



XTO Energy

Eddy County, NM (NAD-27)

Tombstone 11 State

#104H

Wellbore #1

Plan: PERMIT

Standard Planning Report

21 February, 2019



Project: Eddy County, NM (NAD-27)
Site: Tombstone 11 State
Well: #104H
Wellbore: Wellbore #1
Design: PERMIT

WELL DETAILS: #104H

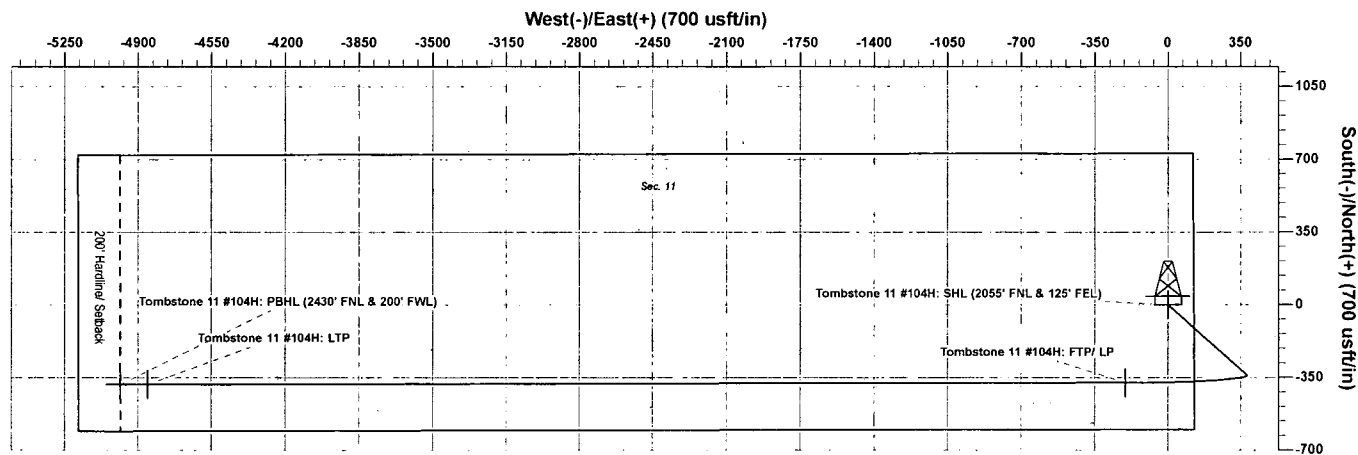
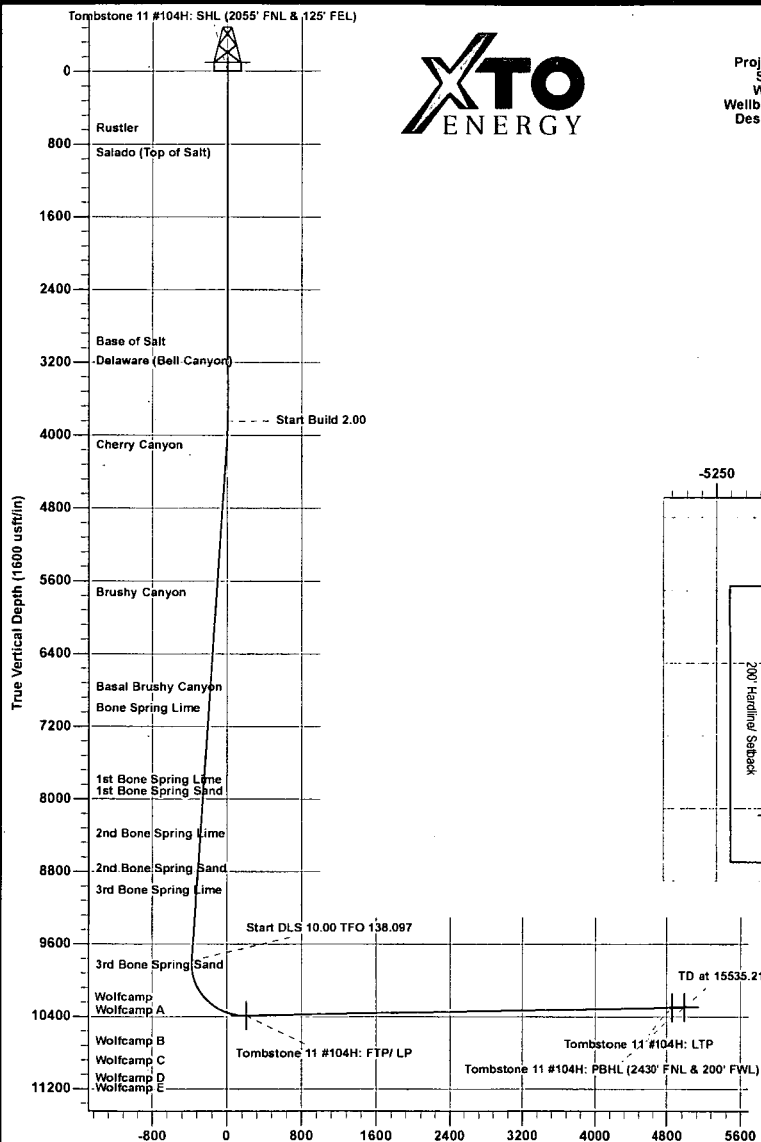
Rig Name:
RKB = 32' @ 3141.00usft
Ground Level: 3109.00
Northing: 417113.10
Easting: 619725.00
Latitude: 32.146169
Longitude: -103.946503

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	3845.00	0.00	0.00	3845.00	0.00	0.00	0.00	0.00	0.00
3	4095.16	5.00	131.63	4094.84	-7.25	8.16	2.00	131.633	-8.15
4	9804.00	5.00	131.63	9781.93	-338.02	380.28	0.00	0.000	-379.69
5	10752.32	91.10	269.90	10391.00	-375.20	-202.40	10.00	138.097	-203.05
6	15405.19	91.10	269.90	10301.50	-383.08	-4854.40	0.00	0.000	4855.06
7	15535.21	91.10	269.90	10299.00	-383.30	-4984.40	0.00	0.000	4985.06

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Tombstone 11 #104H: SHL (2055' FNL & 125' FEL)	0.00	0.00	0.00	417113.10	619725.00	32.146169	-103.946503	Point
Tombstone 11 #104H: PBHL (2430' FNL & 200' FWL)	10299.00	-383.30	-4984.40	416729.80	614740.60	32.145184	-103.962612	Point
Tombstone 11 #104H: LTP	10301.50	-383.10	-4854.40	416730.00	614870.60	32.145163	-103.962192	Point
Tombstone 11 #104H: FTP/LP	10391.00	-375.20	-202.40	416737.90	619522.60	32.145140	-103.947162	Point



FORMATION TOP DETAILS

TVDPath	Formation
707.00	Rustler
980.00	Salado (Top of Salt)
3067.00	Base of Salt
3269.00	Delaware (Bell Canyon)
4190.00	Cherry Canyon
5808.00	Brushy Canyon
6851.00	Basal Brushy Canyon
7080.00	Bone Spring Lime
7953.00	1st Bone Spring Lime
7997.00	1st Bone Spring Sand
8467.00	2nd Bone Spring Lime
8850.00	2nd Bone Spring Sand
9089.00	3rd Bone Spring Lime
9613.00	3rd Bone Spring Sand
10274.00	Wolfcamp
10303.00	Wolfcamp X
10369.00	Wolfcamp Y
10391.00	LP

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

Plan: PERMIT (#104H/Wellbore #1)

Created By: Matthew May Date: 11:08, February 21 2019

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 customer.



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Planning Report

Database: EDM 5000.1 Single User Db
Company: XTO Energy
Project: Eddy County, NM (NAD-27)
Site: Tombstone 11 State
Well: #104H
Wellbore: Wellbore #1
Design: PERMIT

Local Co-ordinate Reference: Well #104H
TVD Reference: RKB = 32' @ 3141.00usft
MD Reference: RKB = 32' @ 3141.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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	Tombstone 11 State				
Site Position:		Northing:	418,228.20 usft	Latitude:	32.149235
From:	Map	Easting:	619,717.20 usft	Longitude:	-103.946516
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.206 °

Well	#104H					
Well Position	+N/-S	-1,115.10 usft	Northing:	417,113.10 usft	Latitude:	32.146170
	+E/-W	7.80 usft	Easting:	619,725.00 usft	Longitude:	-103.946504
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,109.00 usft	

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/21/2019	6.940	59.910	47,682

Design	PERMIT			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	269.90

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	0.000	
3,845.00	0.00	0.00	3,845.00	0.00	0.00	0.00	0.00	0.00	0.000	
4,095.16	5.00	131.63	4,094.84	-7.25	8.16	2.00	2.00	0.00	131.633	
9,804.00	5.00	131.63	9,781.93	-338.02	380.28	0.00	0.00	0.00	0.000	
10,752.32	91.10	269.90	10,391.00	-375.20	-202.40	10.00	9.08	14.58	138.097	Tombstone 11 #10
15,405.19	91.10	269.90	10,301.50	-383.08	-4,854.40	0.00	0.00	0.00	0.000	Tombstone 11 #10
15,535.21	91.10	269.90	10,299.00	-383.30	-4,984.40	0.00	0.00	0.00	0.000	Tombstone 11 #10



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North Reference: Grid
Survey Calculation Method: Minimum Curvature

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
Tombstone 11 #104H: SHL (2055' FNL & 125' FEL)									
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
707.00	0.00	0.00	707.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
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
980.00	0.00	0.00	980.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado (Top of Salt)									
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
3,057.00	0.00	0.00	3,057.00	0.00	0.00	0.00	0.00	0.00	0.00
Base of 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
3,269.00	0.00	0.00	3,269.00	0.00	0.00	0.00	0.00	0.00	0.00
Delaware (Bell Canyon)									
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
3,700.00	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
3,845.00	0.00	0.00	3,845.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	1.10	131.63	3,900.00	-0.35	0.39	-0.39	2.00	2.00	0.00
4,000.00	3.10	131.63	3,999.92	-2.79	3.13	-3.13	2.00	2.00	0.00
4,095.16	5.00	131.63	4,094.84	-7.25	8.16	-8.15	2.00	2.00	0.00
4,100.00	5.00	131.63	4,099.66	-7.53	8.47	-8.46	0.00	0.00	0.00
4,190.68	5.00	131.63	4,190.00	-12.79	14.38	-14.36	0.00	0.00	0.00



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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)
Cherry Canyon									
4,200.00	5.00	131.63	4,199.28	-13.33	14.99	-14.97	0.00	0.00	0.00
4,300.00	5.00	131.63	4,298.90	-19.12	21.51	-21.48	0.00	0.00	0.00
4,400.00	5.00	131.63	4,398.52	-24.91	28.03	-27.99	0.00	0.00	0.00
4,500.00	5.00	131.63	4,498.14	-30.71	34.55	-34.49	0.00	0.00	0.00
4,600.00	5.00	131.63	4,597.76	-36.50	41.07	-41.00	0.00	0.00	0.00
4,700.00	5.00	131.63	4,697.38	-42.30	47.58	-47.51	0.00	0.00	0.00
4,800.00	5.00	131.63	4,797.00	-48.09	54.10	-54.02	0.00	0.00	0.00
4,900.00	5.00	131.63	4,896.62	-53.88	60.62	-60.53	0.00	0.00	0.00
5,000.00	5.00	131.63	4,996.23	-59.68	67.14	-67.04	0.00	0.00	0.00
5,100.00	5.00	131.63	5,095.85	-65.47	73.66	-73.54	0.00	0.00	0.00
5,200.00	5.00	131.63	5,195.47	-71.27	80.18	-80.05	0.00	0.00	0.00
5,300.00	5.00	131.63	5,295.09	-77.06	86.69	-86.56	0.00	0.00	0.00
5,400.00	5.00	131.63	5,394.71	-82.85	93.21	-93.07	0.00	0.00	0.00
5,500.00	5.00	131.63	5,494.33	-88.65	99.73	-99.58	0.00	0.00	0.00
5,600.00	5.00	131.63	5,593.95	-94.44	106.25	-106.08	0.00	0.00	0.00
5,700.00	5.00	131.63	5,693.57	-100.24	112.77	-112.59	0.00	0.00	0.00
5,800.00	5.00	131.63	5,793.19	-106.03	119.29	-119.10	0.00	0.00	0.00
5,814.87	5.00	131.63	5,808.00	-106.89	120.26	-120.07	0.00	0.00	0.00
Brushy Canyon									
5,900.00	5.00	131.63	5,892.81	-111.82	125.80	-125.61	0.00	0.00	0.00
6,000.00	5.00	131.63	5,992.42	-117.62	132.32	-132.12	0.00	0.00	0.00
6,100.00	5.00	131.63	6,092.04	-123.41	138.84	-138.63	0.00	0.00	0.00
6,200.00	5.00	131.63	6,191.66	-129.21	145.36	-145.13	0.00	0.00	0.00
6,300.00	5.00	131.63	6,291.28	-135.00	151.88	-151.64	0.00	0.00	0.00
6,400.00	5.00	131.63	6,390.90	-140.79	158.40	-158.15	0.00	0.00	0.00
6,500.00	5.00	131.63	6,490.52	-146.59	164.92	-164.66	0.00	0.00	0.00
6,600.00	5.00	131.63	6,590.14	-152.38	171.43	-171.17	0.00	0.00	0.00
6,700.00	5.00	131.63	6,689.76	-158.18	177.95	-177.68	0.00	0.00	0.00
6,800.00	5.00	131.63	6,789.38	-163.97	184.47	-184.18	0.00	0.00	0.00
6,861.86	5.00	131.63	6,851.00	-167.55	188.50	-188.21	0.00	0.00	0.00
Basal Brushy Canyon									
6,900.00	5.00	131.63	6,889.00	-169.76	190.99	-190.69	0.00	0.00	0.00
7,000.00	5.00	131.63	6,988.61	-175.56	197.51	-197.20	0.00	0.00	0.00
7,091.74	5.00	131.63	7,080.00	-180.87	203.49	-203.17	0.00	0.00	0.00
Bone Spring Lime									
7,100.00	5.00	131.63	7,088.23	-181.35	204.03	-203.71	0.00	0.00	0.00
7,200.00	5.00	131.63	7,187.85	-187.15	210.54	-210.22	0.00	0.00	0.00
7,300.00	5.00	131.63	7,287.47	-192.94	217.06	-216.73	0.00	0.00	0.00
7,400.00	5.00	131.63	7,387.09	-198.73	223.58	-223.23	0.00	0.00	0.00
7,500.00	5.00	131.63	7,486.71	-204.53	230.10	-229.74	0.00	0.00	0.00
7,600.00	5.00	131.63	7,586.33	-210.32	236.62	-236.25	0.00	0.00	0.00
7,700.00	5.00	131.63	7,685.95	-216.12	243.14	-242.76	0.00	0.00	0.00
7,800.00	5.00	131.63	7,785.57	-221.91	249.65	-249.27	0.00	0.00	0.00
7,900.00	5.00	131.63	7,885.18	-227.70	256.17	-255.77	0.00	0.00	0.00
7,968.07	5.00	131.63	7,953.00	-231.65	260.61	-260.21	0.00	0.00	0.00
1st Bone Spring Lime									
8,000.00	5.00	131.63	7,984.80	-233.50	262.69	-262.28	0.00	0.00	0.00
8,012.24	5.00	131.63	7,997.00	-234.21	263.49	-263.08	0.00	0.00	0.00
1st Bone Spring Sand									
8,100.00	5.00	131.63	8,084.42	-239.29	269.21	-268.79	0.00	0.00	0.00
8,200.00	5.00	131.63	8,184.04	-245.09	275.73	-275.30	0.00	0.00	0.00
8,300.00	5.00	131.63	8,283.66	-250.88	282.25	-281.81	0.00	0.00	0.00



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8,400.00	5.00	131.63	8,383.28	-256.67	288.76	-288.32	0.00	0.00	0.00
8,484.04	5.00	131.63	8,467.00	-261.54	294.24	-293.79	0.00	0.00	0.00
2nd Bone Spring Lime									
8,500.00	5.00	131.63	8,482.90	-262.47	295.28	-294.82	0.00	0.00	0.00
8,600.00	5.00	131.63	8,582.52	-268.26	301.80	-301.33	0.00	0.00	0.00
8,700.00	5.00	131.63	8,682.14	-274.06	308.32	-307.84	0.00	0.00	0.00
8,800.00	5.00	131.63	8,781.76	-279.85	314.84	-314.35	0.00	0.00	0.00
8,868.51	5.00	131.63	8,850.00	-283.82	319.30	-318.81	0.00	0.00	0.00
2nd Bone Spring Sand									
8,900.00	5.00	131.63	8,881.37	-285.64	321.36	-320.86	0.00	0.00	0.00
9,000.00	5.00	131.63	8,980.99	-291.44	327.87	-327.37	0.00	0.00	0.00
9,100.00	5.00	131.63	9,080.61	-297.23	334.39	-333.87	0.00	0.00	0.00
9,108.42	5.00	131.63	9,089.00	-297.72	334.94	-334.42	0.00	0.00	0.00
3rd Bone Spring Lime									
9,200.00	5.00	131.63	9,180.23	-303.03	340.91	-340.38	0.00	0.00	0.00
9,300.00	5.00	131.63	9,279.85	-308.82	347.43	-346.89	0.00	0.00	0.00
9,400.00	5.00	131.63	9,379.47	-314.61	353.95	-353.40	0.00	0.00	0.00
9,500.00	5.00	131.63	9,479.09	-320.41	360.47	-359.91	0.00	0.00	0.00
9,600.00	5.00	131.63	9,578.71	-326.20	366.99	-366.42	0.00	0.00	0.00
9,700.00	5.00	131.63	9,678.33	-332.00	373.50	-372.92	0.00	0.00	0.00
9,804.00	5.00	131.63	9,781.93	-338.02	380.28	-379.69	0.00	0.00	0.00
9,850.00	3.45	194.48	9,827.83	-340.70	381.44	-380.84	10.00	-3.37	136.63
9,900.00	6.75	240.31	9,877.64	-343.61	378.50	-377.90	10.00	6.60	91.66
9,935.75	10.01	250.54	9,913.00	-345.69	373.75	-373.14	10.00	9.13	28.62
3rd Bone Spring Sand									
9,950.00	11.37	252.97	9,927.01	-346.51	371.24	-370.63	10.00	9.49	17.00
10,000.00	16.21	258.26	9,975.55	-349.38	359.68	-359.07	10.00	9.69	10.59
10,050.00	21.13	261.15	10,022.91	-352.18	343.94	-343.32	10.00	9.83	5.78
10,100.00	26.07	262.99	10,068.71	-354.91	324.12	-323.50	10.00	9.89	3.67
10,150.00	31.03	264.27	10,112.62	-357.54	300.37	-299.75	10.00	9.92	2.57
10,200.00	36.01	265.23	10,154.29	-360.05	272.88	-272.25	10.00	9.94	1.92
10,250.00	40.98	265.99	10,193.41	-362.42	241.86	-241.23	10.00	9.96	1.51
10,300.00	45.97	266.60	10,229.68	-364.63	207.54	-206.91	10.00	9.96	1.23
10,350.00	50.95	267.13	10,262.83	-366.67	170.19	-169.55	10.00	9.97	1.04
10,368.08	52.75	267.30	10,274.00	-367.36	155.98	-155.34	10.00	9.97	0.94
Wolfcamp									
10,400.00	55.94	267.58	10,292.60	-368.52	130.08	-129.43	10.00	9.97	0.88
10,419.03	57.84	267.74	10,303.00	-369.17	114.15	-113.50	10.00	9.98	0.83
Wolfcamp X									
10,450.00	60.93	267.98	10,318.77	-370.17	87.52	-86.88	10.00	9.98	0.79
10,500.00	65.92	268.34	10,341.13	-371.60	42.84	-42.19	10.00	9.98	0.73
10,550.00	70.91	268.68	10,359.53	-372.80	-3.62	4.27	10.00	9.98	0.67
10,581.47	74.05	268.88	10,369.00	-373.44	-33.62	34.27	10.00	9.98	0.64
Wolfcamp Y									
10,600.00	75.90	269.00	10,373.81	-373.77	-51.51	52.16	10.00	9.98	0.62
10,650.00	80.89	269.30	10,383.86	-374.50	-100.47	101.12	10.00	9.98	0.61
10,700.00	85.88	269.60	10,389.62	-374.97	-150.12	150.77	10.00	9.98	0.59
10,752.32	91.10	269.90	10,391.00	-375.20	-202.40	203.05	10.00	9.98	0.58
LP - Tombstone 11 #104H: FTP/ LP									
10,800.00	91.10	269.90	10,390.08	-375.28	-250.07	250.72	0.00	0.00	0.00
10,900.00	91.10	269.90	10,388.16	-375.45	-350.05	350.71	0.00	0.00	0.00
11,000.00	91.10	269.90	10,386.24	-375.62	-450.03	450.69	0.00	0.00	0.00
11,100.00	91.10	269.90	10,384.31	-375.79	-550.01	550.67	0.00	0.00	0.00



www.prototypewellplanning.com
Planning Report

Database: EDM 5000.1 Single User Db
Company: XTO Energy
Project: Eddy County, NM (NAD-27)
Site: Tombstone 11 State
Well: #104H
Wellbore: Wellbore #1
Design: PERMIT

Local Co-ordinate Reference: Well #104H
TVD Reference: RKB = 32' @ 3141.00usft
MD Reference: RKB = 32' @ 3141.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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)
11,200.00	91.10	269.90	10,382.39	-375.96	-650.00	650.65	0.00	0.00	0.00
11,300.00	91.10	269.90	10,380.47	-376.13	-749.98	750.63	0.00	0.00	0.00
11,400.00	91.10	269.90	10,378.54	-376.30	-849.96	850.61	0.00	0.00	0.00
11,500.00	91.10	269.90	10,376.62	-376.47	-949.94	950.60	0.00	0.00	0.00
11,600.00	91.10	269.90	10,374.69	-376.64	-1,049.92	1,050.58	0.00	0.00	0.00
11,700.00	91.10	269.90	10,372.77	-376.80	-1,149.90	1,150.56	0.00	0.00	0.00
11,800.00	91.10	269.90	10,370.85	-376.97	-1,249.88	1,250.54	0.00	0.00	0.00
11,900.00	91.10	269.90	10,368.92	-377.14	-1,349.87	1,350.52	0.00	0.00	0.00
12,000.00	91.10	269.90	10,367.00	-377.31	-1,449.85	1,450.50	0.00	0.00	0.00
12,100.00	91.10	269.90	10,365.08	-377.48	-1,549.83	1,550.48	0.00	0.00	0.00
12,200.00	91.10	269.90	10,363.15	-377.65	-1,649.81	1,650.47	0.00	0.00	0.00
12,300.00	91.10	269.90	10,361.23	-377.82	-1,749.79	1,750.45	0.00	0.00	0.00
12,400.00	91.10	269.90	10,359.31	-377.99	-1,849.77	1,850.43	0.00	0.00	0.00
12,500.00	91.10	269.90	10,357.38	-378.16	-1,949.75	1,950.41	0.00	0.00	0.00
12,600.00	91.10	269.90	10,355.46	-378.33	-2,049.73	2,050.39	0.00	0.00	0.00
12,700.00	91.10	269.90	10,353.54	-378.50	-2,149.72	2,150.37	0.00	0.00	0.00
12,800.00	91.10	269.90	10,351.61	-378.67	-2,249.70	2,250.35	0.00	0.00	0.00
12,900.00	91.10	269.90	10,349.69	-378.84	-2,349.68	2,350.34	0.00	0.00	0.00
13,000.00	91.10	269.90	10,347.77	-379.01	-2,449.66	2,450.32	0.00	0.00	0.00
13,100.00	91.10	269.90	10,345.84	-379.18	-2,549.64	2,550.30	0.00	0.00	0.00
13,200.00	91.10	269.90	10,343.92	-379.35	-2,649.62	2,650.28	0.00	0.00	0.00
13,300.00	91.10	269.90	10,342.00	-379.51	-2,749.60	2,750.26	0.00	0.00	0.00
13,400.00	91.10	269.90	10,340.07	-379.68	-2,849.59	2,850.24	0.00	0.00	0.00
13,500.00	91.10	269.90	10,338.15	-379.85	-2,949.57	2,950.23	0.00	0.00	0.00
13,600.00	91.10	269.90	10,336.22	-380.02	-3,049.55	3,050.21	0.00	0.00	0.00
13,700.00	91.10	269.90	10,334.30	-380.19	-3,149.53	3,150.19	0.00	0.00	0.00
13,800.00	91.10	269.90	10,332.38	-380.36	-3,249.51	3,250.17	0.00	0.00	0.00
13,900.00	91.10	269.90	10,330.45	-380.53	-3,349.49	3,350.15	0.00	0.00	0.00
14,000.00	91.10	269.90	10,328.53	-380.70	-3,449.47	3,450.13	0.00	0.00	0.00
14,100.00	91.10	269.90	10,326.61	-380.87	-3,549.45	3,550.11	0.00	0.00	0.00
14,200.00	91.10	269.90	10,324.68	-381.04	-3,649.44	3,650.10	0.00	0.00	0.00
14,300.00	91.10	269.90	10,322.76	-381.21	-3,749.42	3,750.08	0.00	0.00	0.00
14,400.00	91.10	269.90	10,320.84	-381.38	-3,849.40	3,850.06	0.00	0.00	0.00
14,500.00	91.10	269.90	10,318.91	-381.55	-3,949.38	3,950.04	0.00	0.00	0.00
14,600.00	91.10	269.90	10,316.99	-381.72	-4,049.36	4,050.02	0.00	0.00	0.00
14,700.00	91.10	269.90	10,315.07	-381.89	-4,149.34	4,150.00	0.00	0.00	0.00
14,800.00	91.10	269.90	10,313.14	-382.05	-4,249.32	4,249.98	0.00	0.00	0.00
14,900.00	91.10	269.90	10,311.22	-382.22	-4,349.31	4,349.97	0.00	0.00	0.00
15,000.00	91.10	269.90	10,309.30	-382.39	-4,449.29	4,449.95	0.00	0.00	0.00
15,100.00	91.10	269.90	10,307.37	-382.56	-4,549.27	4,549.93	0.00	0.00	0.00
15,200.00	91.10	269.90	10,305.45	-382.73	-4,649.25	4,649.91	0.00	0.00	0.00
15,300.00	91.10	269.90	10,303.52	-382.90	-4,749.23	4,749.89	0.00	0.00	0.00
15,403.47	91.10	269.90	10,301.53	-383.08	-4,852.68	4,853.34	0.00	0.00	0.00
Tombstone 11 #104H: LTP									
15,405.19	91.10	269.90	10,301.50	-383.08	-4,854.40	4,855.06	0.00	0.00	0.00
15,500.00	91.10	269.90	10,299.68	-383.24	-4,949.19	4,949.86	0.00	0.00	0.00
15,535.21	91.10	269.90	10,299.00	-383.30	-4,984.40	4,985.06	0.00	0.00	0.00
Tombstone 11 #104H: PBHL (2430' FNL & 200' FWL)									



Database: EDM 5000.1 Single User Db
Company: XTO Energy
Project: Eddy County, NM (NAD-27)
Site: Tombstone 11 State
Well: #104H
Wellbore: Wellbore #1
Design: PERMIT

Local Co-ordinate Reference: Well #104H
TVD Reference: RKB = 32' @ 3141.00usft
MD Reference: RKB = 32' @ 3141.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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
Tombstone 11 #104H - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	417,113.10	619,725.00	32.146170	-103.946504
Tombstone 11 #104H - plan hits target center - Point	0.00	0.00	10,299.00	-383.30	-4,984.40	416,729.80	614,740.60	32.145164	-103.962612
Tombstone 11 #104H - plan misses target center by 89.48usft at 15403.47usft MD (10301.53 TVD, -383.08 N, -4852.68 E) - Point	0.00	0.00	10,391.00	-383.10	-4,854.40	416,730.00	614,870.60	32.145163	-103.962192
Tombstone 11 #104H - plan hits target center - Point	0.00	0.00	10,391.00	-375.20	-202.40	416,737.90	619,522.60	32.145140	-103.947162

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
707.00	707.00	Rustler			
980.00	980.00	Salado (Top of Salt)			
3,057.00	3,057.00	Base of Salt			
3,269.00	3,269.00	Delaware (Bell Canyon)			
4,190.68	4,190.00	Cherry Canyon			
5,814.87	5,808.00	Brushy Canyon			
6,861.86	6,851.00	Basal Brushy Canyon			
7,091.74	7,080.00	Bone Spring Lime			
7,968.07	7,953.00	1st Bone Spring Lime			
8,012.24	7,997.00	1st Bone Spring Sand			
8,484.04	8,467.00	2nd Bone Spring Lime			
8,868.51	8,850.00	2nd Bone Spring Sand			
9,108.42	9,089.00	3rd Bone Spring Lime			
9,935.75	9,913.00	3rd Bone Spring Sand			
10,368.08	10,274.00	Wolfcamp			
10,419.03	10,303.00	Wolfcamp X			
10,581.47	10,369.00	Wolfcamp Y			
10,752.32	10,391.00	LP			