



XTO Energy

Eddy County, NM (NAD-27)

Tombstone 11 State

#102H

Wellbore #1

Plan: PERMIT

Standard Planning Report

15 February, 2019



Project: Eddy County, NM (NAD-27)
Site: Tombstone 11 State
Well: #102H
Wellbore: Wellbore #1
Design: PERMIT

WELL DETAILS: #102H

Rig Name: Precision 525
RKB = 15' @ 3108.00usft (Precision 525)
Ground Level: 3091.00

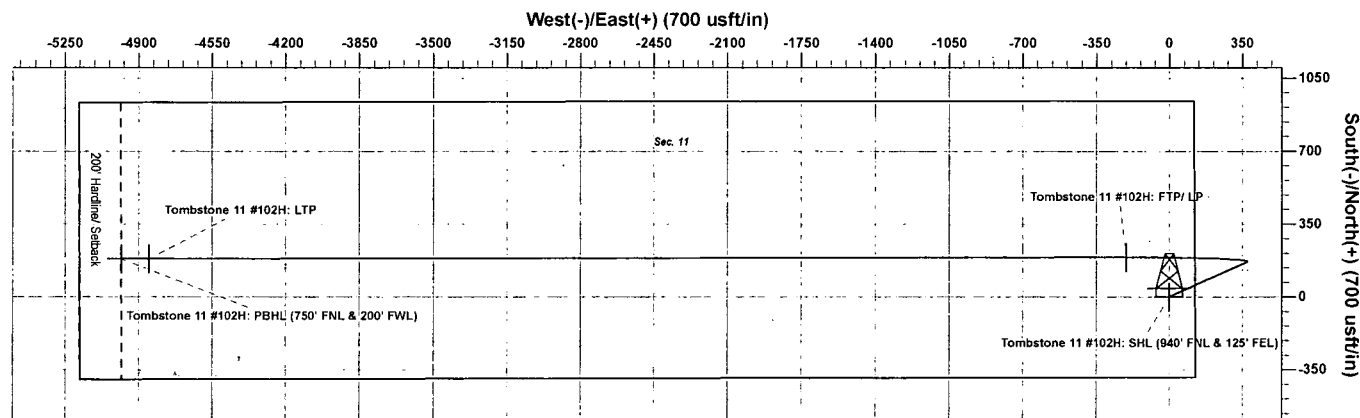
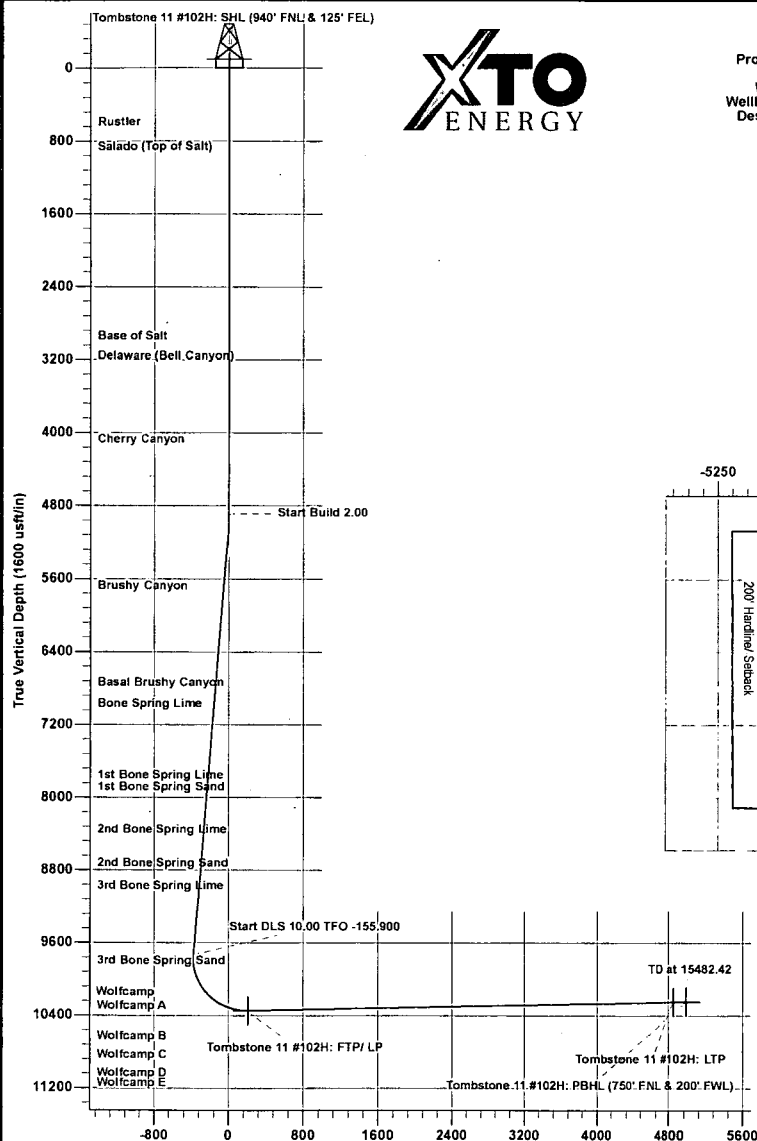
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	418228.20	619717.20	32.149235	-103.946516

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00
2	4888.00	0.00	0.00	4888.00	0.00	0.00	0.00	0.000	0.00
3	5137.85	5.00	65.92	5137.53	4.44	9.94	2.00	65.923	-9.95
4	9748.81	5.00	65.92	9730.97	168.29	376.63	0.00	0.000	-376.92
5	10706.21	91.18	269.90	10349.00	189.70	-206.30	10.00	-155.900	206.97
6	15352.39	91.18	269.90	10253.67	181.63	-4851.50	0.00	0.000	4851.18
7	15482.42	91.18	269.90	10251.00	181.40	-4981.50	0.00	0.000	4981.18

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Tombstone 11 #102H: SHL (940' FNL & 125' FEL)	0.00	0.00	0.00	418228.20	619717.20	32.149235	-103.946516	Point
Tombstone 11 #102H: PBHL (750' FNL & 200' FWL)	10251.00	181.40	-4981.50	418409.60	614735.70	32.149782	-103.962609	Point
Tombstone 11 #102H: LTP	10253.67	181.70	-4851.50	418409.90	614865.70	32.149781	-103.952189	Point
Tombstone 11 #102H: FTP/LP	10349.00	189.70	-206.30	418417.90	619510.90	32.149758	-103.947180	Point



FORMATION TOP DETAILS

TVDPath	Formation
672.00	Rustler
945.00	Salado (Top of Salt)
3022.00	Base of Salt
3235.00	Delaware (Bell Canyon)
4152.00	Cherry Canyon
5798.00	Brushy Canyon
5819.00	Basal Brushy Canyon
7051.00	Bone Spring Lime
7918.00	1st Bone Spring Sand
7965.00	2nd Bone Spring Lime
8433.00	2nd Bone Spring Sand
8804.00	3rd Bone Spring Lime
9054.00	3rd Bone Spring Sand
9878.00	Wolfcamp
10230.00	Wolfcamp X
10258.00	Wolfcamp Y
10322.00	LP
10349.00	

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 (#102H/Wellbore #1)

Created By: Matthew May Date: 13:51, February 14 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.



Database: EDM 5000.1 Single User Db
 Company: XTO Energy
 Project: Eddy County, NM (NAD-27)
 Site: Tombstone 11 State
 Well: #102H
 Wellbore: Wellbore #1
 Design: PERMIT

Local Co-ordinate Reference: Well #102H
 TVD Reference: RKB = 15' @ 3106.00usft (Precision 525)
 MD Reference: RKB = 15' @ 3106.00usft (Precision 525)
 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	#102H			
Well Position	+N/-S	0.00 usft	Northing:	418,228.20 usft
	+E/-W	0.00 usft	Easting:	619,717.20 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level: 3,091.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/14/2019	6.943	59.913	47,686

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	
4,888.00	0.00	0.00	4,888.00	0.00	0.00	0.00	0.00	0.00	0.000	
5,137.85	5.00	65.92	5,137.53	4.44	9.94	2.00	2.00	0.00	65.923	
9,748.81	5.00	65.92	9,730.97	168.29	376.63	0.00	0.00	0.00	0.000	
10,706.21	91.18	269.90	10,349.00	189.70	-206.30	10.00	9.00	-16.30	-155.900	Tombstone 11 #10;
15,352.39	91.18	269.90	10,253.67	181.63	-4,851.50	0.00	0.00	0.00	0.000	Tombstone 11 #10;
15,482.42	91.18	269.90	10,251.00	181.40	-4,981.50	0.00	0.00	0.00	0.000	Tombstone 11 #10;



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 MD Reference: RKB = 15' @ 3106.00usft (Precision 525)
 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 #102H: SHL (940' 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
672.00	0.00	0.00	672.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
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
945.00	0.00	0.00	945.00	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
3,022.00	0.00	0.00	3,022.00	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
3,235.00	0.00	0.00	3,235.00	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
3,900.00	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
4,152.00	0.00	0.00	4,152.00	0.00	0.00	0.00	0.00	0.00	0.00
Cherry Canyon									



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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)
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
4,888.00	0.00	0.00	4,888.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.24	65.92	4,900.00	0.01	0.02	-0.02	2.00	2.00	0.00
5,000.00	2.24	65.92	4,999.97	0.89	2.00	-2.00	2.00	2.00	0.00
5,100.00	4.24	65.92	5,099.81	3.20	7.16	-7.16	2.00	2.00	0.00
5,137.85	5.00	65.92	5,137.53	4.44	9.94	-9.95	2.00	2.00	0.00
5,200.00	5.00	65.92	5,199.45	6.65	14.88	-14.90	0.00	0.00	0.00
5,300.00	5.00	65.92	5,299.07	10.20	22.84	-22.85	0.00	0.00	0.00
5,400.00	5.00	65.92	5,398.69	13.76	30.79	-30.81	0.00	0.00	0.00
5,500.00	5.00	65.92	5,498.31	17.31	38.74	-38.77	0.00	0.00	0.00
5,600.00	5.00	65.92	5,597.93	20.86	46.69	-46.73	0.00	0.00	0.00
5,700.00	5.00	65.92	5,697.55	24.42	54.65	-54.69	0.00	0.00	0.00
5,760.68	5.00	65.92	5,758.00	26.57	59.47	-59.52	0.00	0.00	0.00
Brushy Canyon									
5,800.00	5.00	65.92	5,797.17	27.97	62.60	-62.65	0.00	0.00	0.00
5,900.00	5.00	65.92	5,896.79	31.52	70.55	-70.61	0.00	0.00	0.00
6,000.00	5.00	65.92	5,996.41	35.08	78.50	-78.56	0.00	0.00	0.00
6,100.00	5.00	65.92	6,096.03	38.63	86.46	-86.52	0.00	0.00	0.00
6,200.00	5.00	65.92	6,195.65	42.19	94.41	-94.48	0.00	0.00	0.00
6,300.00	5.00	65.92	6,295.27	45.74	102.36	-102.44	0.00	0.00	0.00
6,400.00	5.00	65.92	6,394.89	49.29	110.31	-110.40	0.00	0.00	0.00
6,500.00	5.00	65.92	6,494.51	52.85	118.27	-118.36	0.00	0.00	0.00
6,600.00	5.00	65.92	6,594.13	56.40	126.22	-126.32	0.00	0.00	0.00
6,700.00	5.00	65.92	6,693.75	59.95	134.17	-134.28	0.00	0.00	0.00
6,800.00	5.00	65.92	6,793.37	63.51	142.12	-142.23	0.00	0.00	0.00
6,825.73	5.00	65.92	6,819.00	64.42	144.17	-144.28	0.00	0.00	0.00
Basal Brushy Canyon									
6,900.00	5.00	65.92	6,892.99	67.06	150.08	-150.19	0.00	0.00	0.00
7,000.00	5.00	65.92	6,992.61	70.61	158.03	-158.15	0.00	0.00	0.00
7,058.62	5.00	65.92	7,051.00	72.70	162.69	-162.82	0.00	0.00	0.00
Bone Spring Lime									
7,100.00	5.00	65.92	7,092.23	74.17	165.98	-166.11	0.00	0.00	0.00
7,200.00	5.00	65.92	7,191.85	77.72	173.93	-174.07	0.00	0.00	0.00
7,300.00	5.00	65.92	7,291.47	81.27	181.89	-182.03	0.00	0.00	0.00
7,400.00	5.00	65.92	7,391.09	84.83	189.84	-189.99	0.00	0.00	0.00
7,500.00	5.00	65.92	7,490.71	88.38	197.79	-197.94	0.00	0.00	0.00
7,600.00	5.00	65.92	7,590.33	91.93	205.74	-205.90	0.00	0.00	0.00
7,700.00	5.00	65.92	7,689.95	95.49	213.70	-213.86	0.00	0.00	0.00
7,800.00	5.00	65.92	7,789.57	99.04	221.65	-221.82	0.00	0.00	0.00
7,900.00	5.00	65.92	7,889.19	102.59	229.60	-229.78	0.00	0.00	0.00
7,928.92	5.00	65.92	7,918.00	103.62	231.90	-232.08	0.00	0.00	0.00
1st Bone Spring Lime									
7,976.10	5.00	65.92	7,965.00	105.30	235.65	-235.84	0.00	0.00	0.00
1st Bone Spring Sand									
8,000.00	5.00	65.92	7,988.81	106.15	237.55	-237.74	0.00	0.00	0.00
8,100.00	5.00	65.92	8,088.43	109.70	245.51	-245.70	0.00	0.00	0.00
8,200.00	5.00	65.92	8,188.05	113.26	253.46	-253.66	0.00	0.00	0.00



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8,300.00	5.00	65.92	8,287.67	116.81	261.41	-261.61	0.00	0.00	0.00
8,400.00	5.00	65.92	8,387.29	120.36	269.36	-269.57	0.00	0.00	0.00
8,445.89	5.00	65.92	8,433.00	121.99	273.01	-273.22	0.00	0.00	0.00
2nd Bone Spring Lime									
8,500.00	5.00	65.92	8,486.91	123.92	277.32	-277.53	0.00	0.00	0.00
8,600.00	5.00	65.92	8,586.53	127.47	285.27	-285.49	0.00	0.00	0.00
8,700.00	5.00	65.92	8,686.14	131.02	293.22	-293.45	0.00	0.00	0.00
8,800.00	5.00	65.92	8,785.76	134.58	301.17	-301.41	0.00	0.00	0.00
8,818.31	5.00	65.92	8,804.00	135.23	302.63	-302.86	0.00	0.00	0.00
2nd Bone Spring Sand									
8,900.00	5.00	65.92	8,885.38	138.13	309.13	-309.37	0.00	0.00	0.00
9,000.00	5.00	65.92	8,985.00	141.68	317.08	-317.32	0.00	0.00	0.00
9,069.26	5.00	65.92	9,054.00	144.14	322.59	-322.84	0.00	0.00	0.00
3rd Bone Spring Lime									
9,100.00	5.00	65.92	9,084.62	145.24	325.03	-325.28	0.00	0.00	0.00
9,200.00	5.00	65.92	9,184.24	148.79	332.98	-333.24	0.00	0.00	0.00
9,300.00	5.00	65.92	9,283.86	152.34	340.94	-341.20	0.00	0.00	0.00
9,400.00	5.00	65.92	9,383.48	155.90	348.89	-349.16	0.00	0.00	0.00
9,500.00	5.00	65.92	9,483.10	159.45	356.84	-357.12	0.00	0.00	0.00
9,600.00	5.00	65.92	9,582.72	163.00	364.79	-365.08	0.00	0.00	0.00
9,700.00	5.00	65.92	9,682.34	166.56	372.75	-373.04	0.00	0.00	0.00
9,748.81	5.00	65.92	9,730.97	168.29	376.63	-376.92	0.00	0.00	0.00
9,750.00	4.89	65.35	9,732.15	168.33	376.72	-377.01	10.00	-9.11	-47.92
9,800.00	2.11	344.69	9,782.08	170.11	378.41	-378.71	10.00	-5.55	-161.32
9,850.00	5.92	290.03	9,831.96	171.89	375.75	-376.05	10.00	7.61	-109.33
9,896.52	10.41	281.12	9,878.00	173.52	369.37	-369.67	10.00	9.65	-19.16
3rd Bone Spring Sand									
9,900.00	10.75	280.75	9,881.42	173.64	368.74	-369.04	10.00	9.81	-10.56
9,950.00	15.69	277.22	9,930.08	175.36	357.45	-357.75	10.00	9.87	-7.05
10,000.00	20.65	275.36	9,977.57	177.03	341.96	-342.26	10.00	9.93	-3.73
10,050.00	25.63	274.20	10,023.54	178.65	322.38	-322.69	10.00	9.96	-2.33
10,100.00	30.62	273.39	10,067.62	180.19	298.87	-299.18	10.00	9.97	-1.61
10,150.00	35.61	272.79	10,109.49	181.66	271.60	-271.92	10.00	9.98	-1.20
10,200.00	40.60	272.32	10,148.82	183.03	240.79	-241.11	10.00	9.98	-0.94
10,250.00	45.59	271.94	10,185.32	184.29	206.66	-206.99	10.00	9.99	-0.76
10,300.00	50.59	271.62	10,218.71	185.44	169.48	-169.81	10.00	9.99	-0.64
10,318.14	52.40	271.51	10,230.00	185.83	155.30	-155.62	10.00	9.99	-0.58
Wolfcamp									
10,350.00	55.58	271.34	10,248.73	186.47	129.54	-129.86	10.00	9.99	-0.54
10,366.76	57.25	271.25	10,258.00	186.79	115.58	-115.90	10.00	9.99	-0.51
Wolfcamp X									
10,400.00	60.58	271.09	10,275.16	187.37	87.12	-87.45	10.00	9.99	-0.49
10,450.00	65.57	270.87	10,297.80	188.13	42.56	-42.89	10.00	9.99	-0.45
10,500.00	70.57	270.66	10,316.46	188.75	-3.80	3.47	10.00	9.99	-0.41
10,517.40	72.31	270.59	10,322.00	188.93	-20.29	19.96	10.00	9.99	-0.40
Wolfcamp Y									
10,550.00	75.56	270.47	10,331.02	189.22	-51.62	51.29	10.00	9.99	-0.39
10,600.00	80.56	270.28	10,341.36	189.53	-100.52	100.19	10.00	9.99	-0.37
10,650.00	85.56	270.10	10,347.40	189.70	-150.14	149.81	10.00	9.99	-0.36
10,682.68	88.82	269.98	10,349.00	189.72	-182.77	182.44	10.00	9.99	-0.36
LP									
10,700.00	90.56	269.92	10,349.09	189.71	-200.09	199.76	10.00	9.99	-0.36
10,706.21	91.18	269.90	10,349.00	189.70	-206.30	205.97	10.00	9.99	-0.36



Database: EDM 5000.1 Single User Db
 Company: XTO Energy
 Project: Eddy County, NM (NAD-27)
 Site: Tombstone 11 State
 Well: #102H
 Wellbore: Wellbore #1
 Design: PERMIT

Local Co-ordinate Reference: Well #102H
 TVD Reference: RKB = 15' @ 3106.00usft (Precision 525)
 MD Reference: RKB = 15' @ 3106.00usft (Precision 525)
 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)
Tombstone 11 #102H: FTP/ LP									
10,800.00	91.18	269.90	10,347.08	189.54	-300.07	299.74	0.00	0.00	0.00
10,900.00	91.18	269.90	10,345.02	189.36	-400.05	399.72	0.00	0.00	0.00
11,000.00	91.18	269.90	10,342.97	189.19	-500.03	499.70	0.00	0.00	0.00
11,100.00	91.18	269.90	10,340.92	189.02	-600.01	599.68	0.00	0.00	0.00
11,200.00	91.18	269.90	10,338.87	188.84	-699.99	699.66	0.00	0.00	0.00
11,300.00	91.18	269.90	10,336.82	188.67	-799.97	799.64	0.00	0.00	0.00
11,400.00	91.18	269.90	10,334.76	188.49	-899.94	899.61	0.00	0.00	0.00
11,500.00	91.18	269.90	10,332.71	188.32	-999.92	999.59	0.00	0.00	0.00
11,600.00	91.18	269.90	10,330.66	188.15	-1,099.90	1,099.57	0.00	0.00	0.00
11,700.00	91.18	269.90	10,328.61	187.97	-1,199.88	1,199.55	0.00	0.00	0.00
11,800.00	91.18	269.90	10,326.56	187.80	-1,299.86	1,299.53	0.00	0.00	0.00
11,900.00	91.18	269.90	10,324.51	187.63	-1,399.84	1,399.51	0.00	0.00	0.00
12,000.00	91.18	269.90	10,322.45	187.45	-1,499.82	1,499.49	0.00	0.00	0.00
12,100.00	91.18	269.90	10,320.40	187.28	-1,599.80	1,599.47	0.00	0.00	0.00
12,200.00	91.18	269.90	10,318.35	187.10	-1,699.77	1,699.45	0.00	0.00	0.00
12,300.00	91.18	269.90	10,316.30	186.93	-1,799.75	1,799.42	0.00	0.00	0.00
12,400.00	91.18	269.90	10,314.25	186.76	-1,899.73	1,899.40	0.00	0.00	0.00
12,500.00	91.18	269.90	10,312.19	186.58	-1,999.71	1,999.38	0.00	0.00	0.00
12,600.00	91.18	269.90	10,310.14	186.41	-2,099.69	2,099.36	0.00	0.00	0.00
12,700.00	91.18	269.90	10,308.09	186.24	-2,199.67	2,199.34	0.00	0.00	0.00
12,800.00	91.18	269.90	10,306.04	186.06	-2,299.65	2,299.32	0.00	0.00	0.00
12,900.00	91.18	269.90	10,303.99	185.89	-2,399.63	2,399.30	0.00	0.00	0.00
13,000.00	91.18	269.90	10,301.94	185.71	-2,499.61	2,499.28	0.00	0.00	0.00
13,100.00	91.18	269.90	10,299.88	185.54	-2,599.58	2,599.26	0.00	0.00	0.00
13,200.00	91.18	269.90	10,297.83	185.37	-2,699.56	2,699.24	0.00	0.00	0.00
13,300.00	91.18	269.90	10,295.78	185.19	-2,799.54	2,799.21	0.00	0.00	0.00
13,400.00	91.18	269.90	10,293.73	185.02	-2,899.52	2,899.19	0.00	0.00	0.00
13,500.00	91.18	269.90	10,291.68	184.85	-2,999.50	2,999.17	0.00	0.00	0.00
13,600.00	91.18	269.90	10,289.62	184.67	-3,099.48	3,099.15	0.00	0.00	0.00
13,700.00	91.18	269.90	10,287.57	184.50	-3,199.46	3,199.13	0.00	0.00	0.00
13,800.00	91.18	269.90	10,285.52	184.32	-3,299.44	3,299.11	0.00	0.00	0.00
13,900.00	91.18	269.90	10,283.47	184.15	-3,399.41	3,399.09	0.00	0.00	0.00
14,000.00	91.18	269.90	10,281.42	183.98	-3,499.39	3,499.07	0.00	0.00	0.00
14,100.00	91.18	269.90	10,279.37	183.80	-3,599.37	3,599.05	0.00	0.00	0.00
14,200.00	91.18	269.90	10,277.31	183.63	-3,699.35	3,699.02	0.00	0.00	0.00
14,300.00	91.18	269.90	10,275.26	183.45	-3,799.33	3,799.00	0.00	0.00	0.00
14,400.00	91.18	269.90	10,273.21	183.28	-3,899.31	3,898.98	0.00	0.00	0.00
14,500.00	91.18	269.90	10,271.16	183.11	-3,999.29	3,998.96	0.00	0.00	0.00
14,600.00	91.18	269.90	10,269.11	182.93	-4,099.27	4,098.94	0.00	0.00	0.00
14,700.00	91.18	269.90	10,267.05	182.76	-4,199.24	4,198.92	0.00	0.00	0.00
14,800.00	91.18	269.90	10,265.00	182.59	-4,299.22	4,298.90	0.00	0.00	0.00
14,900.00	91.18	269.90	10,262.95	182.41	-4,399.20	4,398.88	0.00	0.00	0.00
15,000.00	91.18	269.90	10,260.90	182.24	-4,499.18	4,498.86	0.00	0.00	0.00
15,100.00	91.18	269.90	10,258.85	182.06	-4,599.16	4,598.84	0.00	0.00	0.00
15,200.00	91.18	269.90	10,256.80	181.89	-4,699.14	4,698.81	0.00	0.00	0.00
15,300.00	91.18	269.90	10,254.74	181.72	-4,799.12	4,798.79	0.00	0.00	0.00
15,352.39	91.18	269.90	10,253.67	181.63	-4,851.50	4,851.18	0.00	0.00	0.00
Tombstone 11 #102H: LTP									
15,400.00	91.18	269.90	10,252.69	181.54	-4,899.10	4,898.77	0.00	0.00	0.00
15,482.42	91.18	269.90	10,251.00	181.40	-4,981.50	4,981.18	0.00	0.00	0.00
Tombstone 11 #102H: PBHL (750' FNL & 200' FWL)									



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 Company: XTO Energy
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 Wellbore: Wellbore #1
 Design: PERMIT

Local Co-ordinate Reference: Well #102H
 TVD Reference: RKB = 15' @ 3106.00usft (Precision 525)
 MD Reference: RKB = 15' @ 3106.00usft (Precision 525)
 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 #102H - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	418,228.20	619,717.20	32.149235	-103.946516
Tombstone 11 #102H - plan hits target center - Point	0.00	0.00	10,251.00	181.40	-4,981.50	418,409.60	614,735.70	32.149782	-103.962609
Tombstone 11 #102H - plan misses target center by 0.07usft at 15352.39usft MD (10253.67 TVD, 181.63 N, -4851.50 E) - Point	0.00	0.00	10,253.67	181.70	-4,851.50	418,409.90	614,865.70	32.149781	-103.962189
Tombstone 11 #102H - plan hits target center - Point	0.00	0.00	10,349.00	189.70	-206.30	418,417.90	619,510.90	32.149759	-103.947180

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
672.00	670.00	Rustler			
945.00	943.00	Salado (Top of Salt)			
3,022.00	3,020.00	Base of Salt			
3,235.00	3,233.00	Delaware (Bell Canyon)			
4,152.00	4,150.00	Cherry Canyon			
5,760.68	5,756.00	Brushy Canyon			
6,825.73	6,817.00	Basal Brushy Canyon			
7,058.62	7,049.00	Bone Spring Lime			
7,928.92	7,916.00	1st Bone Spring Lime			
7,976.10	7,963.00	1st Bone Spring Sand			
8,445.89	8,431.00	2nd Bone Spring Lime			
8,818.31	8,802.00	2nd Bone Spring Sand			
9,069.26	9,052.00	3rd Bone Spring Lime			
9,896.52	9,876.00	3rd Bone Spring Sand			
10,318.14	10,228.00	Wolfcamp			
10,366.76	10,256.00	Wolfcamp X			
10,517.40	10,320.00	Wolfcamp Y			
10,682.68	10,347.00	LP			