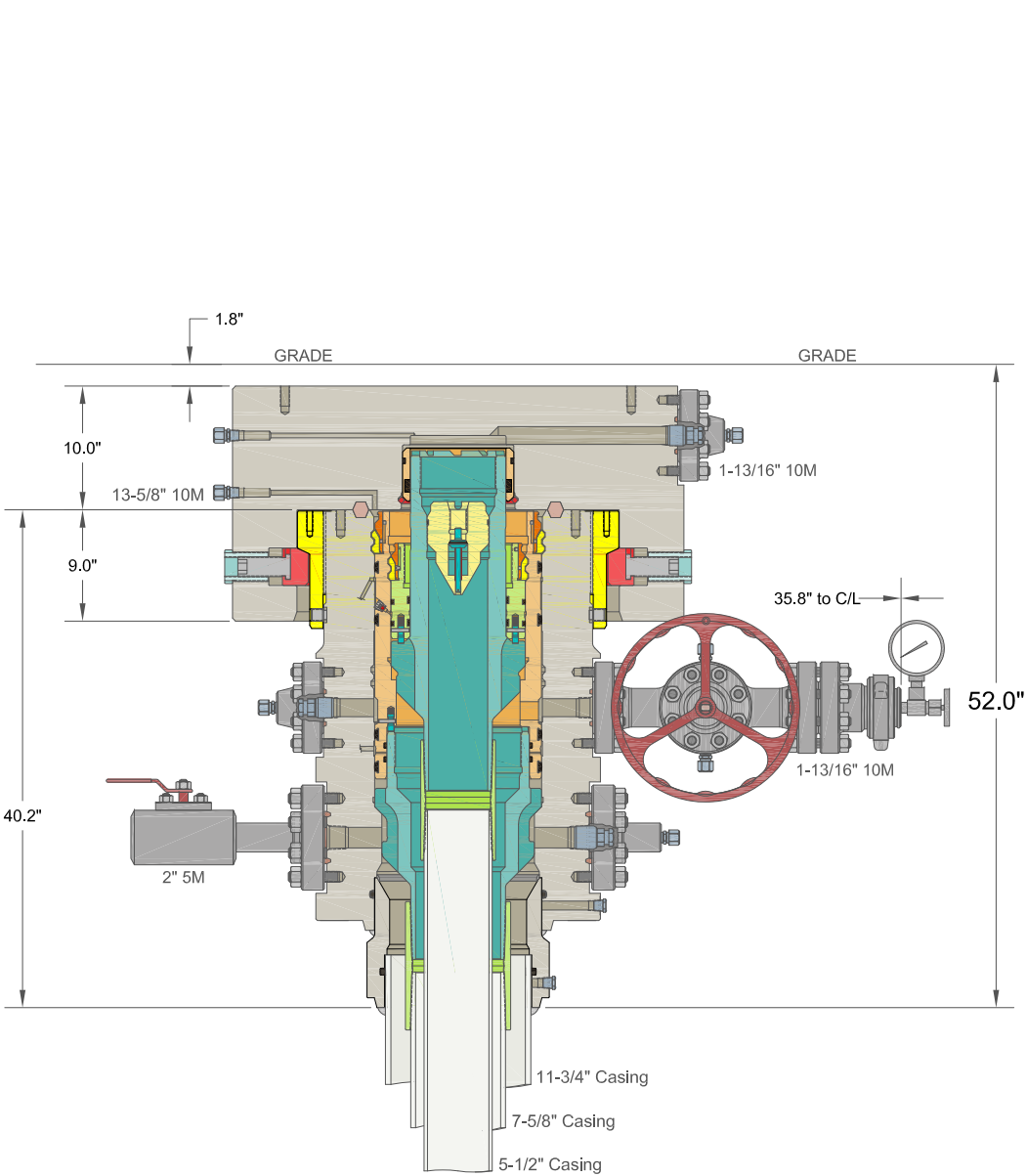
None Anticipated. BHT of 150 to 170 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 6288 psi.

## 10. Anticipated Starting Date and Duration of Operations

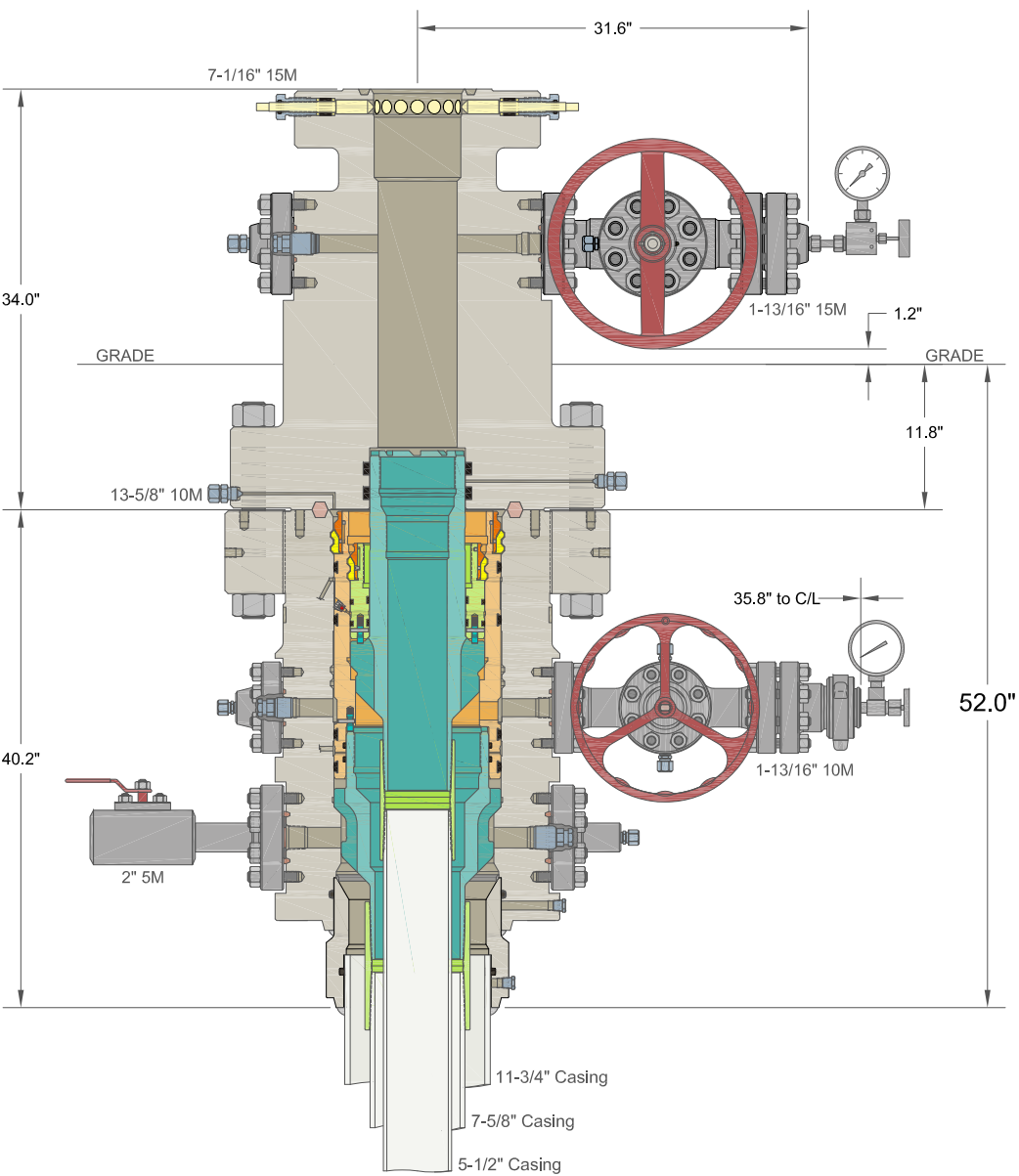
Road and location construction will begin after Santa Fe and BLM have approved the APD. Anticipated spud date will be as soon after Santa Fe and BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 45 days. If production casing is run, an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.



DRILLING



SKID



COMPLETION

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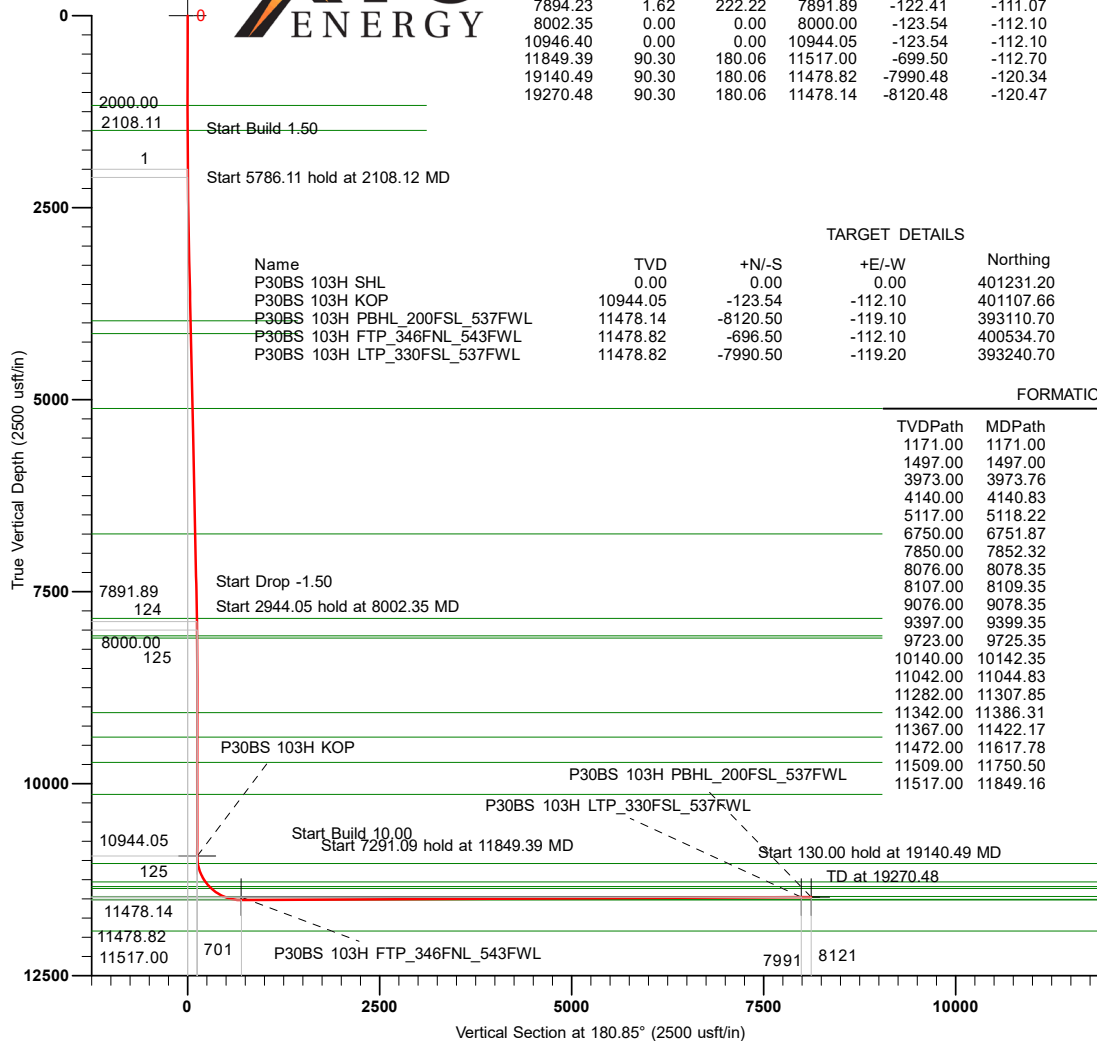
ALL DIMENSIONS APPROXIMATE			
CACTUS WELLHEAD LLC		XTO ENERGY INC POKER LAKE, NM	
30" x 11-3/4" x 7-5/8" x 5-1/2" MBU-3T-SF SOW Wellhead System With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS-SB Tubing Head And 7-5/8" & 5-1/2" Fluted Mandrel Casing Hangers	DRAWN	DLE	09DEC19
	APPRV		
	DRAWING NO. ODE0003261		

# XTO Enerav

Project: Eddy County, NM (NAD27) NMEZ Grid  
Site: PLU 30 BS  
Well: 103H  
Wellbore: Lateral  
Design: Plan #1

3382+25 @ 3407.00usft (e101)  
NAD 1927 (NADCON CONUS)

To convert a Magnetic Direction to a True Direction, Add 6.80° East  
To convert a Magnetic Direction to a Grid Direction, Add 6.53°  
Magnetic North is 6.80° East of True North (Magnetic Declination)  
Magnetic North is 6.53° East of Grid North (Magnetic Convergence)



## SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00
2108.12	1.62	222.22	2108.11	-1.13	-1.03	1.50	222.22	1.15
7894.23	1.62	222.22	7891.89	-122.41	-111.07	0.00	0.00	124.04
8002.35	0.00	0.00	8000.00	-123.54	-112.10	1.50	180.00	125.19
10946.40	0.00	0.00	10944.05	-123.54	-112.10	0.00	0.00	125.19
11849.39	90.30	180.06	11517.00	-699.50	-112.70	10.00	180.06	701.09
19140.49	90.30	180.06	11478.82	-7990.48	-120.34	0.00	0.00	7991.39
19270.48	90.30	180.06	11478.14	-8120.48	-120.47	0.00	0.00	8121.37

## TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
P30BS 103H SHL	0.00	0.00	0.00	401231.20	659219.30	Point
P30BS 103H KOP	10944.05	-123.54	-112.10	401107.66	659107.20	Point
P30BS 103H PBHL_200FSL_537FWL	11478.14	-8120.50	-119.10	393110.70	659100.20	Rectangle (Sides: L7424.20 W100.00)
P30BS 103H FTP_346FNL_543FWL	11478.82	-696.50	-112.10	400534.70	659107.20	Point
P30BS 103H LTP_330FSL_537FWL	11478.82	-7990.50	-119.20	393240.70	659100.10	Point

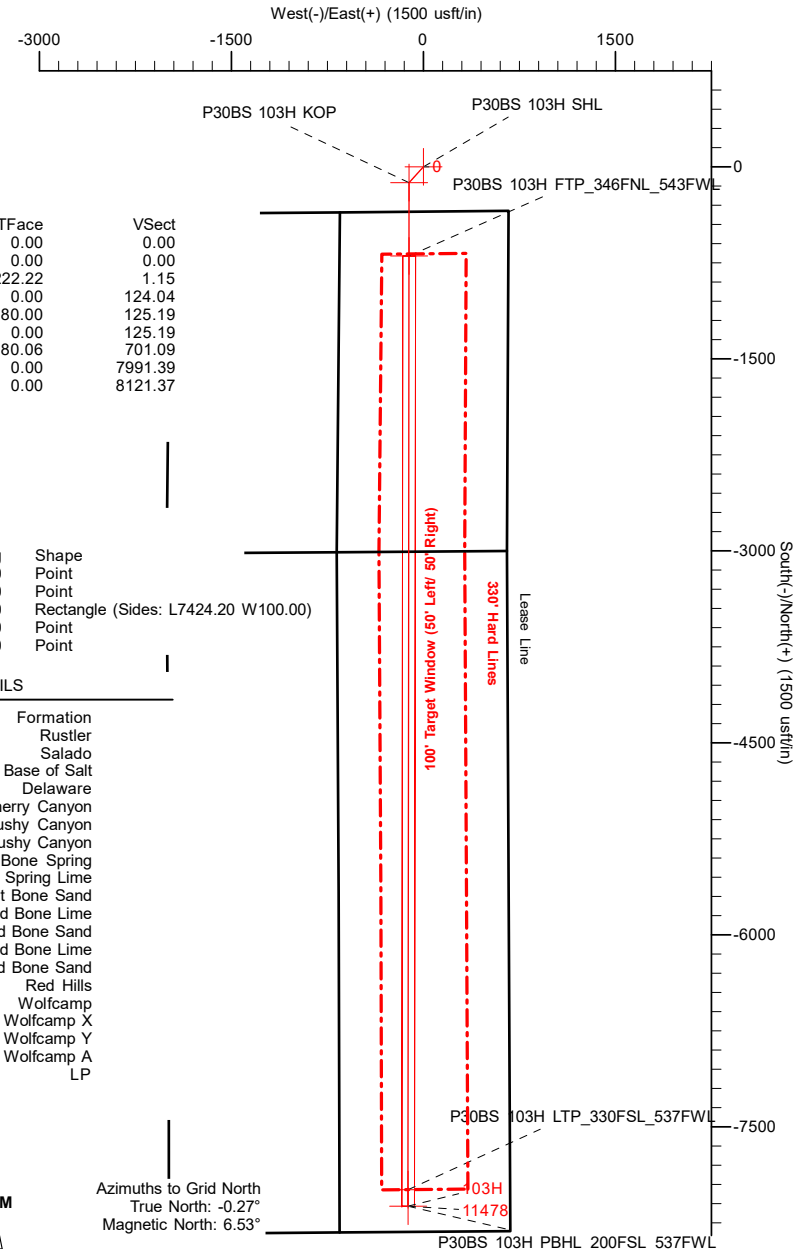
## FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1171.00	1171.00	Rustler
1497.00	1497.00	Salado
3973.00	3973.76	Base of Salt
4140.00	4140.83	Delaware
5117.00	5118.22	Cherry Canyon
6750.00	6751.87	Brushy Canyon
7850.00	7852.32	Basal Brushy Canyon
8076.00	8078.35	Bone Spring
8107.00	8109.35	Bone Spring Lime
9076.00	9078.35	1st Bone Sand
9397.00	9399.35	2nd Bone Lime
9723.00	9725.35	2nd Bone Sand
10140.00	10142.35	3rd Bone Lime
11042.00	11044.83	3rd Bone Sand
11282.00	11307.85	Red Hills
11342.00	11386.31	Wolfcamp
11367.00	11422.17	Wolfcamp X
11472.00	11617.78	Wolfcamp Y
11509.00	11750.50	Wolfcamp A
11517.00	11849.16	LP



Azimuths to Grid North  
True North: -0.27°  
Magnetic North: 6.53°

Magnetic Field  
Strength: 47529.6nT  
Dip Angle: 59.79°  
Date: 03/04/2020  
Model: IGRF2020



## Planning Report

<b>Database:</b>	STRYKER_EDM	<b>Local Co-ordinate Reference:</b>	Well 103H - Slot P30BS 103H SHL
<b>Company:</b>	XTO Energy	<b>TVD Reference:</b>	3382+25 @ 3407.00usft (e101)
<b>Project:</b>	Eddy County, NM (NAD27) NMEZ Grid	<b>MD Reference:</b>	3382+25 @ 3407.00usft (e101)
<b>Site:</b>	PLU 30 BS	<b>North Reference:</b>	Grid
<b>Well:</b>	103H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral		
<b>Design:</b>	Plan #1		

<b>Project</b>	Eddy County, NM (NAD27) NMEZ Grid		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	New Mexico East 3001		

Site		PLU 30 BS			
Site Position:		Northing:	401,230.80 usft	Latitude:	32° 6' 7.4038 N
From:	Map	Easting:	659,159.30 usft	Longitude:	103° 49' 9.6252 W
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	0.27 °

Well	103H - Slot P30BS 103H SHL					
Well Position	+N/-S	0.40 usft	Northing:	401,231.20 usft	Latitude:	32° 6' 7.4050 N
	+E/-W	60.00 usft	Easting:	659,219.30 usft	Longitude:	103° 49' 8.9276 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,382.00 usft

<b>Wellbore</b>	Lateral				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2020	03/04/20	6.80	59.79	47,529.60472491

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	180.85

<b>Plan Survey Tool Program</b>	<b>Date</b>	03/04/20		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	10,946.32 Plan #1 (Lateral)	MWD	
			OWSG MWD - Standard	
2	10,946.32	19,270.41 Plan #1 (Lateral)	MWD+IFR1+MS	
			OWSG MWD + IFR1 + Multi-St	

# Planning Report

<b>Database:</b>	STRYKER_EDM	<b>Local Co-ordinate Reference:</b>	Well 103H - Slot P30BS 103H SHL
<b>Company:</b>	XTO Energy	<b>TVD Reference:</b>	3382+25 @ 3407.00usft (e101)
<b>Project:</b>	Eddy County, NM (NAD27) NMEZ Grid	<b>MD Reference:</b>	3382+25 @ 3407.00usft (e101)
<b>Site:</b>	PLU 30 BS	<b>North Reference:</b>	Grid
<b>Well:</b>	103H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral		
<b>Design:</b>	Plan #1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,108.12	1.62	222.22	2,108.11	-1.13	-1.03	1.50	1.50	0.00	222.22	
7,894.23	1.62	222.22	7,891.89	-122.41	-111.07	0.00	0.00	0.00	0.00	
8,002.35	0.00	0.00	8,000.00	-123.54	-112.10	1.50	-1.50	0.00	180.00	
10,946.40	0.00	0.00	10,944.05	-123.54	-112.10	0.00	0.00	0.00	0.00	
11,849.40	90.30	180.06	11,517.00	-699.50	-112.70	10.00	10.00	0.00	180.06	
19,140.49	90.30	180.06	11,478.82	-7,990.48	-120.34	0.00	0.00	0.00	0.00	P30BS 103H LTP_33i
19,270.48	90.30	180.06	11,478.14	-8,120.48	-120.47	0.00	0.00	0.00	0.00	P30BS 103H PBHL_2

# Planning Report

<b>Database:</b>	STRYKER_EDM	<b>Local Co-ordinate Reference:</b>	Well 103H - Slot P30BS 103H SHL
<b>Company:</b>	XTO Energy	<b>TVD Reference:</b>	3382+25 @ 3407.00usft (e101)
<b>Project:</b>	Eddy County, NM (NAD27) NMEZ Grid	<b>MD Reference:</b>	3382+25 @ 3407.00usft (e101)
<b>Site:</b>	PLU 30 BS	<b>North Reference:</b>	Grid
<b>Well:</b>	103H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,171.00	0.00	0.00	1,171.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Rustler</b>									
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,497.00	0.00	0.00	1,497.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Salado</b>									
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,108.12	1.62	222.22	2,108.11	-1.13	-1.03	1.15	1.50	1.50	0.00
2,200.00	1.62	222.22	2,199.95	-3.06	-2.78	3.10	0.00	0.00	0.00
2,300.00	1.62	222.22	2,299.91	-5.15	-4.68	5.22	0.00	0.00	0.00
2,400.00	1.62	222.22	2,399.87	-7.25	-6.58	7.35	0.00	0.00	0.00
2,500.00	1.62	222.22	2,499.83	-9.35	-8.48	9.47	0.00	0.00	0.00
2,600.00	1.62	222.22	2,599.79	-11.44	-10.38	11.60	0.00	0.00	0.00
2,700.00	1.62	222.22	2,699.75	-13.54	-12.28	13.72	0.00	0.00	0.00
2,800.00	1.62	222.22	2,799.71	-15.63	-14.19	15.84	0.00	0.00	0.00
2,900.00	1.62	222.22	2,899.67	-17.73	-16.09	17.97	0.00	0.00	0.00
3,000.00	1.62	222.22	2,999.63	-19.83	-17.99	20.09	0.00	0.00	0.00
3,100.00	1.62	222.22	3,099.59	-21.92	-19.89	22.22	0.00	0.00	0.00
3,200.00	1.62	222.22	3,199.55	-24.02	-21.79	24.34	0.00	0.00	0.00
3,300.00	1.62	222.22	3,299.51	-26.11	-23.70	26.46	0.00	0.00	0.00
3,400.00	1.62	222.22	3,399.47	-28.21	-25.60	28.59	0.00	0.00	0.00
3,500.00	1.62	222.22	3,499.43	-30.31	-27.50	30.71	0.00	0.00	0.00
3,600.00	1.62	222.22	3,599.39	-32.40	-29.40	32.83	0.00	0.00	0.00
3,700.00	1.62	222.22	3,699.35	-34.50	-31.30	34.96	0.00	0.00	0.00
3,800.00	1.62	222.22	3,799.31	-36.59	-33.21	37.08	0.00	0.00	0.00
3,900.00	1.62	222.22	3,899.27	-38.69	-35.11	39.21	0.00	0.00	0.00
3,973.76	1.62	222.22	3,973.00	-40.24	-36.51	40.77	0.00	0.00	0.00
<b>Base of Salt</b>									
4,000.00	1.62	222.22	3,999.23	-40.79	-37.01	41.33	0.00	0.00	0.00
4,100.00	1.62	222.22	4,099.19	-42.88	-38.91	43.45	0.00	0.00	0.00
4,140.83	1.62	222.22	4,140.00	-43.74	-39.69	44.32	0.00	0.00	0.00
<b>Delaware</b>									
4,200.00	1.62	222.22	4,199.15	-44.98	-40.81	45.58	0.00	0.00	0.00
4,300.00	1.62	222.22	4,299.11	-47.07	-42.71	47.70	0.00	0.00	0.00
4,400.00	1.62	222.22	4,399.07	-49.17	-44.62	49.83	0.00	0.00	0.00
4,500.00	1.62	222.22	4,499.03	-51.27	-46.52	51.95	0.00	0.00	0.00

# Planning Report

<b>Database:</b>	STRYKER_EDM	<b>Local Co-ordinate Reference:</b>	Well 103H - Slot P30BS 103H SHL
<b>Company:</b>	XTO Energy	<b>TVD Reference:</b>	3382+25 @ 3407.00usft (e101)
<b>Project:</b>	Eddy County, NM (NAD27) NMEZ Grid	<b>MD Reference:</b>	3382+25 @ 3407.00usft (e101)
<b>Site:</b>	PLU 30 BS	<b>North Reference:</b>	Grid
<b>Well:</b>	103H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,600.00	1.62	222.22	4,598.99	-53.36	-48.42	54.07	0.00	0.00	0.00
4,700.00	1.62	222.22	4,698.95	-55.46	-50.32	56.20	0.00	0.00	0.00
4,800.00	1.62	222.22	4,798.91	-57.55	-52.22	58.32	0.00	0.00	0.00
4,900.00	1.62	222.22	4,898.87	-59.65	-54.13	60.45	0.00	0.00	0.00
5,000.00	1.62	222.22	4,998.83	-61.75	-56.03	62.57	0.00	0.00	0.00
5,100.00	1.62	222.22	5,098.79	-63.84	-57.93	64.69	0.00	0.00	0.00
5,118.22	1.62	222.22	5,117.00	-64.22	-58.28	65.08	0.00	0.00	0.00
Cherry Canyon									
5,200.00	1.62	222.22	5,198.75	-65.94	-59.83	66.82	0.00	0.00	0.00
5,300.00	1.62	222.22	5,298.71	-68.03	-61.73	68.94	0.00	0.00	0.00
5,400.00	1.62	222.22	5,398.67	-70.13	-63.64	71.07	0.00	0.00	0.00
5,500.00	1.62	222.22	5,498.63	-72.23	-65.54	73.19	0.00	0.00	0.00
5,600.00	1.62	222.22	5,598.59	-74.32	-67.44	75.31	0.00	0.00	0.00
5,700.00	1.62	222.22	5,698.55	-76.42	-69.34	77.44	0.00	0.00	0.00
5,800.00	1.62	222.22	5,798.51	-78.51	-71.24	79.56	0.00	0.00	0.00
5,900.00	1.62	222.22	5,898.47	-80.61	-73.14	81.69	0.00	0.00	0.00
6,000.00	1.62	222.22	5,998.43	-82.70	-75.05	83.81	0.00	0.00	0.00
6,100.00	1.62	222.22	6,098.39	-84.80	-76.95	85.93	0.00	0.00	0.00
6,200.00	1.62	222.22	6,198.35	-86.90	-78.85	88.06	0.00	0.00	0.00
6,300.00	1.62	222.22	6,298.31	-88.99	-80.75	90.18	0.00	0.00	0.00
6,400.00	1.62	222.22	6,398.27	-91.09	-82.65	92.30	0.00	0.00	0.00
6,500.00	1.62	222.22	6,498.23	-93.18	-84.56	94.43	0.00	0.00	0.00
6,600.00	1.62	222.22	6,598.19	-95.28	-86.46	96.55	0.00	0.00	0.00
6,700.00	1.62	222.22	6,698.15	-97.38	-88.36	98.68	0.00	0.00	0.00
6,751.87	1.62	222.22	6,750.00	-98.46	-89.35	99.78	0.00	0.00	0.00
Brushy Canyon									
6,800.00	1.62	222.22	6,798.11	-99.47	-90.26	100.80	0.00	0.00	0.00
6,900.00	1.62	222.22	6,898.07	-101.57	-92.16	102.92	0.00	0.00	0.00
7,000.00	1.62	222.22	6,998.03	-103.66	-94.06	105.05	0.00	0.00	0.00
7,100.00	1.62	222.22	7,097.99	-105.76	-95.97	107.17	0.00	0.00	0.00
7,200.00	1.62	222.22	7,197.95	-107.86	-97.87	109.30	0.00	0.00	0.00
7,300.00	1.62	222.22	7,297.91	-109.95	-99.77	111.42	0.00	0.00	0.00
7,400.00	1.62	222.22	7,397.87	-112.05	-101.67	113.54	0.00	0.00	0.00
7,500.00	1.62	222.22	7,497.83	-114.14	-103.57	115.67	0.00	0.00	0.00
7,600.00	1.62	222.22	7,597.79	-116.24	-105.48	117.79	0.00	0.00	0.00
7,700.00	1.62	222.22	7,697.75	-118.34	-107.38	119.92	0.00	0.00	0.00
7,800.00	1.62	222.22	7,797.71	-120.43	-109.28	122.04	0.00	0.00	0.00
7,852.32	1.62	222.22	7,850.00	-121.53	-110.27	123.15	0.00	0.00	0.00
Basal Brushy Canyon									
7,894.23	1.62	222.22	7,891.89	-122.41	-111.07	124.04	0.00	0.00	0.00
7,900.00	1.54	222.22	7,897.67	-122.52	-111.18	124.16	1.50	-1.50	0.00
8,002.35	0.00	0.00	8,000.00	-123.54	-112.10	125.19	1.50	-1.50	0.00
8,078.35	0.00	0.00	8,076.00	-123.54	-112.10	125.19	0.00	0.00	0.00
Bone Spring									
8,100.00	0.00	0.00	8,097.65	-123.54	-112.10	125.19	0.00	0.00	0.00
8,109.35	0.00	0.00	8,107.00	-123.54	-112.10	125.19	0.00	0.00	0.00
Bone Spring Lime									
8,200.00	0.00	0.00	8,197.65	-123.54	-112.10	125.19	0.00	0.00	0.00
8,300.00	0.00	0.00	8,297.65	-123.54	-112.10	125.19	0.00	0.00	0.00
8,400.00	0.00	0.00	8,397.65	-123.54	-112.10	125.19	0.00	0.00	0.00
8,500.00	0.00	0.00	8,497.65	-123.54	-112.10	125.19	0.00	0.00	0.00
8,600.00	0.00	0.00	8,597.65	-123.54	-112.10	125.19	0.00	0.00	0.00
8,700.00	0.00	0.00	8,697.65	-123.54	-112.10	125.19	0.00	0.00	0.00



# Planning Report

<b>Database:</b>	STRYKER_EDM	<b>Local Co-ordinate Reference:</b>	Well 103H - Slot P30BS 103H SHL
<b>Company:</b>	XTO Energy	<b>TVD Reference:</b>	3382+25 @ 3407.00usft (e101)
<b>Project:</b>	Eddy County, NM (NAD27) NMEZ Grid	<b>MD Reference:</b>	3382+25 @ 3407.00usft (e101)
<b>Site:</b>	PLU 30 BS	<b>North Reference:</b>	Grid
<b>Well:</b>	103H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral		
<b>Design:</b>	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
8,800.00	0.00	0.00	8,797.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
8,900.00	0.00	0.00	8,897.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
9,000.00	0.00	0.00	8,997.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
9,078.35	0.00	0.00	9,076.00	-123.54	-112.10	125.19	0.00	0.00	0.00	
<b>1st Bone Sand</b>										
9,100.00	0.00	0.00	9,097.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
9,200.00	0.00	0.00	9,197.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
9,300.00	0.00	0.00	9,297.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
9,399.35	0.00	0.00	9,397.00	-123.54	-112.10	125.19	0.00	0.00	0.00	
<b>2nd Bone Lime</b>										
9,400.00	0.00	0.00	9,397.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
9,500.00	0.00	0.00	9,497.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
9,600.00	0.00	0.00	9,597.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
9,700.00	0.00	0.00	9,697.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
9,725.35	0.00	0.00	9,723.00	-123.54	-112.10	125.19	0.00	0.00	0.00	
<b>2nd Bone Sand</b>										
9,800.00	0.00	0.00	9,797.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
9,900.00	0.00	0.00	9,897.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
10,000.00	0.00	0.00	9,997.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
10,100.00	0.00	0.00	10,097.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
10,142.35	0.00	0.00	10,140.00	-123.54	-112.10	125.19	0.00	0.00	0.00	
<b>3rd Bone Lime</b>										
10,200.00	0.00	0.00	10,197.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
10,300.00	0.00	0.00	10,297.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
10,400.00	0.00	0.00	10,397.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
10,500.00	0.00	0.00	10,497.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
10,600.00	0.00	0.00	10,597.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
10,700.00	0.00	0.00	10,697.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
10,800.00	0.00	0.00	10,797.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
10,900.00	0.00	0.00	10,897.65	-123.54	-112.10	125.19	0.00	0.00	0.00	
10,946.40	0.00	0.00	10,944.05	-123.54	-112.10	125.19	0.00	0.00	0.00	
10,950.00	0.36	180.06	10,947.65	-123.55	-112.10	125.20	10.00	10.00	0.00	
11,000.00	5.36	180.06	10,997.58	-126.05	-112.10	127.69	10.00	10.00	0.00	
11,044.83	9.84	180.06	11,042.00	-131.97	-112.11	133.62	10.00	10.00	0.00	
<b>3rd Bone Sand</b>										
11,050.00	10.36	180.06	11,047.09	-132.88	-112.11	134.53	10.00	10.00	0.00	
11,100.00	15.36	180.06	11,095.82	-144.01	-112.12	145.65	10.00	10.00	0.00	
11,150.00	20.36	180.06	11,143.40	-159.34	-112.14	160.98	10.00	10.00	0.00	
11,200.00	25.36	180.06	11,189.45	-178.75	-112.16	180.40	10.00	10.00	0.00	
11,250.00	30.36	180.06	11,233.64	-202.11	-112.18	203.76	10.00	10.00	0.00	
11,300.00	35.36	180.06	11,275.63	-229.23	-112.21	230.87	10.00	10.00	0.00	
11,307.85	36.15	180.06	11,282.00	-233.82	-112.22	235.46	10.00	10.00	0.00	
<b>Red Hills</b>										
11,350.00	40.36	180.06	11,315.09	-259.91	-112.24	261.55	10.00	10.00	0.00	
11,386.31	43.99	180.06	11,342.00	-284.29	-112.27	285.92	10.00	10.00	0.00	
<b>Wolfcamp</b>										
11,400.00	45.36	180.06	11,351.73	-293.91	-112.28	295.54	10.00	10.00	0.00	
11,422.17	47.58	180.06	11,367.00	-309.98	-112.30	311.61	10.00	10.00	0.00	
<b>Wolfcamp X</b>										
11,450.00	50.36	180.06	11,385.27	-330.98	-112.32	332.61	10.00	10.00	0.00	
11,500.00	55.36	180.06	11,415.45	-370.82	-112.36	372.45	10.00	10.00	0.00	
11,550.00	60.36	180.06	11,442.04	-413.15	-112.40	414.77	10.00	10.00	0.00	
11,600.00	65.36	180.06	11,464.84	-457.63	-112.45	459.24	10.00	10.00	0.00	

# Planning Report

<b>Database:</b>	STRYKER_EDM	<b>Local Co-ordinate Reference:</b>	Well 103H - Slot P30BS 103H SHL
<b>Company:</b>	XTO Energy	<b>TVD Reference:</b>	3382+25 @ 3407.00usft (e101)
<b>Project:</b>	Eddy County, NM (NAD27) NMEZ Grid	<b>MD Reference:</b>	3382+25 @ 3407.00usft (e101)
<b>Site:</b>	PLU 30 BS	<b>North Reference:</b>	Grid
<b>Well:</b>	103H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
11,617.78	67.14	180.06	11,472.00	-473.90	-112.47	475.52	10.00	10.00	0.00
<b>Wolfcamp Y</b>									
11,650.00	70.36	180.06	11,483.68	-503.92	-112.50	505.54	10.00	10.00	0.00
11,700.00	75.36	180.06	11,498.41	-551.69	-112.55	553.30	10.00	10.00	0.00
11,750.00	80.36	180.06	11,508.92	-600.56	-112.60	602.16	10.00	10.00	0.00
11,750.50	80.41	180.06	11,509.00	-601.05	-112.60	602.65	10.00	10.00	0.00
<b>Wolfcamp A</b>									
11,800.00	85.36	180.06	11,515.13	-650.15	-112.65	651.75	10.00	10.00	0.00
11,849.17	90.30	180.06	11,517.00	-699.27	-112.70	700.86	10.05	10.05	0.00
<b>LP</b>									
11,849.40	90.30	180.06	11,517.00	-699.50	-112.70	701.09	0.00	0.00	0.00
11,900.00	90.30	180.06	11,516.73	-750.10	-112.76	751.69	0.00	0.00	0.00
12,000.00	90.30	180.06	11,516.21	-850.10	-112.86	851.68	0.00	0.00	0.00
12,100.00	90.30	180.06	11,515.69	-950.10	-112.97	951.67	0.00	0.00	0.00
12,200.00	90.30	180.06	11,515.16	-1,050.10	-113.07	1,051.66	0.00	0.00	0.00
12,300.00	90.30	180.06	11,514.64	-1,150.10	-113.18	1,151.65	0.00	0.00	0.00
12,400.00	90.30	180.06	11,514.12	-1,250.09	-113.28	1,251.64	0.00	0.00	0.00
12,500.00	90.30	180.06	11,513.59	-1,350.09	-113.38	1,351.63	0.00	0.00	0.00
12,600.00	90.30	180.06	11,513.07	-1,450.09	-113.49	1,451.61	0.00	0.00	0.00
12,700.00	90.30	180.06	11,512.55	-1,550.09	-113.59	1,551.60	0.00	0.00	0.00
12,800.00	90.30	180.06	11,512.02	-1,650.09	-113.70	1,651.59	0.00	0.00	0.00
12,900.00	90.30	180.06	11,511.50	-1,750.09	-113.80	1,751.58	0.00	0.00	0.00
13,000.00	90.30	180.06	11,510.97	-1,850.09	-113.91	1,851.57	0.00	0.00	0.00
13,100.00	90.30	180.06	11,510.45	-1,950.08	-114.01	1,951.56	0.00	0.00	0.00
13,200.00	90.30	180.06	11,509.93	-2,050.08	-114.12	2,051.55	0.00	0.00	0.00
13,300.00	90.30	180.06	11,509.40	-2,150.08	-114.22	2,151.54	0.00	0.00	0.00
13,400.00	90.30	180.06	11,508.88	-2,250.08	-114.33	2,251.53	0.00	0.00	0.00
13,500.00	90.30	180.06	11,508.36	-2,350.08	-114.43	2,351.52	0.00	0.00	0.00
13,600.00	90.30	180.06	11,507.83	-2,450.08	-114.54	2,451.51	0.00	0.00	0.00
13,700.00	90.30	180.06	11,507.31	-2,550.08	-114.64	2,551.50	0.00	0.00	0.00
13,800.00	90.30	180.06	11,506.79	-2,650.07	-114.75	2,651.48	0.00	0.00	0.00
13,900.00	90.30	180.06	11,506.26	-2,750.07	-114.85	2,751.47	0.00	0.00	0.00
14,000.00	90.30	180.06	11,505.74	-2,850.07	-114.96	2,851.46	0.00	0.00	0.00
14,100.00	90.30	180.06	11,505.21	-2,950.07	-115.06	2,951.45	0.00	0.00	0.00
14,200.00	90.30	180.06	11,504.69	-3,050.07	-115.16	3,051.44	0.00	0.00	0.00
14,300.00	90.30	180.06	11,504.17	-3,150.07	-115.27	3,151.43	0.00	0.00	0.00
14,400.00	90.30	180.06	11,503.64	-3,250.07	-115.37	3,251.42	0.00	0.00	0.00
14,500.00	90.30	180.06	11,503.12	-3,350.06	-115.48	3,351.41	0.00	0.00	0.00
14,600.00	90.30	180.06	11,502.60	-3,450.06	-115.58	3,451.40	0.00	0.00	0.00
14,700.00	90.30	180.06	11,502.07	-3,550.06	-115.69	3,551.39	0.00	0.00	0.00
14,800.00	90.30	180.06	11,501.55	-3,650.06	-115.79	3,651.38	0.00	0.00	0.00
14,900.00	90.30	180.06	11,501.03	-3,750.06	-115.90	3,751.36	0.00	0.00	0.00
15,000.00	90.30	180.06	11,500.50	-3,850.06	-116.00	3,851.35	0.00	0.00	0.00
15,100.00	90.30	180.06	11,499.98	-3,950.06	-116.11	3,951.34	0.00	0.00	0.00
15,200.00	90.30	180.06	11,499.46	-4,050.05	-116.21	4,051.33	0.00	0.00	0.00
15,300.00	90.30	180.06	11,498.93	-4,150.05	-116.32	4,151.32	0.00	0.00	0.00
15,400.00	90.30	180.06	11,498.41	-4,250.05	-116.42	4,251.31	0.00	0.00	0.00
15,500.00	90.30	180.06	11,497.88	-4,350.05	-116.53	4,351.30	0.00	0.00	0.00
15,600.00	90.30	180.06	11,497.36	-4,450.05	-116.63	4,451.29	0.00	0.00	0.00
15,700.00	90.30	180.06	11,496.84	-4,550.05	-116.74	4,551.28	0.00	0.00	0.00
15,800.00	90.30	180.06	11,496.31	-4,650.05	-116.84	4,651.27	0.00	0.00	0.00
15,900.00	90.30	180.06	11,495.79	-4,750.04	-116.94	4,751.26	0.00	0.00	0.00
16,000.00	90.30	180.06	11,495.27	-4,850.04	-117.05	4,851.25	0.00	0.00	0.00

## Planning Report

<b>Database:</b>	STRYKER_EDM	<b>Local Co-ordinate Reference:</b>	Well 103H - Slot P30BS 103H SHL
<b>Company:</b>	XTO Energy	<b>TVD Reference:</b>	3382+25 @ 3407.00usft (e101)
<b>Project:</b>	Eddy County, NM (NAD27) NMEZ Grid	<b>MD Reference:</b>	3382+25 @ 3407.00usft (e101)
<b>Site:</b>	PLU 30 BS	<b>North Reference:</b>	Grid
<b>Well:</b>	103H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral		
<b>Design:</b>	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
16,100.00	90.30	180.06	11,494.74	-4,950.04	-117.15	4,951.23	0.00	0.00	0.00	
16,200.00	90.30	180.06	11,494.22	-5,050.04	-117.26	5,051.22	0.00	0.00	0.00	
16,300.00	90.30	180.06	11,493.70	-5,150.04	-117.36	5,151.21	0.00	0.00	0.00	
16,400.00	90.30	180.06	11,493.17	-5,250.04	-117.47	5,251.20	0.00	0.00	0.00	
16,500.00	90.30	180.06	11,492.65	-5,350.04	-117.57	5,351.19	0.00	0.00	0.00	
16,600.00	90.30	180.06	11,492.13	-5,450.03	-117.68	5,451.18	0.00	0.00	0.00	
16,700.00	90.30	180.06	11,491.60	-5,550.03	-117.78	5,551.17	0.00	0.00	0.00	
16,800.00	90.30	180.06	11,491.08	-5,650.03	-117.89	5,651.16	0.00	0.00	0.00	
16,900.00	90.30	180.06	11,490.55	-5,750.03	-117.99	5,751.15	0.00	0.00	0.00	
17,000.00	90.30	180.06	11,490.03	-5,850.03	-118.10	5,851.14	0.00	0.00	0.00	
17,100.00	90.30	180.06	11,489.51	-5,950.03	-118.20	5,951.13	0.00	0.00	0.00	
17,200.00	90.30	180.06	11,488.98	-6,050.03	-118.31	6,051.11	0.00	0.00	0.00	
17,300.00	90.30	180.06	11,488.46	-6,150.02	-118.41	6,151.10	0.00	0.00	0.00	
17,400.00	90.30	180.06	11,487.94	-6,250.02	-118.52	6,251.09	0.00	0.00	0.00	
17,500.00	90.30	180.06	11,487.41	-6,350.02	-118.62	6,351.08	0.00	0.00	0.00	
17,600.00	90.30	180.06	11,486.89	-6,450.02	-118.73	6,451.07	0.00	0.00	0.00	
17,700.00	90.30	180.06	11,486.37	-6,550.02	-118.83	6,551.06	0.00	0.00	0.00	
17,800.00	90.30	180.06	11,485.84	-6,650.02	-118.93	6,651.05	0.00	0.00	0.00	
17,900.00	90.30	180.06	11,485.32	-6,750.02	-119.04	6,751.04	0.00	0.00	0.00	
18,000.00	90.30	180.06	11,484.79	-6,850.01	-119.14	6,851.03	0.00	0.00	0.00	
18,100.00	90.30	180.06	11,484.27	-6,950.01	-119.25	6,951.02	0.00	0.00	0.00	
18,200.00	90.30	180.06	11,483.75	-7,050.01	-119.35	7,051.01	0.00	0.00	0.00	
18,300.00	90.30	180.06	11,483.22	-7,150.01	-119.46	7,150.99	0.00	0.00	0.00	
18,400.00	90.30	180.06	11,482.70	-7,250.01	-119.56	7,250.98	0.00	0.00	0.00	
18,500.00	90.30	180.06	11,482.18	-7,350.01	-119.67	7,350.97	0.00	0.00	0.00	
18,600.00	90.30	180.06	11,481.65	-7,450.01	-119.77	7,450.96	0.00	0.00	0.00	
18,700.00	90.30	180.06	11,481.13	-7,550.00	-119.88	7,550.95	0.00	0.00	0.00	
18,800.00	90.30	180.06	11,480.61	-7,650.00	-119.98	7,650.94	0.00	0.00	0.00	
18,900.00	90.30	180.06	11,480.08	-7,750.00	-120.09	7,750.93	0.00	0.00	0.00	
19,000.00	90.30	180.06	11,479.56	-7,850.00	-120.19	7,850.92	0.00	0.00	0.00	
19,100.00	90.30	180.06	11,479.04	-7,950.00	-120.30	7,950.91	0.00	0.00	0.00	
19,140.49	90.30	180.06	11,478.82	-7,990.48	-120.34	7,991.39	0.00	0.00	0.00	
19,200.00	90.30	180.06	11,478.51	-8,050.00	-120.40	8,050.90	0.00	0.00	0.00	
19,270.48	90.30	180.06	11,478.14	-8,120.48	-120.47	8,121.37	0.00	0.00	0.00	

## Planning Report

<b>Database:</b>	STRYKER_EDM	<b>Local Co-ordinate Reference:</b>	Well 103H - Slot P30BS 103H SHL
<b>Company:</b>	XTO Energy	<b>TVD Reference:</b>	3382+25 @ 3407.00usft (e101)
<b>Project:</b>	Eddy County, NM (NAD27) NMEZ Grid	<b>MD Reference:</b>	3382+25 @ 3407.00usft (e101)
<b>Site:</b>	PLU 30 BS	<b>North Reference:</b>	Grid
<b>Well:</b>	103H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral		
<b>Design:</b>	Plan #1		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
P30BS 103H SHL - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	401,231.20	659,219.30	32° 6' 7.4050 N	103° 49' 8.9276 W
P30BS 103H KOP - plan hits target center - Point	0.00	0.00	10,944.05	-123.54	-112.10	401,107.66	659,107.20	32° 6' 6.1877 N	103° 49' 10.2377 W
P30BS 103H PBHL_20C - plan misses target center by 1.37usft at 19270.48usft MD (11478.14 TVD, -8120.48 N, -120.47 E) - Rectangle (sides W100.00 H7,424.20 D0.00)	0.00	0.00	11,478.14	-8,120.50	-119.10	393,110.70	659,100.20	32° 4' 47.0485 N	103° 49' 10.7619 W
P30BS 103H FTP_346F - plan misses target center by 38.21usft at 11844.95usft MD (11517.00 TVD, -695.05 N, -112.70 E) - Point	0.00	0.00	11,478.82	-696.50	-112.10	400,534.70	659,107.20	32° 6' 0.5176 N	103° 49' 10.2694 W
P30BS 103H LTP_330F - plan misses target center by 1.14usft at 19140.50usft MD (11478.82 TVD, -7990.50 N, -120.34 E) - Point	0.00	0.01	11,478.82	-7,990.50	-119.20	393,240.70	659,100.10	32° 4' 48.3350 N	103° 49' 10.7559 W

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,171.00	1,171.00	Rustler				
1,497.00	1,497.00	Salado				
3,973.76	3,973.00	Base of Salt				
4,140.83	4,140.00	Delaware				
5,118.22	5,117.00	Cherry Canyon				
6,751.87	6,750.00	Brushy Canyon				
7,852.32	7,850.00	Basal Brushy Canyon				
8,078.35	8,076.00	Bone Spring				
8,109.35	8,107.00	Bone Spring Lime				
9,078.35	9,076.00	1st Bone Sand				
9,399.35	9,397.00	2nd Bone Lime				
9,725.35	9,723.00	2nd Bone Sand				
10,142.35	10,140.00	3rd Bone Lime				
11,044.83	11,042.00	3rd Bone Sand				
11,307.85	11,282.00	Red Hills				
11,386.31	11,342.00	Wolfcamp				
11,422.17	11,367.00	Wolfcamp X				
11,617.78	11,472.00	Wolfcamp Y				
11,750.50	11,509.00	Wolfcamp A				
11,849.17	11,517.00	LP				