



Extraction Oil & Gas

Weld County, CO (NAD83)

Sec. 36-T12N-R62W

SILVERBACK 25N-20-3N

Wellbore #1

Survey: MWD Surveys

Standard Survey Report

03 October, 2017





Company:	Extraction Oil & Gas	Local Co-ordinate Reference:	Well SILVERBACK 25N-20-3N
Project:	Weld County, CO (NAD83)	TVD Reference:	KB=25 @ 5306.00ft (P 346)
Site:	Sec. 36-T12N-R62W	MD Reference:	KB=25 @ 5306.00ft (P 346)
Well:	SILVERBACK 25N-20-3N	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Multi User Db

Project	Weld County, CO (NAD83)		
Map System:	US State Plane 1983	System Datum:	Ground Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	Sec. 36-T12N-R62W				
Site Position:		Northing:	1,599,503.1786 usft	Latitude:	40.972550
From:	Lat/Long	Easting:	3,339,107.5963 usft	Longitude:	-104.272013
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.79 °

Well	SILVERBACK 25N-20-3N					
Well Position	+N/-S	0.00 ft	Northing:	1,599,503.1786 usft	Latitude:	40.972550
	+E/-W	0.00 ft	Easting:	3,339,107.5963 usft	Longitude:	-104.272013
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	5,281.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	9/22/2017	8.20	67.37	52,928

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	359.61	

Survey Program	Date	10/3/2017			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
154.00	16,460.00	MWD Surveys (Wellbore #1)	MWD	MWD - Standard	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	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	
154.00	0.31	338.88	154.00	0.39	-0.15	0.39	0.20	0.20	0.00	
First MWD Survey @ 154'MD										
246.00	0.49	312.62	246.00	0.89	-0.53	0.89	0.27	0.20	-28.54	
337.00	0.62	323.81	336.99	1.55	-1.11	1.56	0.19	0.14	12.30	
431.00	0.80	328.70	430.99	2.52	-1.75	2.53	0.20	0.19	5.20	
525.00	0.80	347.21	524.98	3.72	-2.23	3.74	0.27	0.00	19.69	
620.00	0.62	28.21	619.97	4.82	-2.14	4.83	0.55	-0.19	43.16	
714.00	0.80	15.12	713.96	5.90	-1.73	5.91	0.26	0.19	-13.93	
808.00	0.80	44.20	807.95	7.01	-1.10	7.01	0.43	0.00	30.94	
903.00	1.19	44.20	902.94	8.19	0.05	8.19	0.41	0.41	0.00	



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Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
997.00	1.28	46.58	996.92	9.61	1.50	9.60	0.11	0.10	2.53
1,092.00	1.19	56.10	1,091.90	10.89	3.09	10.87	0.24	-0.09	10.02
1,185.00	1.19	58.92	1,184.88	11.93	4.71	11.89	0.06	0.00	3.03
1,280.00	1.10	59.41	1,279.86	12.90	6.34	12.86	0.10	-0.09	0.52
1,374.00	1.02	88.89	1,373.84	13.37	7.96	13.32	0.58	-0.09	31.36
1,468.00	0.49	23.89	1,467.83	13.76	8.96	13.70	0.99	-0.56	-69.15
1,539.00	0.49	339.90	1,538.83	14.32	8.97	14.26	0.52	0.00	-61.96
1,658.00	0.22	19.39	1,657.83	15.01	8.88	14.95	0.29	-0.23	33.18
1,752.00	3.31	3.29	1,751.77	17.89	9.09	17.83	3.30	3.29	-17.13
1,847.00	6.19	357.79	1,846.44	25.75	9.05	25.69	3.07	3.03	-5.79
1,941.00	7.38	348.09	1,939.78	36.72	7.61	36.67	1.75	1.27	-10.32
2,035.00	7.69	344.92	2,032.97	48.70	4.73	48.67	0.55	0.33	-3.37
2,129.00	9.99	337.30	2,125.85	62.30	-0.06	62.30	2.74	2.45	-8.11
2,224.00	8.62	323.41	2,219.61	75.62	-7.48	75.67	2.76	-1.44	-14.62
2,319.00	8.88	320.90	2,313.50	87.03	-16.35	87.14	0.49	0.27	-2.64
2,414.00	6.89	304.29	2,407.61	95.93	-25.68	96.10	3.16	-2.09	-17.48
2,508.00	6.81	304.69	2,500.94	102.28	-34.92	102.52	0.10	-0.09	0.43
2,602.00	4.20	310.28	2,594.50	107.68	-42.13	107.96	2.83	-2.78	5.95
2,696.00	4.20	313.19	2,688.25	112.26	-47.27	112.58	0.23	0.00	3.10
2,790.00	3.58	309.49	2,782.03	116.48	-52.04	116.84	0.71	-0.66	-3.94
2,885.00	4.60	336.19	2,876.80	121.85	-55.87	122.23	2.24	1.07	28.11
2,979.00	4.11	339.72	2,970.53	128.46	-58.56	128.86	0.59	-0.52	3.76
3,074.00	3.89	339.81	3,065.29	134.68	-60.85	135.09	0.23	-0.23	0.09
3,167.00	6.01	327.60	3,157.94	141.75	-64.55	142.19	2.53	2.28	-13.13
3,261.00	5.61	326.59	3,251.46	149.74	-69.72	150.22	0.44	-0.43	-1.07
3,355.00	5.21	326.01	3,345.04	157.12	-74.63	157.62	0.43	-0.43	-0.62
3,448.00	4.99	325.88	3,437.67	163.97	-79.26	164.51	0.24	-0.24	-0.14
3,543.00	5.21	324.21	3,532.30	170.88	-84.10	171.46	0.28	0.23	-1.76
3,637.00	3.49	313.10	3,626.03	176.30	-88.69	176.91	2.03	-1.83	-11.82
3,731.00	3.89	313.19	3,719.83	180.44	-93.10	181.07	0.43	0.43	0.10
3,826.00	3.40	340.69	3,814.65	185.30	-96.38	185.96	1.89	-0.52	28.95
3,920.00	5.30	345.80	3,908.37	192.14	-98.37	192.81	2.06	2.02	5.44
4,014.00	4.29	342.98	4,002.04	199.71	-100.46	200.40	1.10	-1.07	-3.00
4,108.00	3.89	341.88	4,095.80	206.11	-102.49	206.81	0.43	-0.43	-1.17
4,202.00	6.89	340.38	4,189.37	214.45	-105.37	215.17	3.19	3.19	-1.60
4,296.00	8.09	336.41	4,282.57	225.82	-109.91	226.57	1.39	1.28	-4.22
4,390.00	8.31	331.30	4,375.61	237.84	-115.82	238.63	0.81	0.23	-5.44
4,485.00	8.09	319.49	4,469.65	248.95	-123.46	249.79	1.78	-0.23	-12.43
4,579.00	5.92	310.19	4,562.94	257.11	-131.46	258.00	2.60	-2.31	-9.89
4,673.00	5.08	325.88	4,656.51	263.68	-137.50	264.62	1.82	-0.89	16.69
4,767.00	4.91	320.90	4,750.16	270.25	-142.37	271.22	0.50	-0.18	-5.30
4,862.00	5.08	311.60	4,844.80	276.19	-148.08	277.20	0.87	0.18	-9.79
4,956.00	4.29	322.00	4,938.49	281.73	-153.36	282.77	1.23	-0.84	11.06



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Survey

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5,050.00	4.11	317.99	5,032.23	287.00	-157.78	288.08	0.37	-0.19	-4.27
5,144.00	3.80	312.31	5,126.01	291.60	-162.33	292.71	0.53	-0.33	-6.04
5,239.00	3.40	312.49	5,220.82	295.62	-166.74	296.76	0.42	-0.42	0.19
5,333.00	3.80	329.98	5,314.64	300.20	-170.35	301.37	1.24	0.43	18.61
5,427.00	3.00	326.41	5,408.47	304.95	-173.27	306.13	0.88	-0.85	-3.80
5,522.00	2.70	337.12	5,503.36	309.08	-175.52	310.28	0.64	-0.32	11.27
5,616.00	4.20	314.69	5,597.19	313.54	-178.83	314.76	2.12	1.60	-23.86
5,709.00	3.18	310.81	5,689.99	317.62	-183.20	318.87	1.13	-1.10	-4.17
5,803.00	1.90	303.10	5,783.90	320.18	-186.48	321.45	1.41	-1.36	-8.20
5,897.00	1.59	311.52	5,877.86	321.89	-188.76	323.18	0.43	-0.33	8.96
5,991.00	1.50	319.40	5,971.82	323.69	-190.54	324.99	0.25	-0.10	8.38
6,086.00	1.10	312.22	6,066.80	325.25	-192.02	326.56	0.45	-0.42	-7.56
6,180.00	0.80	321.21	6,160.78	326.37	-193.10	327.69	0.36	-0.32	9.56
6,274.00	0.62	328.09	6,254.78	327.31	-193.78	328.63	0.21	-0.19	7.32
6,369.00	0.31	342.41	6,349.77	327.99	-194.13	329.32	0.35	-0.33	15.07
6,487.00	4.60	10.71	6,467.64	332.95	-193.35	334.27	3.67	3.64	23.98
6,582.00	17.41	5.01	6,560.70	350.92	-191.39	352.23	13.52	13.48	-6.00
6,676.00	24.79	1.49	6,648.34	384.68	-189.65	385.97	7.96	7.85	-3.74
6,770.00	30.31	0.61	6,731.65	428.13	-188.88	429.42	5.89	5.87	-0.94
6,864.00	39.11	358.71	6,808.85	481.60	-189.30	482.89	9.43	9.36	-2.02
6,959.00	42.29	357.61	6,880.86	543.51	-191.30	544.81	3.43	3.35	-1.16
7,053.00	53.29	357.92	6,943.92	612.97	-194.00	614.29	11.70	11.70	0.33
7,148.00	62.31	359.81	6,994.49	693.26	-195.52	694.58	9.64	9.49	1.99
7,243.00	68.80	358.58	7,033.79	779.68	-196.76	781.02	6.93	6.83	-1.29
7,337.00	71.50	358.40	7,065.70	868.06	-199.09	869.41	2.88	2.87	-0.19
7,369.09	73.10	358.65	7,075.46	898.62	-199.88	899.97	5.03	4.98	0.77
FTP-7369.09'MD_898.62'N & 199.88' W_600'FSL & 1270' FWL									
7,431.00	76.18	359.11	7,091.86	958.30	-201.05	959.66	5.03	4.98	0.75
7,525.00	85.82	359.59	7,106.55	1,051.03	-202.09	1,052.39	10.27	10.26	0.51
7,620.00	88.82	1.18	7,110.99	1,145.91	-201.46	1,147.26	3.57	3.16	1.67
7,714.00	88.82	359.68	7,112.92	1,239.88	-200.75	1,241.23	1.60	0.00	-1.60
7,809.00	89.79	359.99	7,114.08	1,334.87	-201.02	1,336.22	1.07	1.02	0.33
7,902.00	91.30	359.42	7,113.19	1,427.86	-201.50	1,429.21	1.74	1.62	-0.61
7,996.00	92.18	359.02	7,110.34	1,521.81	-202.78	1,523.17	1.03	0.94	-0.43
8,090.00	91.12	0.78	7,107.63	1,615.77	-202.94	1,617.12	2.19	-1.13	1.87
8,184.00	90.28	2.19	7,106.48	1,709.72	-200.51	1,711.06	1.75	-0.89	1.50
8,277.00	91.12	2.02	7,105.34	1,802.65	-197.09	1,803.96	0.92	0.90	-0.18
8,372.00	91.52	1.80	7,103.16	1,897.58	-193.93	1,898.86	0.48	0.42	-0.23
8,466.00	92.18	1.62	7,100.12	1,991.48	-191.12	1,992.75	0.73	0.70	-0.19
8,560.00	90.50	0.61	7,097.92	2,085.44	-189.30	2,086.69	2.09	-1.79	-1.07
8,654.00	89.31	0.61	7,098.08	2,179.43	-188.29	2,180.67	1.27	-1.27	0.00
8,749.00	89.88	359.99	7,098.75	2,274.43	-187.80	2,275.66	0.89	0.60	-0.65
8,843.00	90.59	0.61	7,098.37	2,368.42	-187.31	2,369.65	1.00	0.76	0.66



Integrity Directional Services, LLC

Survey Report



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8,938.00	91.12	1.09	7,096.95	2,463.40	-185.90	2,464.62	0.75	0.56	0.51
9,033.00	89.48	0.30	7,096.45	2,558.39	-184.74	2,559.60	1.92	-1.73	-0.83
9,127.00	90.50	0.70	7,096.47	2,652.38	-183.92	2,653.58	1.17	1.09	0.43
9,222.00	88.38	0.39	7,097.40	2,747.37	-183.02	2,748.56	2.26	-2.23	-0.33
9,316.00	89.79	2.28	7,098.90	2,841.32	-180.83	2,842.50	2.51	1.50	2.01
9,410.00	90.50	3.69	7,098.66	2,935.19	-175.94	2,936.33	1.68	0.76	1.50
9,505.00	89.70	0.39	7,098.49	3,030.12	-172.55	3,031.23	3.57	-0.84	-3.47
9,599.00	90.10	3.21	7,098.66	3,124.06	-169.60	3,125.15	3.03	0.43	3.00
9,693.00	90.19	5.89	7,098.42	3,217.76	-162.15	3,218.80	2.85	0.10	2.85
9,787.00	90.99	0.70	7,097.45	3,311.56	-156.74	3,312.56	5.59	0.85	-5.52
9,881.00	91.91	359.51	7,095.07	3,405.53	-156.57	3,406.53	1.60	0.98	-1.27
9,975.00	89.88	359.59	7,093.60	3,499.51	-157.31	3,500.51	2.16	-2.16	0.09
10,070.00	91.12	359.99	7,092.77	3,594.51	-157.66	3,595.50	1.37	1.31	0.42
10,164.00	90.19	359.59	7,091.70	3,688.50	-158.00	3,689.50	1.08	-0.99	-0.43
10,258.00	91.12	359.90	7,090.63	3,782.49	-158.42	3,783.49	1.04	0.99	0.33
10,352.00	89.70	359.02	7,089.95	3,876.48	-159.31	3,877.48	1.78	-1.51	-0.94
10,445.00	90.01	356.82	7,090.19	3,969.41	-162.68	3,970.44	2.39	0.33	-2.37
10,540.00	88.69	358.18	7,091.27	4,064.31	-166.83	4,065.36	1.99	-1.39	1.43
10,633.00	89.31	0.39	7,092.89	4,157.28	-167.99	4,158.34	2.47	0.67	2.38
10,728.00	90.72	1.09	7,092.86	4,252.27	-166.76	4,253.32	1.66	1.48	0.74
10,822.00	89.31	1.40	7,092.84	4,346.25	-164.72	4,347.28	1.54	-1.50	0.33
10,916.00	89.70	2.02	7,093.65	4,440.20	-161.91	4,441.21	0.78	0.41	0.66
11,011.00	89.88	1.31	7,094.00	4,535.16	-159.15	4,536.15	0.77	0.19	-0.75
11,105.00	90.59	1.71	7,093.61	4,629.13	-156.67	4,630.09	0.87	0.76	0.43
11,199.00	89.48	359.28	7,093.56	4,723.12	-155.86	4,724.07	2.84	-1.18	-2.59
11,294.00	89.31	359.51	7,094.56	4,818.10	-156.87	4,819.07	0.30	-0.18	0.24
11,388.00	90.90	1.71	7,094.39	4,912.09	-155.87	4,913.04	2.89	1.69	2.34
11,482.00	89.48	1.00	7,094.08	5,006.06	-153.64	5,007.00	1.69	-1.51	-0.76
11,577.00	89.62	0.78	7,094.82	5,101.05	-152.17	5,101.97	0.27	0.15	-0.23
11,671.00	91.30	0.61	7,094.07	5,195.03	-151.03	5,195.95	1.80	1.79	-0.18
11,860.00	90.72	1.49	7,090.74	5,383.97	-147.56	5,384.85	0.56	-0.31	0.47
11,954.00	89.40	359.90	7,090.64	5,477.96	-146.42	5,478.83	2.20	-1.40	-1.69
12,048.00	90.28	359.90	7,090.90	5,571.96	-146.59	5,572.83	0.94	0.94	0.00
12,142.00	91.12	359.51	7,089.75	5,665.95	-147.07	5,666.82	0.99	0.89	-0.41
12,237.00	89.48	0.39	7,089.25	5,760.94	-147.15	5,761.81	1.96	-1.73	0.93
12,331.00	90.90	2.28	7,088.94	5,854.91	-144.96	5,855.76	2.51	1.51	2.01
12,425.00	88.60	2.11	7,089.35	5,948.83	-141.36	5,949.66	2.45	-2.45	-0.18
12,519.00	89.00	2.41	7,091.32	6,042.74	-137.66	6,043.54	0.53	0.43	0.32
12,613.00	90.19	2.02	7,091.99	6,136.66	-134.03	6,137.44	1.33	1.27	-0.41
12,707.00	91.60	3.21	7,090.52	6,230.55	-129.74	6,231.29	1.96	1.50	1.27
12,801.00	88.91	2.02	7,090.10	6,324.44	-125.45	6,325.15	3.13	-2.86	-1.27
12,894.00	89.70	2.50	7,091.23	6,417.36	-121.78	6,418.05	0.99	0.85	0.52
12,989.00	90.10	1.40	7,091.39	6,512.30	-118.55	6,512.96	1.23	0.42	-1.16
13,084.00	91.12	2.11	7,090.38	6,607.25	-115.64	6,607.89	1.31	1.07	0.75



Company:	Extraction Oil & Gas	Local Co-ordinate Reference:	Well SILVERBACK 25N-20-3N
Project:	Weld County, CO (NAD83)	TVD Reference:	KB=25 @ 5306.00ft (P 346)
Site:	Sec. 36-T12N-R62W	MD Reference:	KB=25 @ 5306.00ft (P 346)
Well:	SILVERBACK 25N-20-3N	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Multi User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,178.00	88.51	0.08	7,090.69	6,701.22	-113.85	6,701.84	3.52	-2.78	-2.16
13,366.00	89.48	359.90	7,093.98	6,889.19	-113.88	6,889.81	0.52	0.52	-0.10
13,555.00	90.01	359.90	7,094.82	7,078.19	-114.21	7,078.80	0.28	0.28	0.00
13,650.00	90.28	359.28	7,094.58	7,173.18	-114.89	7,173.80	0.71	0.28	-0.65
13,744.00	89.79	357.30	7,094.53	7,267.14	-117.69	7,267.77	2.17	-0.52	-2.11
13,838.00	90.81	358.01	7,094.03	7,361.06	-121.54	7,361.72	1.32	1.09	0.76
14,027.00	91.91	358.58	7,089.55	7,549.91	-127.16	7,550.61	0.66	0.58	0.30
14,121.00	89.48	0.78	7,088.41	7,643.89	-127.68	7,644.59	3.49	-2.59	2.34
14,215.00	89.79	0.21	7,089.01	7,737.89	-126.87	7,738.58	0.69	0.33	-0.61
14,309.00	90.19	2.50	7,089.02	7,831.85	-124.65	7,832.53	2.47	0.43	2.44
14,403.00	90.28	1.31	7,088.64	7,925.80	-121.53	7,926.45	1.27	0.10	-1.27
14,593.00	89.48	2.81	7,089.04	8,115.67	-114.70	8,116.27	0.89	-0.42	0.79
14,687.00	90.41	2.81	7,089.13	8,209.56	-110.09	8,210.12	0.99	0.99	0.00
14,782.00	90.50	1.71	7,088.37	8,304.48	-106.34	8,305.01	1.16	0.09	-1.16
14,877.00	89.22	359.59	7,088.60	8,399.46	-105.26	8,399.99	2.61	-1.35	-2.23
14,971.00	89.31	359.51	7,089.81	8,493.45	-106.00	8,493.98	0.13	0.10	-0.09
15,064.00	89.22	359.99	7,091.00	8,586.44	-106.41	8,586.97	0.53	-0.10	0.52
15,159.00	90.59	1.18	7,091.16	8,681.44	-105.44	8,681.95	1.91	1.44	1.25
15,254.00	91.69	2.59	7,089.27	8,776.36	-102.31	8,776.86	1.88	1.16	1.48
15,348.00	87.80	1.71	7,089.69	8,870.28	-98.79	8,870.74	4.24	-4.14	-0.94
15,443.00	88.11	1.00	7,093.08	8,965.19	-96.54	8,965.64	0.82	0.33	-0.75
15,537.00	89.79	1.88	7,094.80	9,059.14	-94.18	9,059.57	2.02	1.79	0.94
15,632.00	89.62	2.28	7,095.29	9,154.07	-90.73	9,154.48	0.46	-0.18	0.42
15,726.00	90.01	1.31	7,095.59	9,248.03	-87.79	9,248.41	1.11	0.41	-1.03
15,820.00	91.30	3.60	7,094.52	9,341.93	-83.76	9,342.28	2.80	1.37	2.44
15,914.00	93.59	2.59	7,090.51	9,435.69	-78.69	9,436.01	2.66	2.44	-1.07
16,008.00	91.12	0.92	7,086.65	9,529.56	-75.82	9,529.86	3.17	-2.63	-1.78
16,102.00	88.60	1.40	7,086.88	9,623.53	-73.92	9,623.81	2.73	-2.68	0.51
16,196.00	89.48	2.28	7,088.45	9,717.47	-70.90	9,717.73	1.32	0.94	0.94
16,291.00	90.99	0.52	7,088.06	9,812.43	-68.58	9,812.67	2.44	1.59	-1.85
16,385.00	90.10	0.52	7,087.17	9,906.43	-67.72	9,906.66	0.95	-0.95	0.00
Final MWD Survey @ 16385'MD									
16,460.00	90.10	0.52	7,087.04	9,981.42	-67.04	9,981.65	0.00	0.00	0.00
PTD-16460'MD_9981.42'N & 67.04'W_855' FNL & 1397' FWL									

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
154.00	154.00	0.39	-0.15	First MWD Survey @ 154'MD
7,369.09	7,075.46	898.62	-199.88	FTP-7369.09'MD_898.62'N & 199.88' W_600'FSL & 1270' FWL
16,385.00	7,087.17	9,906.43	-67.72	Final MWD Survey @ 16385'MD
16,460.00	7,087.04	9,981.42	-67.04	PTD-16460'MD_9981.42'N & 67.04'W_855' FNL & 1397' FWL



Integrity Directional Services, LLC
Survey Report



Company:	Extraction Oil & Gas	Local Co-ordinate Reference:	Well SILVERBACK 25N-20-3N
Project:	Weld County, CO (NAD83)	TVD Reference:	KB=25 @ 5306.00ft (P 346)
Site:	Sec. 36-T12N-R62W	MD Reference:	KB=25 @ 5306.00ft (P 346)
Well:	SILVERBACK 25N-20-3N	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Multi User Db

Checked By: _____ Approved By: _____ Date: _____