



RECEIVED

JUN 17 2019

DISTRICT II-ARTESIA O.C.D.

XTO Energy

**Eddy County, NM (NAD-27)
Remuda South 25 State
#125H**

OH

Plan: PERMIT

Standard Planning Report

31 May, 2019



Project: Eddy County, NM (NAD-27)
Site: Remuda South 25 State
Well: #125H
Wallbore: OH
Design: PERMIT

PROJECT DETAILS: Eddy County, NM (NAD-27)
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

DESIGN TARGET DETAILS

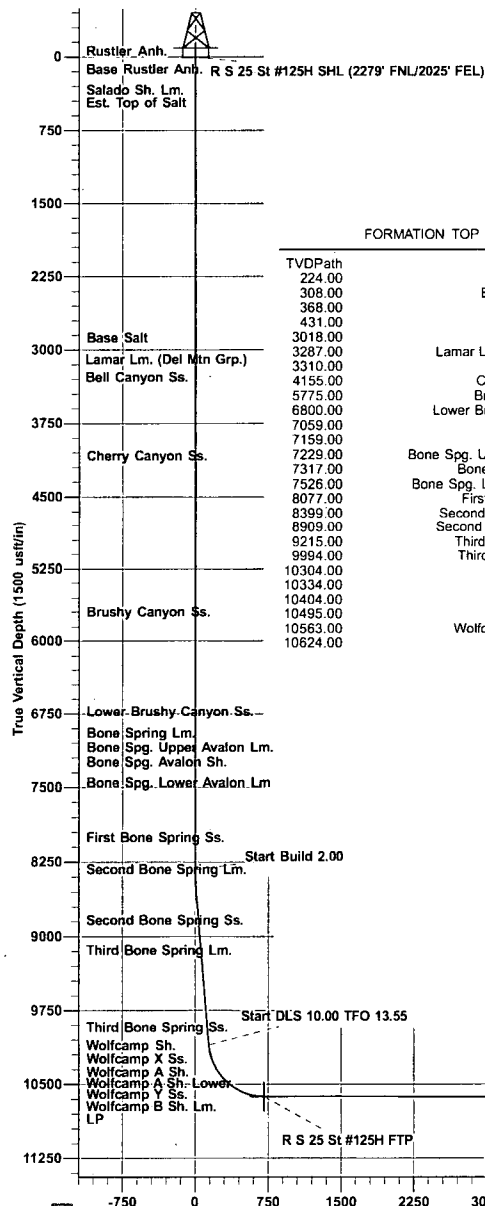
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
R S 25 St #125H SHL (2279' FNL/2025' FEL)	0.00	0.00	0.00	464640.40	622910.20	32.2767870	-103.9356441	Point
R S 25 St #125H FTP	10624.00	-709.90	47.50	463930.50	622957.70	32.2748351	-103.9354989	Point
R S 25 St #125H LTP	10637.00	-8021.00	80.00	456619.40	622990.20	32.2547372	-103.9354815	Point
R S 25 St #125H PBHL (200' FSL/1980' FEL)	10637.00	-8151.00	80.60	456469.40	622990.80	32.2543799	-103.9354811	Point

WELL DETAILS: #125H

Rig Name:		RKB = 22' @ 3083.00usft	
Ground Level:		3061.00	
+N/-S	+E/-W	Northing	Latitude
0.00	0.00	464640.40	32.2767870
		Easting	Longitude
		622910.20	-103.9356441

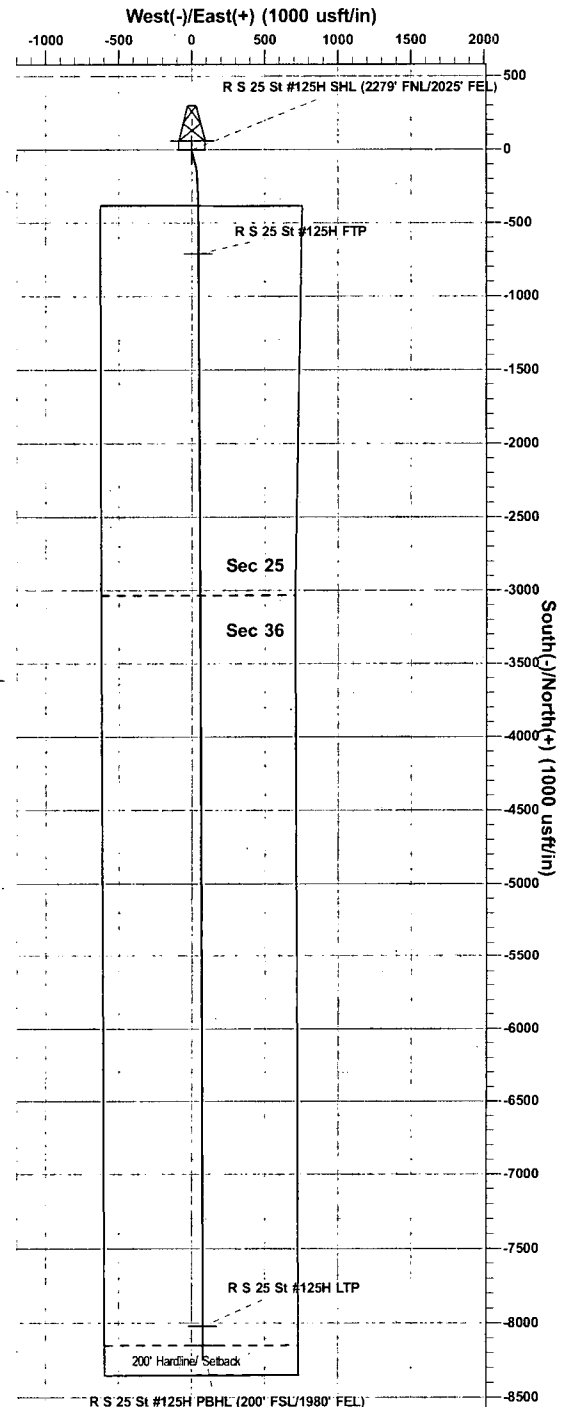
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Diag	TFace	VSec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	8325.00	0.00	0.00	8325.00	0.00	0.00	0.00	0.00	0.00
3	8574.76	5.00	166.24	8574.44	-10.57	2.59	2.00	166.24	10.58
4	10105.79	5.00	166.24	10099.66	-140.05	34.28	0.00	0.00	140.20
5	10956.22	89.90	179.75	10624.00	-709.90	47.50	10.00	13.55	710.10
6	18267.41	89.90	179.75	10636.77	-8021.00	80.02	0.00	0.00	8021.27
7	18397.41	89.90	179.75	10637.00	-8151.00	80.60	0.00	0.00	8151.27



FORMATION TOP DETAILS

TVDPPath	Formation
224.00	Rustler Anh.
308.00	Base Rustler Anh.
368.00	Salado Sh. Lm.
431.00	Est. Top of Salt
3018.00	Base Salt
3287.00	Lamar Lm. (Del Mtn Grp.)
3310.00	Bell Canyon Ss.
4155.00	Cherry Canyon Ss.
5775.00	Brushy Canyon Ss.
6800.00	Lower Brushy Canyon Ss.
7059.00	Bone Spring Lm.
7159.00	Avalon Ss.
7229.00	Bone Spg. Upper Avalon Lm.
7317.00	Bone Spg. Avalon Sh.
7526.00	Bone Spg. Lower Avalon Lm.
8077.00	First Bone Spring Ss.
8399.00	Second Bone Spring Lm.
8909.00	Second Bone Spring Ss.
9215.00	Third Bone Spring Lm.
9994.00	Third Bone Spring Ss.
10304.00	Wolfcamp Sh.
10334.00	Wolfcamp X Ss.
10404.00	Wolfcamp Y Ss.
10495.00	Wolfcamp A Sh.
10563.00	Wolfcamp B Sh.
10624.00	LP



Vertical Section at 179.75° (1500 usft/in)

The customer should only rely on this document after independently verifying all paths, targets, coordinates, lease and hard lines represented. Any decisions made or wells drilled utilizing this or any other information supplied by Pretype are at the sole risk and responsibility of the user.

Plan: PERMIT (#125H/OH)

Created By: Matthew May Date: 9:53, May 31 2019



Planning Report

Database:	EDM 5000.1 13 Single User Db	Local Co-ordinate Reference:	Well #125H
Company:	XTO Energy	TVD Reference:	RKB = 22' @ 3083.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB = 22' @ 3083.00usft
Site:	Remuda South 25 State	North Reference:	Grid
Well:	#125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

Project	Eddy County, NM (NAD-27)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Remuda South 25 State		
Site Position:		Northing:	464,609.70 usft
From:	Map	Easting:	620,263.40 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.2767294
		Longitude:	-103.9442083
		Grid Convergence:	0.21 °

Well	#125H		
Well Position	+N/-S	30.70 usft	Northing:
	+E/-W	2,646.80 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32.2767871
		Longitude:	-103.9356441
		Ground Level:	3,061.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	05/31/19	6.92
			Dip Angle (°)
			60.03
			Field Strength (nT)
			47,733

Design	PERMIT		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
			Direction (°)
			179.75

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,325.00	0.00	0.00	8,325.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,574.76	5.00	166.24	8,574.44	-10.57	2.59	2.00	2.00	0.00	166.24	
10,105.79	5.00	166.24	10,099.66	-140.05	34.28	0.00	0.00	0.00	0.00	
10,956.22	89.90	179.75	10,624.00	-709.90	47.50	10.00	9.98	1.59	13.55	R S 25 St #125H F
18,267.41	89.90	179.75	10,636.77	-8,021.00	80.02	0.00	0.00	0.00	0.00	R S 25 St #125H L1
18,397.41	89.90	179.75	10,637.00	-8,151.00	80.60	0.00	0.00	0.00	0.00	R S 25 St #125H P1



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well #125H
Company:	XTO Energy	TVD Reference:	RKB = 22' @ 3083.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB = 22' @ 3083.00usft
Site:	Remuda South 25 State	North Reference:	Grid
Well:	#125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
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
224.00	0.00	0.00	224.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler Anh.									
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
308.00	0.00	0.00	308.00	0.00	0.00	0.00	0.00	0.00	0.00
Base Rustler Anh.									
368.00	0.00	0.00	368.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado Sh. Lm.									
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
431.00	0.00	0.00	431.00	0.00	0.00	0.00	0.00	0.00	0.00
Est. Top of Salt									
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
1,200.00	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
1,500.00	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
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,018.00	0.00	0.00	3,018.00	0.00	0.00	0.00	0.00	0.00	0.00
Base Salt									
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,287.00	0.00	0.00	3,287.00	0.00	0.00	0.00	0.00	0.00	0.00
Lamar Lm. (Del Mtn Grp.)									
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,310.00	0.00	0.00	3,310.00	0.00	0.00	0.00	0.00	0.00	0.00
Bell Canyon Ss.									
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00



Planning Report

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Company:	XTO Energy	TVD Reference:	RKB = 22' @ 3083.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB = 22' @ 3083.00usft
Site:	Remuda South 25 State	North Reference:	Grid
Well:	#125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,155.00	0.00	0.00	4,155.00	0.00	0.00	0.00	0.00	0.00	0.00
Cherry Canyon Ss.									
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,775.00	0.00	0.00	5,775.00	0.00	0.00	0.00	0.00	0.00	0.00
Brushy Canyon Ss.									
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
Lower Brushy Canyon Ss.									
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,059.00	0.00	0.00	7,059.00	0.00	0.00	0.00	0.00	0.00	0.00
Bone Spring Lm.									
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,159.00	0.00	0.00	7,159.00	0.00	0.00	0.00	0.00	0.00	0.00
Avalon Ss.									
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,229.00	0.00	0.00	7,229.00	0.00	0.00	0.00	0.00	0.00	0.00
Bone Spg. Upper Avalon Lm.									
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,317.00	0.00	0.00	7,317.00	0.00	0.00	0.00	0.00	0.00	0.00
Bone Spg. Avalon Sh.									
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,526.00	0.00	0.00	7,526.00	0.00	0.00	0.00	0.00	0.00	0.00
Bone Spg. Lower Avalon Lm									
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00



Planning Report

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Company:	XTO Energy	TVD Reference:	RKB = 22' @ 3083.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB = 22' @ 3083.00usft
Site:	Remuda South 25 State	North Reference:	Grid
Well:	#125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,077.00	0.00	0.00	8,077.00	0.00	0.00	0.00	0.00	0.00	0.00
First Bone Spring Ss.									
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00
8,325.00	0.00	0.00	8,325.00	0.00	0.00	0.00	0.00	0.00	0.00
8,399.01	1.48	166.24	8,399.00	-0.93	0.23	0.93	2.00	2.00	0.00
Second Bone Spring Lm.									
8,400.00	1.50	166.24	8,399.99	-0.95	0.23	0.95	2.00	2.00	0.00
8,500.00	3.50	166.24	8,499.89	-5.19	1.27	5.20	2.00	2.00	0.00
8,574.76	5.00	166.24	8,574.44	-10.57	2.59	10.58	2.00	2.00	0.00
8,600.00	5.00	166.24	8,599.59	-12.70	3.11	12.72	0.00	0.00	0.00
8,700.00	5.00	166.24	8,699.21	-21.16	5.18	21.18	0.00	0.00	0.00
8,800.00	5.00	166.24	8,798.83	-29.62	7.25	29.65	0.00	0.00	0.00
8,900.00	5.00	166.24	8,898.45	-38.08	9.32	38.12	0.00	0.00	0.00
8,910.59	5.00	166.24	8,909.00	-38.97	9.54	39.01	0.00	0.00	0.00
Second Bone Spring Ss.									
9,000.00	5.00	166.24	8,998.07	-46.53	11.39	46.58	0.00	0.00	0.00
9,100.00	5.00	166.24	9,097.69	-54.99	13.46	55.05	0.00	0.00	0.00
9,200.00	5.00	166.24	9,197.31	-63.45	15.53	63.51	0.00	0.00	0.00
9,217.76	5.00	166.24	9,215.00	-64.95	15.90	65.02	0.00	0.00	0.00
Third Bone Spring Lm.									
9,300.00	5.00	166.24	9,296.93	-71.90	17.60	71.98	0.00	0.00	0.00
9,400.00	5.00	166.24	9,396.55	-80.36	19.67	80.45	0.00	0.00	0.00
9,500.00	5.00	166.24	9,496.17	-88.82	21.74	88.91	0.00	0.00	0.00
9,600.00	5.00	166.24	9,595.79	-97.28	23.81	97.38	0.00	0.00	0.00
9,700.00	5.00	166.24	9,695.41	-105.73	25.88	105.85	0.00	0.00	0.00
9,800.00	5.00	166.24	9,795.03	-114.19	27.95	114.31	0.00	0.00	0.00
9,900.00	5.00	166.24	9,894.65	-122.65	30.02	122.78	0.00	0.00	0.00
9,999.73	5.00	166.24	9,994.00	-131.08	32.09	131.22	0.00	0.00	0.00
Third Bone Spring Ss.									
10,000.00	5.00	166.24	9,994.27	-131.11	32.09	131.24	0.00	0.00	0.00
10,105.79	5.00	166.24	10,099.66	-140.05	34.28	140.20	0.00	0.00	0.00
10,150.00	9.35	172.63	10,143.51	-145.49	35.20	145.64	10.00	9.85	14.44
10,200.00	14.32	175.16	10,192.44	-155.68	36.25	155.84	10.00	9.95	5.07
10,250.00	19.31	176.41	10,240.28	-170.11	37.29	170.27	10.00	9.97	2.49
10,300.00	24.30	177.16	10,286.69	-188.65	38.32	188.81	10.00	9.98	1.50
10,319.14	26.22	177.37	10,304.00	-196.81	38.71	196.97	10.00	9.99	1.12
Wolfcamp Sh.									
10,350.00	29.30	177.66	10,331.30	-211.16	39.33	211.33	10.00	9.99	0.94
10,353.10	29.61	177.69	10,334.00	-212.69	39.39	212.85	10.00	9.99	0.84
Wolfcamp X Ss.									
10,400.00	34.29	178.03	10,373.79	-237.48	40.31	237.66	10.00	9.99	0.73
10,437.43	38.04	178.25	10,404.00	-259.56	41.02	259.73	10.00	9.99	0.59
Wolfcamp Y Ss.									
10,450.00	39.29	178.32	10,413.81	-267.40	41.26	267.58	10.00	9.99	0.52
10,500.00	44.29	178.55	10,451.08	-300.70	42.17	300.88	10.00	10.00	0.46
10,550.00	49.29	178.74	10,485.30	-337.12	43.02	337.31	10.00	10.00	0.38
10,565.10	50.80	178.79	10,495.00	-348.69	43.27	348.88	10.00	10.00	0.35



Planning Report

Database:	EDM 5000.1:13 Single User Db	Local Co-ordinate Reference:	Well #125H
Company:	XTO Energy	TVD Reference:	RKB = 22' @ 3083.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB = 22' @ 3083.00usft
Site:	Remuda South 25 State	North Reference:	Grid
Well:	#125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Wolfcamp A Sh.									
10,600.00	54.29	178.91	10,516.22	-376.39	43.83	376.57	10.00	10.00	0.32
10,650.00	59.28	179.05	10,543.60	-418.20	44.57	418.39	10.00	10.00	0.29
10,690.40	63.32	179.16	10,563.00	-453.63	45.12	453.82	10.00	10.00	0.27
Wolfcamp A Sh. Lower									
10,700.00	64.28	179.18	10,567.24	-462.24	45.25	462.43	10.00	10.00	0.25
10,750.00	69.28	179.30	10,586.94	-508.17	45.85	508.37	10.00	10.00	0.24
10,800.00	74.28	179.42	10,602.57	-555.65	46.38	555.84	10.00	10.00	0.23
10,850.00	79.28	179.53	10,614.00	-604.30	46.83	604.50	10.00	10.00	0.22
10,900.00	84.28	179.63	10,621.15	-653.77	47.19	653.97	10.00	10.00	0.21
10,950.00	89.28	179.73	10,623.96	-703.68	47.47	703.88	10.00	10.00	0.20
10,956.22	89.90	179.75	10,624.00	-709.90	47.50	710.10	10.00	10.00	0.20
LP									
11,000.00	89.90	179.75	10,624.08	-753.68	47.69	753.88	0.00	0.00	0.00
11,100.00	89.90	179.75	10,624.25	-853.67	48.14	853.88	0.00	0.00	0.00
11,200.00	89.90	179.75	10,624.43	-953.67	48.58	953.88	0.00	0.00	0.00
11,300.00	89.90	179.75	10,624.60	-1,053.67	49.03	1,053.88	0.00	0.00	0.00
11,400.00	89.90	179.75	10,624.78	-1,153.67	49.47	1,153.88	0.00	0.00	0.00
11,500.00	89.90	179.75	10,624.95	-1,253.67	49.92	1,253.88	0.00	0.00	0.00
11,600.00	89.90	179.75	10,625.12	-1,353.67	50.36	1,353.88	0.00	0.00	0.00
11,700.00	89.90	179.75	10,625.30	-1,453.67	50.81	1,453.88	0.00	0.00	0.00
11,800.00	89.90	179.75	10,625.47	-1,553.67	51.25	1,553.88	0.00	0.00	0.00
11,900.00	89.90	179.75	10,625.65	-1,653.67	51.70	1,653.88	0.00	0.00	0.00
12,000.00	89.90	179.75	10,625.82	-1,753.66	52.14	1,753.88	0.00	0.00	0.00
12,100.00	89.90	179.75	10,626.00	-1,853.66	52.59	1,853.87	0.00	0.00	0.00
12,200.00	89.90	179.75	10,626.17	-1,953.66	53.03	1,953.87	0.00	0.00	0.00
12,300.00	89.90	179.75	10,626.35	-2,053.66	53.48	2,053.87	0.00	0.00	0.00
12,400.00	89.90	179.75	10,626.52	-2,153.66	53.92	2,153.87	0.00	0.00	0.00
12,500.00	89.90	179.75	10,626.70	-2,253.66	54.37	2,253.87	0.00	0.00	0.00
12,600.00	89.90	179.75	10,626.87	-2,353.66	54.81	2,353.87	0.00	0.00	0.00
12,700.00	89.90	179.75	10,627.05	-2,453.66	55.26	2,453.87	0.00	0.00	0.00
12,800.00	89.90	179.75	10,627.22	-2,553.66	55.70	2,553.87	0.00	0.00	0.00
12,900.00	89.90	179.75	10,627.40	-2,653.65	56.15	2,653.87	0.00	0.00	0.00
13,000.00	89.90	179.75	10,627.57	-2,753.65	56.59	2,753.87	0.00	0.00	0.00
13,100.00	89.90	179.75	10,627.75	-2,853.65	57.04	2,853.87	0.00	0.00	0.00
13,200.00	89.90	179.75	10,627.92	-2,953.65	57.48	2,953.87	0.00	0.00	0.00
13,300.00	89.90	179.75	10,628.09	-3,053.65	57.93	3,053.87	0.00	0.00	0.00
13,400.00	89.90	179.75	10,628.27	-3,153.65	58.37	3,153.87	0.00	0.00	0.00
13,500.00	89.90	179.75	10,628.44	-3,253.65	58.82	3,253.87	0.00	0.00	0.00
13,600.00	89.90	179.75	10,628.62	-3,353.65	59.26	3,353.87	0.00	0.00	0.00
13,700.00	89.90	179.75	10,628.79	-3,453.64	59.70	3,453.87	0.00	0.00	0.00
13,800.00	89.90	179.75	10,628.97	-3,553.64	60.15	3,553.87	0.00	0.00	0.00
13,900.00	89.90	179.75	10,629.14	-3,653.64	60.59	3,653.87	0.00	0.00	0.00
14,000.00	89.90	179.75	10,629.32	-3,753.64	61.04	3,753.87	0.00	0.00	0.00
14,100.00	89.90	179.75	10,629.49	-3,853.64	61.48	3,853.87	0.00	0.00	0.00
14,200.00	89.90	179.75	10,629.67	-3,953.64	61.93	3,953.87	0.00	0.00	0.00
14,300.00	89.90	179.75	10,629.84	-4,053.64	62.37	4,053.87	0.00	0.00	0.00
14,400.00	89.90	179.75	10,630.02	-4,153.64	62.82	4,153.87	0.00	0.00	0.00
14,500.00	89.90	179.75	10,630.19	-4,253.64	63.26	4,253.87	0.00	0.00	0.00
14,600.00	89.90	179.75	10,630.37	-4,353.63	63.71	4,353.87	0.00	0.00	0.00
14,700.00	89.90	179.75	10,630.54	-4,453.63	64.15	4,453.87	0.00	0.00	0.00
14,800.00	89.90	179.75	10,630.72	-4,553.63	64.60	4,553.87	0.00	0.00	0.00
14,900.00	89.90	179.75	10,630.89	-4,653.63	65.04	4,653.87	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well #125H
Company:	XTO Energy	TVD Reference:	RKB = 22' @ 3083.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB = 22' @ 3083.00usft
Site:	Remuda South 25 State	North Reference:	Grid
Well:	#125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,000.00	89.90	179.75	10,631.06	-4,753.63	65.49	4,753.87	0.00	0.00	0.00
15,100.00	89.90	179.75	10,631.24	-4,853.63	65.93	4,853.87	0.00	0.00	0.00
15,200.00	89.90	179.75	10,631.41	-4,953.63	66.38	4,953.87	0.00	0.00	0.00
15,300.00	89.90	179.75	10,631.59	-5,053.63	66.82	5,053.87	0.00	0.00	0.00
15,400.00	89.90	179.75	10,631.76	-5,153.63	67.27	5,153.87	0.00	0.00	0.00
15,500.00	89.90	179.75	10,631.94	-5,253.62	67.71	5,253.87	0.00	0.00	0.00
15,600.00	89.90	179.75	10,632.11	-5,353.62	68.16	5,353.87	0.00	0.00	0.00
15,700.00	89.90	179.75	10,632.29	-5,453.62	68.60	5,453.87	0.00	0.00	0.00
15,800.00	89.90	179.75	10,632.46	-5,553.62	69.05	5,553.87	0.00	0.00	0.00
15,900.00	89.90	179.75	10,632.64	-5,653.62	69.49	5,653.87	0.00	0.00	0.00
16,000.00	89.90	179.75	10,632.81	-5,753.62	69.94	5,753.87	0.00	0.00	0.00
16,100.00	89.90	179.75	10,632.99	-5,853.62	70.38	5,853.87	0.00	0.00	0.00
16,200.00	89.90	179.75	10,633.16	-5,953.62	70.83	5,953.87	0.00	0.00	0.00
16,300.00	89.90	179.75	10,633.34	-6,053.62	71.27	6,053.87	0.00	0.00	0.00
16,400.00	89.90	179.75	10,633.51	-6,153.61	71.72	6,153.87	0.00	0.00	0.00
16,500.00	89.90	179.75	10,633.69	-6,253.61	72.16	6,253.87	0.00	0.00	0.00
16,600.00	89.90	179.75	10,633.86	-6,353.61	72.60	6,353.87	0.00	0.00	0.00
16,700.00	89.90	179.75	10,634.03	-6,453.61	73.05	6,453.87	0.00	0.00	0.00
16,800.00	89.90	179.75	10,634.21	-6,553.61	73.49	6,553.87	0.00	0.00	0.00
16,900.00	89.90	179.75	10,634.38	-6,653.61	73.94	6,653.87	0.00	0.00	0.00
17,000.00	89.90	179.75	10,634.56	-6,753.61	74.38	6,753.87	0.00	0.00	0.00
17,100.00	89.90	179.75	10,634.73	-6,853.61	74.83	6,853.87	0.00	0.00	0.00
17,200.00	89.90	179.75	10,634.91	-6,953.61	75.27	6,953.87	0.00	0.00	0.00
17,300.00	89.90	179.75	10,635.08	-7,053.60	75.72	7,053.87	0.00	0.00	0.00
17,400.00	89.90	179.75	10,635.26	-7,153.60	76.16	7,153.87	0.00	0.00	0.00
17,500.00	89.90	179.75	10,635.43	-7,253.60	76.61	7,253.87	0.00	0.00	0.00
17,600.00	89.90	179.75	10,635.61	-7,353.60	77.05	7,353.87	0.00	0.00	0.00
17,700.00	89.90	179.75	10,635.78	-7,453.60	77.50	7,453.87	0.00	0.00	0.00
17,800.00	89.90	179.75	10,635.96	-7,553.60	77.94	7,553.87	0.00	0.00	0.00
17,900.00	89.90	179.75	10,636.13	-7,653.60	78.39	7,653.87	0.00	0.00	0.00
18,000.00	89.90	179.75	10,636.31	-7,753.60	78.83	7,753.87	0.00	0.00	0.00
18,100.00	89.90	179.75	10,636.48	-7,853.59	79.28	7,853.87	0.00	0.00	0.00
18,200.00	89.90	179.75	10,636.66	-7,953.59	79.72	7,953.87	0.00	0.00	0.00
18,267.41	89.90	179.75	10,636.77	-8,021.00	80.02	8,021.27	0.00	0.00	0.00
18,300.00	89.90	179.75	10,636.83	-8,053.59	80.17	8,053.87	0.00	0.00	0.00
18,397.41	89.90	179.75	10,637.00	-8,151.00	80.60	8,151.27	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.1.13 Single User Db.	Local Co-ordinate Reference:	Well #125H
Company:	XTO Energy	TVD Reference:	RKB = 22' @ 3083.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB = 22' @ 3083.00usft
Site:	Remuda South 25 State	North Reference:	Grid
Well:	#125H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

Design Targets

Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
R S 25 St #125H SHL - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	464,640.40	622,910.20	32.2767871	-103.9356441
R S 25 St #125H FTP - plan hits target center - Point	0.00	0.00	10,624.00	-709.90	47.50	463,930.50	622,957.70	32.2748351	-103.9354989
R S 25 St #125H PBI- - plan hits target center - Point	0.00	0.00	10,637.00	-8,151.00	80.60	456,489.40	622,990.80	32.2543799	-103.9354811
R S 25 St #125H LTP - plan misses target center by 0.23usft at 18267.41usft MD (10636.77 TVD, -8021.00 N, 80.02 E) - Point	0.00	0.00	10,637.00	-8,021.00	80.00	456,619.40	622,990.20	32.2547372	-103.9354815

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
224.00	224.00	Rustler Anh.			
308.00	308.00	Base Rustler Anh.			
368.00	368.00	Salado Sh. Lm.			
431.00	431.00	Est. Top of Salt			
3,018.00	3,018.00	Base Salt			
3,287.00	3,287.00	Lamar Lm. (Del Mtn Grp.)			
3,310.00	3,310.00	Bell Canyon Ss.			
4,155.00	4,155.00	Cherry Canyon Ss.			
5,775.00	5,775.00	Brushy Canyon Ss.			
6,800.00	6,800.00	Lower Brushy Canyon Ss.			
7,059.00	7,059.00	Bone Spring Lm.			
7,159.00	7,159.00	Avalon Ss.			
7,229.00	7,229.00	Bone Spg. Upper Avalon Lm.			
7,317.00	7,317.00	Bone Spg. Avalon Sh.			
7,526.00	7,526.00	Bone Spg. Lower Avalon Lm			
8,077.00	8,077.00	First Bone Spring Ss.			
8,399.01	8,399.00	Second Bone Spring Lm.			
8,910.59	8,909.00	Second Bone Spring Ss.			
9,217.76	9,215.00	Third Bone Spring Lm.			
9,999.73	9,994.00	Third Bone Spring Ss.			
10,319.14	10,304.00	Wolfcamp Sh.			
10,353.10	10,334.00	Wolfcamp X Ss.			
10,437.43	10,404.00	Wolfcamp Y Ss.			
10,565.10	10,495.00	Wolfcamp A Sh.			
10,690.40	10,563.00	Wolfcamp A Sh. Lower			
10,956.22	10,624.00	LP			