



XTO Energy

Eddy County, NM (NAD-27)

Tombstone 11 State

#701H

Wellbore #1

Plan: PERMIT

Standard Planning Report

15 February, 2019



Project: Eddy County, NM (NAD-27)
Site: Tombstone 11 State
Well: #701H
Wellbore: Wellbore #1
Design: PERMIT

WELL DETAILS: #701H

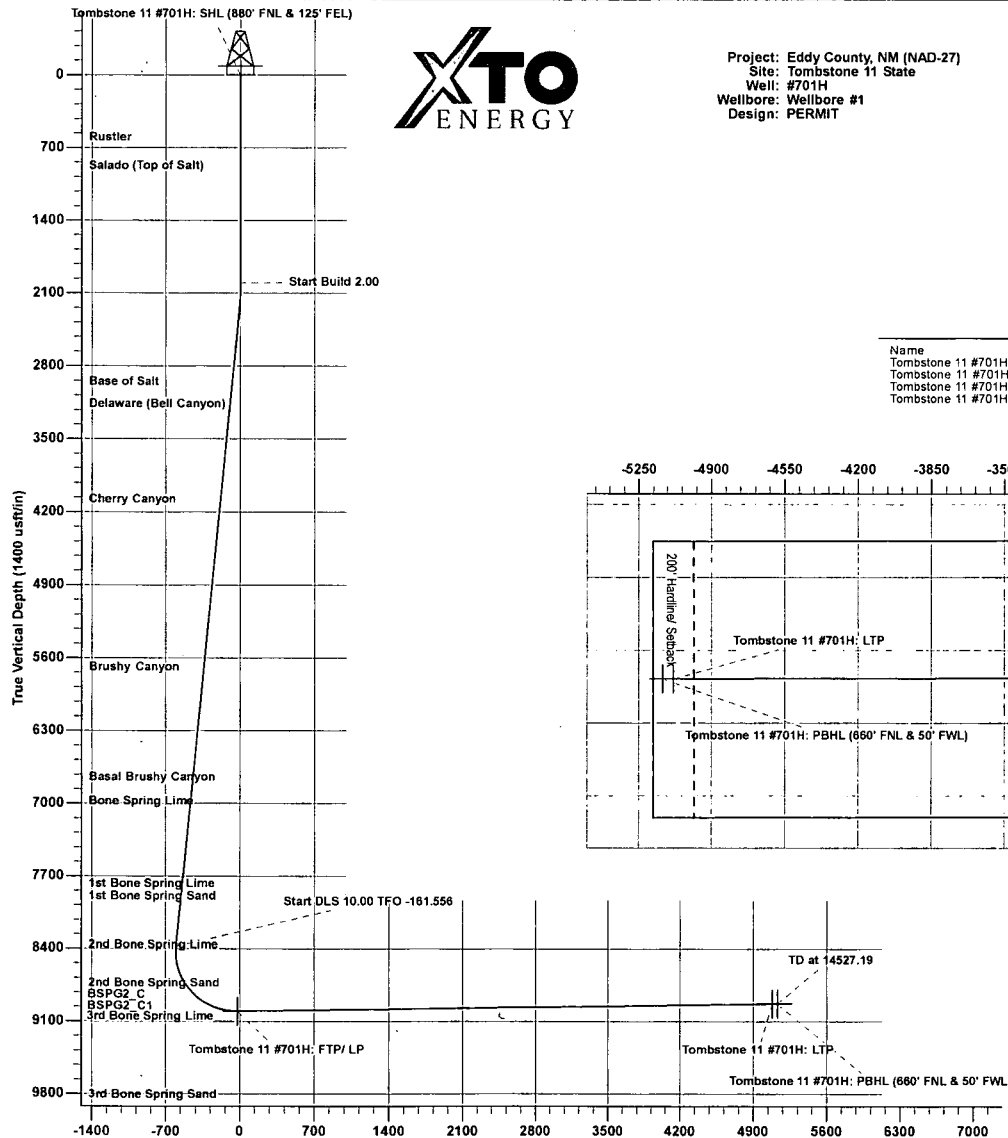
Rig Name: Precision 525
RKB = 15' @ 3104.00usft (Precision 525)
Ground Level: 3089.00
Northing: 418288.20
Easting: 619716.80
Latitude: 32.149400
Longitude: -103.946516

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Deg	TFace	VSec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00
2	2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.000	0.00
3	2290.77	5.82	71.57	2290.28	4.66	13.99	2.00	71.573	-14.00
4	8408.31	5.82	71.57	6378.32	200.60	802.07	0.00	0.000	-802.42
5	9371.83	90.83	269.90	9004.00	220.00	23.40	10.00	-161.556	-23.78
6	14477.18	90.83	269.90	8929.73	211.19	-5081.40	0.00	0.000	5081.02
7	14527.19	90.83	269.90	8929.00	211.10	-5131.40	0.00	0.000	5131.02

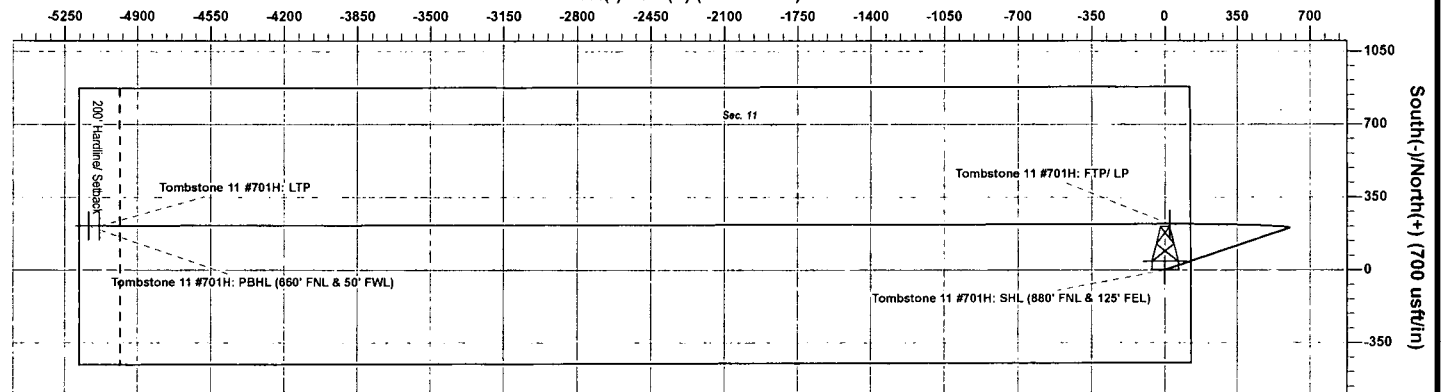
DESIGN TARGET DETAILS

Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude	Shape
Tombstone 11 #701H: SHL (880' FNL & 125' FEL)	0.00	0.00	0.00	418288.20	619716.80	32.149400	-103.946516	Point
Tombstone 11 #701H: LTP	8929.00	211.20	-5081.40	418499.40	614835.40	32.150030	-103.962932	Point
Tombstone 11 #701H: PBHL (660' FNL & 50' FWL)	8929.00	211.10	-5131.40	418499.30	614585.40	32.150030	-103.963094	Point
Tombstone 11 #701H: FTP/LP	9004.00	220.00	23.40	418508.20	619740.20	32.150004	-103.946438	Point



Vertical Section at 269.90° (1400 usft/in)

West(-)/East(+) (700 usft/in)



FORMATION TOP DETAILS

TVDPath	Formation
670.00	Rustler
943.00	Salado (Top of Salt)
3020.00	Base of Salt
3233.00	Delaware (Bell Canyon)
4150.00	Cherry Canyon
5756.00	Brushy Canyon
6817.00	Basal Brushy Canyon
7049.00	Bone Spring Lime
7916.00	1st Bone Spring Lime
7963.00	1st Bone Spring Sand
8431.00	2nd Bone Spring Lime
8802.00	2nd Bone Spring Sand
8878.00	BSPG2_C
9004.00	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 (#701H/Wellbore #1)

Created By: Matthew May Date: 6:18, February 15 2019

The customer should only rely on this document after independently verifying all paths, targets, coordinates, lease and hand 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.



Planning Report

Database: EDM 5000.1 Single User Db
 Company: XTO Energy
 Project: Eddy County, NM (NAD-27)
 Site: Tombstone 11 State
 Well: #701H
 Wellbore: Wellbore #1
 Design: PERMIT

Local Co-ordinate Reference: Well #701H
 TVD Reference: RKB = 15' @ 3104.00usft (Precision 525)
 MD Reference: RKB = 15' @ 3104.00usft (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
From: Map		Easting:	619,717.20 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.149235
		Longitude:	-103.946516
		Grid Convergence:	0.206 °

Well	#701H		
Well Position	+N/-S	60.00 usft	Northing: 418,288.20 usft
	+E/-W	-0.40 usft	Easting: 619,716.80 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32.149400
		Longitude:	-103.946517
		Ground Level:	3,089.00 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	2/15/2019	(°)
			6.942
			Dip Angle
			(°)
			59.913
			Field Strength
			(nT)
			47,686

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
			(°)
			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	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.000	
2,290.77	5.82	71.57	2,290.28	4.66	13.99	2.00	2.00	0.00	71.573	
8,408.31	5.82	71.57	8,376.32	200.60	602.07	0.00	0.00	0.00	0.000	
9,371.83	90.83	269.90	9,004.00	220.00	23.40	10.00	8.82	-16.78	-161.556	Tombstone 11 #70
14,477.18	90.83	269.90	8,929.73	211.19	-5,081.40	0.00	0.00	0.00	0.000	Tombstone 11 #70
14,527.19	90.83	269.90	8,929.00	211.10	-5,131.40	0.00	0.00	0.00	0.000	Tombstone 11 #70



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Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:

Well #701H
 RKB = 15' @ 3104.00usft (Precision 525)
 RKB = 15' @ 3104.00usft (Precision 525)
 Grid
 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 #701H: SHL (880' 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
670.00	0.00	0.00	670.00	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
943.00	0.00	0.00	943.00	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	71.57	2,099.98	0.55	1.66	-1.66	2.00	2.00	0.00
2,200.00	4.00	71.57	2,199.84	2.21	6.62	-6.62	2.00	2.00	0.00
2,290.77	5.82	71.57	2,290.28	4.66	13.99	-14.00	2.00	2.00	0.00
2,300.00	5.82	71.57	2,299.45	4.96	14.87	-14.88	0.00	0.00	0.00
2,400.00	5.82	71.57	2,398.94	8.16	24.49	-24.50	0.00	0.00	0.00
2,500.00	5.82	71.57	2,498.42	11.36	34.10	-34.12	0.00	0.00	0.00
2,600.00	5.82	71.57	2,597.91	14.56	43.71	-43.74	0.00	0.00	0.00
2,700.00	5.82	71.57	2,697.39	17.77	53.33	-53.36	0.00	0.00	0.00
2,800.00	5.82	71.57	2,796.88	20.97	62.94	-62.98	0.00	0.00	0.00
2,900.00	5.82	71.57	2,896.37	24.17	72.55	-72.60	0.00	0.00	0.00
3,000.00	5.82	71.57	2,995.85	27.38	82.17	-82.21	0.00	0.00	0.00
3,024.27	5.82	71.57	3,020.00	28.15	84.50	-84.55	0.00	0.00	0.00
Base of Salt									
3,100.00	5.82	71.57	3,095.34	30.58	91.78	-91.83	0.00	0.00	0.00
3,200.00	5.82	71.57	3,194.82	33.78	101.39	-101.45	0.00	0.00	0.00
3,238.38	5.82	71.57	3,233.00	35.01	105.08	-105.14	0.00	0.00	0.00
Delaware (Bell Canyon)									
3,300.00	5.82	71.57	3,294.31	36.98	111.00	-111.07	0.00	0.00	0.00
3,400.00	5.82	71.57	3,393.79	40.19	120.62	-120.69	0.00	0.00	0.00
3,500.00	5.82	71.57	3,493.28	43.39	130.23	-130.31	0.00	0.00	0.00
3,600.00	5.82	71.57	3,592.76	46.59	139.84	-139.93	0.00	0.00	0.00
3,700.00	5.82	71.57	3,692.25	49.80	149.46	-149.54	0.00	0.00	0.00
3,800.00	5.82	71.57	3,791.73	53.00	159.07	-159.16	0.00	0.00	0.00
3,900.00	5.82	71.57	3,891.22	56.20	168.68	-168.78	0.00	0.00	0.00
4,000.00	5.82	71.57	3,990.70	59.41	178.30	-178.40	0.00	0.00	0.00
4,100.00	5.82	71.57	4,090.19	62.61	187.91	-188.02	0.00	0.00	0.00
4,160.12	5.82	71.57	4,150.00	64.53	193.69	-193.80	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	5.82	71.57	4,189.67	65.81	197.52	-197.64	0.00	0.00	0.00
4,300.00	5.82	71.57	4,289.16	69.01	207.13	-207.26	0.00	0.00	0.00
4,400.00	5.82	71.57	4,388.65	72.22	216.75	-216.87	0.00	0.00	0.00
4,500.00	5.82	71.57	4,488.13	75.42	226.36	-226.49	0.00	0.00	0.00
4,600.00	5.82	71.57	4,587.62	78.62	235.97	-236.11	0.00	0.00	0.00
4,700.00	5.82	71.57	4,687.10	81.83	245.59	-245.73	0.00	0.00	0.00
4,800.00	5.82	71.57	4,786.59	85.03	255.20	-255.35	0.00	0.00	0.00
4,900.00	5.82	71.57	4,886.07	88.23	264.81	-264.97	0.00	0.00	0.00
5,000.00	5.82	71.57	4,985.56	91.43	274.43	-274.59	0.00	0.00	0.00
5,100.00	5.82	71.57	5,085.04	94.64	284.04	-284.20	0.00	0.00	0.00
5,200.00	5.82	71.57	5,184.53	97.84	293.65	-293.82	0.00	0.00	0.00
5,300.00	5.82	71.57	5,284.01	101.04	303.26	-303.44	0.00	0.00	0.00
5,400.00	5.82	71.57	5,383.50	104.25	312.88	-313.06	0.00	0.00	0.00
5,500.00	5.82	71.57	5,482.98	107.45	322.49	-322.68	0.00	0.00	0.00
5,600.00	5.82	71.57	5,582.47	110.65	332.10	-332.30	0.00	0.00	0.00
5,700.00	5.82	71.57	5,681.96	113.85	341.72	-341.92	0.00	0.00	0.00
5,774.43	5.82	71.57	5,756.00	116.24	348.87	-349.07	0.00	0.00	0.00
Brushy Canyon									
5,800.00	5.82	71.57	5,781.44	117.06	351.33	-351.53	0.00	0.00	0.00
5,900.00	5.82	71.57	5,880.93	120.26	360.94	-361.15	0.00	0.00	0.00
6,000.00	5.82	71.57	5,980.41	123.46	370.56	-370.77	0.00	0.00	0.00
6,100.00	5.82	71.57	6,079.90	126.67	380.17	-380.39	0.00	0.00	0.00
6,200.00	5.82	71.57	6,179.38	129.87	389.78	-390.01	0.00	0.00	0.00
6,300.00	5.82	71.57	6,278.87	133.07	399.39	-399.63	0.00	0.00	0.00
6,400.00	5.82	71.57	6,378.35	136.27	409.01	-409.25	0.00	0.00	0.00
6,500.00	5.82	71.57	6,477.84	139.48	418.62	-418.86	0.00	0.00	0.00
6,600.00	5.82	71.57	6,577.32	142.68	428.23	-428.48	0.00	0.00	0.00
6,700.00	5.82	71.57	6,676.81	145.88	437.85	-438.10	0.00	0.00	0.00
6,800.00	5.82	71.57	6,776.29	149.09	447.46	-447.72	0.00	0.00	0.00
6,840.92	5.82	71.57	6,817.00	150.40	451.39	-451.66	0.00	0.00	0.00
Basal Brushy Canyon									
6,900.00	5.82	71.57	6,875.78	152.29	457.07	-457.34	0.00	0.00	0.00
7,000.00	5.82	71.57	6,975.26	155.49	466.69	-466.96	0.00	0.00	0.00
7,074.12	5.82	71.57	7,049.00	157.87	473.81	-474.09	0.00	0.00	0.00
Bone Spring Lime									
7,100.00	5.82	71.57	7,074.75	158.69	476.30	-476.58	0.00	0.00	0.00
7,200.00	5.82	71.57	7,174.24	161.90	485.91	-486.19	0.00	0.00	0.00
7,300.00	5.82	71.57	7,273.72	165.10	495.52	-495.81	0.00	0.00	0.00
7,400.00	5.82	71.57	7,373.21	168.30	505.14	-505.43	0.00	0.00	0.00
7,500.00	5.82	71.57	7,472.69	171.51	514.75	-515.05	0.00	0.00	0.00
7,600.00	5.82	71.57	7,572.18	174.71	524.36	-524.67	0.00	0.00	0.00
7,700.00	5.82	71.57	7,671.66	177.91	533.98	-534.29	0.00	0.00	0.00
7,800.00	5.82	71.57	7,771.15	181.11	543.59	-543.91	0.00	0.00	0.00
7,900.00	5.82	71.57	7,870.63	184.32	553.20	-553.52	0.00	0.00	0.00
7,945.60	5.82	71.57	7,916.00	185.78	557.59	-557.91	0.00	0.00	0.00
1st Bone Spring Lime									
7,992.85	5.82	71.57	7,963.00	187.29	562.13	-562.45	0.00	0.00	0.00
1st Bone Spring Sand									
8,000.00	5.82	71.57	7,970.12	187.52	562.82	-563.14	0.00	0.00	0.00
8,100.00	5.82	71.57	8,069.60	190.72	572.43	-572.76	0.00	0.00	0.00
8,200.00	5.82	71.57	8,169.09	193.93	582.04	-582.38	0.00	0.00	0.00
8,300.00	5.82	71.57	8,268.57	197.13	591.66	-592.00	0.00	0.00	0.00



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8,408.31	5.82	71.57	8,376.32	200.60	602.07	-602.42	0.00	0.00	0.00
8,450.00	2.28	36.24	8,417.91	201.93	604.56	-604.91	10.00	-8.48	-84.75
8,463.10	1.84	1.17	8,431.00	202.35	604.72	-605.07	10.00	-3.37	-267.77
2nd Bone Spring Lime									
8,500.00	4.09	296.61	8,467.86	203.54	603.56	-603.91	10.00	6.09	-174.95
8,550.00	8.84	281.83	8,517.53	205.12	598.20	-598.56	10.00	9.51	-29.56
8,600.00	13.77	277.45	8,566.55	206.68	588.53	-588.89	10.00	9.86	-8.76
8,650.00	18.74	275.35	8,614.53	208.20	574.62	-574.99	10.00	9.93	-4.19
8,700.00	23.72	274.11	8,661.13	209.67	556.59	-556.95	10.00	9.96	-2.48
8,750.00	28.70	273.29	8,705.97	211.09	534.56	-534.92	10.00	9.97	-1.66
8,800.00	33.69	272.68	8,748.73	212.42	508.70	-509.07	10.00	9.98	-1.20
8,850.00	38.69	272.22	8,789.06	213.68	479.21	-479.58	10.00	9.99	-0.92
8,866.77	40.36	272.09	8,802.00	214.08	468.55	-468.92	10.00	9.99	-0.79
2nd Bone Spring Sand									
8,900.00	43.68	271.85	8,826.68	214.85	446.32	-446.69	10.00	9.99	-0.72
8,950.00	48.68	271.54	8,861.29	215.91	410.27	-410.65	10.00	9.99	-0.62
9,000.00	53.67	271.28	8,892.63	216.87	371.34	-371.72	10.00	9.99	-0.53
9,050.00	58.67	271.05	8,920.46	217.71	329.83	-330.21	10.00	9.99	-0.47
9,100.00	63.67	270.84	8,944.56	218.42	286.05	-286.43	10.00	9.99	-0.42
9,150.00	68.66	270.65	8,964.76	219.01	240.33	-240.71	10.00	9.99	-0.38
9,189.98	72.66	270.50	8,978.00	219.39	202.62	-203.00	10.00	9.99	-0.36
BSPG2_C									
9,200.00	73.66	270.47	8,980.90	219.47	193.03	-193.41	10.00	9.99	-0.35
9,250.00	78.66	270.30	8,992.86	219.80	144.49	-144.88	10.00	9.99	-0.34
9,300.00	83.65	270.13	9,000.55	219.98	95.10	-95.49	10.00	9.99	-0.33
9,350.00	88.65	269.97	9,003.90	220.02	45.23	-45.62	10.00	9.99	-0.32
9,371.83	90.83	269.90	9,004.00	220.00	23.40	-23.78	10.00	9.99	-0.32
LP - Tombstone 11 #701H: FTP/ LP									
9,400.00	90.83	269.90	9,003.59	219.95	-4.76	4.38	0.00	0.00	0.00
9,500.00	90.83	269.90	9,002.14	219.78	-104.75	104.37	0.00	0.00	0.00
9,600.00	90.83	269.90	9,000.68	219.61	-204.74	204.36	0.00	0.00	0.00
9,700.00	90.83	269.90	8,999.23	219.43	-304.73	304.35	0.00	0.00	0.00
9,800.00	90.83	269.90	8,997.77	219.26	-404.72	404.34	0.00	0.00	0.00
9,900.00	90.83	269.90	8,996.32	219.09	-504.71	504.33	0.00	0.00	0.00
10,000.00	90.83	269.90	8,994.86	218.92	-604.70	604.31	0.00	0.00	0.00
10,100.00	90.83	269.90	8,993.41	218.74	-704.69	704.30	0.00	0.00	0.00
10,200.00	90.83	269.90	8,991.95	218.57	-804.68	804.29	0.00	0.00	0.00
10,300.00	90.83	269.90	8,990.50	218.40	-904.67	904.28	0.00	0.00	0.00
10,400.00	90.83	269.90	8,989.04	218.23	-1,004.65	1,004.27	0.00	0.00	0.00
10,500.00	90.83	269.90	8,987.59	218.05	-1,104.64	1,104.26	0.00	0.00	0.00
10,600.00	90.83	269.90	8,986.13	217.88	-1,204.63	1,204.25	0.00	0.00	0.00
10,700.00	90.83	269.90	8,984.68	217.71	-1,304.62	1,304.24	0.00	0.00	0.00
10,800.00	90.83	269.90	8,983.22	217.53	-1,404.61	1,404.23	0.00	0.00	0.00
10,900.00	90.83	269.90	8,981.77	217.36	-1,504.60	1,504.22	0.00	0.00	0.00
11,000.00	90.83	269.90	8,980.31	217.19	-1,604.59	1,604.21	0.00	0.00	0.00
11,100.00	90.83	269.90	8,978.86	217.02	-1,704.58	1,704.20	0.00	0.00	0.00
11,200.00	90.83	269.90	8,977.40	216.84	-1,804.57	1,804.19	0.00	0.00	0.00
11,300.00	90.83	269.90	8,975.95	216.67	-1,904.56	1,904.18	0.00	0.00	0.00
11,400.00	90.83	269.90	8,974.49	216.50	-2,004.55	2,004.17	0.00	0.00	0.00
11,500.00	90.83	269.90	8,973.04	216.33	-2,104.54	2,104.16	0.00	0.00	0.00
11,600.00	90.83	269.90	8,971.58	216.15	-2,204.53	2,204.15	0.00	0.00	0.00
11,700.00	90.83	269.90	8,970.13	215.98	-2,304.52	2,304.13	0.00	0.00	0.00
11,800.00	90.83	269.90	8,968.68	215.81	-2,404.50	2,404.12	0.00	0.00	0.00
11,900.00	90.83	269.90	8,967.22	215.64	-2,504.49	2,504.11	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: #701H
 Wellbore: Wellbore #1
 Design: PERMIT

Local Co-ordinate Reference: Well #701H
 TVD Reference: RKB = 15' @ 3104.00usft (Precision 525)
 MD Reference: RKB = 15' @ 3104.00usft (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)
12,000.00	90.83	269.90	8,965.77	215.46	-2,604.48	2,604.10	0.00	0.00	0.00
12,100.00	90.83	269.90	8,964.31	215.29	-2,704.47	2,704.09	0.00	0.00	0.00
12,200.00	90.83	269.90	8,962.86	215.12	-2,804.46	2,804.08	0.00	0.00	0.00
12,300.00	90.83	269.90	8,961.40	214.94	-2,904.45	2,904.07	0.00	0.00	0.00
12,400.00	90.83	269.90	8,959.95	214.77	-3,004.44	3,004.06	0.00	0.00	0.00
12,500.00	90.83	269.90	8,958.49	214.60	-3,104.43	3,104.05	0.00	0.00	0.00
12,600.00	90.83	269.90	8,957.04	214.43	-3,204.42	3,204.04	0.00	0.00	0.00
12,700.00	90.83	269.90	8,955.58	214.25	-3,304.41	3,304.03	0.00	0.00	0.00
12,800.00	90.83	269.90	8,954.13	214.08	-3,404.40	3,404.02	0.00	0.00	0.00
12,900.00	90.83	269.90	8,952.67	213.91	-3,504.39	3,504.01	0.00	0.00	0.00
13,000.00	90.83	269.90	8,951.22	213.74	-3,604.38	3,604.00	0.00	0.00	0.00
13,100.00	90.83	269.90	8,949.76	213.56	-3,704.37	3,703.99	0.00	0.00	0.00
13,200.00	90.83	269.90	8,948.31	213.39	-3,804.35	3,803.98	0.00	0.00	0.00
13,300.00	90.83	269.90	8,946.85	213.22	-3,904.34	3,903.97	0.00	0.00	0.00
13,400.00	90.83	269.90	8,945.40	213.05	-4,004.33	4,003.96	0.00	0.00	0.00
13,500.00	90.83	269.90	8,943.94	212.87	-4,104.32	4,103.94	0.00	0.00	0.00
13,600.00	90.83	269.90	8,942.49	212.70	-4,204.31	4,203.93	0.00	0.00	0.00
13,700.00	90.83	269.90	8,941.03	212.53	-4,304.30	4,303.92	0.00	0.00	0.00
13,800.00	90.83	269.90	8,939.58	212.36	-4,404.29	4,403.91	0.00	0.00	0.00
13,900.00	90.83	269.90	8,938.12	212.18	-4,504.28	4,503.90	0.00	0.00	0.00
14,000.00	90.83	269.90	8,936.67	212.01	-4,604.27	4,603.89	0.00	0.00	0.00
14,100.00	90.83	269.90	8,935.21	211.84	-4,704.26	4,703.88	0.00	0.00	0.00
14,200.00	90.83	269.90	8,933.76	211.66	-4,804.25	4,803.87	0.00	0.00	0.00
14,300.00	90.83	269.90	8,932.31	211.49	-4,904.24	4,903.86	0.00	0.00	0.00
14,400.00	90.83	269.90	8,930.85	211.32	-5,004.23	5,003.85	0.00	0.00	0.00
14,477.18	90.83	269.90	8,929.73	211.19	-5,081.40	5,081.02	0.00	0.00	0.00
14,477.19	90.83	269.90	8,929.73	211.19	-5,081.41	5,081.03	0.00	0.00	0.00
Tombstone 11 #701H: LTP									
14,500.00	90.83	269.90	8,929.40	211.15	-5,104.21	5,103.84	0.00	0.00	0.00
14,527.19	90.83	269.90	8,929.00	211.10	-5,131.40	5,131.02	0.00	0.00	0.00
Tombstone 11 #701H: PBHL (660' FNL & 50' FWL)									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Tombstone 11 #701H	0.00	0.00	0.00	0.00	0.00	418,288.20	619,716.80	32.149400	-103.946517
- plan hits target center									
- Point									
Tombstone 11 #701H	0.00	0.00	8,929.00	211.20	-5,081.40	418,499.40	614,635.40	32.150030	-103.962932
- plan misses target center by 0.73usft at 14477.19usft MD (8929.73 TVD, 211.19 N, -5081.41 E)									
- Point									
Tombstone 11 #701H	0.00	0.00	8,929.00	211.10	-5,131.40	418,499.30	614,585.40	32.150030	-103.963094
- plan hits target center									
- Point									
Tombstone 11 #701H	0.00	0.00	9,004.00	220.00	23.40	418,508.20	619,740.20	32.150004	-103.946438
- plan hits target center									
- Point									



Database: EDM 5000.1 Single User Db
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Project: Eddy County, NM (NAD-27)
Site: Tombstone 11 State
Well: #701H
Wellbore: Wellbore #1
Design: PERMIT

Local Co-ordinate Reference: Well #701H
TVD Reference: RKB = 15' @ 3104.00usft (Precision 525)
MD Reference: RKB = 15' @ 3104.00usft (Precision 525)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
670.00	670.00	Rustler			
943.00	943.00	Salado (Top of Salt)			
3,024.27	3,020.00	Base of Salt			
3,238.38	3,233.00	Delaware (Bell Canyon)			
4,160.12	4,150.00	Cherry Canyon			
5,774.43	5,756.00	Brushy Canyon			
6,840.92	6,817.00	Basal Brushy Canyon			
7,074.12	7,049.00	Bone Spring Lime			
7,945.60	7,916.00	1st Bone Spring Lime			
7,992.85	7,963.00	1st Bone Spring Sand			
8,463.10	8,431.00	2nd Bone Spring Lime			
8,866.77	8,802.00	2nd Bone Spring Sand			
9,189.98	8,978.00	BSPG2_C			
9,371.83	9,004.00	LP			