

# **EXTRACTION OIL & GAS**

**WELD COUNTY**

**SEC 17-T7N-R67W**

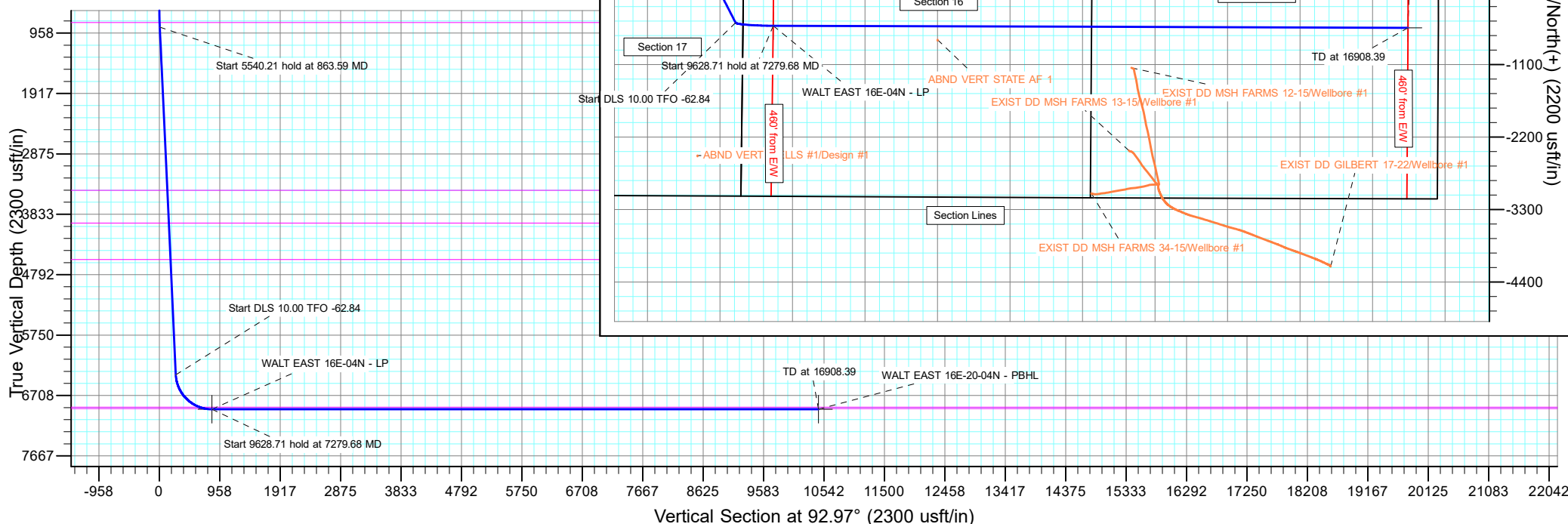
**WALT EAST 16E-20-04N**

**OWB**

**Plan: PROPOSAL 1**

## **Standard Planning Report**

**20 August, 2021**



## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WALT EAST 16E-20-04N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 29' @ 5135.00usft
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KB 29' @ 5135.00usft
<b>Site:</b>	SEC 17-T7N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	WALT EAST 16E-20-04N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PROPOSAL 1		

<b>Project</b>	WELD COUNTY		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

Site		SEC 17-T7N-R67W				
Site Position:		Northing:	1,455,244.22	usft	Latitude:	40.581536°N
From:	Lat/Long	Easting:	3,164,511.50	usft	Longitude:	104.907726°W
Position Uncertainty:		0.00	usft	Slot Radius:	13.200	in

Well		WALT EAST 16E-20-04N				
Well Position	+N/-S	0.00 usft	Northing:	1,453,058.11 usft	Latitude:	40.575542°N
	+E/-W	0.00 usft	Easting:	3,164,157.47 usft	Longitude:	104.909053°W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	5,106.00 usft
Grid Convergence:		0.38 °				

<b>Wellbore</b>	OWB				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2020	8/15/2018	8.22	66.89	52,337.09382461

<b>Design</b>	PROPOSAL 1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	92.97

<b>Plan Survey Tool Program</b>	<b>Date</b>	8/20/2021		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	16,908.39 PROPOSAL 1 (OWB)	MWD OWSG	
			OWSG MWD - Standard	

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.00	0.00	0.00	0.00	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	
863.59	5.27	152.93	863.22	-10.79	5.52	2.00	2.00	0.00	152.93	
6,403.80	5.27	152.93	6,379.99	-464.05	237.19	0.00	0.00	0.00	0.00	
7,279.68	90.00	90.18	6,927.00	-510.74	809.49	10.00	9.67	-7.16	-62.84	WALT EAST 16E-04N
16,908.39	90.00	90.18	6,927.00	-541.33	10,438.16	0.00	0.00	0.00	0.00	WALT EAST 16E-20-04N

# Planning Report

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<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 29' @ 5135.00usft
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KB 29' @ 5135.00usft
<b>Site:</b>	SEC 17-T7N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	WALT EAST 16E-20-04N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	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
<b>Start Build 2.00</b>									
700.00	2.00	152.93	699.98	-1.55	0.79	0.87	2.00	2.00	0.00
792.14	3.84	152.93	792.00	-5.74	2.93	3.22	2.00	2.00	0.00
<b>Fox Hills Base:</b>									
800.00	4.00	152.93	799.84	-6.21	3.18	3.49	2.00	2.00	0.00
863.59	5.27	152.93	863.22	-10.79	5.52	6.07	2.00	2.00	0.00
<b>Start 5540.21 hold at 863.59 MD</b>									
900.00	5.27	152.93	899.47	-13.77	7.04	7.74	0.00	0.00	0.00
1,000.00	5.27	152.93	999.05	-21.95	11.22	12.34	0.00	0.00	0.00
1,100.00	5.27	152.93	1,098.63	-30.13	15.40	16.94	0.00	0.00	0.00
1,200.00	5.27	152.93	1,198.21	-38.31	19.58	21.54	0.00	0.00	0.00
1,300.00	5.27	152.93	1,297.78	-46.49	23.76	26.14	0.00	0.00	0.00
1,400.00	5.27	152.93	1,397.36	-54.68	27.95	30.74	0.00	0.00	0.00
1,500.00	5.27	152.93	1,496.94	-62.86	32.13	35.34	0.00	0.00	0.00
1,600.00	5.27	152.93	1,596.51	-71.04	36.31	39.94	0.00	0.00	0.00
1,700.00	5.27	152.93	1,696.09	-79.22	40.49	44.54	0.00	0.00	0.00
1,800.00	5.27	152.93	1,795.67	-87.40	44.67	49.14	0.00	0.00	0.00
1,900.00	5.27	152.93	1,895.24	-95.58	48.85	53.74	0.00	0.00	0.00
2,000.00	5.27	152.93	1,994.82	-103.76	53.04	58.34	0.00	0.00	0.00
2,100.00	5.27	152.93	2,094.40	-111.94	57.22	62.94	0.00	0.00	0.00
2,200.00	5.27	152.93	2,193.98	-120.13	61.40	67.54	0.00	0.00	0.00
2,300.00	5.27	152.93	2,293.55	-128.31	65.58	72.14	0.00	0.00	0.00
2,400.00	5.27	152.93	2,393.13	-136.49	69.76	76.74	0.00	0.00	0.00
2,500.00	5.27	152.93	2,492.71	-144.67	73.95	81.34	0.00	0.00	0.00
2,600.00	5.27	152.93	2,592.28	-152.85	78.13	85.94	0.00	0.00	0.00
2,700.00	5.27	152.93	2,691.86	-161.03	82.31	90.54	0.00	0.00	0.00
2,800.00	5.27	152.93	2,791.44	-169.21	86.49	95.14	0.00	0.00	0.00
2,900.00	5.27	152.93	2,891.01	-177.40	90.67	99.74	0.00	0.00	0.00
3,000.00	5.27	152.93	2,990.59	-185.58	94.85	104.34	0.00	0.00	0.00
3,100.00	5.27	152.93	3,090.17	-193.76	99.04	108.94	0.00	0.00	0.00
3,200.00	5.27	152.93	3,189.75	-201.94	103.22	113.54	0.00	0.00	0.00
3,300.00	5.27	152.93	3,289.32	-210.12	107.40	118.14	0.00	0.00	0.00
3,400.00	5.27	152.93	3,388.90	-218.30	111.58	122.74	0.00	0.00	0.00
3,463.37	5.27	152.93	3,452.00	-223.49	114.23	125.65	0.00	0.00	0.00
<b>Parkman:</b>									
3,500.00	5.27	152.93	3,488.48	-226.48	115.76	127.34	0.00	0.00	0.00
3,600.00	5.27	152.93	3,588.05	-234.66	119.94	131.94	0.00	0.00	0.00
3,700.00	5.27	152.93	3,687.63	-242.85	124.13	136.54	0.00	0.00	0.00
3,800.00	5.27	152.93	3,787.21	-251.03	128.31	141.14	0.00	0.00	0.00
3,900.00	5.27	152.93	3,886.78	-259.21	132.49	145.74	0.00	0.00	0.00
3,985.58	5.27	152.93	3,972.00	-266.21	136.07	149.67	0.00	0.00	0.00
<b>Sussex:</b>									
4,000.00	5.27	152.93	3,986.36	-267.39	136.67	150.34	0.00	0.00	0.00
4,100.00	5.27	152.93	4,085.94	-275.57	140.85	154.94	0.00	0.00	0.00
4,200.00	5.27	152.93	4,185.52	-283.75	145.03	159.54	0.00	0.00	0.00
4,300.00	5.27	152.93	4,285.09	-291.93	149.22	164.14	0.00	0.00	0.00
4,400.00	5.27	152.93	4,384.67	-300.12	153.40	168.74	0.00	0.00	0.00
4,500.00	5.27	152.93	4,484.25	-308.30	157.58	173.33	0.00	0.00	0.00
4,568.04	5.27	152.93	4,552.00	-313.86	160.42	176.46	0.00	0.00	0.00
<b>Shannon:</b>									
4,600.00	5.27	152.93	4,583.82	-316.48	161.76	177.93	0.00	0.00	0.00

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<b>Wellbore:</b>	OWB		
<b>Design:</b>	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,700.00	5.27	152.93	4,683.40	-324.66	165.94	182.53	0.00	0.00	0.00
4,800.00	5.27	152.93	4,782.98	-332.84	170.12	187.13	0.00	0.00	0.00
4,900.00	5.27	152.93	4,882.55	-341.02	174.31	191.73	0.00	0.00	0.00
5,000.00	5.27	152.93	4,982.13	-349.20	178.49	196.33	0.00	0.00	0.00
5,100.00	5.27	152.93	5,081.71	-357.38	182.67	200.93	0.00	0.00	0.00
5,200.00	5.27	152.93	5,181.29	-365.57	186.85	205.53	0.00	0.00	0.00
5,300.00	5.27	152.93	5,280.86	-373.75	191.03	210.13	0.00	0.00	0.00
5,400.00	5.27	152.93	5,380.44	-381.93	195.21	214.73	0.00	0.00	0.00
5,500.00	5.27	152.93	5,480.02	-390.11	199.40	219.33	0.00	0.00	0.00
5,600.00	5.27	152.93	5,579.59	-398.29	203.58	223.93	0.00	0.00	0.00
5,700.00	5.27	152.93	5,679.17	-406.47	207.76	228.53	0.00	0.00	0.00
5,800.00	5.27	152.93	5,778.75	-414.65	211.94	233.13	0.00	0.00	0.00
5,900.00	5.27	152.93	5,878.32	-422.84	216.12	237.73	0.00	0.00	0.00
6,000.00	5.27	152.93	5,977.90	-431.02	220.31	242.33	0.00	0.00	0.00
6,100.00	5.27	152.93	6,077.48	-439.20	224.49	246.93	0.00	0.00	0.00
6,200.00	5.27	152.93	6,177.06	-447.38	228.67	251.53	0.00	0.00	0.00
6,300.00	5.27	152.93	6,276.63	-455.56	232.85	256.13	0.00	0.00	0.00
6,403.80	5.27	152.93	6,379.99	-464.05	237.19	260.91	0.00	0.00	0.00
Start DLS 10.00 TFO -62.84									
6,450.00	8.45	123.72	6,425.87	-467.83	240.98	264.89	10.00	6.87	-63.22
6,500.00	12.90	111.17	6,475.00	-471.88	249.25	273.35	10.00	8.91	-25.10
6,550.00	17.65	105.12	6,523.22	-475.88	261.77	286.07	10.00	9.49	-12.09
6,600.00	22.50	101.60	6,570.17	-479.78	278.47	302.95	10.00	9.71	-7.04
6,650.00	27.41	99.28	6,615.49	-483.57	299.22	323.86	10.00	9.81	-4.64
6,700.00	32.34	97.63	6,658.84	-487.20	323.84	348.64	10.00	9.86	-3.32
6,750.00	37.29	96.37	6,699.88	-490.66	352.17	377.10	10.00	9.90	-2.52
6,800.00	42.24	95.36	6,738.30	-493.91	383.97	409.04	10.00	9.92	-2.00
6,850.00	47.21	94.54	6,773.81	-496.93	419.02	444.19	10.00	9.93	-1.65
6,900.00	52.18	93.83	6,806.14	-499.71	457.03	482.30	10.00	9.94	-1.41
6,950.00	57.16	93.22	6,835.05	-502.21	497.73	523.08	10.00	9.95	-1.23
7,000.00	62.13	92.67	6,860.31	-504.42	540.81	566.21	10.00	9.95	-1.10
7,050.00	67.11	92.17	6,881.73	-506.32	585.93	611.37	10.00	9.96	-1.00
7,086.96	70.79	91.82	6,895.00	-507.52	620.40	645.85	10.00	9.96	-0.94
Sharon Springs (Confining Zone):									
7,100.00	72.09	91.70	6,899.15	-507.89	632.75	658.21	10.00	9.96	-0.91
7,150.00	77.08	91.26	6,912.44	-509.14	680.92	706.38	10.00	9.96	-0.88
7,172.29	79.30	91.07	6,917.00	-509.58	702.74	728.19	10.00	9.97	-0.85
Niobrara:									
7,200.00	82.06	90.84	6,921.49	-510.04	730.07	755.51	10.00	9.97	-0.84
7,250.00	87.04	90.42	6,926.23	-510.58	779.83	805.23	10.00	9.97	-0.83
7,279.68	90.00	90.18	6,927.00	-510.74	809.49	834.86	10.00	9.97	-0.82
Start 9628.71 hold at 7279.68 MD									
7,300.00	90.00	90.18	6,927.00	-510.81	829.82	855.16	0.00	0.00	0.00
7,400.00	90.00	90.18	6,927.00	-511.12	929.82	955.04	0.00	0.00	0.00
7,500.00	90.00	90.18	6,927.00	-511.44	1,029.81	1,054.92	0.00	0.00	0.00
7,600.00	90.00	90.18	6,927.00	-511.76	1,129.81	1,154.80	0.00	0.00	0.00
7,700.00	90.00	90.18	6,927.00	-512.08	1,229.81	1,254.68	0.00	0.00	0.00
7,800.00	90.00	90.18	6,927.00	-512.39	1,329.81	1,354.57	0.00	0.00	0.00
7,900.00	90.00	90.18	6,927.00	-512.71	1,429.81	1,454.45	0.00	0.00	0.00
8,000.00	90.00	90.18	6,927.00	-513.03	1,529.81	1,554.33	0.00	0.00	0.00
8,100.00	90.00	90.18	6,927.00	-513.35	1,629.81	1,654.21	0.00	0.00	0.00
8,200.00	90.00	90.18	6,927.00	-513.66	1,729.81	1,754.09	0.00	0.00	0.00
8,300.00	90.00	90.18	6,927.00	-513.98	1,829.81	1,853.97	0.00	0.00	0.00

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<b>Well:</b>	WALT EAST 16E-20-04N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
8,400.00	90.00	90.18	6,927.00	-514.30	1,929.81	1,953.86	0.00	0.00	0.00	
8,500.00	90.00	90.18	6,927.00	-514.62	2,029.81	2,053.74	0.00	0.00	0.00	
8,600.00	90.00	90.18	6,927.00	-514.94	2,129.81	2,153.62	0.00	0.00	0.00	
8,700.00	90.00	90.18	6,927.00	-515.25	2,229.81	2,253.50	0.00	0.00	0.00	
8,800.00	90.00	90.18	6,927.00	-515.57	2,329.81	2,353.38	0.00	0.00	0.00	
8,900.00	90.00	90.18	6,927.00	-515.89	2,429.81	2,453.27	0.00	0.00	0.00	
9,000.00	90.00	90.18	6,927.00	-516.21	2,529.81	2,553.15	0.00	0.00	0.00	
9,100.00	90.00	90.18	6,927.00	-516.52	2,629.81	2,653.03	0.00	0.00	0.00	
9,200.00	90.00	90.18	6,927.00	-516.84	2,729.81	2,752.91	0.00	0.00	0.00	
9,300.00	90.00	90.18	6,927.00	-517.16	2,829.81	2,852.79	0.00	0.00	0.00	
9,400.00	90.00	90.18	6,927.00	-517.48	2,929.81	2,952.67	0.00	0.00	0.00	
9,500.00	90.00	90.18	6,927.00	-517.79	3,029.80	3,052.56	0.00	0.00	0.00	
9,600.00	90.00	90.18	6,927.00	-518.11	3,129.80	3,152.44	0.00	0.00	0.00	
9,700.00	90.00	90.18	6,927.00	-518.43	3,229.80	3,252.32	0.00	0.00	0.00	
9,800.00	90.00	90.18	6,927.00	-518.75	3,329.80	3,352.20	0.00	0.00	0.00	
9,900.00	90.00	90.18	6,927.00	-519.07	3,429.80	3,452.08	0.00	0.00	0.00	
10,000.00	90.00	90.18	6,927.00	-519.38	3,529.80	3,551.96	0.00	0.00	0.00	
10,100.00	90.00	90.18	6,927.00	-519.70	3,629.80	3,651.85	0.00	0.00	0.00	
10,200.00	90.00	90.18	6,927.00	-520.02	3,729.80	3,751.73	0.00	0.00	0.00	
10,300.00	90.00	90.18	6,927.00	-520.34	3,829.80	3,851.61	0.00	0.00	0.00	
10,400.00	90.00	90.18	6,927.00	-520.65	3,929.80	3,951.49	0.00	0.00	0.00	
10,500.00	90.00	90.18	6,927.00	-520.97	4,029.80	4,051.37	0.00	0.00	0.00	
10,600.00	90.00	90.18	6,927.00	-521.29	4,129.80	4,151.26	0.00	0.00	0.00	
10,700.00	90.00	90.18	6,927.00	-521.61	4,229.80	4,251.14	0.00	0.00	0.00	
10,800.00	90.00	90.18	6,927.00	-521.92	4,329.80	4,351.02	0.00	0.00	0.00	
10,900.00	90.00	90.18	6,927.00	-522.24	4,429.80	4,450.90	0.00	0.00	0.00	
11,000.00	90.00	90.18	6,927.00	-522.56	4,529.80	4,550.78	0.00	0.00	0.00	
11,100.00	90.00	90.18	6,927.00	-522.88	4,629.80	4,650.66	0.00	0.00	0.00	
11,200.00	90.00	90.18	6,927.00	-523.20	4,729.80	4,750.55	0.00	0.00	0.00	
11,300.00	90.00	90.18	6,927.00	-523.51	4,829.80	4,850.43	0.00	0.00	0.00	
11,400.00	90.00	90.18	6,927.00	-523.83	4,929.80	4,950.31	0.00	0.00	0.00	
11,500.00	90.00	90.18	6,927.00	-524.15	5,029.79	5,050.19	0.00	0.00	0.00	
11,600.00	90.00	90.18	6,927.00	-524.47	5,129.79	5,150.07	0.00	0.00	0.00	
11,700.00	90.00	90.18	6,927.00	-524.78	5,229.79	5,249.95	0.00	0.00	0.00	
11,800.00	90.00	90.18	6,927.00	-525.10	5,329.79	5,349.84	0.00	0.00	0.00	
11,900.00	90.00	90.18	6,927.00	-525.42	5,429.79	5,449.72	0.00	0.00	0.00	
12,000.00	90.00	90.18	6,927.00	-525.74	5,529.79	5,549.60	0.00	0.00	0.00	
12,100.00	90.00	90.18	6,927.00	-526.05	5,629.79	5,649.48	0.00	0.00	0.00	
12,200.00	90.00	90.18	6,927.00	-526.37	5,729.79	5,749.36	0.00	0.00	0.00	
12,300.00	90.00	90.18	6,927.00	-526.69	5,829.79	5,849.24	0.00	0.00	0.00	
12,400.00	90.00	90.18	6,927.00	-527.01	5,929.79	5,949.13	0.00	0.00	0.00	
12,500.00	90.00	90.18	6,927.00	-527.33	6,029.79	6,049.01	0.00	0.00	0.00	
12,600.00	90.00	90.18	6,927.00	-527.64	6,129.79	6,148.89	0.00	0.00	0.00	
12,700.00	90.00	90.18	6,927.00	-527.96	6,229.79	6,248.77	0.00	0.00	0.00	
12,800.00	90.00	90.18	6,927.00	-528.28	6,329.79	6,348.65	0.00	0.00	0.00	
12,900.00	90.00	90.18	6,927.00	-528.60	6,429.79	6,448.54	0.00	0.00	0.00	
13,000.00	90.00	90.18	6,927.00	-528.91	6,529.79	6,548.42	0.00	0.00	0.00	
13,100.00	90.00	90.18	6,927.00	-529.23	6,629.79	6,648.30	0.00	0.00	0.00	
13,200.00	90.00	90.18	6,927.00	-529.55	6,729.79	6,748.18	0.00	0.00	0.00	
13,300.00	90.00	90.18	6,927.00	-529.87	6,829.79	6,848.06	0.00	0.00	0.00	
13,400.00	90.00	90.18	6,927.00	-530.18	6,929.79	6,947.94	0.00	0.00	0.00	
13,500.00	90.00	90.18	6,927.00	-530.50	7,029.78	7,047.83	0.00	0.00	0.00	
13,600.00	90.00	90.18	6,927.00	-530.82	7,129.78	7,147.71	0.00	0.00	0.00	
13,700.00	90.00	90.18	6,927.00	-531.14	7,229.78	7,247.59	0.00	0.00	0.00	

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WALT EAST 16E-20-04N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 29' @ 5135.00usft
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KB 29' @ 5135.00usft
<b>Site:</b>	SEC 17-T7N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	WALT EAST 16E-20-04N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
13,800.00	90.00	90.18	6,927.00	-531.46	7,329.78	7,347.47	0.00	0.00	0.00	
13,900.00	90.00	90.18	6,927.00	-531.77	7,429.78	7,447.35	0.00	0.00	0.00	
14,000.00	90.00	90.18	6,927.00	-532.09	7,529.78	7,547.23	0.00	0.00	0.00	
14,100.00	90.00	90.18	6,927.00	-532.41	7,629.78	7,647.12	0.00	0.00	0.00	
14,200.00	90.00	90.18	6,927.00	-532.73	7,729.78	7,747.00	0.00	0.00	0.00	
14,300.00	90.00	90.18	6,927.00	-533.04	7,829.78	7,846.88	0.00	0.00	0.00	
14,400.00	90.00	90.18	6,927.00	-533.36	7,929.78	7,946.76	0.00	0.00	0.00	
14,500.00	90.00	90.18	6,927.00	-533.68	8,029.78	8,046.64	0.00	0.00	0.00	
14,600.00	90.00	90.18	6,927.00	-534.00	8,129.78	8,146.52	0.00	0.00	0.00	
14,700.00	90.00	90.18	6,927.00	-534.31	8,229.78	8,246.41	0.00	0.00	0.00	
14,800.00	90.00	90.18	6,927.00	-534.63	8,329.78	8,346.29	0.00	0.00	0.00	
14,900.00	90.00	90.18	6,927.00	-534.95	8,429.78	8,446.17	0.00	0.00	0.00	
15,000.00	90.00	90.18	6,927.00	-535.27	8,529.78	8,546.05	0.00	0.00	0.00	
15,100.00	90.00	90.18	6,927.00	-535.59	8,629.78	8,645.93	0.00	0.00	0.00	
15,200.00	90.00	90.18	6,927.00	-535.90	8,729.78	8,745.82	0.00	0.00	0.00	
15,300.00	90.00	90.18	6,927.00	-536.22	8,829.78	8,845.70	0.00	0.00	0.00	
15,400.00	90.00	90.18	6,927.00	-536.54	8,929.78	8,945.58	0.00	0.00	0.00	
15,500.00	90.00	90.18	6,927.00	-536.86	9,029.77	9,045.46	0.00	0.00	0.00	
15,600.00	90.00	90.18	6,927.00	-537.17	9,129.77	9,145.34	0.00	0.00	0.00	
15,700.00	90.00	90.18	6,927.00	-537.49	9,229.77	9,245.22	0.00	0.00	0.00	
15,800.00	90.00	90.18	6,927.00	-537.81	9,329.77	9,345.11	0.00	0.00	0.00	
15,900.00	90.00	90.18	6,927.00	-538.13	9,429.77	9,444.99	0.00	0.00	0.00	
16,000.00	90.00	90.18	6,927.00	-538.44	9,529.77	9,544.87	0.00	0.00	0.00	
16,100.00	90.00	90.18	6,927.00	-538.76	9,629.77	9,644.75	0.00	0.00	0.00	
16,200.00	90.00	90.18	6,927.00	-539.08	9,729.77	9,744.63	0.00	0.00	0.00	
16,300.00	90.00	90.18	6,927.00	-539.40	9,829.77	9,844.51	0.00	0.00	0.00	
16,400.00	90.00	90.18	6,927.00	-539.72	9,929.77	9,944.40	0.00	0.00	0.00	
16,500.00	90.00	90.18	6,927.00	-540.03	10,029.77	10,044.28	0.00	0.00	0.00	
16,600.00	90.00	90.18	6,927.00	-540.35	10,129.77	10,144.16	0.00	0.00	0.00	
16,700.00	90.00	90.18	6,927.00	-540.67	10,229.77	10,244.04	0.00	0.00	0.00	
16,800.00	90.00	90.18	6,927.00	-540.99	10,329.77	10,343.92	0.00	0.00	0.00	
16,908.39	90.00	90.18	6,927.00	-541.33	10,438.16	10,452.19	0.00	0.00	0.00	
TD at 16908.39										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude		Longitude
WALT EAST 16E-04N - I - hit/miss target - Shape	0.00	0.00	6,927.00	-510.74	809.49	1,452,552.77	3,164,970.35	40.574140°N		104.906139°W
WALT EAST 16E-20-04N - plan hits target center - Point	0.00	0.00	6,927.00	-541.33	10,438.16	1,452,586.35	3,174,599.00	40.574050°N		104.871478°W

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WALT EAST 16E-20-04N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB 29' @ 5135.00usft
<b>Project:</b>	WELD COUNTY	<b>MD Reference:</b>	KB 29' @ 5135.00usft
<b>Site:</b>	SEC 17-T7N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	WALT EAST 16E-20-04N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PROPOSAL 1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
792.14	792.00	Fox Hills Base:				
3,463.37	3,452.00	Parkman:				
3,985.58	3,972.00	Sussex:				
4,568.04	4,552.00	Shannon:				
7,086.96	6,895.00	Sharon Springs (Confining Zone):				
7,172.29	6,917.00	Niobrara:				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
600.00	600.00	0.00	0.00	Start Build 2.00	
863.59	863.22	-10.79	5.52	Start 5540.21 hold at 863.59 MD	
6,403.80	6,379.99	-464.05	237.19	Start DLS 10.00 TFO -62.84	
7,279.68	6,927.00	-510.74	809.49	Start 9628.71 hold at 7279.68 MD	
16,908.39	6,927.00	-541.33	10,438.16	TD at 16908.39	