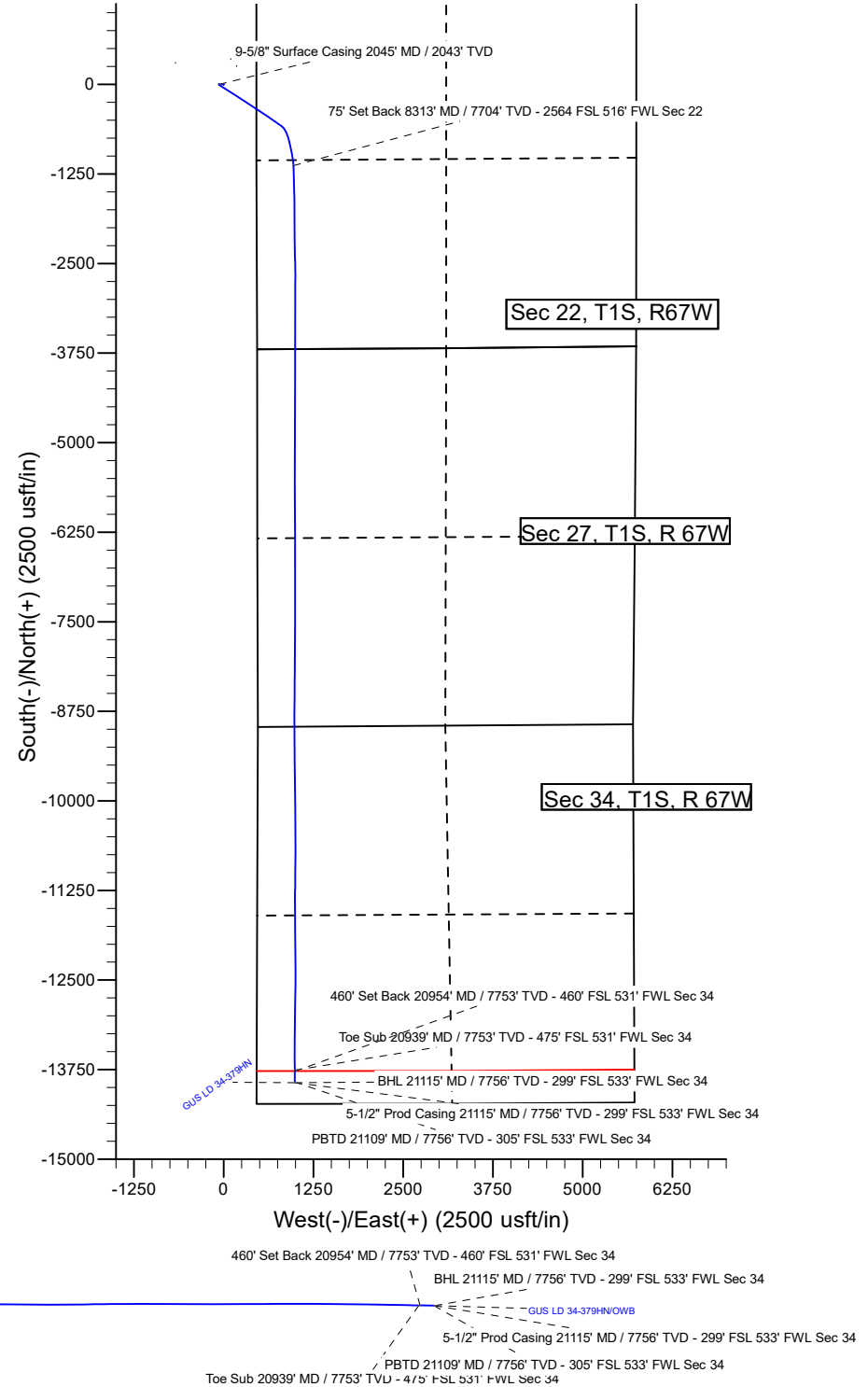
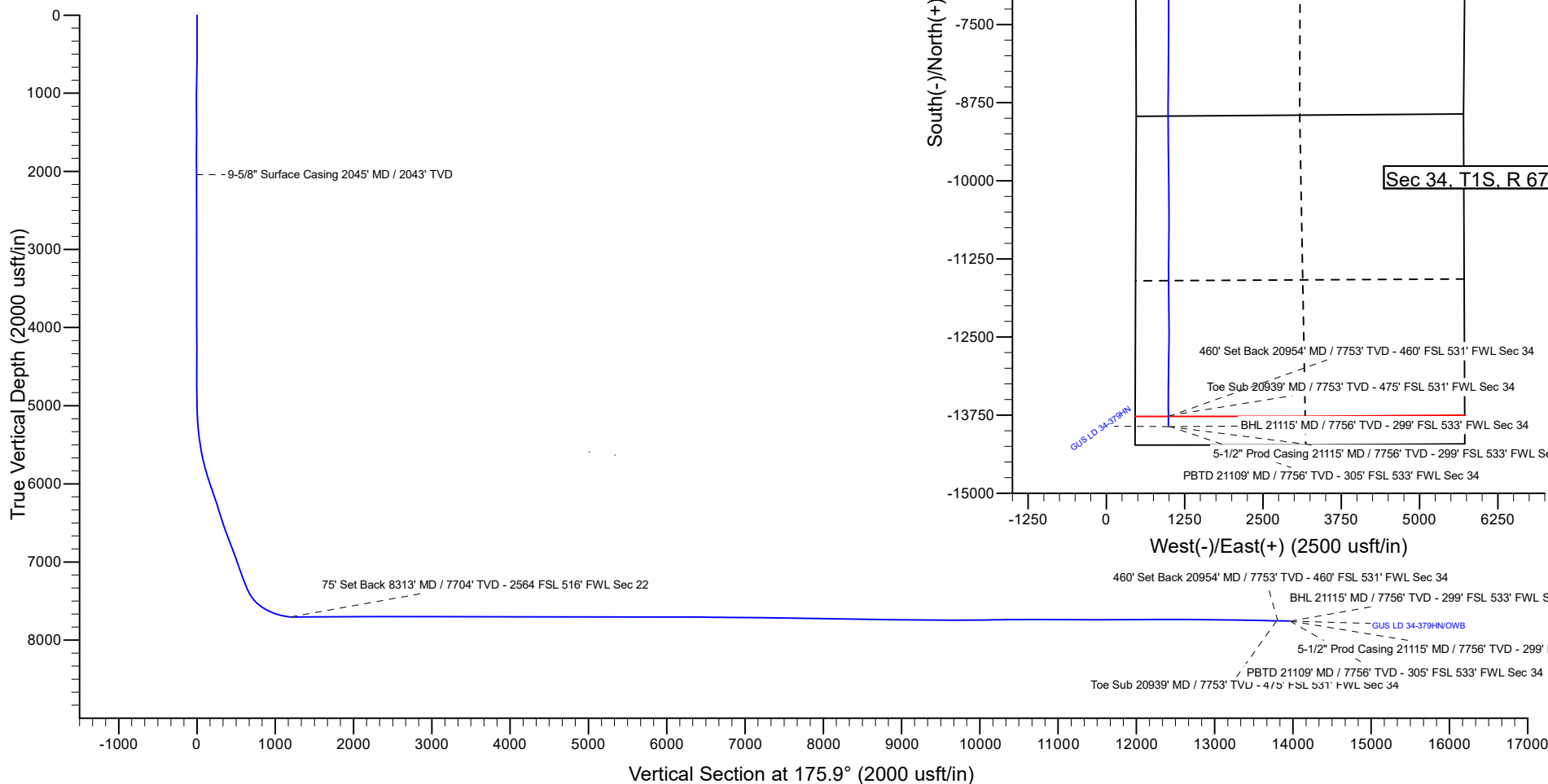
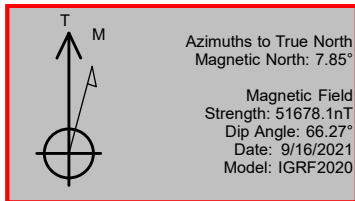




Project: ADAMS COUNTY
Site: SEC 21-T1S-R67W
Well: GUS LD 34-379HN
GL: 5124.0
KB: KB 20' @ 5144.0usft
API: 001-10489

Design: OWB (GUS LD 34-379HN/OWB)
Created By: Mike Mataalii Date: 10:14, March 14 2022



Survey Report

Company:	GWP - PLANNING DB	Local Co-ordinate Reference:	Well GUS LD 34-379HN
Project:	ADAMS COUNTY	TVD Reference:	KB 20' @ 5144.0usft
Site:	SEC 21-T1S-R67W	MD Reference:	KB 20' @ 5144.0usft
Well:	GUS LD 34-379HN	North Reference:	True
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	OWB	Database:	EDM 16 Production

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)	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
98.0	0.7	190.3	98.0	-0.6	-0.1	0.5	0.67	0.67	0.00	
185.0	0.3	148.8	185.0	-1.3	-0.1	1.3	0.53	-0.36	-47.68	
276.0	0.1	161.3	276.0	-1.6	0.1	1.6	0.25	-0.24	13.71	
368.0	0.6	258.9	368.0	-1.8	-0.3	1.8	0.65	0.48	106.04	
458.0	1.3	272.7	458.0	-1.8	-1.7	1.7	0.81	0.78	15.32	
548.0	1.2	289.1	548.0	-1.5	-3.6	1.2	0.40	-0.04	18.27	
638.0	1.4	302.8	637.9	-0.6	-5.4	0.2	0.37	0.14	15.23	
728.0	2.9	287.7	727.9	0.7	-8.5	-1.3	1.76	1.67	-16.80	
818.0	3.2	287.5	817.7	2.1	-13.0	-3.0	0.33	0.33	-0.19	
908.0	3.5	281.9	907.6	3.4	-18.0	-4.7	0.50	0.34	-6.26	
998.0	3.7	280.8	997.4	4.5	-23.5	-6.2	0.26	0.24	-1.17	
1,088.0	3.6	261.0	1,087.2	4.6	-29.2	-6.7	1.41	-0.04	-22.07	
1,178.0	3.3	263.8	1,177.1	3.9	-34.6	-6.3	0.39	-0.34	3.12	
1,268.0	2.5	255.3	1,267.0	3.1	-39.1	-5.9	1.05	-0.93	-9.48	
1,358.0	2.5	257.2	1,356.9	2.2	-43.0	-5.2	0.09	0.00	2.16	
1,448.0	1.5	267.3	1,446.8	1.7	-46.1	-5.0	1.13	-1.07	11.22	
1,538.0	2.2	273.5	1,536.8	1.7	-49.0	-5.2	0.81	0.78	6.93	
1,628.0	2.1	274.3	1,626.7	2.0	-52.4	-5.7	0.19	-0.19	0.88	
1,718.0	1.6	275.8	1,716.7	2.2	-55.3	-6.1	0.49	-0.49	1.67	
1,808.0	1.5	263.3	1,806.6	2.2	-57.7	-6.3	0.41	-0.16	-13.97	
1,898.0	1.0	250.1	1,896.6	1.8	-59.6	-6.1	0.65	-0.58	-14.64	
1,990.0	0.6	245.4	1,988.6	1.3	-60.8	-5.7	0.39	-0.38	-5.07	
2,071.0	0.3	215.7	2,069.6	1.0	-61.3	-5.4	0.50	-0.42	-36.65	
2,160.0	1.1	239.6	2,158.6	0.4	-62.2	-4.8	0.99	0.96	26.82	
2,250.0	0.1	108.7	2,248.6	-0.1	-62.9	-4.4	1.34	-1.13	-145.49	
2,339.0	0.0	256.1	2,337.6	-0.1	-62.8	-4.3	0.15	-0.09	165.71	
2,429.0	0.5	279.4	2,427.6	-0.1	-63.2	-4.4	0.51	0.51	25.79	
2,518.0	0.0	58.6	2,516.6	0.0	-63.6	-4.5	0.58	-0.52	156.47	
2,608.0	0.2	191.5	2,606.6	-0.2	-63.6	-4.3	0.30	0.24	147.70	
2,698.0	0.3	142.2	2,696.6	-0.5	-63.5	-4.0	0.25	0.03	-54.78	
2,787.0	0.1	31.6	2,785.6	-0.6	-63.3	-3.9	0.41	-0.15	-124.28	
2,877.0	0.0	79.8	2,875.6	-0.5	-63.2	-4.0	0.15	-0.13	53.57	
2,966.0	0.1	306.7	2,964.6	-0.5	-63.3	-4.0	0.14	0.08	-149.60	
3,056.0	0.2	106.1	3,054.6	-0.5	-63.2	-4.0	0.35	0.13	177.11	
3,146.0	0.1	185.5	3,144.6	-0.6	-63.0	-3.9	0.25	-0.12	88.21	
3,235.0	0.0	255.0	3,233.6	-0.7	-63.1	-3.8	0.12	-0.08	78.12	
3,325.0	0.3	158.4	3,323.6	-1.0	-63.0	-3.5	0.40	0.34	-107.32	
3,415.0	0.2	220.9	3,413.6	-1.3	-63.0	-3.2	0.34	-0.20	69.40	
3,504.0	0.2	137.8	3,502.6	-1.5	-62.9	-2.9	0.29	0.06	-93.37	
3,594.0	0.3	278.0	3,592.6	-1.6	-63.1	-2.9	0.60	0.14	155.80	
3,684.0	0.6	304.7	3,682.6	-1.3	-63.8	-3.2	0.39	0.31	29.60	
3,773.0	0.2	91.2	3,771.6	-1.0	-64.0	-3.5	0.87	-0.52	164.66	
3,863.0	0.1	293.5	3,861.6	-1.0	-64.0	-3.5	0.26	-0.11	-175.19	

Survey Report

Company:	GWP - PLANNING DB	Local Co-ordinate Reference:	Well GUS LD 34-379HN
Project:	ADAMS COUNTY	TVD Reference:	KB 20' @ 5144.0usft
Site:	SEC 21-T1S-R67W	MD Reference:	KB 20' @ 5144.0usft
Well:	GUS LD 34-379HN	North Reference:	True
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	OWB	Database:	EDM 16 Production

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)	
3,952.0	0.2	271.0	3,950.6	-1.0	-64.2	-3.6	0.21	0.20	-25.28	
4,042.0	0.2	216.9	4,040.6	-1.1	-64.5	-3.5	0.25	-0.01	-60.14	
4,132.0	0.7	187.1	4,130.6	-1.9	-64.7	-2.8	0.59	0.54	-33.10	
4,221.0	0.2	255.9	4,219.6	-2.4	-64.9	-2.2	0.77	-0.63	77.27	
4,311.0	0.3	153.1	4,309.6	-2.7	-64.9	-2.0	0.38	0.10	-114.18	
4,400.0	0.3	163.3	4,398.6	-3.0	-64.8	-1.6	0.05	0.00	11.42	
4,489.0	0.3	168.4	4,487.6	-3.4	-64.7	-1.2	0.04	0.02	5.72	
4,579.0	0.2	231.8	4,577.6	-3.8	-64.8	-0.8	0.30	-0.07	70.49	
4,668.0	0.2	144.1	4,666.6	-4.0	-64.8	-0.6	0.33	-0.01	-98.54	
4,758.0	0.3	235.3	4,756.6	-4.3	-64.9	-0.4	0.42	0.11	101.30	
4,848.0	0.3	296.0	4,846.6	-4.3	-65.3	-0.3	0.34	-0.01	67.41	
4,937.0	0.1	235.9	4,935.6	-4.2	-65.6	-0.4	0.31	-0.26	-67.46	
5,027.0	2.0	124.1	5,025.5	-5.2	-64.3	0.6	2.26	2.16	-124.28	
5,117.0	4.0	124.1	5,115.4	-7.8	-60.4	3.5	2.21	2.21	0.04	
5,206.0	6.1	123.2	5,204.1	-12.1	-53.9	8.3	2.35	2.35	-0.97	
5,296.0	8.7	123.3	5,293.3	-18.5	-44.2	15.3	2.92	2.92	0.10	
5,386.0	11.1	122.3	5,381.9	-26.9	-31.2	24.6	2.70	2.69	-1.17	
5,476.0	14.2	122.4	5,469.7	-37.4	-14.5	36.3	3.36	3.36	0.09	
5,565.0	16.6	122.7	5,555.6	-50.1	5.4	50.4	2.73	2.73	0.36	
5,655.0	19.3	123.0	5,641.2	-65.2	28.7	67.0	3.03	3.03	0.32	
5,744.0	22.3	122.5	5,724.3	-82.3	55.3	86.0	3.36	3.36	-0.48	
5,834.0	24.5	121.9	5,806.9	-101.3	85.6	107.2	2.48	2.47	-0.76	
5,923.0	27.0	122.1	5,887.1	-121.8	118.4	129.9	2.76	2.75	0.30	
6,013.0	29.5	122.4	5,966.3	-144.6	154.4	155.2	2.85	2.84	0.27	
6,102.0	29.7	122.0	6,043.7	-168.0	191.6	181.2	0.29	0.22	-0.37	
6,192.0	29.6	122.7	6,121.9	-191.9	229.3	207.7	0.35	-0.10	0.68	
6,282.0	29.8	123.2	6,200.0	-216.2	266.8	234.6	0.38	0.22	0.62	
6,371.0	27.2	123.6	6,278.2	-239.6	302.2	260.4	3.02	-3.01	0.45	
6,461.0	26.6	123.2	6,358.5	-262.0	336.2	285.2	0.64	-0.61	-0.44	
6,550.0	27.3	123.5	6,437.8	-284.2	369.9	309.7	0.77	0.76	0.27	
6,640.0	29.3	123.0	6,517.1	-307.6	405.6	335.6	2.20	2.19	-0.47	
6,729.0	30.5	122.9	6,594.2	-331.7	442.8	362.3	1.37	1.37	-0.20	
6,819.0	31.3	124.0	6,671.5	-357.1	481.3	390.5	1.12	0.90	1.31	
6,909.0	31.3	124.6	6,748.4	-383.5	519.9	419.5	0.30	-0.02	0.58	
6,998.0	31.2	124.3	6,824.5	-409.6	558.0	448.2	0.17	-0.07	-0.29	
7,088.0	31.1	124.6	6,901.5	-436.0	596.5	477.2	0.18	-0.08	0.32	
7,177.0	29.7	124.4	6,978.2	-461.5	633.6	505.4	1.63	-1.63	-0.17	
7,267.0	29.5	124.7	7,056.4	-486.7	670.2	533.1	0.26	-0.21	0.32	
7,357.0	30.7	123.9	7,134.3	-512.2	707.5	561.2	1.43	1.36	-0.91	
7,446.0	31.1	124.6	7,210.6	-537.9	745.3	589.6	0.62	0.47	0.79	
7,536.0	30.9	124.3	7,287.7	-564.2	783.6	618.5	0.30	-0.26	-0.29	
7,625.0	31.2	132.0	7,364.0	-592.5	819.6	649.3	4.42	0.29	8.55	
7,715.0	37.3	148.5	7,438.5	-631.5	851.3	690.4	12.38	6.86	18.41	

Survey Report

Company:	GWP - PLANNING DB	Local Co-ordinate Reference:	Well GUS LD 34-379HN
Project:	ADAMS COUNTY	TVD Reference:	KB 20' @ 5144.0usft
Site:	SEC 21-T1S-R67W	MD Reference:	KB 20' @ 5144.0usft
Well:	GUS LD 34-379HN	North Reference:	True
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	OWB	Database:	EDM 16 Production

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)	
7,805.0	45.4	157.6	7,506.0	-684.6	877.8	745.2	11.17	8.99	10.07	
7,894.0	53.6	163.3	7,563.8	-748.3	900.2	810.4	10.36	9.13	6.45	
7,984.0	61.4	166.7	7,612.1	-821.6	919.7	884.9	9.30	8.74	3.78	
8,073.0	68.5	168.3	7,649.8	-900.3	937.1	964.6	8.05	7.90	1.73	
8,163.0	75.0	169.5	7,678.0	-984.1	953.6	1,049.4	7.35	7.24	1.33	
8,253.0	80.5	173.3	7,697.1	-1,071.0	966.8	1,137.0	7.36	6.10	4.21	
8,342.0	89.7	178.2	7,704.7	-1,159.3	973.4	1,225.6	11.74	10.38	5.52	
8,432.0	89.7	178.1	7,705.2	-1,249.3	976.3	1,315.5	0.08	0.00	-0.08	
8,522.0	90.6	177.7	7,704.9	-1,339.2	979.6	1,405.4	1.09	1.00	-0.43	
8,611.0	90.5	178.6	7,704.0	-1,428.1	982.4	1,494.4	1.04	-0.08	1.03	
8,701.0	90.2	179.0	7,703.4	-1,518.1	984.3	1,584.2	0.55	-0.41	0.37	
8,791.0	90.9	179.1	7,702.6	-1,608.1	985.8	1,674.1	0.81	0.79	0.17	
8,880.0	90.1	179.9	7,701.8	-1,697.1	986.6	1,762.9	1.26	-0.87	0.92	
8,970.0	89.9	180.2	7,701.7	-1,787.1	986.5	1,852.7	0.35	-0.20	0.29	
9,059.0	90.1	180.1	7,701.7	-1,876.1	986.2	1,941.4	0.20	0.17	-0.10	
9,149.0	90.1	179.0	7,701.6	-1,966.1	987.0	2,031.3	1.27	0.00	-1.27	
9,239.0	90.0	179.1	7,701.5	-2,056.1	988.5	2,121.1	0.18	-0.10	0.14	
9,328.0	89.8	179.1	7,701.6	-2,145.1	989.9	2,210.0	0.17	-0.17	0.04	
9,418.0	89.9	178.8	7,701.8	-2,235.1	991.5	2,299.9	0.35	0.03	-0.34	
9,508.0	90.1	179.1	7,701.8	-2,325.0	993.1	2,389.7	0.42	0.30	0.30	
9,597.0	89.9	179.3	7,701.7	-2,414.0	994.4	2,478.6	0.36	-0.24	0.27	
9,687.0	90.0	179.1	7,701.8	-2,504.0	995.6	2,568.4	0.32	0.10	-0.30	
9,777.0	90.0	179.1	7,701.7	-2,594.0	997.1	2,658.3	0.09	-0.03	0.09	
9,866.0	89.9	180.2	7,701.8	-2,683.0	997.6	2,747.1	1.17	-0.07	1.17	
9,956.0	90.0	180.3	7,701.8	-2,773.0	997.2	2,836.9	0.20	0.07	0.19	
10,046.0	90.0	180.0	7,701.8	-2,863.0	996.9	2,926.6	0.36	0.03	-0.36	
10,135.0	90.0	180.0	7,701.8	-2,952.0	996.8	3,015.4	0.01	0.00	-0.01	
10,225.0	90.5	179.7	7,701.3	-3,042.0	997.0	3,105.2	0.63	0.54	-0.32	
10,315.0	89.8	179.9	7,701.0	-3,132.0	997.3	3,195.0	0.77	-0.74	0.19	
10,404.0	90.5	180.4	7,700.7	-3,221.0	997.1	3,283.7	0.96	0.75	0.60	
10,494.0	89.7	180.2	7,700.6	-3,311.0	996.6	3,373.5	0.93	-0.89	-0.29	
10,584.0	89.6	180.3	7,701.1	-3,401.0	996.2	3,463.2	0.22	-0.10	0.20	
10,673.0	89.9	180.5	7,701.5	-3,490.0	995.5	3,551.9	0.33	0.28	0.17	
10,763.0	90.0	179.8	7,701.5	-3,580.0	995.3	3,641.7	0.77	0.17	-0.76	
10,853.0	89.9	179.8	7,701.5	-3,670.0	995.5	3,731.5	0.10	-0.10	0.01	
10,943.0	89.8	179.9	7,701.7	-3,760.0	995.8	3,821.3	0.15	-0.13	0.07	
11,033.0	89.9	180.4	7,701.9	-3,850.0	995.6	3,911.0	0.53	0.10	0.52	
11,122.0	89.7	179.9	7,702.2	-3,939.0	995.3	3,999.8	0.51	-0.21	-0.46	
11,212.0	89.7	180.1	7,702.6	-4,029.0	995.3	4,089.5	0.15	0.03	0.14	
11,302.0	89.9	180.5	7,702.9	-4,119.0	994.8	4,179.3	0.51	0.21	0.47	
11,391.0	89.7	180.1	7,703.1	-4,208.0	994.4	4,268.0	0.52	-0.21	-0.47	
11,481.0	90.0	180.3	7,703.3	-4,298.0	994.1	4,357.8	0.34	0.28	0.20	
11,570.0	89.9	180.4	7,703.4	-4,387.0	993.6	4,446.5	0.17	-0.07	0.16	

Survey Report

Company:	GWP - PLANNING DB	Local Co-ordinate Reference:	Well GUS LD 34-379HN
Project:	ADAMS COUNTY	TVD Reference:	KB 20' @ 5144.0usft
Site:	SEC 21-T1S-R67W	MD Reference:	KB 20' @ 5144.0usft
Well:	GUS LD 34-379HN	North Reference:	True
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	OWB	Database:	EDM 16 Production

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)	
11,660.0	89.7	179.8	7,703.7	-4,477.0	993.4	4,536.3	0.70	-0.31	-0.62	
11,750.0	89.7	180.2	7,704.2	-4,567.0	993.4	4,626.0	0.43	0.10	0.42	
11,839.0	90.1	179.9	7,704.2	-4,656.0	993.3	4,714.8	0.56	0.45	-0.33	
11,929.0	90.0	179.9	7,704.1	-4,746.0	993.4	4,804.6	0.15	-0.13	-0.08	
12,018.0	90.0	179.8	7,704.0	-4,835.0	993.7	4,893.4	0.03	0.00	-0.03	
12,108.0	90.0	179.8	7,704.0	-4,925.0	994.0	4,983.2	0.07	-0.07	-0.03	
12,197.0	90.0	180.2	7,704.1	-5,014.0	994.0	5,071.9	0.46	0.00	0.46	
12,287.0	90.1	180.2	7,704.0	-5,104.0	993.6	5,161.7	0.20	0.20	0.01	
12,377.0	90.2	179.8	7,703.7	-5,194.0	993.6	5,251.5	0.43	0.03	-0.43	
12,466.0	90.1	180.1	7,703.5	-5,283.0	993.6	5,340.2	0.37	-0.07	0.36	
12,556.0	90.0	180.8	7,703.4	-5,373.0	992.8	5,429.9	0.75	-0.10	0.74	
12,645.0	90.1	180.1	7,703.3	-5,462.0	992.1	5,518.7	0.86	0.07	-0.85	
12,735.0	90.1	180.0	7,703.2	-5,552.0	992.1	5,608.4	0.02	0.00	-0.02	
12,825.0	90.3	180.3	7,702.8	-5,642.0	991.8	5,698.2	0.40	0.24	0.31	
12,915.0	90.1	180.4	7,702.5	-5,732.0	991.2	5,787.9	0.26	-0.24	0.09	
13,004.0	90.1	179.6	7,702.4	-5,821.0	991.2	5,876.7	0.93	0.03	-0.93	
13,094.0	89.4	179.9	7,702.7	-5,911.0	991.6	5,966.5	0.85	-0.74	0.41	
13,184.0	89.3	180.1	7,703.7	-6,001.0	991.6	6,056.3	0.27	-0.14	0.23	
13,274.0	89.5	180.3	7,704.6	-6,091.0	991.2	6,146.0	0.28	0.18	0.21	
13,363.0	89.8	178.8	7,705.2	-6,179.9	991.8	6,234.8	1.75	0.38	-1.71	
13,453.0	89.7	179.3	7,705.5	-6,269.9	993.3	6,324.7	0.50	-0.11	0.49	
13,543.0	89.7	179.5	7,706.0	-6,359.9	994.3	6,414.5	0.31	-0.07	0.30	
13,632.0	89.1	179.2	7,707.0	-6,448.9	995.2	6,503.3	0.72	-0.65	-0.31	
13,722.0	89.3	179.3	7,708.3	-6,538.9	996.4	6,593.2	0.24	0.23	0.03	
13,812.0	89.0	178.8	7,709.6	-6,628.9	997.9	6,683.0	0.62	-0.34	-0.51	
13,901.0	89.1	179.7	7,711.1	-6,717.9	999.0	6,771.9	1.04	0.11	1.03	
13,991.0	89.9	180.4	7,711.9	-6,807.8	998.8	6,861.6	1.24	0.96	0.79	
14,081.0	89.7	180.8	7,712.2	-6,897.8	997.9	6,951.3	0.47	-0.24	0.40	
14,171.0	89.7	180.2	7,712.6	-6,987.8	997.1	7,041.0	0.67	0.03	-0.67	
14,260.0	89.9	180.3	7,712.9	-7,076.8	996.6	7,129.8	0.20	0.15	0.13	
14,350.0	89.2	180.5	7,713.6	-7,166.8	996.0	7,219.5	0.80	-0.79	0.16	
14,439.0	89.3	180.2	7,714.8	-7,255.8	995.4	7,308.2	0.28	0.13	-0.25	
14,529.0	89.3	180.4	7,715.9	-7,345.8	994.9	7,397.9	0.18	0.00	0.18	
14,618.0	89.2	180.3	7,717.1	-7,434.8	994.3	7,486.7	0.13	-0.10	-0.08	
14,708.0	89.3	180.4	7,718.2	-7,524.8	993.8	7,576.4	0.18	0.17	0.07	
14,798.0	88.9	180.2	7,719.6	-7,614.8	993.3	7,666.1	0.47	-0.44	-0.17	
14,888.0	89.0	180.5	7,721.2	-7,704.8	992.6	7,755.8	0.32	0.08	0.31	
14,977.0	89.0	180.1	7,722.7	-7,793.8	992.2	7,844.6	0.50	-0.04	-0.49	
15,067.0	88.8	180.2	7,724.5	-7,883.7	991.9	7,934.3	0.25	-0.20	0.16	
15,157.0	88.9	180.2	7,726.2	-7,973.7	991.6	8,024.0	0.15	0.13	-0.08	
15,246.0	89.0	180.0	7,727.8	-8,062.7	991.5	8,112.8	0.18	0.11	-0.15	
15,336.0	89.0	180.4	7,729.4	-8,152.7	991.1	8,202.5	0.38	-0.04	0.38	
15,426.0	88.9	180.4	7,731.1	-8,242.7	990.6	8,292.2	0.07	-0.07	0.01	
15,515.0	89.0	181.0	7,732.7	-8,331.6	989.5	8,380.9	0.69	0.07	0.69	

Survey Report

Company:	GWP - PLANNING DB	Local Co-ordinate Reference:	Well GUS LD 34-379HN
Project:	ADAMS COUNTY	TVD Reference:	KB 20' @ 5144.0usft
Site:	SEC 21-T1S-R67W	MD Reference:	KB 20' @ 5144.0usft
Well:	GUS LD 34-379HN	North Reference:	True
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	OWB	Database:	EDM 16 Production

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)	
15,605.0	88.9	180.6	7,734.3	-8,421.6	988.2	8,470.6	0.44	-0.07	-0.43	
15,695.0	89.2	180.0	7,735.8	-8,511.6	987.7	8,560.3	0.68	0.28	-0.62	
15,784.0	89.8	180.1	7,736.6	-8,600.6	987.6	8,649.0	0.77	0.76	0.12	
15,874.0	89.8	180.5	7,736.8	-8,690.6	987.1	8,738.8	0.37	0.00	0.37	
15,964.0	89.1	179.9	7,737.6	-8,780.6	986.8	8,828.5	1.03	-0.79	-0.67	
16,053.0	89.2	179.6	7,739.0	-8,869.6	987.2	8,917.3	0.27	0.03	-0.27	
16,143.0	89.3	180.4	7,740.2	-8,959.6	987.2	9,007.1	0.84	0.10	0.83	
16,232.0	89.1	180.3	7,741.5	-9,048.6	986.6	9,095.8	0.17	-0.17	-0.04	
16,322.0	89.3	180.7	7,742.7	-9,138.6	985.8	9,185.5	0.42	0.23	0.34	
16,412.0	89.8	179.4	7,743.4	-9,228.6	985.8	9,275.3	1.51	0.51	-1.42	
16,501.0	89.7	178.9	7,743.8	-9,317.5	987.1	9,364.1	0.50	-0.10	-0.49	
16,591.0	89.7	179.2	7,744.3	-9,407.5	988.5	9,454.0	0.35	-0.03	0.34	
16,681.0	88.6	179.3	7,745.7	-9,497.5	989.6	9,543.8	1.16	-1.16	0.10	
16,770.0	89.5	179.0	7,747.1	-9,586.5	990.9	9,632.7	1.09	1.00	-0.43	
16,860.0	91.2	179.2	7,746.6	-9,676.5	992.3	9,722.5	1.87	1.84	0.29	
16,949.0	89.7	179.3	7,745.9	-9,765.5	993.5	9,811.4	1.70	-1.70	0.08	
17,039.0	90.9	179.3	7,745.5	-9,855.4	994.6	9,901.2	1.33	1.33	0.01	
17,129.0	91.3	179.2	7,743.9	-9,945.4	995.7	9,991.0	0.45	0.44	-0.06	
17,218.0	90.5	179.8	7,742.5	-10,034.4	996.4	10,079.9	1.04	-0.80	0.67	
17,308.0	90.8	179.0	7,741.4	-10,124.4	997.3	10,169.7	0.95	0.28	-0.91	
17,397.0	90.8	179.2	7,740.2	-10,213.4	998.7	10,258.5	0.19	-0.03	0.19	
17,487.0	91.0	179.5	7,738.7	-10,303.4	999.7	10,348.4	0.43	0.31	0.30	
17,577.0	90.8	179.4	7,737.3	-10,393.3	1,000.6	10,438.2	0.25	-0.24	-0.02	
17,666.0	89.5	180.4	7,737.0	-10,482.3	1,000.7	10,527.0	1.81	-1.45	1.09	
17,756.0	89.5	180.3	7,737.7	-10,572.3	1,000.1	10,616.7	0.14	-0.03	-0.13	
17,845.0	90.8	180.6	7,737.5	-10,661.3	999.4	10,705.4	1.45	1.42	0.33	
17,935.0	89.2	180.2	7,737.6	-10,751.3	998.8	10,795.1	1.84	-1.78	-0.46	
18,024.0	89.4	180.6	7,738.7	-10,840.3	998.2	10,883.8	0.56	0.24	0.51	
18,114.0	89.7	180.1	7,739.4	-10,930.3	997.6	10,973.6	0.65	0.38	-0.53	
18,203.0	89.6	180.7	7,739.9	-11,019.3	997.0	11,062.3	0.59	-0.10	0.58	
18,293.0	89.5	180.5	7,740.6	-11,109.3	996.0	11,152.0	0.20	-0.13	-0.14	
18,382.0	90.2	180.5	7,740.8	-11,198.3	995.2	11,240.7	0.80	0.80	-0.01	
18,471.0	90.2	179.8	7,740.4	-11,287.3	994.9	11,329.5	0.79	0.00	-0.79	
18,561.0	90.1	180.1	7,740.2	-11,377.3	994.9	11,419.2	0.36	-0.08	0.36	
18,651.0	90.2	179.4	7,739.8	-11,467.3	995.2	11,509.0	0.82	0.11	-0.81	
18,740.0	90.2	180.8	7,739.4	-11,556.3	995.0	11,597.8	1.61	0.00	1.61	
18,830.0	90.1	179.7	7,739.1	-11,646.3	994.6	11,687.5	1.32	-0.11	-1.31	
18,919.0	90.2	180.0	7,738.8	-11,735.3	994.9	11,776.3	0.37	0.08	0.36	
19,009.0	90.2	179.7	7,738.5	-11,825.3	995.2	11,866.1	0.37	0.00	-0.37	
19,098.0	90.0	179.8	7,738.3	-11,914.3	995.6	11,954.9	0.25	-0.21	0.13	
19,188.0	90.2	178.9	7,738.1	-12,004.3	996.6	12,044.8	0.99	0.17	-0.98	
19,277.0	90.3	179.8	7,737.7	-12,093.3	997.6	12,133.6	1.06	0.18	1.04	
19,367.0	90.3	179.5	7,737.2	-12,183.3	998.1	12,223.4	0.34	0.00	-0.34	

Survey Report

Company:	GWP - PLANNING DB	Local Co-ordinate Reference:	Well GUS LD 34-379HN
Project:	ADAMS COUNTY	TVD Reference:	KB 20' @ 5144.0usft
Site:	SEC 21-T1S-R67W	MD Reference:	KB 20' @ 5144.0usft
Well:	GUS LD 34-379HN	North Reference:	True
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	OWB	Database:	EDM 16 Production

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)	
19,456.0	90.1	179.2	7,736.8	-12,272.3	999.1	12,312.2	0.46	-0.25	-0.38	
19,545.0	90.3	179.6	7,736.5	-12,361.3	1,000.1	12,401.1	0.55	0.18	0.52	
19,635.0	89.9	179.5	7,736.4	-12,451.3	1,000.7	12,490.9	0.41	-0.38	-0.16	
19,724.0	89.7	180.8	7,736.6	-12,540.2	1,000.5	12,579.6	1.44	-0.25	1.42	
19,813.0	90.5	181.0	7,736.5	-12,629.2	999.2	12,668.3	0.90	0.87	0.25	
19,903.0	89.7	180.6	7,736.3	-12,719.2	997.9	12,758.0	1.01	-0.92	-0.40	
19,993.0	89.0	181.6	7,737.4	-12,809.2	996.2	12,847.6	1.26	-0.68	1.07	
20,082.0	88.9	180.6	7,739.0	-12,898.2	994.5	12,936.2	1.15	-0.18	-1.13	
20,172.0	89.0	180.6	7,740.6	-12,988.2	993.6	13,025.9	0.14	0.14	-0.01	
20,261.0	89.3	180.4	7,741.9	-13,077.1	992.9	13,114.6	0.36	0.34	-0.12	
20,351.0	89.3	180.7	7,742.9	-13,167.1	992.0	13,204.3	0.28	0.03	0.28	
20,440.0	88.9	180.6	7,744.3	-13,256.1	990.9	13,293.0	0.55	-0.55	-0.07	
20,530.0	88.7	180.3	7,746.2	-13,346.1	990.2	13,382.7	0.44	-0.13	-0.42	
20,620.0	88.9	180.5	7,748.1	-13,436.1	989.6	13,472.4	0.31	0.13	0.28	
20,709.0	89.1	180.3	7,749.7	-13,525.1	989.0	13,561.1	0.39	0.28	-0.27	
20,799.0	88.8	179.1	7,751.3	-13,615.0	989.5	13,650.9	1.38	-0.31	-1.34	
20,888.0	89.4	179.8	7,752.7	-13,704.0	990.4	13,739.8	1.05	0.62	0.85	
20,978.0	89.0	179.3	7,753.9	-13,794.0	991.1	13,829.6	0.71	-0.40	-0.59	
21,068.0	88.9	179.5	7,755.6	-13,884.0	992.1	13,919.4	0.22	-0.11	0.19	
21,090.0	88.9	179.4	7,756.0	-13,906.0	992.3	13,941.3	0.43	0.14	-0.41	
21,115.0	88.9	179.4	7,756.4	-13,931.0	992.6	13,966.3	0.00	0.00	0.00	