



30-015-44891

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DEC 17 2019

DISTRICT 7 - ARTESIA O.C.D.

I **Larry Wright**, certify that I am employed by **Wellbenders Directional Services**. That I did on the day(s) of **11/01/18** thru **01/21/19** conduct or supervise the taking of a **MWD Survey** from a depth of **181'** to a depth of **18319'**; that the data is true, correct, complete and within the limitations of the tool as set forth by **Wellbenders Directional Services**; that I am authorized and qualified to make this report; that this survey was conducted at the request of **XTO Energy Inc** for the **Poker Lake Unit 18 Brushy Draw 103H** API No. **30-015-44891** in **Eddy County, New Mexico**; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by **Wellbenders Directional Services**.

Larry Wright

Larry
Wright

Digitally signed
by Larry Wright
Date:
2019.12.12
12:03:54 -06'00'

13901 Hwy 105W, Conroe, Texas
77304
PH 936-539-9602



Wellbenders End Of Well Report



Company:	XTO Energy	Local Co-ordinate Reference:	Well #103H
Project:	Eddy County, NM (Nad-27 / East Zone)	TVD Reference:	RKB = 23' @ 3191.00usft (Frontier 17)
Site:	Poker Lake Unit 18 BD	MD Reference:	RKB = 23' @ 3191.00usft (Frontier 17)
Well:	#103H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	WBDS_SQL_2

Project	Eddy County, NM (Nad-27 / East Zone)		
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	Poker Lake Unit 18 BD		
Site Position:		Northing:	411,609.60 usft
From:	Map	Easting:	626,461.90 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in
		Latitude:	32.130972
		Longitude:	-103.924804
		Grid Convergence:	0.217 °

Well	#103H					
Well Position	+N/-S	0.00 usft	Northing:	411,609.70 usft	Latitude:	32.130972
	+E/-W	0.00 usft	Easting:	626,491.80 usft	Longitude:	-103.924708
Position Uncertainty	0.00 usft		Wellhead Elevation:	usft	Ground Level:	3,168.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/29/2018	6.963	59.903	47,707.02669420

Design	OH			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	179.65

Survey Program		Date 1/23/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
181.00	18,319.00	Survey #1 (OH)	WBDS_IGRF	OWSG MWD + IGRF or WMM



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Well:	#103H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	WBDS_SQL_2

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
181.00	0.30	239.60	181.00	-0.24	-0.41	0.24	181.00	239.60	0.17	
274.00	0.30	221.10	274.00	-0.55	-0.78	0.54	93.00	230.35	0.10	
438.00	0.20	124.50	438.00	-1.03	-0.83	1.03	164.00	185.45	0.23	
508.00	0.60	112.10	508.00	-1.24	-0.38	1.24	70.00	115.19	0.58	
634.00	0.90	88.90	633.98	-1.47	1.22	1.48	126.00	98.15	0.33	
715.00	1.60	85.40	714.96	-1.37	2.98	1.38	81.00	86.66	0.87	
810.00	2.00	86.20	809.92	-1.15	5.96	1.19	95.00	85.84	0.42	
904.00	2.40	87.30	903.85	-0.95	9.56	1.01	94.00	86.80	0.43	
999.00	2.40	91.50	998.76	-0.91	13.53	0.99	95.00	89.40	0.19	
1,098.00	1.40	98.50	1,097.71	-1.14	16.80	1.24	99.00	94.08	1.04	
1,189.00	0.90	162.20	1,188.69	-1.98	18.12	2.09	91.00	122.66	1.41	
1,284.00	1.10	256.30	1,283.68	-2.91	17.46	3.02	95.00	215.38	1.55	
1,380.00	1.40	267.00	1,379.66	-3.19	15.40	3.28	96.00	262.29	0.39	
1,474.00	1.30	269.20	1,473.64	-3.27	13.18	3.35	94.00	268.06	0.12	
1,569.00	1.50	260.00	1,568.61	-3.50	10.88	3.56	95.00	264.27	0.32	
1,663.00	1.40	262.90	1,662.58	-3.85	8.53	3.90	94.00	261.40	0.13	
1,758.00	1.50	235.90	1,757.55	-4.69	6.35	4.73	95.00	248.93	0.72	
1,853.00	1.70	232.90	1,852.51	-6.24	4.19	6.26	95.00	234.31	0.23	
1,949.00	1.80	217.00	1,948.47	-8.30	2.15	8.32	96.00	224.72	0.51	
2,045.00	1.50	231.40	2,044.43	-10.29	0.26	10.29	96.00	223.54	0.53	
2,141.00	1.50	231.90	2,140.39	-11.85	-1.71	11.84	96.00	231.65	0.01	
2,236.00	1.40	231.80	2,235.36	-13.33	-3.60	13.31	95.00	231.85	0.11	
2,331.00	1.30	223.90	2,330.34	-14.83	-5.26	14.80	95.00	228.00	0.22	
2,425.00	1.40	226.00	2,424.31	-16.39	-6.82	16.35	94.00	224.99	0.12	
2,519.00	1.10	232.40	2,518.29	-17.74	-8.37	17.69	94.00	228.82	0.35	
2,615.00	0.40	168.50	2,614.28	-18.63	-9.03	18.58	96.00	216.68	1.03	



Wellbenders End Of Well Report



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Site:	Poker Lake Unit 18 BD	MD Reference:	RKB = 23' @ 3191.00usft (Frontier 17)
Well:	#103H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	WBDS_SQL_2

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
2,710.00	0.70	143.30	2,709.28	-19.42	-8.62	19.37	95.00	152.41	0.40
2,802.00	1.60	124.70	2,801.26	-20.61	-7.22	20.56	92.00	130.33	1.05
2,896.00	2.50	103.40	2,895.20	-21.83	-4.15	21.80	94.00	111.69	1.24
2,991.00	2.10	76.70	2,990.12	-21.91	-0.44	21.90	95.00	91.23	1.19
3,087.00	2.60	79.50	3,086.04	-21.11	3.41	21.13	96.00	78.25	0.53
3,180.00	3.50	94.00	3,178.91	-20.92	8.32	20.97	93.00	87.82	1.27
3,276.00	2.80	96.00	3,274.77	-21.37	13.57	21.45	96.00	94.89	0.74
3,371.00	1.30	119.80	3,369.70	-22.15	16.82	22.25	95.00	103.49	1.78
3,402.00	1.00	128.40	3,400.70	-22.49	17.33	22.60	31.00	123.54	1.11
3,426.00	0.70	133.60	3,424.69	-22.72	17.60	22.83	24.00	130.54	1.29
3,529.00	0.90	114.30	3,527.69	-23.49	18.80	23.60	103.00	122.73	0.32
3,625.00	1.00	138.20	3,623.67	-24.42	20.04	24.54	96.00	126.89	0.42
3,722.00	1.20	136.20	3,720.65	-25.79	21.31	25.92	97.00	137.11	0.21
3,816.00	1.30	128.10	3,814.63	-27.16	22.83	27.29	94.00	131.99	0.22
3,911.00	1.00	127.20	3,909.61	-28.32	24.34	28.47	95.00	127.71	0.32
4,006.00	1.50	118.10	4,004.59	-29.41	26.10	29.57	95.00	121.74	0.56
4,101.00	1.30	121.50	4,099.56	-30.56	28.11	30.73	95.00	119.68	0.23
4,186.00	1.50	127.40	4,184.54	-31.74	29.82	31.92	85.00	124.66	0.29
4,280.00	1.10	124.60	4,278.51	-33.00	31.54	33.19	94.00	126.22	0.43
4,375.00	1.10	119.00	4,373.49	-33.96	33.09	34.16	95.00	121.80	0.11
4,469.00	1.00	136.00	4,467.48	-34.98	34.44	35.19	94.00	127.09	0.35
4,563.00	1.30	125.50	4,561.46	-36.19	35.88	36.41	94.00	130.06	0.39
4,658.00	2.70	114.00	4,656.40	-37.73	38.80	37.97	95.00	117.73	1.53
4,753.00	2.90	118.00	4,751.29	-39.77	42.97	40.03	95.00	116.07	0.29
4,847.00	2.90	112.00	4,845.17	-41.77	47.27	42.06	94.00	115.00	0.32
4,941.00	2.40	118.20	4,939.07	-43.60	51.21	43.91	94.00	114.81	0.61
5,036.00	2.40	121.00	5,033.98	-45.56	54.67	45.89	95.00	119.60	0.12



Wellbenders End Of Well Report



Company: XTO Energy
Project: Eddy County, NM (Nad-27 / East Zone)
Site: Poker Lake Unit 18 BD
Well: #103H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #103H
TVD Reference: RKB = 23' @ 3191.00usft (Frontier 17)
MD Reference: RKB = 23' @ 3191.00usft (Frontier 17)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WBDS_SQL_2

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
5,131.00	2.10	116.70	5,128.91	-47.37	57.93	47.72	95.00	118.99	0.36
5,225.00	2.00	125.50	5,222.85	-49.09	60.81	49.46	94.00	120.99	0.35
5,320.00	1.80	128.50	5,317.80	-50.98	63.32	51.37	95.00	126.92	0.24
5,414.00	1.70	133.90	5,411.75	-52.87	65.48	53.27	94.00	131.12	0.21
5,510.00	1.80	140.90	5,507.71	-55.03	67.46	55.44	96.00	137.50	0.25
5,604.00	3.40	138.20	5,601.61	-58.25	70.25	58.68	94.00	139.13	1.71
5,699.00	3.70	137.30	5,696.43	-62.60	74.20	63.06	95.00	137.73	0.32
5,795.00	3.30	137.20	5,792.25	-66.91	78.18	67.38	96.00	137.25	0.42
5,891.00	3.00	134.80	5,888.10	-70.71	81.84	71.20	96.00	136.06	0.34
5,986.00	3.10	137.80	5,982.97	-74.36	85.33	74.88	95.00	136.32	0.20
6,080.00	2.60	141.90	6,076.85	-77.92	88.36	78.46	94.00	139.67	0.57
6,175.00	2.50	139.70	6,171.76	-81.20	91.02	81.75	95.00	140.82	0.15
6,271.00	2.20	146.10	6,267.68	-84.32	93.41	84.89	96.00	142.70	0.41
6,365.00	1.90	138.40	6,361.62	-86.99	95.45	87.57	94.00	142.53	0.43
6,458.00	2.30	137.30	6,454.55	-89.51	97.74	90.11	93.00	137.80	0.43
6,553.00	2.10	138.60	6,549.48	-92.22	100.18	92.83	95.00	137.92	0.22
6,648.00	2.20	138.90	6,644.42	-94.90	102.53	95.52	95.00	138.75	0.11
6,742.00	2.50	143.90	6,738.34	-97.91	104.92	98.55	94.00	141.56	0.39
6,835.00	1.40	152.70	6,831.28	-100.56	106.64	101.21	93.00	147.06	1.22
6,932.00	1.40	144.00	6,928.25	-102.57	107.88	103.23	97.00	148.35	0.22
7,028.00	1.20	143.70	7,024.23	-104.33	109.16	105.00	96.00	143.86	0.21
7,122.00	1.30	148.80	7,118.21	-106.04	110.30	106.71	94.00	146.35	0.16
7,218.00	1.10	156.70	7,214.19	-107.81	111.23	108.49	96.00	152.42	0.27
7,312.00	1.30	151.30	7,308.16	-109.58	112.10	110.26	94.00	153.77	0.24
7,408.00	1.50	151.60	7,404.14	-111.64	113.22	112.33	96.00	151.46	0.21
7,502.00	1.10	147.60	7,498.11	-113.48	114.29	114.18	94.00	149.91	0.44
7,597.00	1.00	176.50	7,593.10	-115.08	114.83	115.78	95.00	161.35	0.56



Wellbenders End Of Well Report



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Well:	#103H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	WBDS_SQL_2

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
7,691.00	0.10	290.50	7,687.09	-115.87	114.80	116.57	94.00	181.94	1.11
7,786.00	0.30	121.60	7,782.09	-115.97	114.93	116.67	95.00	127.05	0.42
7,880.00	1.40	105.00	7,876.08	-116.40	116.25	117.11	94.00	107.91	1.19
7,980.00	2.10	105.90	7,976.03	-117.22	119.19	117.94	100.00	105.54	0.70
8,070.00	1.90	91.90	8,065.98	-117.72	122.27	118.46	90.00	99.25	0.58
8,164.00	2.20	143.80	8,159.93	-119.22	124.89	119.99	94.00	119.89	1.93
8,259.00	2.00	143.00	8,254.86	-122.02	126.97	122.79	95.00	143.42	0.21
8,353.00	1.90	151.70	8,348.81	-124.70	128.70	125.49	94.00	147.24	0.33
8,447.00	1.50	156.10	8,442.77	-127.20	129.93	127.99	94.00	153.64	0.45
8,542.00	1.50	155.30	8,537.73	-129.47	130.96	130.26	95.00	155.70	0.02
8,637.00	0.90	177.30	8,632.71	-131.34	131.51	132.14	95.00	163.52	0.79
8,732.00	1.30	210.60	8,727.70	-133.01	131.00	133.81	95.00	197.06	0.78
8,826.00	1.40	196.70	8,821.67	-135.03	130.12	135.82	94.00	203.39	0.36
8,919.00	1.50	211.10	8,914.64	-137.16	129.17	137.95	93.00	204.15	0.41
9,020.00	1.30	226.50	9,015.61	-139.08	127.66	139.86	101.00	218.25	0.42
9,108.00	1.60	206.40	9,103.58	-140.87	126.38	141.64	88.00	215.40	0.67
9,204.00	1.60	290.90	9,199.56	-141.59	124.54	142.35	96.00	248.65	2.24
9,306.00	1.40	289.00	9,301.52	-140.68	122.03	141.42	102.00	290.01	0.20
9,396.00	1.10	295.90	9,391.50	-139.94	120.21	140.67	90.00	292.04	0.37
9,491.00	0.50	203.80	9,486.49	-139.92	119.22	140.65	95.00	271.11	1.29
9,586.00	1.10	223.00	9,581.48	-140.97	118.43	141.69	95.00	217.03	0.68
9,680.00	1.80	200.90	9,675.45	-143.01	117.29	143.72	94.00	209.25	0.94
9,775.00	1.50	198.00	9,770.41	-145.59	116.38	146.29	95.00	199.58	0.33
9,905.00	2.70	199.70	9,900.32	-150.09	114.82	150.79	130.00	199.09	0.92
10,000.00	6.30	183.00	9,995.02	-157.40	113.79	158.09	95.00	188.00	3.99
10,064.00	9.70	179.80	10,058.39	-166.30	113.63	166.99	64.00	181.06	5.36
10,096.00	11.90	175.90	10,089.82	-172.29	113.87	172.98	32.00	177.65	7.24



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Design:	OH	Database:	WBDS_SQL_2

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
10,127.00	14.90	176.40	10,119.97	-179.46	114.35	180.15	31.00	176.18	9.68
10,158.00	17.60	177.70	10,149.73	-188.12	114.79	188.82	31.00	177.10	8.79
10,190.00	20.20	175.70	10,180.00	-198.46	115.40	199.17	32.00	176.63	8.37
10,237.00	23.70	172.30	10,223.59	-215.92	117.27	216.64	47.00	173.87	7.92
10,284.00	28.20	173.40	10,265.84	-236.33	119.81	237.05	47.00	172.89	9.63
10,331.00	33.10	175.30	10,306.26	-260.16	122.14	260.90	47.00	174.42	10.63
10,378.00	37.80	176.10	10,344.54	-287.34	124.18	288.09	47.00	175.72	10.05
10,425.00	42.10	176.70	10,380.56	-317.45	126.06	318.21	47.00	176.41	9.19
10,472.00	46.30	177.20	10,414.25	-350.16	127.80	350.94	47.00	176.96	8.97
10,519.00	49.90	177.90	10,445.63	-385.11	129.29	385.89	47.00	177.56	7.74
10,566.00	53.10	178.50	10,474.89	-421.87	130.44	422.66	47.00	178.21	6.88
10,613.00	56.20	178.70	10,502.08	-460.19	131.38	460.98	47.00	178.60	6.60
10,660.00	59.60	178.20	10,527.05	-499.98	132.46	500.78	47.00	178.45	7.29
10,707.00	61.90	178.50	10,550.01	-540.97	133.64	541.77	47.00	178.35	4.93
10,754.00	65.30	179.40	10,570.91	-583.05	134.40	583.86	47.00	178.96	7.43
10,802.00	67.00	180.20	10,590.32	-626.95	134.55	627.76	48.00	179.80	3.86
10,849.00	69.30	179.20	10,607.81	-670.57	134.79	671.38	47.00	179.70	5.28
10,896.00	72.60	178.90	10,623.15	-714.98	135.52	715.80	47.00	179.05	7.05
10,944.00	77.19	178.70	10,635.65	-761.30	136.49	762.12	48.00	178.80	9.57
10,991.00	80.70	179.80	10,644.66	-807.42	137.10	808.24	47.00	179.25	7.81
11,020.00	83.30	180.40	10,648.70	-836.13	137.04	836.96	29.00	180.10	9.20
11,131.00	87.74	182.62	10,657.37	-946.72	134.12	947.52	111.00	181.51	4.47
11,226.00	86.86	179.63	10,661.84	-1,041.59	132.26	1,042.38	95.00	181.13	3.28
11,320.00	89.49	178.14	10,664.84	-1,135.51	134.09	1,136.31	94.00	178.88	3.22
11,414.00	89.63	178.49	10,665.56	-1,229.47	136.85	1,230.28	94.00	178.32	0.40
11,508.00	91.43	177.17	10,664.69	-1,323.39	140.41	1,324.22	94.00	177.83	2.37
11,603.00	92.00	177.96	10,661.85	-1,418.26	144.45	1,419.12	95.00	177.56	1.03



Wellbenders
End Of Well Report



Company:	XTO Energy	Local Co-ordinate Reference:	Well #103H
Project:	Eddy County; NM (Nad-27 / East Zone)	TVD Reference:	RKB = 23' @ 3191.00usft (Frontier 17)
Site:	Poker Lake Unit 18 BD	MD Reference:	RKB = 23' @ 3191.00usft (Frontier 17)
Well:	#103H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	WBDS_SQL_2

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
11,697.00	91.91	177.96	10,658.64	-1,512.15	147.79	1,513.02	94.00	177.96	0.10
11,791.00	91.03	177.96	10,656.23	-1,606.05	151.13	1,606.95	94.00	177.96	0.94
11,885.00	90.99	176.99	10,654.57	-1,699.95	155.27	1,700.86	94.00	177.47	1.03
11,980.00	90.33	176.91	10,653.48	-1,794.81	160.33	1,795.75	95.00	176.95	0.70
12,074.00	92.48	179.28	10,651.17	-1,888.71	163.45	1,889.68	94.00	178.09	3.40
12,169.00	91.60	179.02	10,647.79	-1,983.64	164.86	1,984.61	95.00	179.15	0.97
12,263.00	90.37	178.58	10,646.17	-2,077.61	166.83	2,078.59	94.00	178.80	1.39
12,357.00	89.45	178.22	10,646.32	-2,171.57	169.45	2,172.56	94.00	178.40	1.05
12,451.00	90.55	178.93	10,646.32	-2,265.54	171.79	2,266.54	94.00	178.57	1.39
12,545.00	90.29	179.02	10,645.63	-2,359.52	173.47	2,360.53	94.00	178.98	0.29
12,639.00	89.14	178.31	10,646.10	-2,453.49	175.66	2,454.52	94.00	178.67	1.44
12,733.00	92.13	177.96	10,645.06	-2,547.42	178.72	2,548.47	94.00	178.14	3.20
12,827.00	92.40	177.70	10,641.34	-2,641.28	182.28	2,642.35	94.00	177.83	0.40
12,921.00	90.73	177.26	10,638.78	-2,735.15	186.41	2,736.24	94.00	177.48	1.84
13,015.00	92.53	178.75	10,636.10	-2,829.05	189.68	2,830.16	94.00	178.00	2.49
13,109.00	93.36	181.56	10,631.27	-2,922.92	189.43	2,924.02	94.00	180.15	3.11
13,203.00	92.13	181.74	10,626.77	-3,016.77	186.73	3,017.85	94.00	181.65	1.32
13,296.00	90.90	183.06	10,624.31	-3,109.65	182.83	3,110.71	93.00	182.40	1.94
13,390.00	91.56	183.85	10,622.29	-3,203.46	177.17	3,204.48	94.00	183.45	1.09
13,485.00	88.70	184.38	10,622.08	-3,298.20	170.35	3,299.18	95.00	184.12	3.06
13,579.00	88.57	184.73	10,624.32	-3,391.88	162.89	3,392.81	94.00	184.55	0.40
13,673.00	85.36	180.95	10,629.30	-3,485.60	158.24	3,486.50	94.00	182.84	5.27
13,767.00	87.91	180.77	10,634.81	-3,579.42	156.83	3,580.31	94.00	180.86	2.72
13,861.00	86.15	179.63	10,639.68	-3,673.29	156.50	3,674.18	94.00	180.20	2.23
13,955.00	87.03	178.14	10,645.28	-3,767.10	158.33	3,768.00	94.00	178.88	1.84
14,049.00	86.59	177.79	10,650.51	-3,860.90	161.66	3,861.81	94.00	177.97	0.60
14,143.00	88.13	178.58	10,654.84	-3,954.74	164.63	3,955.68	94.00	178.19	1.84



Wellbenders End Of Well Report



Company:	XTO Energy	Local Co-ordinate Reference:	Well.#103H
Project:	Eddy County, NM (Nad-27 / East Zone)	TVD Reference:	RKB = 23' @ 3191.00usft (Frontier 17)
Site:	Poker Lake Unit 18 BD	MD Reference:	RKB = 23' @ 3191.00usft (Frontier 17)
Well:	#103H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	WBDS_SQL_2

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
14,238.00	88.70	178.49	10,657.46	-4,049.68	167.06	4,050.62	95.00	178.53	0.61
14,331.00	90.11	178.93	10,658.43	-4,142.65	169.15	4,143.60	93.00	178.71	1.59
14,425.00	91.12	179.19	10,657.42	-4,236.63	170.69	4,237.59	94.00	179.06	1.11
14,519.00	90.33	178.93	10,656.23	-4,330.61	172.24	4,331.58	94.00	179.06	0.88
14,613.00	87.43	178.75	10,658.07	-4,424.56	174.14	4,425.54	94.00	178.84	3.09
14,706.00	86.73	178.58	10,662.81	-4,517.41	176.30	4,518.40	93.00	178.67	0.77
14,800.00	86.99	176.99	10,667.95	-4,611.20	179.93	4,612.21	94.00	177.78	1.71
14,894.00	91.69	176.99	10,669.04	-4,705.04	184.86	4,706.08	94.00	176.99	5.00
14,988.00	90.90	176.03	10,666.91	-4,798.84	190.59	4,799.91	94.00	176.51	1.32
15,083.00	90.55	176.99	10,665.71	-4,893.65	196.37	4,894.76	95.00	176.51	1.08
15,177.00	89.45	179.89	10,665.71	-4,987.60	198.93	4,988.73	94.00	178.44	3.30
15,271.00	88.44	179.37	10,667.44	-5,081.58	199.53	5,082.71	94.00	179.63	1.21
15,366.00	86.55	177.79	10,671.59	-5,176.46	201.88	5,177.59	95.00	178.58	2.59
15,460.00	91.03	179.54	10,673.58	-5,270.38	204.07	5,271.53	94.00	178.67	5.12
15,554.00	92.84	180.60	10,670.40	-5,364.32	203.96	5,365.47	94.00	180.07	2.23
15,648.00	91.74	180.16	10,666.65	-5,458.25	203.33	5,459.39	94.00	180.38	1.26
15,741.00	91.16	179.98	10,664.30	-5,551.21	203.22	5,552.35	93.00	180.07	0.65
15,836.00	89.36	179.28	10,663.86	-5,646.21	203.83	5,647.35	95.00	179.63	2.03
15,930.00	90.68	179.89	10,663.83	-5,740.20	204.52	5,741.34	94.00	179.58	1.55
16,024.00	90.64	179.54	10,662.75	-5,834.19	204.98	5,835.34	94.00	179.71	0.37
16,119.00	91.38	180.42	10,661.07	-5,929.18	205.02	5,930.32	95.00	179.98	1.21
16,213.00	90.33	179.98	10,659.67	-6,023.17	204.69	6,024.30	94.00	180.20	1.21
16,307.00	91.25	180.33	10,658.38	-6,117.16	204.43	6,118.29	94.00	180.15	1.05
16,401.00	91.96	180.42	10,655.74	-6,211.12	203.82	6,212.25	94.00	180.37	0.76
16,494.00	91.12	179.89	10,653.24	-6,304.08	203.57	6,305.21	93.00	180.15	1.07
16,588.00	87.69	179.02	10,654.22	-6,398.06	204.46	6,399.19	94.00	179.46	3.76
16,682.00	90.55	179.81	10,655.66	-6,492.03	205.42	6,493.16	94.00	179.42	3.16



Wellbenders End Of Well Report



Company:	XTO Energy	Local Co-ordinate Reference:	Well #103H
Project:	Eddy County, NM (Nad-27 / East Zone)	TVD Reference:	RKB = 23' @ 3191.00usft (Frontier 17)
Site:	Poker Lake Unit 18 BD	MD Reference:	RKB = 23' @ 3191.00usft (Frontier 17)
Well:	#103H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	WBDS_SQL_2

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
16,776.00	91.12	179.46	10,654.29	-6,586.02	206.02	6,587.15	94.00	179.64	0.71
16,870.00	90.42	179.28	10,653.03	-6,680.00	207.05	6,681.14	94.00	179.37	0.77
16,964.00	89.63	179.19	10,652.99	-6,773.99	208.31	6,775.14	94.00	179.23	0.85
17,058.00	87.82	178.75	10,655.08	-6,867.95	210.00	6,869.11	94.00	178.97	1.98
17,153.00	87.25	178.75	10,659.17	-6,962.84	212.07	6,964.01	95.00	178.75	0.60
17,247.00	89.89	179.54	10,661.51	-7,056.79	213.47	7,057.96	94.00	179.15	2.93
17,342.00	89.98	179.54	10,661.62	-7,151.79	214.23	7,152.96	95.00	179.54	0.09
17,436.00	92.04	180.95	10,659.96	-7,245.77	213.83	7,246.94	94.00	180.24	2.66
17,530.00	91.56	180.60	10,657.01	-7,339.71	212.56	7,340.87	94.00	180.77	0.63
17,620.00	90.24	179.89	10,655.60	-7,429.70	212.18	7,430.85	90.00	180.24	1.67
17,714.00	91.03	180.77	10,654.55	-7,523.69	211.63	7,524.84	94.00	180.33	1.26
17,808.00	91.65	180.42	10,652.36	-7,617.66	210.66	7,618.80	94.00	180.60	0.76
17,902.00	90.02	179.81	10,650.99	-7,711.64	210.47	7,712.78	94.00	180.11	1.85
17,996.00	92.62	181.48	10,648.82	-7,805.60	209.41	7,806.73	94.00	180.64	3.29
18,089.00	91.30	180.60	10,645.64	-7,898.53	207.73	7,899.65	93.00	181.04	1.71
18,184.00	91.38	180.51	10,643.42	-7,993.50	206.81	7,994.61	95.00	180.56	0.13
18,263.00	90.15	179.72	10,642.36	-8,072.49	206.65	8,073.60	79.00	180.11	1.85
18,319.00	90.15	179.72	10,642.22	-8,128.49	206.92	8,129.60	56.00	179.72	0.00
Final Station Closure Distance= 8131.12 / Direction= 178.54 - Projection to Bit: 18319.00' MD/ 10642.22' TVD - TD: Latitude = 32.108625 / Longitude = -103.924139 - TD: Y= 403481.21 / X= 626698.72									



Wellbenders
End Of Well Report



Company: XTO Energy
Project: Eddy County, NM (Nad-27 / East Zone)
Site: Poker Lake Unit 18 BD
Well: #103H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #103H
TVD Reference: RKB = 23' @ 3191.00usft (Frontier 17)
MD Reference: RKB = 23' @ 3191.00usft (Frontier 17)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WBDS_SQL_2

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
18,319.00	10,642.22	-8,128.49	206.92	Final Station Closure Distance= 8131.12 /Direction= 178.54
18,319.00	10,642.22	-8,128.49	206.92	Projection to Bit: 18319.00' MD/ 10642.22' TVD
18,319.00	10,642.22	-8,128.49	206.92	TD: Latitude = 32.108625 / Longitude = -103.924139
18,319.00	10,642.22	-8,128.49	206.92	TD: Y= 403481.21 / X= 626698.72

Checked By: _____ Approved By: _____ Date: _____