



XTO Energy

Eddy County, NM (NAD-27)

Tombstone 11 State

#108H

Wellbore #1

Plan: PERMIT

Standard Planning Report

21 February, 2019



Project: Eddy County, NM (NAD-27)
Site: Tombstone 11 State
Well: #108H
Wellbore: Wellbore #1
Design: PERMIT

WELL DETAILS: #108H

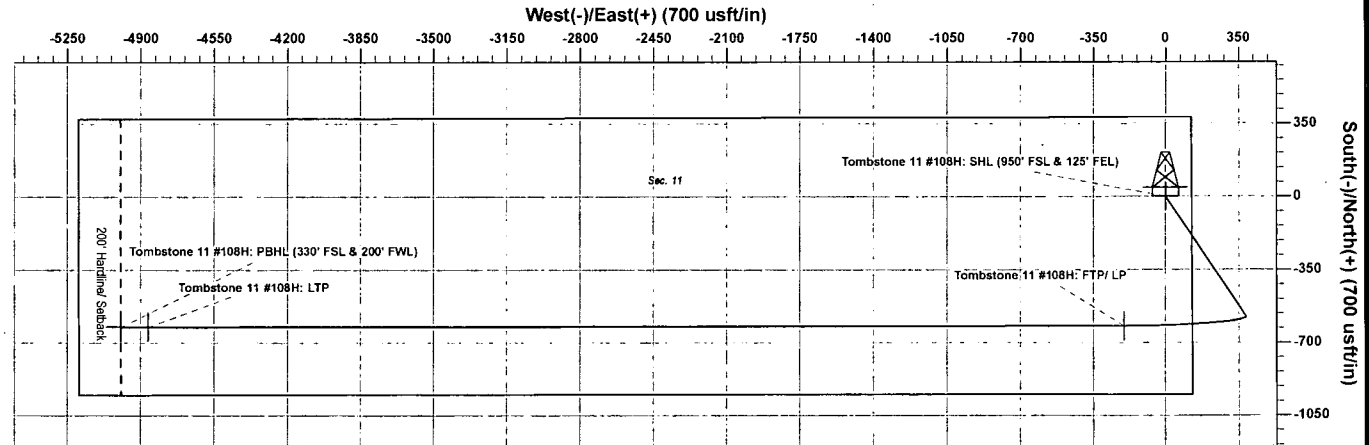
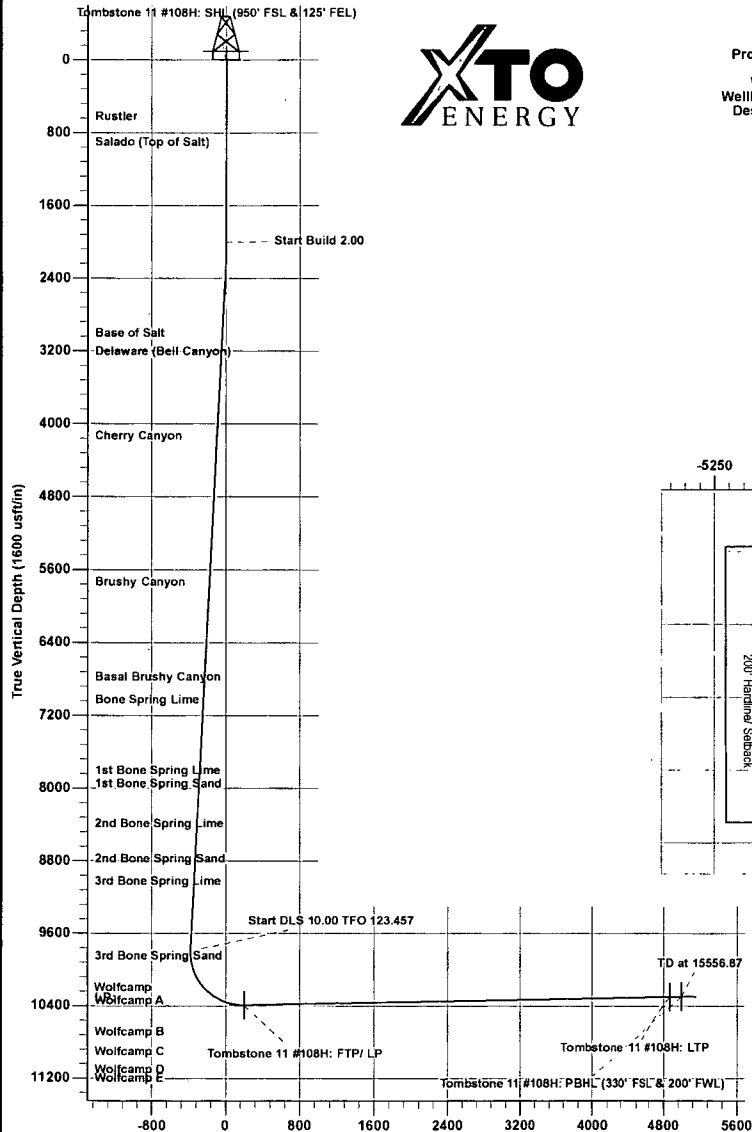
Rig Name:	GL @ 3142.00usft
Ground Level:	3142.00
Easting	619741.60
Latitude	32.139817
Longitude	-103.946477

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	0.00	0.00
2	2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00
3	2257.02	5.14	146.30	2256.68	-9.59	6.39	2.00	146.303	-6.38
4	9823.23	5.14	146.30	9792.45	-573.60	382.49	0.00	0.000	-381.99
5	10762.77	91.11	269.95	10392.00	-619.90	-200.80	10.00	123.457	201.34
6	15426.85	91.11	269.95	10301.52	-623.99	-4864.00	0.00	0.000	4864.54
7	15556.87	91.11	269.95	10299.00	-624.10	-4994.00	0.00	0.000	4994.54

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Tombstone 11 #108H: SHL (950' FSL & 125' FEL)	0.00	0.00	0.00	414802.40	619741.60	32.139817	-103.946477	Point
Tombstone 11 #108H: PBHL (330' FSL & 200' FWL)	10299.00	-624.10	-4994.00	414178.30	614747.60	32.138150	-103.962618	Point
Tombstone 11 #108H: LTP	10301.52	-624.00	-4864.00	414178.40	614877.60	32.138149	-103.962196	Point
Tombstone 11 #108H: FTP/LP	10392.00	-619.90	-200.80	414182.50	619540.80	32.138115	-103.947132	Point



FORMATION TOP DETAILS

TVDPath	Formation
705.00	Rustler
984.00	Salado (Top of Salt)
3089.00	Base of Salt
3291.00	Delaware (Bell Canyon)
4214.00	Cherry Canyon
5819.00	Brushy Canyon
6860.00	Basal Brushy Canyon
7109.00	Bone Spring Lime
7971.00	1st Bone Spring Lime
8032.00	1st Bone Spring Sand
8473.00	2nd Bone Spring Lime
8859.00	2nd Bone Spring Sand
9108.00	3rd Bone Spring Lime
9930.00	3rd Bone Spring Sand
10286.00	Wolfcamp
10304.00	Wolfcamp X
10370.00	Wolfcamp Y
10392.00	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 (#108H/Wellbore #1)

Created By: Matthew May Date: 11:12, 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.



Database: EDM 5000.1 Single User Db
 Company: XTO Energy
 Project: Eddy County, NM (NAD-27)
 Site: Tombstone 11 State
 Well: #108H
 Wellbore: Wellbore #1
 Design: PERMIT

Local Co-ordinate Reference: Well #108H
 TVD Reference: GL @ 3142.00usft
 MD Reference: GL @ 3142.00usft
 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	#108H					
Well Position	+N/-S	-3,425.80 usft	Northing:	414,802.40 usft	Latitude:	32.139817
	+E/-W	24.40 usft	Easting:	619,741.60 usft	Longitude:	-103.946477
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,142.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/21/2019	6.940	59.904	47,678

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	269.95	

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	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.000	
2,257.02	5.14	146.30	2,256.68	-9.59	6.39	2.00	2.00	0.00	146.303	
9,823.23	5.14	146.30	9,792.45	-573.60	382.49	0.00	0.00	0.00	0.000	
10,762.77	91.11	269.95	10,392.00	-619.90	-200.80	10.00	9.15	13.16	123.457	Tombstone 11 #108
15,426.85	91.11	269.95	10,301.52	-623.99	-4,864.00	0.00	0.00	0.00	0.000	Tombstone 11 #108
15,556.87	91.11	269.95	10,299.00	-624.10	-4,994.00	0.00	0.00	0.00	0.000	Tombstone 11 #108



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Local Co-ordinate Reference: Well #108H
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 MD Reference: GL @ 3142.00usft
 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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tombstone 11 #108H: SHL (950' FSL & 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
705.00	0.00	0.00	705.00	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
984.00	0.00	0.00	984.00	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	2.00	146.30	2,099.98	-1.45	0.97	-0.97	2.00	2.00	0.00
2,200.00	4.00	146.30	2,199.84	-5.81	3.87	-3.87	2.00	2.00	0.00
2,257.02	5.14	146.30	2,256.68	-9.59	6.39	-6.38	2.00	2.00	0.00
2,300.00	5.14	146.30	2,299.48	-12.79	8.53	-8.52	0.00	0.00	0.00
2,400.00	5.14	146.30	2,399.08	-20.24	13.50	-13.48	0.00	0.00	0.00
2,500.00	5.14	146.30	2,498.68	-27.70	18.47	-18.45	0.00	0.00	0.00
2,600.00	5.14	146.30	2,598.28	-35.15	23.44	-23.41	0.00	0.00	0.00
2,700.00	5.14	146.30	2,697.87	-42.61	28.41	-28.37	0.00	0.00	0.00
2,800.00	5.14	146.30	2,797.47	-50.06	33.38	-33.34	0.00	0.00	0.00
2,900.00	5.14	146.30	2,897.07	-57.52	38.35	-38.30	0.00	0.00	0.00
3,000.00	5.14	146.30	2,996.67	-64.97	43.32	-43.27	0.00	0.00	0.00
3,092.71	5.14	146.30	3,089.00	-71.88	47.93	-47.87	0.00	0.00	0.00
Base of Salt									
3,100.00	5.14	146.30	3,096.27	-72.42	48.30	-48.23	0.00	0.00	0.00
3,200.00	5.14	146.30	3,195.86	-79.88	53.27	-53.20	0.00	0.00	0.00
3,295.52	5.14	146.30	3,291.00	-87.00	58.01	-57.94	0.00	0.00	0.00
Delaware (Bell Canyon)									
3,300.00	5.14	146.30	3,295.46	-87.33	58.24	-58.16	0.00	0.00	0.00
3,400.00	5.14	146.30	3,395.06	-94.79	63.21	-63.12	0.00	0.00	0.00
3,500.00	5.14	146.30	3,494.66	-102.24	68.18	-68.09	0.00	0.00	0.00
3,600.00	5.14	146.30	3,594.25	-109.70	73.15	-73.05	0.00	0.00	0.00
3,700.00	5.14	146.30	3,693.85	-117.15	78.12	-78.02	0.00	0.00	0.00
3,800.00	5.14	146.30	3,793.45	-124.61	83.09	-82.98	0.00	0.00	0.00
3,900.00	5.14	146.30	3,893.05	-132.06	88.06	-87.95	0.00	0.00	0.00
4,000.00	5.14	146.30	3,992.65	-139.51	93.03	-92.91	0.00	0.00	0.00
4,100.00	5.14	146.30	4,092.24	-146.97	98.00	-97.87	0.00	0.00	0.00
4,200.00	5.14	146.30	4,191.84	-154.42	102.97	-102.84	0.00	0.00	0.00
4,222.25	5.14	146.30	4,214.00	-156.08	104.08	-103.94	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									
4,300.00	5.14	146.30	4,291.44	-161.88	107.94	-107.80	0.00	0.00	0.00
4,400.00	5.14	146.30	4,391.04	-169.33	112.92	-112.77	0.00	0.00	0.00
4,500.00	5.14	146.30	4,490.63	-176.79	117.89	-117.73	0.00	0.00	0.00
4,600.00	5.14	146.30	4,590.23	-184.24	122.86	-122.70	0.00	0.00	0.00
4,700.00	5.14	146.30	4,689.83	-191.69	127.83	-127.66	0.00	0.00	0.00
4,800.00	5.14	146.30	4,789.43	-199.15	132.80	-132.63	0.00	0.00	0.00
4,900.00	5.14	146.30	4,889.03	-206.60	137.77	-137.59	0.00	0.00	0.00
5,000.00	5.14	146.30	4,988.62	-214.06	142.74	-142.55	0.00	0.00	0.00
5,100.00	5.14	146.30	5,088.22	-221.51	147.71	-147.52	0.00	0.00	0.00
5,200.00	5.14	146.30	5,187.82	-228.97	152.68	-152.48	0.00	0.00	0.00
5,300.00	5.14	146.30	5,287.42	-236.42	157.65	-157.45	0.00	0.00	0.00
5,400.00	5.14	146.30	5,387.01	-243.87	162.62	-162.41	0.00	0.00	0.00
5,500.00	5.14	146.30	5,486.61	-251.33	167.59	-167.38	0.00	0.00	0.00
5,600.00	5.14	146.30	5,586.21	-258.78	172.57	-172.34	0.00	0.00	0.00
5,700.00	5.14	146.30	5,685.81	-266.24	177.54	-177.30	0.00	0.00	0.00
5,800.00	5.14	146.30	5,785.41	-273.69	182.51	-182.27	0.00	0.00	0.00
5,833.73	5.14	146.30	5,819.00	-276.21	184.18	-183.94	0.00	0.00	0.00
Brushy Canyon									
5,900.00	5.14	146.30	5,885.00	-281.15	187.48	-187.23	0.00	0.00	0.00
6,000.00	5.14	146.30	5,984.60	-288.60	192.45	-192.20	0.00	0.00	0.00
6,100.00	5.14	146.30	6,084.20	-296.06	197.42	-197.16	0.00	0.00	0.00
6,200.00	5.14	146.30	6,183.80	-303.51	202.39	-202.13	0.00	0.00	0.00
6,300.00	5.14	146.30	6,283.39	-310.96	207.36	-207.09	0.00	0.00	0.00
6,400.00	5.14	146.30	6,382.99	-318.42	212.33	-212.05	0.00	0.00	0.00
6,500.00	5.14	146.30	6,482.59	-325.87	217.30	-217.02	0.00	0.00	0.00
6,600.00	5.14	146.30	6,582.19	-333.33	222.27	-221.98	0.00	0.00	0.00
6,700.00	5.14	146.30	6,681.79	-340.78	227.24	-226.95	0.00	0.00	0.00
6,800.00	5.14	146.30	6,781.38	-348.24	232.22	-231.91	0.00	0.00	0.00
6,878.93	5.14	146.30	6,860.00	-354.12	236.14	-235.83	0.00	0.00	0.00
Basal Brushy Canyon									
6,900.00	5.14	146.30	6,880.98	-355.69	237.19	-236.88	0.00	0.00	0.00
7,000.00	5.14	146.30	6,980.58	-363.14	242.16	-241.84	0.00	0.00	0.00
7,100.00	5.14	146.30	7,080.18	-370.60	247.13	-246.80	0.00	0.00	0.00
7,128.94	5.14	146.30	7,109.00	-372.76	248.57	-248.24	0.00	0.00	0.00
Bone Spring Lime									
7,200.00	5.14	146.30	7,179.78	-378.05	252.10	-251.77	0.00	0.00	0.00
7,300.00	5.14	146.30	7,279.37	-385.51	257.07	-256.73	0.00	0.00	0.00
7,400.00	5.14	146.30	7,378.97	-392.96	262.04	-261.70	0.00	0.00	0.00
7,500.00	5.14	146.30	7,478.57	-400.42	267.01	-266.66	0.00	0.00	0.00
7,600.00	5.14	146.30	7,578.17	-407.87	271.98	-271.63	0.00	0.00	0.00
7,700.00	5.14	146.30	7,677.76	-415.33	276.95	-276.59	0.00	0.00	0.00
7,800.00	5.14	146.30	7,777.36	-422.78	281.92	-281.55	0.00	0.00	0.00
7,900.00	5.14	146.30	7,876.96	-430.23	286.89	-286.52	0.00	0.00	0.00
7,994.42	5.14	146.30	7,971.00	-437.27	291.59	-291.21	0.00	0.00	0.00
1st Bone Spring Lime									
8,000.00	5.14	146.30	7,976.56	-437.69	291.86	-291.48	0.00	0.00	0.00
8,055.67	5.14	146.30	8,032.00	-441.84	294.63	-294.25	0.00	0.00	0.00
1st Bone Spring Sand									
8,100.00	5.14	146.30	8,076.16	-445.14	296.84	-296.45	0.00	0.00	0.00
8,200.00	5.14	146.30	8,175.75	-452.60	301.81	-301.41	0.00	0.00	0.00
8,300.00	5.14	146.30	8,275.35	-460.05	306.78	-306.38	0.00	0.00	0.00
8,400.00	5.14	146.30	8,374.95	-467.51	311.75	-311.34	0.00	0.00	0.00



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8,498.45	5.14	146.30	8,473.00	-474.84	316.64	-316.23	0.00	0.00	0.00
2nd Bone Spring Lime									
8,500.00	5.14	146.30	8,474.55	-474.96	316.72	-316.30	0.00	0.00	0.00
8,600.00	5.14	146.30	8,574.14	-482.41	321.69	-321.27	0.00	0.00	0.00
8,700.00	5.14	146.30	8,673.74	-489.87	326.66	-326.23	0.00	0.00	0.00
8,800.00	5.14	146.30	8,773.34	-497.32	331.63	-331.20	0.00	0.00	0.00
8,886.01	5.14	146.30	8,859.00	-503.73	335.91	-335.47	0.00	0.00	0.00
2nd Bone Spring Sand									
8,900.00	5.14	146.30	8,872.94	-504.78	336.60	-336.16	0.00	0.00	0.00
9,000.00	5.14	146.30	8,972.54	-512.23	341.57	-341.13	0.00	0.00	0.00
9,100.00	5.14	146.30	9,072.13	-519.69	346.54	-346.09	0.00	0.00	0.00
9,136.01	5.14	146.30	9,108.00	-522.37	348.33	-347.88	0.00	0.00	0.00
3rd Bone Spring Lime									
9,200.00	5.14	146.30	9,171.73	-527.14	351.51	-351.05	0.00	0.00	0.00
9,300.00	5.14	146.30	9,271.33	-534.59	356.49	-356.02	0.00	0.00	0.00
9,400.00	5.14	146.30	9,370.93	-542.05	361.46	-360.98	0.00	0.00	0.00
9,500.00	5.14	146.30	9,470.52	-549.50	366.43	-365.95	0.00	0.00	0.00
9,600.00	5.14	146.30	9,570.12	-556.96	371.40	-370.91	0.00	0.00	0.00
9,700.00	5.14	146.30	9,669.72	-564.41	376.37	-375.88	0.00	0.00	0.00
9,800.00	5.14	146.30	9,769.32	-571.87	381.34	-380.84	0.00	0.00	0.00
9,823.23	5.14	146.30	9,792.45	-573.60	382.49	-381.99	0.00	0.00	0.00
9,850.00	4.29	177.70	9,819.14	-575.60	383.20	-382.70	10.00	-3.18	117.27
9,900.00	6.46	228.42	9,868.94	-579.33	381.17	-380.66	10.00	4.34	101.43
9,950.00	10.72	246.55	9,918.38	-583.06	374.79	-374.28	10.00	8.52	36.26
9,961.85	11.82	248.87	9,930.00	-583.93	372.65	-372.14	10.00	9.24	19.62
3rd Bone Spring Sand									
10,000.00	15.43	254.11	9,967.07	-586.73	364.12	-363.61	10.00	9.47	13.73
10,050.00	20.28	258.16	10,014.65	-590.33	349.23	-348.72	10.00	9.69	8.10
10,100.00	25.18	260.69	10,060.75	-593.83	330.25	-329.73	10.00	9.81	5.06
10,150.00	30.12	262.44	10,105.03	-597.20	307.30	-306.78	10.00	9.87	3.50
10,200.00	35.07	263.74	10,147.14	-600.42	280.57	-280.04	10.00	9.90	2.59
10,250.00	40.03	264.75	10,186.77	-603.46	250.26	-249.73	10.00	9.92	2.02
10,300.00	45.00	265.57	10,223.62	-606.31	216.60	-216.07	10.00	9.94	1.64
10,350.00	49.97	266.26	10,257.40	-608.92	179.85	-179.32	10.00	9.95	1.38
10,396.79	54.63	266.82	10,286.00	-611.15	142.91	-142.37	10.00	9.96	1.20
Wolfcamp									
10,400.00	54.95	266.85	10,287.85	-611.30	140.29	-139.75	10.00	9.96	1.12
10,429.19	57.86	267.17	10,304.00	-612.57	116.01	-115.48	10.00	9.96	1.08
Wolfcamp X									
10,450.00	59.93	267.38	10,314.75	-613.41	98.21	-97.68	10.00	9.96	1.02
10,500.00	64.91	267.86	10,337.89	-615.25	53.95	-53.41	10.00	9.96	0.95
10,550.00	69.90	268.29	10,357.10	-616.80	7.82	-7.29	10.00	9.97	0.88
10,591.71	74.06	268.64	10,370.00	-617.86	-31.82	32.36	10.00	9.97	0.83
Wolfcamp Y									
10,600.00	74.88	268.71	10,372.22	-618.04	-39.80	40.34	10.00	9.97	0.81
10,650.00	79.87	269.10	10,383.15	-618.97	-88.57	89.11	10.00	9.97	0.79
10,700.00	84.85	269.48	10,389.79	-619.59	-138.10	138.65	10.00	9.97	0.76
10,740.47	88.89	269.78	10,392.00	-619.85	-178.51	179.05	10.00	9.97	0.75
LP:									
10,750.00	89.84	269.85	10,392.11	-619.88	-188.03	188.58	10.00	9.97	0.75
10,762.77	91.11	269.95	10,392.00	-619.90	-200.80	201.34	10.00	9.97	0.75
Tombstone 11 #108H: FTP/ LP									
10,800.00	91.11	269.95	10,391.28	-619.93	-238.03	238.57	0.00	0.00	0.00



Database: EDM 5000.1 Single User Db
Company: XTO Energy
Project: Eddy County, NM (NAD-27)
Site: Tombstone 11 State
Well: #108H
Wellbore: Wellbore #1
Design: PERMIT

Local Co-ordinate Reference: Well #108H
TVD Reference: GL @ 3142.00usft
MD Reference: GL @ 3142.00usft
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)
10,900.00	91.11	269.95	10,389.34	-620.02	-338.01	338.55	0.00	0.00	0.00
11,000.00	91.11	269.95	10,387.40	-620.11	-437.99	438.53	0.00	0.00	0.00
11,100.00	91.11	269.95	10,385.46	-620.20	-537.97	538.51	0.00	0.00	0.00
11,200.00	91.11	269.95	10,383.52	-620.28	-637.95	638.49	0.00	0.00	0.00
11,300.00	91.11	269.95	10,381.58	-620.37	-737.93	738.47	0.00	0.00	0.00
11,400.00	91.11	269.95	10,379.64	-620.46	-837.91	838.45	0.00	0.00	0.00
11,500.00	91.11	269.95	10,377.70	-620.55	-937.89	938.44	0.00	0.00	0.00
11,600.00	91.11	269.95	10,375.76	-620.63	-1,037.88	1,038.42	0.00	0.00	0.00
11,700.00	91.11	269.95	10,373.82	-620.72	-1,137.86	1,138.40	0.00	0.00	0.00
11,800.00	91.11	269.95	10,371.88	-620.81	-1,237.84	1,238.38	0.00	0.00	0.00
11,900.00	91.11	269.95	10,369.94	-620.90	-1,337.82	1,338.36	0.00	0.00	0.00
12,000.00	91.11	269.95	10,368.00	-620.98	-1,437.80	1,438.34	0.00	0.00	0.00
12,100.00	91.11	269.95	10,366.06	-621.07	-1,537.78	1,538.32	0.00	0.00	0.00
12,200.00	91.11	269.95	10,364.12	-621.16	-1,637.76	1,638.30	0.00	0.00	0.00
12,300.00	91.11	269.95	10,362.18	-621.25	-1,737.74	1,738.29	0.00	0.00	0.00
12,400.00	91.11	269.95	10,360.24	-621.33	-1,837.73	1,838.27	0.00	0.00	0.00
12,500.00	91.11	269.95	10,358.30	-621.42	-1,937.71	1,938.25	0.00	0.00	0.00
12,600.00	91.11	269.95	10,356.36	-621.51	-2,037.69	2,038.23	0.00	0.00	0.00
12,700.00	91.11	269.95	10,354.42	-621.60	-2,137.67	2,138.21	0.00	0.00	0.00
12,800.00	91.11	269.95	10,352.48	-621.68	-2,237.65	2,238.19	0.00	0.00	0.00
12,900.00	91.11	269.95	10,350.54	-621.77	-2,337.63	2,338.17	0.00	0.00	0.00
13,000.00	91.11	269.95	10,348.60	-621.86	-2,437.61	2,438.15	0.00	0.00	0.00
13,100.00	91.11	269.95	10,346.66	-621.95	-2,537.59	2,538.13	0.00	0.00	0.00
13,200.00	91.11	269.95	10,344.72	-622.04	-2,637.57	2,638.12	0.00	0.00	0.00
13,300.00	91.11	269.95	10,342.78	-622.12	-2,737.56	2,738.10	0.00	0.00	0.00
13,400.00	91.11	269.95	10,340.84	-622.21	-2,837.54	2,838.08	0.00	0.00	0.00
13,500.00	91.11	269.95	10,338.90	-622.30	-2,937.52	2,938.06	0.00	0.00	0.00
13,600.00	91.11	269.95	10,336.96	-622.39	-3,037.50	3,038.04	0.00	0.00	0.00
13,700.00	91.11	269.95	10,335.02	-622.47	-3,137.48	3,138.02	0.00	0.00	0.00
13,800.00	91.11	269.95	10,333.08	-622.56	-3,237.46	3,238.00	0.00	0.00	0.00
13,900.00	91.11	269.95	10,331.14	-622.65	-3,337.44	3,337.98	0.00	0.00	0.00
14,000.00	91.11	269.95	10,329.20	-622.74	-3,437.42	3,437.97	0.00	0.00	0.00
14,100.00	91.11	269.95	10,327.26	-622.82	-3,537.40	3,537.95	0.00	0.00	0.00
14,200.00	91.11	269.95	10,325.32	-622.91	-3,637.39	3,637.93	0.00	0.00	0.00
14,300.00	91.11	269.95	10,323.38	-623.00	-3,737.37	3,737.91	0.00	0.00	0.00
14,400.00	91.11	269.95	10,321.44	-623.09	-3,837.35	3,837.89	0.00	0.00	0.00
14,500.00	91.11	269.95	10,319.50	-623.17	-3,937.33	3,937.87	0.00	0.00	0.00
14,600.00	91.11	269.95	10,317.56	-623.26	-4,037.31	4,037.85	0.00	0.00	0.00
14,700.00	91.11	269.95	10,315.62	-623.35	-4,137.29	4,137.83	0.00	0.00	0.00
14,800.00	91.11	269.95	10,313.68	-623.44	-4,237.27	4,237.82	0.00	0.00	0.00
14,900.00	91.11	269.95	10,311.74	-623.52	-4,337.25	4,337.80	0.00	0.00	0.00
15,000.00	91.11	269.95	10,309.80	-623.61	-4,437.23	4,437.78	0.00	0.00	0.00
15,100.00	91.11	269.95	10,307.86	-623.70	-4,537.22	4,537.76	0.00	0.00	0.00
15,200.00	91.11	269.95	10,305.92	-623.79	-4,637.20	4,637.74	0.00	0.00	0.00
15,300.00	91.11	269.95	10,303.98	-623.87	-4,737.18	4,737.72	0.00	0.00	0.00
15,400.00	91.11	269.95	10,302.04	-623.96	-4,837.16	4,837.70	0.00	0.00	0.00
15,426.85	91.11	269.95	10,301.52	-623.99	-4,864.00	4,864.54	0.00	0.00	0.00
Tombstone 11 #108H: LTP									
15,500.00	91.11	269.95	10,300.10	-624.05	-4,937.14	4,937.68	0.00	0.00	0.00
15,556.87	91.11	269.95	10,299.00	-624.10	-4,994.00	4,994.54	0.00	0.00	0.00
Tombstone 11 #108H: PBHL (330' FSL & 200' FWL)									



Database: EDM 5000.1 Single User Db
 Company: XTO Energy
 Project: Eddy County, NM (NAD-27)
 Site: Tombstone 11 State
 Well: #108H
 Wellbore: Wellbore #1
 Design: PERMIT

Local Co-ordinate Reference: Well #108H
 TVD Reference: GL @ 3142.00usft
 MD Reference: GL @ 3142.00usft
 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 #108H - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	414,802.40	619,741.60	32.139817	-103.946477
Tombstone 11 #108H - plan hits target center - Point	0.00	0.00	10,299.00	-624.10	-4,994.00	414,178.30	614,747.60	32.138150	-103.962618
Tombstone 11 #108H - plan misses target center by 0.01usft at 15426.85usft MD (10301.52 TVD, -623.99 N, -4864.00 E) - Point	0.00	0.00	10,301.52	-624.00	-4,864.00	414,178.40	614,877.60	32.138149	-103.962198
Tombstone 11 #108H - plan hits target center - Point	0.00	0.00	10,392.00	-619.90	-200.80	414,182.50	619,540.80	32.138115	-103.947133

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
705.00	705.00	Rustler			
984.00	984.00	Salado (Top of Salt)			
3,092.71	3,089.00	Base of Salt			
3,295.52	3,291.00	Delaware (Bell Canyon)			
4,222.25	4,214.00	Cherry Canyon			
5,833.73	5,819.00	Brushy Canyon			
6,878.93	6,860.00	Basal Brushy Canyon			
7,128.94	7,109.00	Bone Spring Lime			
7,994.42	7,971.00	1st Bone Spring Lime			
8,055.67	8,032.00	1st Bone Spring Sand			
8,498.45	8,473.00	2nd Bone Spring Lime			
8,886.01	8,859.00	2nd Bone Spring Sand			
9,136.01	9,108.00	3rd Bone Spring Lime			
9,961.85	9,930.00	3rd Bone Spring Sand			
10,396.79	10,286.00	Wolfcamp			
10,429.19	10,304.00	Wolfcamp X			
10,591.71	10,370.00	Wolfcamp Y			
10,740.47	10,392.00	LP:			