

EXTRACTION OIL & GAS

Weld County

Sec 32-T6N-R67W

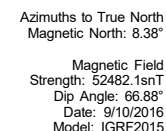
MILKSHAKE 31W-20-2N

ORIGINAL WELLBORE

Plan: PROPOSAL 1

Standard Planning Report

31 October, 2017



Vertical Section at 289.86° (1600 usft/in)

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well MILKSHAKE 31W-20-2N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 4973.00usft
Project:	Weld County	MD Reference:	KB 25' @ 4973.00usft
Site:	Sec 32-T6N-R67W	North Reference:	True
Well:	MILKSHAKE 31W-20-2N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Project	Weld County		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Sec 32-T6N-R67W			
Site Position:		Northing:	1,403,778.12 usft	Latitude:	40° 26' 25.253 N
From:	Lat/Long	Easting:	3,160,062.89 usft	Longitude:	104° 55' 29.795 W
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.37 °

Well	MILKSHAKE 31W-20-2N					
Well Position	+N/-S	-441.90 usft	Northing:	1,403,337.39 usft	Latitude:	40° 26' 20.886 N
	+E/-W	180.09 usft	Easting:	3,160,245.84 usft	Longitude:	104° 55' 27.466 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	4,948.00 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	9/10/2016	8.38	66.88	52,482.14402704

Design	PROPOSAL 1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	289.86

Plan Survey Tool Program			Date	10/31/2017	
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	17,847.59	PROPOSAL 1 (ORIGINAL WELL	MWD OWSG	
			OWSG MWD - Standard		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	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	
1,662.73	29.25	355.00	1,600.00	364.00	-31.85	2.00	2.00	0.00	355.00	
1,727.73	29.25	355.00	1,656.71	395.64	-34.61	0.00	0.00	0.00	0.00	
1,874.19	31.72	351.88	1,782.91	469.42	-43.17	2.00	1.68	-2.13	-34.01	
7,605.94	31.72	351.88	6,658.43	3,452.91	-468.65	0.00	0.00	0.00	0.00	
8,462.26	90.00	270.21	7,110.00	3,731.20	-1,038.92	10.00	6.81	-9.54	-82.90	MILKSHAKE 31W-2N
17,848.51	90.00	270.21	7,110.00	3,765.80	-10,425.11	0.00	0.00	0.00	0.00	MILKSHAKE 31W-2N

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Site:	Sec 32-T6N-R67W	North Reference:	True
Well:	MILKSHAKE 31W-20-2N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	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
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
BUILD 2°/100'									
300.00	2.00	355.00	299.98	1.74	-0.15	0.73	2.00	2.00	0.00
400.00	4.00	355.00	399.84	6.95	-0.61	2.93	2.00	2.00	0.00
500.00	6.00	355.00	499.45	15.63	-1.37	6.60	2.00	2.00	0.00
600.00	8.00	355.00	598.70	27.77	-2.43	11.72	2.00	2.00	0.00
700.00	10.00	355.00	697.47	43.36	-3.79	18.30	2.00	2.00	0.00
800.00	12.00	355.00	795.62	62.36	-5.46	26.32	2.00	2.00	0.00
900.00	14.00	355.00	893.06	84.77	-7.42	35.78	2.00	2.00	0.00
1,000.00	16.00	355.00	989.64	110.55	-9.67	46.66	2.00	2.00	0.00
1,100.00	18.00	355.00	1,085.27	139.68	-12.22	58.95	2.00	2.00	0.00
1,200.00	20.00	355.00	1,179.82	172.11	-15.06	72.63	2.00	2.00	0.00
1,300.00	22.00	355.00	1,273.17	207.81	-18.18	87.70	2.00	2.00	0.00
1,400.00	24.00	355.00	1,365.21	246.73	-21.59	104.13	2.00	2.00	0.00
1,500.00	26.00	355.00	1,455.84	288.83	-25.27	121.89	2.00	2.00	0.00
1,600.00	28.00	355.00	1,544.94	334.05	-29.23	140.98	2.00	2.00	0.00
1,662.73	29.25	355.00	1,600.00	364.00	-31.85	153.61	2.00	2.00	0.00
HOLD 29.25° INC									
1,700.00	29.25	355.00	1,632.51	382.14	-33.43	161.27	0.00	0.00	0.00
1,727.73	29.25	355.00	1,656.71	395.64	-34.61	166.97	0.00	0.00	0.00
DROP 2°/100'									
1,800.00	30.46	353.41	1,719.38	431.43	-38.26	182.55	2.00	1.67	-2.21
1,874.19	31.72	351.88	1,782.91	469.42	-43.17	200.08	2.00	1.70	-2.05
HOLD VERTICAL									
1,900.00	31.72	351.88	1,804.87	482.86	-45.09	206.45	0.00	0.00	0.00
2,000.00	31.72	351.88	1,889.93	534.91	-52.51	231.12	0.00	0.00	0.00
2,100.00	31.72	351.88	1,974.99	586.96	-59.93	255.78	0.00	0.00	0.00
2,200.00	31.72	351.88	2,060.05	639.01	-67.36	280.45	0.00	0.00	0.00
2,300.00	31.72	351.88	2,145.12	691.07	-74.78	305.11	0.00	0.00	0.00
2,400.00	31.72	351.88	2,230.18	743.12	-82.20	329.78	0.00	0.00	0.00
2,500.00	31.72	351.88	2,315.24	795.17	-89.63	354.44	0.00	0.00	0.00
2,600.00	31.72	351.88	2,400.30	847.22	-97.05	379.11	0.00	0.00	0.00
2,700.00	31.72	351.88	2,485.36	899.27	-104.47	403.78	0.00	0.00	0.00
2,800.00	31.72	351.88	2,570.42	951.33	-111.90	428.44	0.00	0.00	0.00
2,900.00	31.72	351.88	2,655.49	1,003.38	-119.32	453.11	0.00	0.00	0.00
3,000.00	31.72	351.88	2,740.55	1,055.43	-126.74	477.77	0.00	0.00	0.00
3,100.00	31.72	351.88	2,825.61	1,107.48	-134.17	502.44	0.00	0.00	0.00
3,200.00	31.72	351.88	2,910.67	1,159.53	-141.59	527.10	0.00	0.00	0.00
3,300.00	31.72	351.88	2,995.73	1,211.59	-149.01	551.77	0.00	0.00	0.00
3,400.00	31.72	351.88	3,080.79	1,263.64	-156.43	576.44	0.00	0.00	0.00
3,500.00	31.72	351.88	3,165.86	1,315.69	-163.86	601.10	0.00	0.00	0.00
3,600.00	31.72	351.88	3,250.92	1,367.74	-171.28	625.77	0.00	0.00	0.00
3,700.00	31.72	351.88	3,335.98	1,419.79	-178.70	650.43	0.00	0.00	0.00
3,800.00	31.72	351.88	3,421.04	1,471.85	-186.13	675.10	0.00	0.00	0.00
3,900.00	31.72	351.88	3,506.10	1,523.90	-193.55	699.76	0.00	0.00	0.00
3,998.63	31.72	351.88	3,590.00	1,575.24	-200.87	724.09	0.00	0.00	0.00
PARKMAN									
4,000.00	31.72	351.88	3,591.16	1,575.95	-200.97	724.43	0.00	0.00	0.00
4,100.00	31.72	351.88	3,676.23	1,628.00	-208.40	749.10	0.00	0.00	0.00
4,200.00	31.72	351.88	3,761.29	1,680.05	-215.82	773.76	0.00	0.00	0.00
4,300.00	31.72	351.88	3,846.35	1,732.11	-223.24	798.43	0.00	0.00	0.00

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Project:	Weld County	MD Reference:	KB 25' @ 4973.00usft
Site:	Sec 32-T6N-R67W	North Reference:	True
Well:	MILKSHAKE 31W-20-2N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	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)	
4,400.00	31.72	351.88	3,931.41	1,784.16	-230.67	823.09	0.00	0.00	0.00	
4,500.00	31.72	351.88	4,016.47	1,836.21	-238.09	847.76	0.00	0.00	0.00	
4,600.00	31.72	351.88	4,101.53	1,888.26	-245.51	872.42	0.00	0.00	0.00	
4,700.00	31.72	351.88	4,186.60	1,940.31	-252.94	897.09	0.00	0.00	0.00	
4,727.51	31.72	351.88	4,210.00	1,954.63	-254.98	903.88	0.00	0.00	0.00	
SUSSEX										
4,800.00	31.72	351.88	4,271.66	1,992.37	-260.36	921.76	0.00	0.00	0.00	
4,900.00	31.72	351.88	4,356.72	2,044.42	-267.78	946.42	0.00	0.00	0.00	
5,000.00	31.72	351.88	4,441.78	2,096.47	-275.21	971.09	0.00	0.00	0.00	
5,100.00	31.72	351.88	4,526.84	2,148.52	-282.63	995.75	0.00	0.00	0.00	
5,200.00	31.72	351.88	4,611.90	2,200.57	-290.05	1,020.42	0.00	0.00	0.00	
5,274.18	31.72	351.88	4,675.00	2,239.18	-295.56	1,038.72	0.00	0.00	0.00	
SHANNON										
5,300.00	31.72	351.88	4,696.97	2,252.63	-297.48	1,045.08	0.00	0.00	0.00	
5,400.00	31.72	351.88	4,782.03	2,304.68	-304.90	1,069.75	0.00	0.00	0.00	
5,500.00	31.72	351.88	4,867.09	2,356.73	-312.32	1,094.42	0.00	0.00	0.00	
5,600.00	31.72	351.88	4,952.15	2,408.78	-319.74	1,119.08	0.00	0.00	0.00	
5,700.00	31.72	351.88	5,037.21	2,460.83	-327.17	1,143.75	0.00	0.00	0.00	
5,800.00	31.72	351.88	5,122.27	2,512.89	-334.59	1,168.41	0.00	0.00	0.00	
5,900.00	31.72	351.88	5,207.34	2,564.94	-342.01	1,193.08	0.00	0.00	0.00	
6,000.00	31.72	351.88	5,292.40	2,616.99	-349.44	1,217.74	0.00	0.00	0.00	
6,100.00	31.72	351.88	5,377.46	2,669.04	-356.86	1,242.41	0.00	0.00	0.00	
6,200.00	31.72	351.88	5,462.52	2,721.09	-364.28	1,267.08	0.00	0.00	0.00	
6,300.00	31.72	351.88	5,547.58	2,773.15	-371.71	1,291.74	0.00	0.00	0.00	
6,400.00	31.72	351.88	5,632.64	2,825.20	-379.13	1,316.41	0.00	0.00	0.00	
6,500.00	31.72	351.88	5,717.71	2,877.25	-386.55	1,341.07	0.00	0.00	0.00	
6,600.00	31.72	351.88	5,802.77	2,929.30	-393.98	1,365.74	0.00	0.00	0.00	
6,700.00	31.72	351.88	5,887.83	2,981.35	-401.40	1,390.40	0.00	0.00	0.00	
6,800.00	31.72	351.88	5,972.89	3,033.41	-408.82	1,415.07	0.00	0.00	0.00	
6,900.00	31.72	351.88	6,057.95	3,085.46	-416.25	1,439.74	0.00	0.00	0.00	
7,000.00	31.72	351.88	6,143.01	3,137.51	-423.67	1,464.40	0.00	0.00	0.00	
7,100.00	31.72	351.88	6,228.08	3,189.56	-431.09	1,489.07	0.00	0.00	0.00	
7,200.00	31.72	351.88	6,313.14	3,241.61	-438.52	1,513.73	0.00	0.00	0.00	
7,300.00	31.72	351.88	6,398.20	3,293.67	-445.94	1,538.40	0.00	0.00	0.00	
7,400.00	31.72	351.88	6,483.26	3,345.72	-453.36	1,563.07	0.00	0.00	0.00	
7,500.00	31.72	351.88	6,568.32	3,397.77	-460.79	1,587.73	0.00	0.00	0.00	
7,605.94	31.72	351.88	6,658.43	3,452.91	-468.65	1,613.86	0.00	0.00	0.00	
KOP, BUILD 10°/100'										
7,650.00	32.53	343.73	6,695.77	3,475.76	-473.61	1,626.29	10.00	1.84	-18.50	
7,700.00	34.05	335.05	6,737.59	3,501.38	-483.28	1,644.09	10.00	3.04	-17.37	
7,750.00	36.13	327.13	6,778.52	3,526.46	-497.20	1,665.70	10.00	4.16	-15.84	
7,800.00	38.67	320.04	6,818.25	3,550.83	-515.24	1,690.95	10.00	5.09	-14.18	
7,850.00	41.60	313.75	6,856.49	3,574.30	-537.28	1,719.65	10.00	5.86	-12.58	
7,900.00	44.84	308.17	6,892.94	3,596.68	-563.15	1,751.58	10.00	6.47	-11.15	
7,950.00	48.31	303.22	6,927.31	3,617.82	-592.64	1,786.50	10.00	6.95	-9.91	
7,977.12	50.28	300.75	6,945.00	3,628.70	-610.08	1,806.60	10.00	7.25	-9.08	
SHARON SPRINGS										
8,000.00	51.98	298.78	6,959.36	3,637.54	-625.54	1,824.15	10.00	7.42	-8.61	
8,043.22	55.27	295.30	6,985.00	3,653.34	-656.54	1,858.66	10.00	7.61	-8.06	
NIOBRARA										
8,050.00	55.79	294.78	6,988.84	3,655.70	-661.60	1,864.23	10.00	7.74	-7.68	
8,100.00	59.72	291.13	7,015.51	3,672.16	-700.53	1,906.44	10.00	7.87	-7.30	
8,150.00	63.75	287.76	7,039.19	3,686.79	-742.05	1,950.46	10.00	8.05	-6.73	

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Wellbore:	ORIGINAL WELLBORE		
Design:	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)
8,200.00	67.85	284.63	7,059.68	3,699.49	-785.84	1,995.95	10.00	8.20	-6.28
8,250.00	72.01	281.67	7,076.84	3,710.15	-831.56	2,042.58	10.00	8.31	-5.92
8,300.00	76.21	278.85	7,090.53	3,718.70	-878.86	2,089.97	10.00	8.40	-5.64
8,346.17	80.11	276.33	7,100.00	3,724.66	-923.64	2,134.11	10.00	8.46	-5.45
NIO B									
8,350.00	80.44	276.12	7,100.65	3,725.06	-927.40	2,137.78	10.00	8.48	-5.37
8,400.00	84.69	273.47	7,107.12	3,729.20	-976.79	2,185.64	10.00	8.50	-5.31
8,450.00	88.95	270.85	7,109.89	3,731.08	-1,026.66	2,233.19	10.00	8.53	-5.24
8,462.26	90.00	270.21	7,110.00	3,731.20	-1,038.92	2,244.76	10.00	8.53	-5.22
LP @ 90° INC, 270.21° AZM HOLD									
8,500.00	90.00	270.21	7,110.00	3,731.34	-1,076.66	2,280.30	0.00	0.00	0.00
8,600.00	90.00	270.21	7,110.00	3,731.70	-1,176.66	2,374.47	0.00	0.00	0.00
8,700.00	90.00	270.21	7,110.00	3,732.07	-1,276.66	2,468.65	0.00	0.00	0.00
8,800.00	90.00	270.21	7,110.00	3,732.44	-1,376.66	2,562.83	0.00	0.00	0.00
8,900.00	90.00	270.21	7,110.00	3,732.81	-1,476.65	2,657.00	0.00	0.00	0.00
9,000.00	90.00	270.21	7,110.00	3,733.18	-1,576.65	2,751.18	0.00	0.00	0.00
9,100.00	90.00	270.21	7,110.00	3,733.55	-1,676.65	2,845.35	0.00	0.00	0.00
9,200.00	90.00	270.21	7,110.00	3,733.92	-1,776.65	2,939.53	0.00	0.00	0.00
9,300.00	90.00	270.21	7,110.00	3,734.28	-1,876.65	3,033.71	0.00	0.00	0.00
9,400.00	90.00	270.21	7,110.00	3,734.65	-1,976.65	3,127.88	0.00	0.00	0.00
9,500.00	90.00	270.21	7,110.00	3,735.02	-2,076.65	3,222.06	0.00	0.00	0.00
9,600.00	90.00	270.21	7,110.00	3,735.39	-2,176.65	3,316.24	0.00	0.00	0.00
9,700.00	90.00	270.21	7,110.00	3,735.76	-2,276.65	3,410.41	0.00	0.00	0.00
9,800.00	90.00	270.21	7,110.00	3,736.13	-2,376.65	3,504.59	0.00	0.00	0.00
9,900.00	90.00	270.21	7,110.00	3,736.49	-2,476.65	3,598.77	0.00	0.00	0.00
10,000.00	90.00	270.21	7,110.00	3,736.86	-2,576.65	3,692.94	0.00	0.00	0.00
10,100.00	90.00	270.21	7,110.00	3,737.23	-2,676.65	3,787.12	0.00	0.00	0.00
10,200.00	90.00	270.21	7,110.00	3,737.60	-2,776.65	3,881.30	0.00	0.00	0.00
10,300.00	90.00	270.21	7,110.00	3,737.97	-2,876.65	3,975.47	0.00	0.00	0.00
10,400.00	90.00	270.21	7,110.00	3,738.34	-2,976.64	4,069.65	0.00	0.00	0.00
10,500.00	90.00	270.21	7,110.00	3,738.71	-3,076.64	4,163.83	0.00	0.00	0.00
10,600.00	90.00	270.21	7,110.00	3,739.07	-3,176.64	4,258.00	0.00	0.00	0.00
10,700.00	90.00	270.21	7,110.00	3,739.44	-3,276.64	4,352.18	0.00	0.00	0.00
10,800.00	90.00	270.21	7,110.00	3,739.81	-3,376.64	4,446.36	0.00	0.00	0.00
10,900.00	90.00	270.21	7,110.00	3,740.18	-3,476.64	4,540.53	0.00	0.00	0.00
11,000.00	90.00	270.21	7,110.00	3,740.55	-3,576.64	4,634.71	0.00	0.00	0.00
11,100.00	90.00	270.21	7,110.00	3,740.92	-3,676.64	4,728.89	0.00	0.00	0.00
11,200.00	90.00	270.21	7,110.00	3,741.29	-3,776.64	4,823.06	0.00	0.00	0.00
11,300.00	90.00	270.21	7,110.00	3,741.65	-3,876.64	4,917.24	0.00	0.00	0.00
11,400.00	90.00	270.21	7,110.00	3,742.02	-3,976.64	5,011.42	0.00	0.00	0.00
11,500.00	90.00	270.21	7,110.00	3,742.39	-4,076.64	5,105.59	0.00	0.00	0.00
11,600.00	90.00	270.21	7,110.00	3,742.76	-4,176.64	5,199.77	0.00	0.00	0.00
11,700.00	90.00	270.21	7,110.00	3,743.13	-4,276.64	5,293.95	0.00	0.00	0.00
11,800.00	90.00	270.21	7,110.00	3,743.50	-4,376.64	5,388.12	0.00	0.00	0.00
11,900.00	90.00	270.21	7,110.00	3,743.87	-4,476.63	5,482.30	0.00	0.00	0.00
12,000.00	90.00	270.21	7,110.00	3,744.23	-4,576.63	5,576.48	0.00	0.00	0.00
12,100.00	90.00	270.21	7,110.00	3,744.60	-4,676.63	5,670.65	0.00	0.00	0.00
12,200.00	90.00	270.21	7,110.00	3,744.97	-4,776.63	5,764.83	0.00	0.00	0.00
12,300.00	90.00	270.21	7,110.00	3,745.34	-4,876.63	5,859.01	0.00	0.00	0.00
12,400.00	90.00	270.21	7,110.00	3,745.71	-4,976.63	5,953.18	0.00	0.00	0.00
12,500.00	90.00	270.21	7,110.00	3,746.08	-5,076.63	6,047.36	0.00	0.00	0.00
12,600.00	90.00	270.21	7,110.00	3,746.45	-5,176.63	6,141.54	0.00	0.00	0.00
12,700.00	90.00	270.21	7,110.00	3,746.81	-5,276.63	6,235.71	0.00	0.00	0.00
12,800.00	90.00	270.21	7,110.00	3,747.18	-5,376.63	6,329.89	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well MILKSHAKE 31W-20-2N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 4973.00usft
Project:	Weld County	MD Reference:	KB 25' @ 4973.00usft
Site:	Sec 32-T6N-R67W	North Reference:	True
Well:	MILKSHAKE 31W-20-2N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	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)
12,900.00	90.00	270.21	7,110.00	3,747.55	-5,476.63	6,424.06	0.00	0.00	0.00
13,000.00	90.00	270.21	7,110.00	3,747.92	-5,576.63	6,518.24	0.00	0.00	0.00
13,100.00	90.00	270.21	7,110.00	3,748.29	-5,676.63	6,612.42	0.00	0.00	0.00
13,200.00	90.00	270.21	7,110.00	3,748.66	-5,776.63	6,706.59	0.00	0.00	0.00
13,300.00	90.00	270.21	7,110.00	3,749.03	-5,876.62	6,800.77	0.00	0.00	0.00
13,400.00	90.00	270.21	7,110.00	3,749.39	-5,976.62	6,894.95	0.00	0.00	0.00
13,500.00	90.00	270.21	7,110.00	3,749.76	-6,076.62	6,989.12	0.00	0.00	0.00
13,600.00	90.00	270.21	7,110.00	3,750.13	-6,176.62	7,083.30	0.00	0.00	0.00
13,700.00	90.00	270.21	7,110.00	3,750.50	-6,276.62	7,177.48	0.00	0.00	0.00
13,800.00	90.00	270.21	7,110.00	3,750.87	-6,376.62	7,271.65	0.00	0.00	0.00
13,900.00	90.00	270.21	7,110.00	3,751.24	-6,476.62	7,365.83	0.00	0.00	0.00
14,000.00	90.00	270.21	7,110.00	3,751.61	-6,576.62	7,460.01	0.00	0.00	0.00
14,100.00	90.00	270.21	7,110.00	3,751.97	-6,676.62	7,554.18	0.00	0.00	0.00
14,200.00	90.00	270.21	7,110.00	3,752.34	-6,776.62	7,648.36	0.00	0.00	0.00
14,300.00	90.00	270.21	7,110.00	3,752.71	-6,876.62	7,742.54	0.00	0.00	0.00
14,400.00	90.00	270.21	7,110.00	3,753.08	-6,976.62	7,836.71	0.00	0.00	0.00
14,500.00	90.00	270.21	7,110.00	3,753.45	-7,076.62	7,930.89	0.00	0.00	0.00
14,600.00	90.00	270.21	7,110.00	3,753.82	-7,176.62	8,025.07	0.00	0.00	0.00
14,700.00	90.00	270.21	7,110.00	3,754.19	-7,276.62	8,119.24	0.00	0.00	0.00
14,800.00	90.00	270.21	7,110.00	3,754.55	-7,376.61	8,213.42	0.00	0.00	0.00
14,900.00	90.00	270.21	7,110.00	3,754.92	-7,476.61	8,307.60	0.00	0.00	0.00
15,000.00	90.00	270.21	7,110.00	3,755.29	-7,576.61	8,401.77	0.00	0.00	0.00
15,100.00	90.00	270.21	7,110.00	3,755.66	-7,676.61	8,495.95	0.00	0.00	0.00
15,200.00	90.00	270.21	7,110.00	3,756.03	-7,776.61	8,590.13	0.00	0.00	0.00
15,300.00	90.00	270.21	7,110.00	3,756.40	-7,876.61	8,684.30	0.00	0.00	0.00
15,400.00	90.00	270.21	7,110.00	3,756.77	-7,976.61	8,778.48	0.00	0.00	0.00
15,500.00	90.00	270.21	7,110.00	3,757.13	-8,076.61	8,872.66	0.00	0.00	0.00
15,600.00	90.00	270.21	7,110.00	3,757.50	-8,176.61	8,966.83	0.00	0.00	0.00
15,700.00	90.00	270.21	7,110.00	3,757.87	-8,276.61	9,061.01	0.00	0.00	0.00
15,800.00	90.00	270.21	7,110.00	3,758.24	-8,376.61	9,155.19	0.00	0.00	0.00
15,900.00	90.00	270.21	7,110.00	3,758.61	-8,476.61	9,249.36	0.00	0.00	0.00
16,000.00	90.00	270.21	7,110.00	3,758.98	-8,576.61	9,343.54	0.00	0.00	0.00
16,100.00	90.00	270.21	7,110.00	3,759.35	-8,676.61	9,437.72	0.00	0.00	0.00
16,200.00	90.00	270.21	7,110.00	3,759.71	-8,776.61	9,531.89	0.00	0.00	0.00
16,300.00	90.00	270.21	7,110.00	3,760.08	-8,876.60	9,626.07	0.00	0.00	0.00
16,400.00	90.00	270.21	7,110.00	3,760.45	-8,976.60	9,720.24	0.00	0.00	0.00
16,500.00	90.00	270.21	7,110.00	3,760.82	-9,076.60	9,814.42	0.00	0.00	0.00
16,600.00	90.00	270.21	7,110.00	3,761.19	-9,176.60	9,908.60	0.00	0.00	0.00
16,700.00	90.00	270.21	7,110.00	3,761.56	-9,276.60	10,002.77	0.00	0.00	0.00
16,800.00	90.00	270.21	7,110.00	3,761.93	-9,376.60	10,096.95	0.00	0.00	0.00
16,900.00	90.00	270.21	7,110.00	3,762.29	-9,476.60	10,191.13	0.00	0.00	0.00
17,000.00	90.00	270.21	7,110.00	3,762.66	-9,576.60	10,285.30	0.00	0.00	0.00
17,100.00	90.00	270.21	7,110.00	3,763.03	-9,676.60	10,379.48	0.00	0.00	0.00
17,200.00	90.00	270.21	7,110.00	3,763.40	-9,776.60	10,473.66	0.00	0.00	0.00
17,300.00	90.00	270.21	7,110.00	3,763.77	-9,876.60	10,567.83	0.00	0.00	0.00
17,400.00	90.00	270.21	7,110.00	3,764.14	-9,976.60	10,662.01	0.00	0.00	0.00
17,500.00	90.00	270.21	7,110.00	3,764.50	-10,076.60	10,756.19	0.00	0.00	0.00
17,600.00	90.00	270.21	7,110.00	3,764.87	-10,176.60	10,850.36	0.00	0.00	0.00
17,700.00	90.00	270.21	7,110.00	3,765.24	-10,276.60	10,944.54	0.00	0.00	0.00
17,800.00	90.00	270.21	7,110.00	3,765.61	-10,376.59	11,038.72	0.00	0.00	0.00
17,848.51	90.00	270.21	7,110.00	3,765.80	-10,425.11	11,084.41	0.00	0.00	0.00
TD at 17848.51' MD									

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well MILKSHAKE 31W-20-2N
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 4973.00usft
Project:	Weld County	MD Reference:	KB 25' @ 4973.00usft
Site:	Sec 32-T6N-R67W	North Reference:	True
Well:	MILKSHAKE 31W-20-2N	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL 1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
MILKSHAKE 31W-2N LF - plan hits target center - Point	0.00	0.00	7,110.00	3,731.20	-1,038.92	1,407,061.76	3,159,182.72	40° 26' 57.757 N	104° 55' 40.904 W
MILKSHAKE 31W-2N PI - plan hits target center - Point	0.00	0.00	7,110.00	3,765.80	-10,425.11	1,407,035.43	3,149,796.51	40° 26' 58.078 N	104° 57' 42.318 W

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
3,998.63	3,590.00	PARKMAN				
4,727.51	4,210.00	SUSSEX				
5,274.18	4,675.00	SHANNON				
7,977.12	6,945.00	SHARON SPRINGS				
8,043.22	6,985.00	NIOBRARA				
8,346.17	7,100.00	NIO B				

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
200.00	200.00	0.00	0.00	BUILD 2°/100'
1,662.73	1,600.00	364.00	-31.85	HOLD 29.25° INC
1,727.73	1,656.71	395.64	-34.61	DROP 2°/100'
1,874.19	1,782.91	469.42	-43.17	HOLD VERTICAL
7,605.94	6,658.43	3,452.91	-468.65	KOP, BUILD 10°/100'
8,462.26	7,110.00	3,731.20	-1,038.92	LP @ 90° INC, 270.21° AZM HOLD
17,848.51	7,110.00	3,765.80	-10,425.11	TD at 17848.51' MD