



RECEIVED

JUN 18 2019

DISTRICT II-ARTESIA O.C.D.

XTO Energy

**Eddy County, NM (NAD-27)
Remuda North 25 State
#126H**

OH

Plan: PERMIT

Standard Planning Report

20 May, 2019



Project: Eddy County, NM (NAD-27)
Site: Ramuda North 25 State
Well: #126H
Wellbore: 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

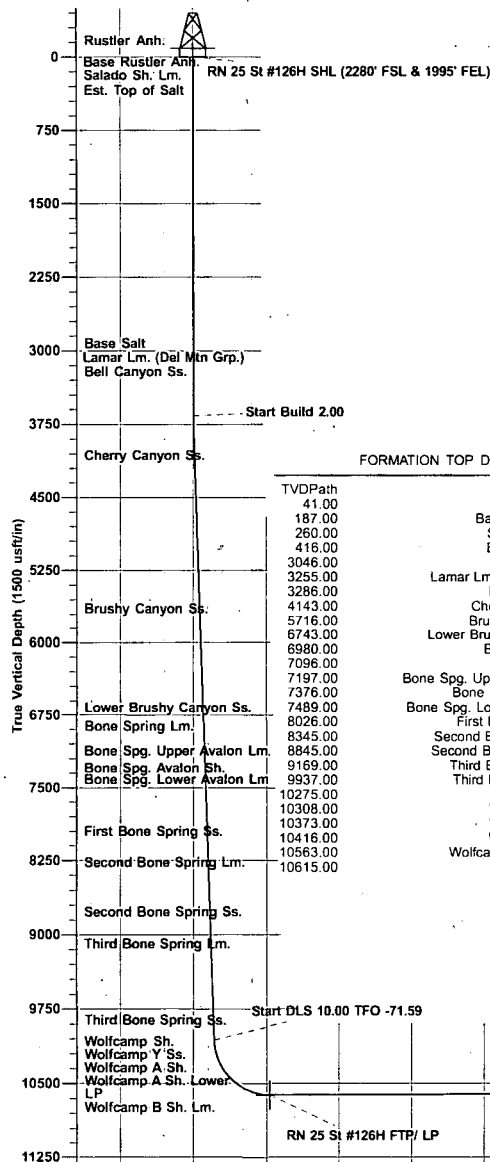
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
RN 25 St #126H SHL (2280' FSL & 1995' FEL)	0.00	0.00	0.00	463888.10	622943.30	32.2747187	-103.9355460	Point
RN 25 St #126H PBHL (200' FNL & 1430' FEL)	10595.00	8139.80	513.50	472027.90	623456.80	32.2970890	-103.9337865	Point
RN 25 St #126H LTP	10595.35	8009.80	514.40	471897.90	623457.70	32.2967316	-103.9337852	Point
RN 25 St #126H FTP/LP	10615.00	751.60	561.50	464639.70	623504.80	32.2767790	-103.9337203	Point

WELL DETAILS: #126H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	463888.10	622943.30	32.2747187	-103.9355460

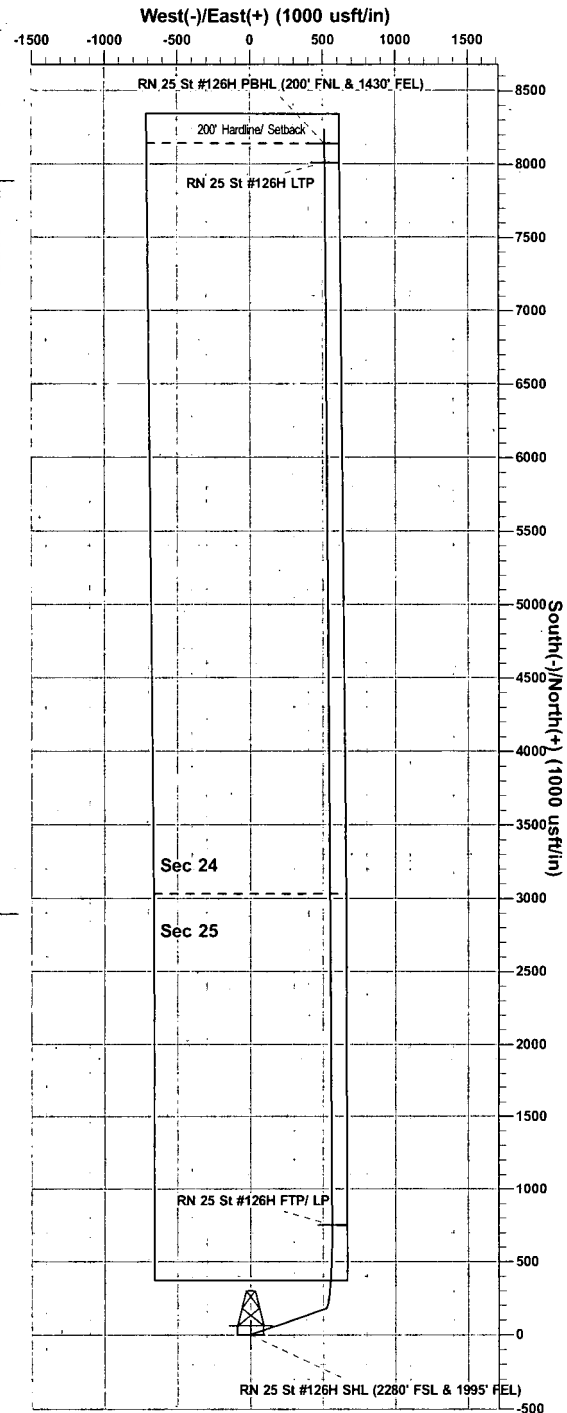
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	3660.00	0.00	0.00	3660.00	0.00	0.00	0.00	0.00	0.00
3	3909.75	5.00	71.17	3909.44	3.51	10.30	2.00	71.17	4.15
4	10083.52	5.00	71.17	10059.76	177.03	519.07	0.00	0.00	209.36
5	10969.27	90.16	359.63	10615.00	751.60	561.50	10.00	-71.59	785.46
6	18227.65	90.16	359.63	10595.35	8009.80	514.34	0.00	0.00	8026.30
7	18357.65	90.16	359.63	10595.00	8139.80	513.50	0.00	0.00	8155.98



FORMATION TOP DETAILS

TVDPath	Formation
41.00	Rustler Anh.
187.00	Base Rustler Anh.
260.00	Salado Sh. Lm.
416.00	Est. Top of Salt
3046.00	Base Salt
3255.00	Lamar Lm. (Del Min Grp.)
3286.00	Bell Canyon Ss.
4143.00	Cherry Canyon Ss.
5716.00	Brushy Canyon Ss.
6743.00	Lower Brushy Canyon Ss.
6980.00	Bone Spring Lm.
7096.00	Avalon Ss.
7197.00	Bone Spg. Upper Avalon Lm.
7376.00	Bone Spg. Avalon Sh.
7489.00	Bone Spg. Lower Avalon Lm.
8026.00	First Bone Spring Ss.
8345.00	Second Bone Spring Lm.
8845.00	Second Bone Spring Ss.
9169.00	Third Bone Spring Lm.
9937.00	Third Bone Spring Ss.
10275.00	Wolfcamp Sh.
10308.00	Wolfcamp X Ss.
10373.00	Wolfcamp Y Ss.
10416.00	Wolfcamp A Sh.
10563.00	Wolfcamp A Sh. Lower LP
10615.00	LP



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 Prototype are at the sole risk and responsibility of the user.

Vertical Section at 3.61° (1500 usft/in)

Plan: PERMIT (#126H/OH)

Created By: Matthew May Date: 19:04, May 20 2019



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well #126H
Company:	XTO Energy	TVD Reference:	RKB = 18' @ 3077.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB = 18' @ 3077.00usft
Site:	Remuda North 25 State	North Reference:	Grid
Well:	#126H	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 North 25 State		
Site Position:		Northing:	463,916.50 usft
From:	Map	Easting:	620,263.40 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.2748238
		Longitude:	-103.9442164
		Grid Convergence:	0.21 °

Well	#126H		
Well Position	+N/-S	-28.40 usft	Northing:
	+E/-W	2,679.90 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32.2747187
		Longitude:	-103.9355460
		Ground Level:	3,059.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2015	05/20/19	6.92
			Dip Angle
			(°)
			60.03
			Field Strength
			(nT)
			47,735

Design	PERMIT		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			3.61

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,660.00	0.00	0.00	3,660.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,909.75	5.00	71.17	3,909.44	3.51	10.30	2.00	2.00	0.00	71.17	
10,083.52	5.00	71.17	10,059.76	177.03	519.07	0.00	0.00	0.00	0.00	
10,969.27	90.16	359.63	10,615.00	751.60	561.50	10.00	9.61	-8.08	-71.59	RN 25 St #126H FT
18,227.65	90.16	359.63	10,595.35	8,009.80	514.34	0.00	0.00	0.00	0.00	RN 25 St #126H LT
18,357.65	90.16	359.63	10,595.00	8,139.80	513.50	0.00	0.00	0.00	0.00	RN 25 St #126H PE



Planning Report

Database:	EDM 5000.1.13 Single User.Db	Local Co-ordinate Reference:	Well #126H
Company:	XTO Energy	TVD Reference:	RKB = 18' @ 3077.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB = 18' @ 3077.00usft
Site:	Remuda North 25 State	North Reference:	Grid
Well:	#126H	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
41.00	0.00	0.00	41.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler Anh.									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
187.00	0.00	0.00	187.00	0.00	0.00	0.00	0.00	0.00	0.00
Base Rustler Anh.									
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
260.00	0.00	0.00	260.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado Sh. Lm.									
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
416.00	0.00	0.00	416.00	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
3,046.00	0.00	0.00	3,046.00	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
3,255.00	0.00	0.00	3,255.00	0.00	0.00	0.00	0.00	0.00	0.00
Lamar Lm. (Del Mtn Grp.)									
3,286.00	0.00	0.00	3,286.00	0.00	0.00	0.00	0.00	0.00	0.00
Bell Canyon Ss.									
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
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
3,660.00	0.00	0.00	3,660.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.80	71.17	3,700.00	0.09	0.26	0.11	2.00	2.00	0.00



Planning Report

Database:	EDM 5000.1.13-Single User Db	Local Co-ordinate Reference:	Well #126H
Company:	XTO Energy	TVD Reference:	RKB = 18' @ 3077.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB = 18' @ 3077.00usft
Site:	Remuda North 25 State	North Reference:	Grid
Well:	#126H	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)
3,800.00	2.80	71.17	3,799.94	1.10	3.24	1.31	2.00	2.00	0.00
3,909.75	5.00	71.17	3,909.44	3.51	10.30	4.15	2.00	2.00	0.00
4,000.00	5.00	71.17	3,999.34	6.05	17.73	7.15	0.00	0.00	0.00
4,100.00	5.00	71.17	4,098.96	8.86	25.98	10.48	0.00	0.00	0.00
4,144.21	5.00	71.17	4,143.00	10.10	29.62	11.95	0.00	0.00	0.00
Cherry Canyon Ss.									
4,200.00	5.00	71.17	4,198.58	11.67	34.22	13.80	0.00	0.00	0.00
4,300.00	5.00	71.17	4,298.20	14.48	42.46	17.12	0.00	0.00	0.00
4,400.00	5.00	71.17	4,397.82	17.29	50.70	20.45	0.00	0.00	0.00
4,500.00	5.00	71.17	4,497.44	20.10	58.94	23.77	0.00	0.00	0.00
4,600.00	5.00	71.17	4,597.06	22.91	67.18	27.10	0.00	0.00	0.00
4,700.00	5.00	71.17	4,696.68	25.72	75.42	30.42	0.00	0.00	0.00
4,800.00	5.00	71.17	4,796.30	28.53	83.66	33.74	0.00	0.00	0.00
4,900.00	5.00	71.17	4,895.92	31.34	91.90	37.07	0.00	0.00	0.00
5,000.00	5.00	71.17	4,995.54	34.15	100.14	40.39	0.00	0.00	0.00
5,100.00	5.00	71.17	5,095.16	36.96	108.39	43.71	0.00	0.00	0.00
5,200.00	5.00	71.17	5,194.78	39.77	116.63	47.04	0.00	0.00	0.00
5,300.00	5.00	71.17	5,294.40	42.59	124.87	50.36	0.00	0.00	0.00
5,400.00	5.00	71.17	5,394.02	45.40	133.11	53.69	0.00	0.00	0.00
5,500.00	5.00	71.17	5,493.64	48.21	141.35	57.01	0.00	0.00	0.00
5,600.00	5.00	71.17	5,593.26	51.02	149.59	60.33	0.00	0.00	0.00
5,700.00	5.00	71.17	5,692.88	53.83	157.83	63.66	0.00	0.00	0.00
5,723.20	5.00	71.17	5,716.00	54.48	159.74	64.43	0.00	0.00	0.00
Brushy Canyon Ss.									
5,800.00	5.00	71.17	5,792.51	56.64	166.07	66.98	0.00	0.00	0.00
5,900.00	5.00	71.17	5,892.13	59.45	174.31	70.30	0.00	0.00	0.00
6,000.00	5.00	71.17	5,991.75	62.26	182.55	73.63	0.00	0.00	0.00
6,100.00	5.00	71.17	6,091.37	65.07	190.79	76.95	0.00	0.00	0.00
6,200.00	5.00	71.17	6,190.99	67.88	199.04	80.28	0.00	0.00	0.00
6,300.00	5.00	71.17	6,290.61	70.69	207.28	83.60	0.00	0.00	0.00
6,400.00	5.00	71.17	6,390.23	73.50	215.52	86.92	0.00	0.00	0.00
6,500.00	5.00	71.17	6,489.85	76.31	223.76	90.25	0.00	0.00	0.00
6,600.00	5.00	71.17	6,589.47	79.12	232.00	93.57	0.00	0.00	0.00
6,700.00	5.00	71.17	6,689.09	81.93	240.24	96.90	0.00	0.00	0.00
6,754.12	5.00	71.17	6,743.00	83.45	244.70	98.69	0.00	0.00	0.00
Lower Brushy Canyon Ss.									
6,800.00	5.00	71.17	6,788.71	84.74	248.48	100.22	0.00	0.00	0.00
6,900.00	5.00	71.17	6,888.33	87.55	256.72	103.54	0.00	0.00	0.00
6,992.02	5.00	71.17	6,980.00	90.14	264.31	106.60	0.00	0.00	0.00
Bone Spring Lm.									
7,000.00	5.00	71.17	6,987.95	90.36	264.96	106.87	0.00	0.00	0.00
7,100.00	5.00	71.17	7,087.57	93.17	273.20	110.19	0.00	0.00	0.00
7,108.46	5.00	71.17	7,096.00	93.41	273.90	110.47	0.00	0.00	0.00
Avalon Ss.									
7,200.00	5.00	71.17	7,187.19	95.98	281.44	113.51	0.00	0.00	0.00
7,209.85	5.00	71.17	7,197.00	96.26	282.26	113.84	0.00	0.00	0.00
Bone Spg. Upper Avalon Lm.									
7,300.00	5.00	71.17	7,286.81	98.80	289.69	116.84	0.00	0.00	0.00
7,389.53	5.00	71.17	7,376.00	101.31	297.06	119.81	0.00	0.00	0.00
Bone Spg. Avalon Sh.									
7,400.00	5.00	71.17	7,386.43	101.61	297.93	120.16	0.00	0.00	0.00
7,500.00	5.00	71.17	7,486.05	104.42	306.17	123.49	0.00	0.00	0.00
7,502.96	5.00	71.17	7,489.00	104.50	306.41	123.58	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well #126H
Company:	XTO Energy	TVD Reference:	RKB = 18' @ 3077.00usft.
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB = 18' @ 3077.00usft
Site:	Remuda North 25 State	North Reference:	Grid
Well:	#126H	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)
Bone Spp. Lower Avalon Lm									
7,600.00	5.00	71.17	7,585.67	107.23	314.41	126.81	0.00	0.00	0.00
7,700.00	5.00	71.17	7,685.29	110.04	322.65	130.13	0.00	0.00	0.00
7,800.00	5.00	71.17	7,784.91	112.85	330.89	133.46	0.00	0.00	0.00
7,900.00	5.00	71.17	7,884.53	115.66	339.13	136.78	0.00	0.00	0.00
8,000.00	5.00	71.17	7,984.15	118.47	347.37	140.10	0.00	0.00	0.00
8,042.01	5.00	71.17	8,026.00	119.65	350.83	141.50	0.00	0.00	0.00
First Bone Spring Ss.									
8,100.00	5.00	71.17	8,083.77	121.28	355.61	143.43	0.00	0.00	0.00
8,200.00	5.00	71.17	8,183.39	124.09	363.85	146.75	0.00	0.00	0.00
8,300.00	5.00	71.17	8,283.01	126.90	372.10	150.08	0.00	0.00	0.00
8,362.23	5.00	71.17	8,345.00	128.65	377.22	152.14	0.00	0.00	0.00
Second Bone Spring Lm.									
8,400.00	5.00	71.17	8,382.63	129.71	380.34	153.40	0.00	0.00	0.00
8,500.00	5.00	71.17	8,482.25	132.52	388.58	156.72	0.00	0.00	0.00
8,600.00	5.00	71.17	8,581.87	135.33	396.82	160.05	0.00	0.00	0.00
8,700.00	5.00	71.17	8,681.49	138.14	405.06	163.37	0.00	0.00	0.00
8,800.00	5.00	71.17	8,781.11	140.95	413.30	166.69	0.00	0.00	0.00
8,864.13	5.00	71.17	8,845.00	142.76	418.58	168.83	0.00	0.00	0.00
Second Bone Spring Ss.									
8,900.00	5.00	71.17	8,880.73	143.76	421.54	170.02	0.00	0.00	0.00
9,000.00	5.00	71.17	8,980.35	146.57	429.78	173.34	0.00	0.00	0.00
9,100.00	5.00	71.17	9,079.97	149.38	438.02	176.67	0.00	0.00	0.00
9,189.37	5.00	71.17	9,169.00	151.90	445.39	179.64	0.00	0.00	0.00
Third Bone Spring Lm.									
9,200.00	5.00	71.17	9,179.59	152.20	446.26	179.99	0.00	0.00	0.00
9,300.00	5.00	71.17	9,279.21	155.01	454.50	183.31	0.00	0.00	0.00
9,400.00	5.00	71.17	9,378.83	157.82	462.75	186.64	0.00	0.00	0.00
9,500.00	5.00	71.17	9,478.45	160.63	470.99	189.96	0.00	0.00	0.00
9,600.00	5.00	71.17	9,578.07	163.44	479.23	193.29	0.00	0.00	0.00
9,700.00	5.00	71.17	9,677.69	166.25	487.47	196.61	0.00	0.00	0.00
9,800.00	5.00	71.17	9,777.31	169.06	495.71	199.93	0.00	0.00	0.00
9,900.00	5.00	71.17	9,876.93	171.87	503.95	203.26	0.00	0.00	0.00
9,960.30	5.00	71.17	9,937.00	173.56	508.92	205.26	0.00	0.00	0.00
Third Bone Spring Ss.									
10,000.00	5.00	71.17	9,976.55	174.68	512.19	206.58	0.00	0.00	0.00
10,083.52	5.00	71.17	10,059.76	177.03	519.07	209.36	0.00	0.00	0.00
10,100.00	5.73	55.31	10,076.17	177.73	520.43	210.14	10.00	4.47	-96.21
10,150.00	9.49	29.38	10,125.73	182.74	524.51	215.40	10.00	7.51	-51.87
10,200.00	14.04	19.00	10,174.67	192.07	528.51	224.97	10.00	9.10	-20.75
10,250.00	18.81	13.72	10,222.62	205.65	532.40	238.76	10.00	9.55	-10.56
10,300.00	23.68	10.54	10,269.21	223.36	536.15	256.68	10.00	9.73	-6.37
10,306.34	24.30	10.22	10,275.00	225.90	536.61	259.23	10.00	9.79	-5.00
Wolfcamp Sh.									
10,343.09	27.91	8.64	10,308.00	241.85	539.25	275.32	10.00	9.82	-4.29
Wolfcamp X Ss.									
10,350.00	28.59	8.39	10,314.08	245.08	539.73	278.58	10.00	9.85	-3.69
10,400.00	33.53	6.83	10,356.90	270.65	543.12	304.31	10.00	9.87	-3.12
10,419.53	35.46	6.32	10,373.00	281.63	544.39	315.35	10.00	9.89	-2.58
Wolfcamp Y Ss.									
10,450.00	38.48	5.63	10,397.34	299.86	546.29	333.66	10.00	9.91	-2.29
10,474.25	40.88	5.14	10,416.00	315.27	547.74	349.13	10.00	9.92	-2.03
Wolfcamp A Sh.									



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well #126H
Company:	XTO Energy	TVD Reference:	RKB = 18' @ 3077.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB = 18' @ 3077.00usft
Site:	Remuda North 25 State	North Reference:	Grid
Well:	#126H	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)
10,500.00	43.44	4.66	10,435.09	332.49	549.21	366.41	10.00	9.92	-1.84
10,550.00	48.40	3.86	10,469.86	368.30	551.87	402.31	10.00	9.93	-1.60
10,600.00	53.38	3.17	10,501.39	407.01	554.24	441.10	10.00	9.94	-1.37
10,650.00	58.35	2.57	10,529.44	448.33	556.31	482.46	10.00	9.95	-1.21
10,700.00	63.33	2.03	10,553.80	491.94	558.06	526.10	10.00	9.96	-1.08
10,721.29	65.45	1.81	10,563.00	511.12	558.70	545.29	10.00	9.96	-1.02
Wolfcamp A Sh. Lower									
10,750.00	68.31	1.53	10,574.28	537.52	559.47	571.68	10.00	9.96	-0.98
10,800.00	73.29	1.07	10,590.72	584.71	560.53	618.84	10.00	9.96	-0.93
10,850.00	78.27	0.63	10,602.99	633.16	561.25	667.24	10.00	9.96	-0.88
10,900.00	83.25	0.20	10,611.02	682.49	561.60	716.49	10.00	9.96	-0.85
10,950.00	88.24	359.79	10,614.73	732.34	561.60	766.24	10.00	9.97	-0.83
10,969.27	90.16	359.63	10,615.00	751.60	561.50	785.46	10.00	9.97	-0.83
LP									
11,000.00	90.16	359.63	10,614.92	782.33	561.30	816.12	0.00	0.00	0.00
11,100.00	90.16	359.63	10,614.65	882.33	560.65	915.88	0.00	0.00	0.00
11,200.00	90.16	359.63	10,614.38	982.33	560.00	1,015.64	0.00	0.00	0.00
11,300.00	90.16	359.63	10,614.10	1,082.33	559.35	1,115.39	0.00	0.00	0.00
11,400.00	90.16	359.63	10,613.83	1,182.32	558.70	1,215.15	0.00	0.00	0.00
11,500.00	90.16	359.63	10,613.56	1,282.32	558.05	1,314.91	0.00	0.00	0.00
11,600.00	90.16	359.63	10,613.29	1,382.32	557.40	1,414.67	0.00	0.00	0.00
11,700.00	90.16	359.63	10,613.02	1,482.32	556.75	1,514.43	0.00	0.00	0.00
11,800.00	90.16	359.63	10,612.75	1,582.31	556.10	1,614.19	0.00	0.00	0.00
11,900.00	90.16	359.63	10,612.48	1,682.31	555.45	1,713.94	0.00	0.00	0.00
12,000.00	90.16	359.63	10,612.21	1,782.31	554.80	1,813.70	0.00	0.00	0.00
12,100.00	90.16	359.63	10,611.94	1,882.31	554.15	1,913.46	0.00	0.00	0.00
12,200.00	90.16	359.63	10,611.67	1,982.30	553.50	2,013.22	0.00	0.00	0.00
12,300.00	90.16	359.63	10,611.40	2,082.30	552.85	2,112.98	0.00	0.00	0.00
12,400.00	90.16	359.63	10,611.13	2,182.30	552.20	2,212.74	0.00	0.00	0.00
12,500.00	90.16	359.63	10,610.86	2,282.30	551.56	2,312.49	0.00	0.00	0.00
12,600.00	90.16	359.63	10,610.59	2,382.29	550.91	2,412.25	0.00	0.00	0.00
12,700.00	90.16	359.63	10,610.32	2,482.29	550.26	2,512.01	0.00	0.00	0.00
12,800.00	90.16	359.63	10,610.04	2,582.29	549.61	2,611.77	0.00	0.00	0.00
12,900.00	90.16	359.63	10,609.77	2,682.29	548.96	2,711.53	0.00	0.00	0.00
13,000.00	90.16	359.63	10,609.50	2,782.28	548.31	2,811.28	0.00	0.00	0.00
13,100.00	90.16	359.63	10,609.23	2,882.28	547.66	2,911.04	0.00	0.00	0.00
13,200.00	90.16	359.63	10,608.96	2,982.28	547.01	3,010.80	0.00	0.00	0.00
13,300.00	90.16	359.63	10,608.69	3,082.28	546.36	3,110.56	0.00	0.00	0.00
13,400.00	90.16	359.63	10,608.42	3,182.27	545.71	3,210.32	0.00	0.00	0.00
13,500.00	90.16	359.63	10,608.15	3,282.27	545.06	3,310.08	0.00	0.00	0.00
13,600.00	90.16	359.63	10,607.88	3,382.27	544.41	3,409.83	0.00	0.00	0.00
13,700.00	90.16	359.63	10,607.61	3,482.27	543.76	3,509.59	0.00	0.00	0.00
13,800.00	90.16	359.63	10,607.34	3,582.26	543.11	3,609.35	0.00	0.00	0.00
13,900.00	90.16	359.63	10,607.07	3,682.26	542.46	3,709.11	0.00	0.00	0.00
14,000.00	90.16	359.63	10,606.80	3,782.26	541.81	3,808.87	0.00	0.00	0.00
14,100.00	90.16	359.63	10,606.53	3,882.26	541.16	3,908.63	0.00	0.00	0.00
14,200.00	90.16	359.63	10,606.25	3,982.25	540.51	4,008.38	0.00	0.00	0.00
14,300.00	90.16	359.63	10,605.98	4,082.25	539.86	4,108.14	0.00	0.00	0.00
14,400.00	90.16	359.63	10,605.71	4,182.25	539.21	4,207.90	0.00	0.00	0.00
14,500.00	90.16	359.63	10,605.44	4,282.25	538.56	4,307.66	0.00	0.00	0.00
14,600.00	90.16	359.63	10,605.17	4,382.24	537.91	4,407.42	0.00	0.00	0.00
14,700.00	90.16	359.63	10,604.90	4,482.24	537.26	4,507.17	0.00	0.00	0.00
14,800.00	90.16	359.63	10,604.63	4,582.24	536.61	4,606.93	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well #126H
Company:	XTO Energy	TVD Reference:	RKB = 18' @ 3077.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB = 18' @ 3077.00usft
Site:	Remuda North 25 State	North Reference:	Grid
Well:	#126H	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)
14,900.00	90.16	359.63	10,604.36	4,682.24	535.96	4,706.69	0.00	0.00	0.00
15,000.00	90.16	359.63	10,604.09	4,782.23	535.31	4,806.45	0.00	0.00	0.00
15,100.00	90.16	359.63	10,603.82	4,882.23	534.66	4,906.21	0.00	0.00	0.00
15,200.00	90.16	359.63	10,603.55	4,982.23	534.01	5,005.97	0.00	0.00	0.00
15,300.00	90.16	359.63	10,603.28	5,082.23	533.36	5,105.72	0.00	0.00	0.00
15,400.00	90.16	359.63	10,603.01	5,182.22	532.71	5,205.48	0.00	0.00	0.00
15,500.00	90.16	359.63	10,602.74	5,282.22	532.07	5,305.24	0.00	0.00	0.00
15,600.00	90.16	359.63	10,602.47	5,382.22	531.42	5,405.00	0.00	0.00	0.00
15,700.00	90.16	359.63	10,602.19	5,482.22	530.77	5,504.76	0.00	0.00	0.00
15,800.00	90.16	359.63	10,601.92	5,582.21	530.12	5,604.52	0.00	0.00	0.00
15,900.00	90.16	359.63	10,601.65	5,682.21	529.47	5,704.27	0.00	0.00	0.00
16,000.00	90.16	359.63	10,601.38	5,782.21	528.82	5,804.03	0.00	0.00	0.00
16,100.00	90.16	359.63	10,601.11	5,882.21	528.17	5,903.79	0.00	0.00	0.00
16,200.00	90.16	359.63	10,600.84	5,982.20	527.52	6,003.55	0.00	0.00	0.00
16,300.00	90.16	359.63	10,600.57	6,082.20	526.87	6,103.31	0.00	0.00	0.00
16,400.00	90.16	359.63	10,600.30	6,182.20	526.22	6,203.06	0.00	0.00	0.00
16,500.00	90.16	359.63	10,600.03	6,282.20	525.57	6,302.82	0.00	0.00	0.00
16,600.00	90.16	359.63	10,599.76	6,382.19	524.92	6,402.58	0.00	0.00	0.00
16,700.00	90.16	359.63	10,599.49	6,482.19	524.27	6,502.34	0.00	0.00	0.00
16,800.00	90.16	359.63	10,599.22	6,582.19	523.62	6,602.10	0.00	0.00	0.00
16,900.00	90.16	359.63	10,598.95	6,682.19	522.97	6,701.86	0.00	0.00	0.00
17,000.00	90.16	359.63	10,598.68	6,782.18	522.32	6,801.61	0.00	0.00	0.00
17,100.00	90.16	359.63	10,598.40	6,882.18	521.67	6,901.37	0.00	0.00	0.00
17,200.00	90.16	359.63	10,598.13	6,982.18	521.02	7,001.13	0.00	0.00	0.00
17,300.00	90.16	359.63	10,597.86	7,082.18	520.37	7,100.89	0.00	0.00	0.00
17,400.00	90.16	359.63	10,597.59	7,182.17	519.72	7,200.65	0.00	0.00	0.00
17,500.00	90.16	359.63	10,597.32	7,282.17	519.07	7,300.41	0.00	0.00	0.00
17,600.00	90.16	359.63	10,597.05	7,382.17	518.42	7,400.16	0.00	0.00	0.00
17,700.00	90.16	359.63	10,596.78	7,482.17	517.77	7,499.92	0.00	0.00	0.00
17,800.00	90.16	359.63	10,596.51	7,582.16	517.12	7,599.68	0.00	0.00	0.00
17,900.00	90.16	359.63	10,596.24	7,682.16	516.47	7,699.44	0.00	0.00	0.00
18,000.00	90.16	359.63	10,595.97	7,782.16	515.82	7,799.20	0.00	0.00	0.00
18,100.00	90.16	359.63	10,595.70	7,882.16	515.17	7,898.95	0.00	0.00	0.00
18,200.00	90.16	359.63	10,595.43	7,982.15	514.52	7,998.71	0.00	0.00	0.00
18,227.65	90.16	359.63	10,595.35	8,009.80	514.34	8,026.30	0.00	0.00	0.00
18,300.00	90.16	359.63	10,595.16	8,082.15	513.87	8,098.47	0.00	0.00	0.00
18,357.65	90.16	359.63	10,595.00	8,139.80	513.50	8,155.98	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well #126H
Company:	XTO Energy	TVD Reference:	RKB = 18' @ 3077.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB = 18' @ 3077.00usft
Site:	Remuda North 25 State	North Reference:	Grid
Well:	#126H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

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
RN 25 St #126H SHL - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	463,888.10	622,943.30	32.2747187	-103.9355460
RN 25 St #126H PBH - plan hits target center - Point	0.00	0.00	10,595.00	8,139.80	513.50	472,027.90	623,456.80	32.2970890	-103.9337865
RN 25 St #126H LTP - plan misses target center by 0.06usft at 18227.65usft MD (10595.35 TVD, 8009.80 N, 514.34 E) - Point	0.00	0.01	10,595.35	8,009.80	514.40	471,897.90	623,457.70	32.2967316	-103.9337852
RN 25 St #126H FTP/ - plan hits target center - Point	0.00	0.01	10,615.00	751.60	561.50	464,639.70	623,504.80	32.2767791	-103.9337203

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
41.00	41.00	Rustler Anh.			
187.00	187.00	Base Rustler Anh.			
260.00	260.00	Salado Sh. Lm.			
416.00	416.00	Est. Top of Salt			
3,046.00	3,046.00	Base Salt			
3,255.00	3,255.00	Lamar Lm. (Del Mtn Grp.)			
3,286.00	3,286.00	Bell Canyon Ss.			
4,144.21	4,143.00	Cherry Canyon Ss.			
5,723.20	5,716.00	Brushy Canyon Ss.			
6,754.12	6,743.00	Lower Brushy Canyon Ss.			
6,992.02	6,980.00	Bone Spring Lm.			
7,108.46	7,096.00	Avalon Ss.			
7,209.85	7,197.00	Bone Spg. Upper Avalon Lm.			
7,389.53	7,376.00	Bone Spg. Avalon Sh.			
7,502.96	7,489.00	Bone Spg. Lower Avalon Lm			
8,042.01	8,026.00	First Bone Spring Ss.			
8,362.23	8,345.00	Second Bone Spring Lm.			
8,864.13	8,845.00	Second Bone Spring Ss.			
9,189.37	9,169.00	Third Bone Spring Lm.			
9,960.30	9,937.00	Third Bone Spring Ss.			
10,306.34	10,275.00	Wolfcamp Sh.			
10,343.09	10,308.00	Wolfcamp X Ss.			
10,419.53	10,373.00	Wolfcamp Y Ss.			
10,474.25	10,416.00	Wolfcamp A Sh.			
10,721.29	10,563.00	Wolfcamp A Sh. Lower			
10,969.27	10,615.00	LP			