



Project: ADAMS COUNTY  
Site: SEC 21-T1S-R67W  
Well: GUS LD 34-376HN  
GL: 5124.0  
KB: KB 20' @ 5144.0usft  
API: 001-10495

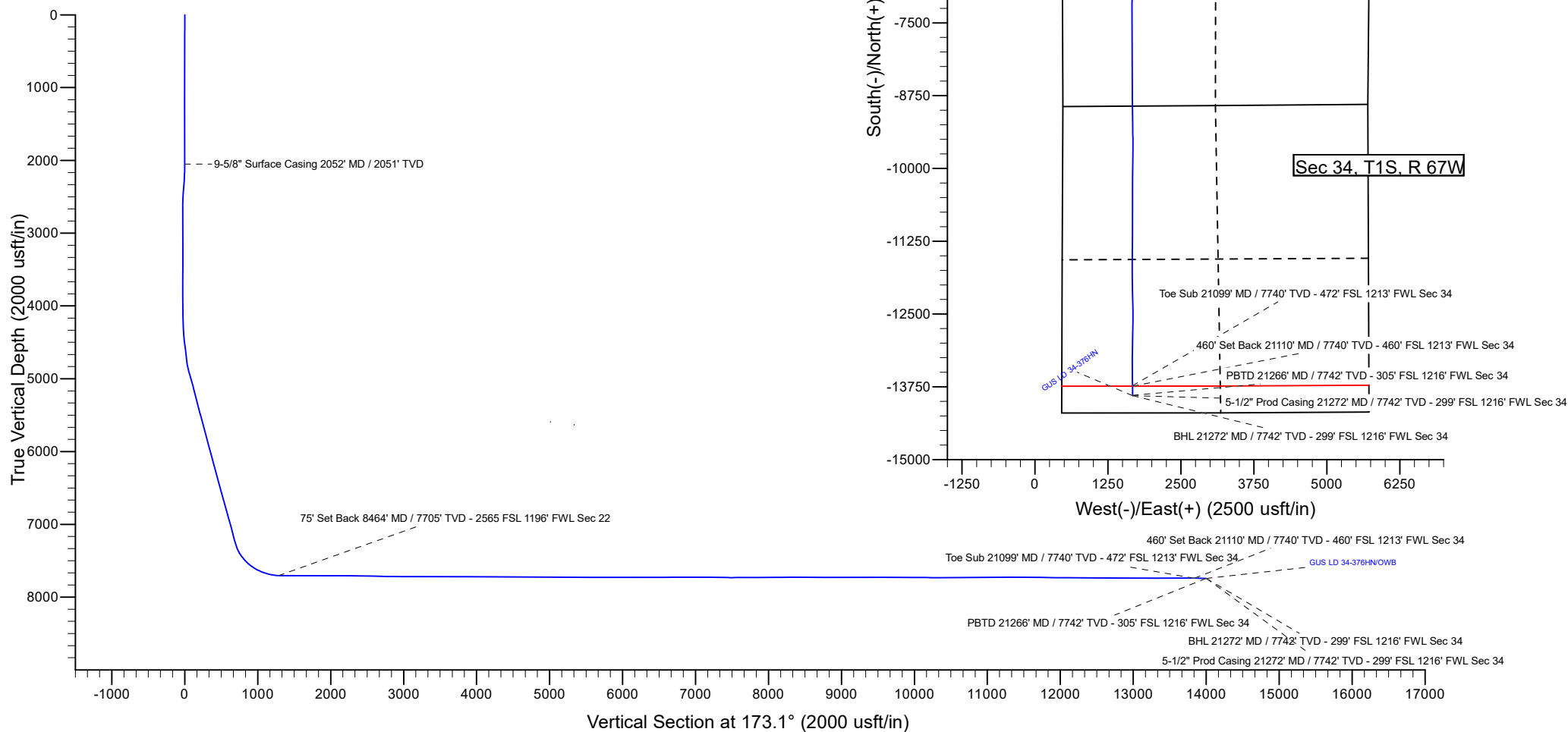
Design: OWB (GUS LD 34-376HN/OWB)

Created By: Mike Mataalii Date: 8:22, March 14 2022



Azimuths to True North  
Magnetic North: 7.85°

Magnetic Field  
Strength: 51678.0nT  
Dip Angle: 66.27°  
Date: 9/16/2021  
Model: IGRF2020



## Survey Report

<b>Company:</b>	GWP - PLANNING DB	<b>Local Co-ordinate Reference:</b>	Well GUS LD 34-376HN
<b>Project:</b>	ADAMS COUNTY	<b>TVD Reference:</b>	KB 20' @ 5144.0usft
<b>Site:</b>	SEC 21-T1S-R67W	<b>MD Reference:</b>	KB 20' @ 5144.0usft
<b>Well:</b>	GUS LD 34-376HN	<b>North Reference:</b>	True
<b>Wellbore:</b>	OWB	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OWB	<b>Database:</b>	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	0.3	231.2	98.0	-0.1	-0.2	0.1	0.27	0.27	0.00	
185.0	0.2	71.8	185.0	-0.2	-0.2	0.2	0.50	-0.09	-183.25	
276.0	0.3	43.5	276.0	0.0	0.1	0.0	0.23	0.19	-31.01	
368.0	0.2	116.1	368.0	0.2	0.5	-0.1	0.37	-0.18	78.91	
458.0	0.0	130.5	458.0	0.1	0.6	0.0	0.16	-0.16	15.92	
548.0	0.2	58.0	548.0	0.1	0.7	0.0	0.19	0.16	-80.57	
638.0	0.3	84.1	638.0	0.2	1.1	-0.1	0.14	0.09	29.10	
728.0	0.4	43.5	728.0	0.5	1.5	-0.3	0.29	0.16	-45.21	
818.0	0.4	18.0	818.0	1.0	1.8	-0.8	0.20	0.00	-28.32	
908.0	0.5	320.6	908.0	1.6	1.7	-1.4	0.48	0.09	-63.78	
998.0	0.4	297.5	998.0	2.1	1.1	-1.9	0.21	-0.04	-25.58	
1,088.0	0.7	281.2	1,088.0	2.3	0.3	-2.3	0.30	0.24	-18.17	
1,178.0	0.7	236.6	1,178.0	2.1	-0.7	-2.2	0.57	0.04	-49.51	
1,268.0	0.7	251.5	1,268.0	1.6	-1.6	-1.8	0.20	0.00	16.50	
1,358.0	0.7	261.6	1,358.0	1.4	-2.7	-1.7	0.14	-0.04	11.23	
1,448.0	0.7	258.9	1,448.0	1.2	-3.7	-1.6	0.06	0.04	-3.02	
1,538.0	0.5	299.7	1,538.0	1.3	-4.6	-1.8	0.51	-0.24	45.40	
1,628.0	1.1	269.1	1,627.9	1.5	-5.8	-2.1	0.85	0.73	-34.08	
1,718.0	1.1	245.1	1,717.9	1.1	-7.5	-2.0	0.53	0.00	-26.66	
1,808.0	0.9	247.9	1,807.9	0.4	-9.0	-1.5	0.25	-0.24	3.12	
1,898.0	0.4	258.1	1,897.9	0.1	-10.0	-1.3	0.59	-0.58	11.32	
1,997.0	0.3	277.9	1,996.9	0.0	-10.6	-1.3	0.14	-0.05	19.98	
2,070.0	0.1	193.7	2,069.9	0.0	-10.9	-1.3	0.48	-0.38	-115.26	
2,160.0	0.8	19.3	2,159.9	0.6	-10.7	-1.9	0.98	0.82	-193.78	
2,249.0	4.4	13.3	2,248.8	4.5	-9.7	-5.6	4.03	4.02	-6.81	
2,339.0	3.9	359.4	2,338.6	10.9	-8.9	-11.9	1.24	-0.57	-15.39	
2,429.0	4.2	354.8	2,428.3	17.2	-9.2	-18.2	0.48	0.31	-5.13	
2,518.0	3.5	341.2	2,517.1	22.9	-10.4	-24.0	1.27	-0.78	-15.30	
2,608.0	0.4	241.2	2,607.1	25.4	-11.6	-26.6	3.96	-3.41	-111.02	
2,697.0	0.4	90.5	2,696.1	25.2	-11.5	-26.4	0.90	0.03	-169.43	
2,787.0	0.1	144.9	2,786.1	25.2	-11.1	-26.3	0.43	-0.38	60.54	
2,877.0	0.1	203.4	2,876.1	25.1	-11.1	-26.2	0.09	-0.03	64.93	
2,966.0	0.3	200.0	2,965.1	24.8	-11.2	-25.9	0.33	0.33	-3.82	
3,056.0	0.6	59.8	3,055.1	24.7	-10.9	-25.9	0.99	0.27	-155.76	
3,145.0	0.3	232.9	3,144.1	24.8	-10.7	-25.9	1.00	-0.33	194.51	
3,235.0	0.3	108.6	3,234.1	24.6	-10.6	-25.7	0.62	0.03	-138.13	
3,325.0	0.1	155.1	3,324.1	24.5	-10.4	-25.5	0.32	-0.30	51.64	
3,415.0	0.2	80.5	3,414.1	24.5	-10.2	-25.5	0.27	0.21	-82.87	
3,504.0	0.3	9.7	3,503.1	24.7	-9.9	-25.7	0.37	0.07	-79.52	
3,594.0	0.3	333.4	3,593.1	25.2	-10.0	-26.2	0.21	0.00	-40.40	
3,684.0	0.2	233.2	3,683.1	25.3	-10.2	-26.4	0.46	-0.10	-111.33	
3,773.0	0.2	214.6	3,772.1	25.1	-10.5	-26.2	0.08	-0.03	-20.91	
3,863.0	0.1	270.6	3,862.1	25.0	-10.6	-26.1	0.18	-0.11	62.30	

## Survey Report

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<b>Site:</b>	SEC 21-T1S-R67W	<b>MD Reference:</b>	KB 20' @ 5144.0usft
<b>Well:</b>	GUS LD 34-376HN	<b>North Reference:</b>	True
<b>Wellbore:</b>	OWB	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OWB	<b>Database:</b>	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	277.0	3,951.1	25.0	-10.9	-26.1	0.15	0.15	7.19	
4,042.0	0.3	180.8	4,041.1	24.7	-11.0	-25.9	0.48	0.14	-106.88	
4,132.0	1.9	128.9	4,131.1	23.5	-9.9	-24.6	1.85	1.68	-57.69	
4,221.0	4.4	113.4	4,219.9	21.3	-5.6	-21.8	2.99	2.87	-17.47	
4,311.0	5.5	102.6	4,309.6	19.0	1.8	-18.6	1.60	1.23	-11.91	
4,400.0	7.7	118.0	4,398.0	15.2	11.2	-13.8	3.13	2.44	17.28	
4,489.0	11.2	121.7	4,485.8	7.9	23.8	-5.0	3.96	3.91	4.08	
4,579.0	14.5	115.0	4,573.5	-1.5	41.5	6.4	4.09	3.76	-7.36	
4,668.0	15.9	106.9	4,659.4	-9.8	63.2	17.2	2.81	1.48	-9.10	
4,758.0	19.8	98.8	4,745.1	-15.7	90.1	26.3	5.19	4.40	-9.03	
4,848.0	21.9	112.9	4,829.2	-24.6	120.7	38.8	6.03	2.34	15.64	
4,937.0	25.9	120.7	4,910.6	-41.0	152.8	58.9	5.69	4.45	8.76	
5,027.0	27.4	115.5	4,991.0	-59.9	188.4	82.0	3.12	1.72	-5.80	
5,116.0	29.7	113.5	5,069.2	-77.5	227.1	104.2	2.73	2.53	-2.18	
5,206.0	29.9	108.6	5,147.2	-93.6	268.9	125.1	2.71	0.27	-5.42	
5,296.0	29.6	109.3	5,225.4	-108.2	311.1	144.6	0.56	-0.41	0.76	
5,386.0	30.2	110.3	5,303.4	-123.4	353.3	164.7	0.90	0.72	1.08	
5,475.0	29.4	110.6	5,380.6	-138.8	394.8	185.0	0.94	-0.93	0.30	
5,565.0	30.1	110.6	5,458.8	-154.5	436.5	205.6	0.76	0.76	0.04	
5,655.0	29.7	111.0	5,536.8	-170.5	478.5	226.5	0.48	-0.41	0.48	
5,744.0	29.9	109.2	5,614.0	-185.7	520.0	246.5	1.06	0.28	-2.04	
5,834.0	30.3	111.4	5,691.9	-201.4	562.4	267.2	1.27	0.37	2.42	
5,923.0	30.0	111.1	5,768.8	-217.6	604.0	288.2	0.35	-0.30	-0.36	
6,013.0	29.6	110.8	5,846.9	-233.6	645.8	309.1	0.43	-0.41	-0.26	
6,102.0	30.1	111.1	5,924.1	-249.4	687.2	329.9	0.58	0.56	0.28	
6,192.0	30.2	111.2	6,001.9	-265.7	729.4	351.1	0.07	0.07	0.07	
6,282.0	30.4	110.7	6,079.6	-282.0	771.8	372.3	0.32	0.22	-0.46	
6,371.0	29.6	110.7	6,156.7	-297.7	813.4	392.9	0.89	-0.89	-0.03	
6,461.0	30.0	110.8	6,234.8	-313.6	855.3	413.7	0.47	0.47	0.12	
6,550.0	30.5	110.7	6,311.6	-329.5	897.2	434.5	0.51	0.51	-0.10	
6,640.0	29.5	110.3	6,389.6	-345.3	939.4	455.2	1.07	-1.04	-0.48	
6,729.0	30.2	110.2	6,466.8	-360.7	980.9	475.4	0.70	0.70	-0.08	
6,819.0	31.1	110.9	6,544.2	-376.8	1,023.8	496.5	1.10	1.02	0.78	
6,908.0	30.4	112.2	6,620.7	-393.5	1,066.1	518.2	1.04	-0.74	1.43	
6,998.0	30.6	111.2	6,698.3	-410.4	1,108.6	540.1	0.60	0.16	-1.13	
7,088.0	31.1	113.1	6,775.5	-427.8	1,151.3	562.4	1.24	0.63	2.09	
7,177.0	29.1	110.1	6,852.5	-444.3	1,192.8	583.8	2.77	-2.22	-3.30	
7,267.0	30.9	111.4	6,930.4	-460.2	1,234.9	604.7	2.09	1.97	1.41	
7,357.0	30.2	110.5	7,007.9	-476.6	1,277.7	626.0	0.97	-0.82	-1.01	
7,446.0	30.1	110.5	7,084.9	-492.3	1,319.5	646.6	0.09	-0.08	0.07	
7,536.0	30.5	110.2	7,162.6	-508.1	1,362.1	667.4	0.51	0.48	-0.34	
7,625.0	29.4	111.9	7,239.7	-524.1	1,403.6	688.2	1.61	-1.29	1.91	
7,715.0	31.5	119.0	7,317.3	-543.7	1,444.6	712.6	4.61	2.32	7.87	

## Survey Report

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<b>Project:</b>	ADAMS COUNTY	<b>TVD Reference:</b>	KB 20' @ 5144.0usft
<b>Site:</b>	SEC 21-T1S-R67W	<b>MD Reference:</b>	KB 20' @ 5144.0usft
<b>Well:</b>	GUS LD 34-376HN	<b>North Reference:</b>	True
<b>Wellbore:</b>	OWB	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OWB	<b>Database:</b>	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	36.4	136.4	7,392.1	-574.6	1,483.7	747.9	12.03	5.43	19.32	
7,894.0	41.7	147.1	7,461.3	-618.6	1,518.1	795.7	9.61	5.99	11.98	
7,984.0	48.2	151.7	7,525.0	-673.3	1,550.3	853.9	8.07	7.21	5.13	
8,073.0	55.0	161.8	7,580.3	-737.4	1,577.5	920.7	11.73	7.69	11.34	
8,163.0	63.2	168.1	7,626.5	-811.9	1,597.4	997.1	10.91	9.12	6.99	
8,253.0	69.6	167.2	7,662.4	-892.4	1,615.0	1,079.2	7.14	7.09	-0.91	
8,342.0	77.2	168.8	7,687.9	-975.8	1,632.7	1,164.1	8.65	8.49	1.73	
8,432.0	84.6	171.7	7,702.1	-1,063.3	1,647.7	1,252.8	8.86	8.26	3.27	
8,484.0	88.9	174.2	7,705.0	-1,114.8	1,654.0	1,304.7	9.54	8.23	4.83	
8,521.0	90.0	173.7	7,705.4	-1,151.6	1,657.9	1,341.6	3.21	2.92	-1.32	
8,611.0	89.6	176.2	7,705.7	-1,241.3	1,665.8	1,431.6	2.75	-0.41	2.72	
8,701.0	89.4	177.8	7,706.5	-1,331.1	1,670.5	1,521.4	1.75	-0.24	1.73	
8,790.0	90.1	178.4	7,706.9	-1,420.1	1,673.4	1,610.0	1.14	0.83	0.78	
8,880.0	90.8	179.2	7,706.2	-1,510.1	1,675.3	1,699.6	1.12	0.72	0.86	
8,970.0	90.7	180.2	7,705.1	-1,600.0	1,675.8	1,789.0	1.05	-0.07	1.04	
9,059.0	90.6	181.3	7,704.1	-1,689.0	1,674.6	1,877.2	1.34	-0.13	1.34	
9,149.0	89.3	181.6	7,704.2	-1,779.0	1,672.3	1,966.3	1.50	-1.48	0.26	
9,239.0	89.8	181.3	7,704.9	-1,869.0	1,670.0	2,055.3	0.67	0.58	-0.33	
9,328.0	89.7	181.3	7,705.3	-1,957.9	1,668.1	2,143.4	0.10	-0.10	-0.02	
9,418.0	89.0	180.9	7,706.3	-2,047.9	1,666.4	2,232.5	0.80	-0.71	-0.37	
9,508.0	89.0	180.9	7,707.9	-2,137.9	1,664.9	2,321.7	0.05	-0.04	-0.01	
9,597.0	88.9	180.7	7,709.5	-2,226.9	1,663.6	2,409.9	0.26	-0.10	-0.24	
9,687.0	88.9	181.2	7,711.1	-2,316.8	1,662.2	2,499.0	0.52	0.03	0.52	
9,777.0	89.0	180.7	7,712.7	-2,406.8	1,660.6	2,588.2	0.48	0.08	-0.48	
9,866.0	88.6	179.5	7,714.6	-2,495.8	1,660.4	2,676.5	1.48	-0.48	-1.40	
9,956.0	89.5	179.5	7,716.1	-2,585.8	1,661.2	2,765.9	1.02	1.02	0.06	
10,046.0	88.9	179.6	7,717.3	-2,675.8	1,661.8	2,855.3	0.63	-0.62	0.07	
10,135.0	89.4	178.9	7,718.5	-2,764.8	1,663.0	2,943.8	0.96	0.56	-0.78	
10,225.0	89.9	178.3	7,719.1	-2,854.7	1,665.2	3,033.4	0.83	0.48	-0.68	
10,315.0	89.5	178.2	7,719.5	-2,944.7	1,667.9	3,123.0	0.40	-0.38	-0.12	
10,404.0	90.3	177.5	7,719.6	-3,033.6	1,671.2	3,211.7	1.14	0.87	-0.74	
10,494.0	90.5	179.1	7,719.0	-3,123.6	1,673.9	3,301.4	1.73	0.20	1.72	
10,584.0	90.2	180.0	7,718.4	-3,213.6	1,674.6	3,390.8	1.08	-0.30	1.03	
10,673.0	90.1	180.4	7,718.2	-3,302.6	1,674.3	3,479.1	0.43	-0.18	0.39	
10,763.0	90.1	180.8	7,718.1	-3,392.6	1,673.4	3,568.4	0.45	0.07	0.44	
10,853.0	89.6	180.6	7,718.3	-3,482.6	1,672.3	3,657.6	0.65	-0.61	-0.23	
10,943.0	89.2	180.5	7,719.3	-3,572.5	1,671.4	3,746.8	0.41	-0.41	-0.01	
11,032.0	89.9	180.8	7,720.0	-3,661.5	1,670.4	3,835.0	0.81	0.76	0.28	
11,122.0	90.1	180.2	7,720.1	-3,751.5	1,669.6	3,924.3	0.69	0.20	-0.66	
11,212.0	89.8	179.9	7,720.2	-3,841.5	1,669.5	4,013.6	0.42	-0.31	-0.29	
11,301.0	89.0	179.4	7,721.1	-3,930.5	1,670.0	4,102.1	1.08	-0.87	-0.65	
11,391.0	90.0	180.3	7,721.9	-4,020.5	1,670.3	4,191.4	1.46	1.07	1.00	
11,480.0	89.7	179.5	7,722.2	-4,109.5	1,670.5	4,279.8	0.93	-0.35	-0.87	

## Survey Report

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<b>Wellbore:</b>	OWB	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OWB	<b>Database:</b>	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)	
11,570.0	89.5	178.7	7,722.9	-4,199.5	1,671.9	4,369.3	0.90	-0.17	-0.89	
11,660.0	89.6	180.3	7,723.6	-4,289.5	1,672.7	4,458.8	1.73	0.07	1.73	
11,749.0	89.7	180.6	7,724.2	-4,378.5	1,672.0	4,547.0	0.39	0.13	0.37	
11,839.0	90.4	181.3	7,724.1	-4,468.5	1,670.5	4,636.2	1.12	0.79	0.80	
11,929.0	89.4	180.2	7,724.2	-4,558.5	1,669.4	4,725.4	1.66	-1.06	-1.28	
12,018.0	88.9	179.2	7,725.5	-4,647.5	1,669.9	4,813.8	1.26	-0.66	-1.07	
12,108.0	89.3	180.5	7,727.0	-4,737.4	1,670.1	4,903.2	1.48	0.48	1.40	
12,197.0	90.1	180.2	7,727.4	-4,826.4	1,669.6	4,991.5	1.00	0.97	-0.25	
12,287.0	89.5	180.4	7,727.7	-4,916.4	1,669.0	5,080.8	0.74	-0.71	0.21	
12,377.0	90.6	180.9	7,727.6	-5,006.4	1,667.9	5,170.0	1.36	1.23	0.57	
12,466.0	90.0	179.9	7,727.1	-5,095.4	1,667.3	5,258.3	1.39	-0.70	-1.20	
12,555.0	89.7	179.0	7,727.4	-5,184.4	1,668.2	5,346.7	1.05	-0.38	-0.98	
12,645.0	90.5	181.0	7,727.2	-5,274.4	1,668.1	5,436.1	2.44	0.92	2.26	
12,735.0	89.1	179.5	7,727.6	-5,364.4	1,667.7	5,525.4	2.33	-1.53	-1.76	
12,825.0	89.3	180.6	7,728.8	-5,454.4	1,667.7	5,614.7	1.31	0.17	1.30	
12,914.0	90.0	179.9	7,729.4	-5,543.4	1,667.2	5,703.0	1.18	0.87	-0.81	
13,004.0	89.7	180.5	7,729.6	-5,633.4	1,666.9	5,792.3	0.75	-0.31	0.68	
13,094.0	90.1	178.8	7,729.7	-5,723.4	1,667.4	5,881.7	1.95	0.38	-1.91	
13,184.0	89.2	180.7	7,730.3	-5,813.4	1,667.8	5,971.1	2.36	-1.02	2.12	
13,273.0	91.2	179.8	7,730.0	-5,902.4	1,667.4	6,059.4	2.54	2.31	-1.06	
13,363.0	89.2	179.9	7,729.6	-5,992.4	1,667.7	6,148.8	2.23	-2.22	0.14	
13,453.0	90.4	180.1	7,729.9	-6,082.4	1,667.7	6,238.2	1.30	1.27	0.28	
13,542.0	90.2	180.0	7,729.4	-6,171.4	1,667.5	6,326.5	0.20	-0.13	-0.15	
13,632.0	89.8	180.1	7,729.3	-6,261.4	1,667.5	6,415.9	0.45	-0.44	0.06	
13,722.0	90.3	179.5	7,729.2	-6,351.4	1,667.8	6,505.2	0.78	0.48	-0.61	
13,811.0	90.4	179.8	7,728.7	-6,440.4	1,668.3	6,593.7	0.29	0.10	0.27	
13,901.0	90.8	179.5	7,727.8	-6,530.3	1,669.0	6,683.1	0.56	0.44	-0.33	
13,991.0	90.3	179.6	7,727.0	-6,620.3	1,669.7	6,772.5	0.52	-0.51	0.11	
14,081.0	90.4	179.9	7,726.5	-6,710.3	1,670.2	6,861.9	0.35	0.07	0.34	
14,170.0	90.0	179.2	7,726.2	-6,799.3	1,670.9	6,950.4	0.82	-0.42	-0.71	
14,260.0	89.3	181.5	7,726.7	-6,889.3	1,670.2	7,039.6	2.69	-0.79	2.57	
14,350.0	90.0	182.2	7,727.3	-6,979.3	1,667.3	7,128.6	1.01	0.76	0.68	
14,439.0	88.9	180.6	7,728.2	-7,068.2	1,665.2	7,216.7	2.17	-1.25	-1.78	
14,528.0	89.6	179.7	7,729.4	-7,157.2	1,665.0	7,305.0	1.28	0.80	-1.00	
14,618.0	88.6	180.7	7,730.9	-7,247.2	1,664.7	7,394.3	1.53	-1.06	1.11	
14,708.0	89.8	180.3	7,732.1	-7,337.2	1,663.9	7,483.5	1.39	1.33	-0.39	
14,798.0	90.8	180.0	7,731.6	-7,427.2	1,663.6	7,572.9	1.16	1.09	-0.40	
14,887.0	89.7	179.6	7,731.2	-7,516.2	1,664.0	7,661.3	1.33	-1.25	-0.45	
14,977.0	90.5	179.9	7,731.1	-7,606.2	1,664.4	7,750.7	0.94	0.89	0.31	
15,067.0	90.4	179.8	7,730.4	-7,696.2	1,664.7	7,840.0	0.14	-0.13	-0.04	
15,156.0	89.2	179.8	7,730.7	-7,785.2	1,664.9	7,928.4	1.28	-1.28	0.02	
15,246.0	91.1	179.6	7,730.5	-7,875.2	1,665.3	8,017.8	2.07	2.06	-0.22	
15,336.0	90.3	180.3	7,729.4	-7,965.2	1,665.4	8,107.2	1.12	-0.89	0.69	
15,425.0	90.6	179.6	7,728.7	-8,054.2	1,665.5	8,195.6	0.79	0.34	-0.72	

## Survey Report

<b>Company:</b>	GWP - PLANNING DB	<b>Local Co-ordinate Reference:</b>	Well GUS LD 34-376HN
<b>Project:</b>	ADAMS COUNTY	<b>TVD Reference:</b>	KB 20' @ 5144.0usft
<b>Site:</b>	SEC 21-T1S-R67W	<b>MD Reference:</b>	KB 20' @ 5144.0usft
<b>Well:</b>	GUS LD 34-376HN	<b>North Reference:</b>	True
<b>Wellbore:</b>	OWB	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OWB	<b>Database:</b>	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)	
15,515.0	90.4	179.6	7,727.9	-8,144.2	1,666.1	8,285.0	0.17	-0.17	-0.02	
15,605.0	89.7	180.0	7,727.8	-8,234.2	1,666.4	8,374.4	0.88	-0.76	0.44	
15,694.0	90.3	179.5	7,727.7	-8,323.2	1,666.8	8,462.8	0.85	0.66	-0.54	
15,784.0	89.7	180.0	7,727.7	-8,413.2	1,667.2	8,552.2	0.87	-0.66	0.57	
15,874.0	90.0	180.2	7,727.9	-8,503.2	1,667.0	8,641.5	0.32	0.24	0.21	
15,963.0	89.5	179.9	7,728.3	-8,592.2	1,666.9	8,729.9	0.60	-0.48	-0.36	
16,053.0	88.9	179.9	7,729.5	-8,682.2	1,667.0	8,819.2	0.72	-0.72	0.00	
16,142.0	89.8	178.7	7,730.5	-8,771.1	1,668.1	8,907.7	1.69	1.00	-1.36	
16,232.0	90.2	178.9	7,730.5	-8,861.1	1,670.0	8,997.3	0.54	0.49	0.22	
16,322.0	90.0	179.4	7,730.3	-8,951.1	1,671.3	9,086.8	0.66	-0.21	0.62	
16,411.0	90.5	179.2	7,729.9	-9,040.1	1,672.3	9,175.2	0.59	0.55	-0.22	
16,501.0	89.5	179.4	7,729.9	-9,130.1	1,673.4	9,264.7	1.17	-1.16	0.18	
16,591.0	90.5	179.1	7,729.9	-9,220.1	1,674.5	9,354.2	1.23	1.19	-0.32	
16,680.0	90.2	179.3	7,729.3	-9,309.1	1,675.7	9,442.7	0.42	-0.34	0.25	
16,770.0	90.0	179.3	7,729.1	-9,399.1	1,676.8	9,532.1	0.31	-0.31	-0.01	
16,860.0	90.0	179.4	7,729.1	-9,489.1	1,677.8	9,621.6	0.13	0.07	0.11	
16,949.0	90.0	179.5	7,729.1	-9,578.1	1,678.6	9,710.1	0.05	-0.03	0.03	
17,039.0	89.9	180.8	7,729.1	-9,668.1	1,678.4	9,799.4	1.53	-0.10	1.52	
17,128.0	89.8	180.4	7,729.3	-9,757.0	1,677.5	9,887.6	0.52	-0.07	-0.52	
17,218.0	89.3	179.9	7,730.0	-9,847.0	1,677.3	9,977.0	0.86	-0.66	-0.56	
17,308.0	89.2	180.8	7,731.2	-9,937.0	1,676.8	10,066.3	1.00	-0.07	1.00	
17,397.0	89.8	180.3	7,732.0	-10,026.0	1,675.9	10,154.5	0.89	0.73	-0.51	
17,487.0	89.7	180.5	7,732.3	-10,116.0	1,675.2	10,243.8	0.30	-0.18	0.24	
17,577.0	89.2	180.3	7,733.2	-10,206.0	1,674.6	10,333.0	0.57	-0.51	-0.26	
17,666.0	90.5	181.0	7,733.4	-10,295.0	1,673.6	10,421.3	1.58	1.38	0.78	
17,755.0	90.0	180.6	7,733.0	-10,384.0	1,672.3	10,509.5	0.65	-0.48	-0.44	
17,845.0	90.6	180.5	7,732.5	-10,474.0	1,671.4	10,598.7	0.70	0.69	-0.13	
17,934.0	90.3	179.8	7,731.8	-10,563.0	1,671.2	10,687.0	0.84	-0.42	-0.73	
18,024.0	91.4	180.4	7,730.4	-10,653.0	1,671.0	10,776.4	1.46	1.30	0.67	
18,113.0	90.5	178.7	7,728.9	-10,742.0	1,671.6	10,864.8	2.24	-1.08	-1.97	
18,203.0	89.9	180.3	7,728.6	-10,831.9	1,672.4	10,954.2	1.97	-0.68	1.84	
18,292.0	90.5	180.3	7,728.3	-10,920.9	1,671.9	11,042.5	0.75	0.75	-0.02	
18,382.0	90.5	180.3	7,727.4	-11,010.9	1,671.3	11,131.8	0.02	0.00	0.02	
18,471.0	90.0	180.5	7,727.0	-11,099.9	1,670.7	11,220.1	0.64	-0.62	0.15	
18,561.0	90.8	180.3	7,726.3	-11,189.9	1,670.1	11,309.4	0.94	0.92	-0.17	
18,650.0	89.5	180.4	7,726.1	-11,278.9	1,669.5	11,397.6	1.48	-1.48	0.06	
18,740.0	89.3	180.2	7,727.0	-11,368.9	1,669.0	11,486.9	0.28	-0.21	-0.19	
18,829.0	89.0	180.4	7,728.3	-11,457.9	1,668.6	11,575.2	0.35	-0.30	0.18	
18,919.0	89.5	180.3	7,729.4	-11,547.9	1,668.1	11,664.5	0.56	0.54	-0.12	
19,008.0	88.9	180.7	7,730.5	-11,636.9	1,667.4	11,752.8	0.81	-0.66	0.46	
19,098.0	89.6	180.4	7,731.7	-11,726.9	1,666.5	11,842.0	0.76	0.69	-0.31	
19,187.0	89.4	179.4	7,732.5	-11,815.9	1,666.7	11,930.4	1.15	-0.17	-1.13	
19,277.0	89.7	179.6	7,733.2	-11,905.9	1,667.5	12,019.8	0.43	0.33	0.28	

## Survey Report

<b>Company:</b>	GWP - PLANNING DB	<b>Local Co-ordinate Reference:</b>	Well GUS LD 34-376HN
<b>Project:</b>	ADAMS COUNTY	<b>TVD Reference:</b>	KB 20' @ 5144.0usft
<b>Site:</b>	SEC 21-T1S-R67W	<b>MD Reference:</b>	KB 20' @ 5144.0usft
<b>Well:</b>	GUS LD 34-376HN	<b>North Reference:</b>	True
<b>Wellbore:</b>	OWB	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OWB	<b>Database:</b>	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)	
19,366.0	89.3	179.5	7,733.9	-11,994.9	1,668.2	12,108.3	0.43	-0.42	-0.11	
19,456.0	89.7	177.0	7,734.6	-12,084.8	1,670.8	12,197.9	2.78	0.38	-2.76	
19,545.0	89.3	178.6	7,735.4	-12,173.7	1,674.2	12,286.6	1.81	-0.42	1.76	
19,634.0	89.6	179.2	7,736.2	-12,262.7	1,675.9	12,375.1	0.76	0.35	0.67	
19,724.0	89.9	178.9	7,736.6	-12,352.7	1,677.4	12,464.7	0.47	0.28	-0.38	
19,813.0	89.7	178.8	7,736.9	-12,441.7	1,679.2	12,553.2	0.22	-0.18	-0.12	
19,903.0	89.7	181.1	7,737.4	-12,531.7	1,679.3	12,642.6	2.58	-0.03	2.58	
19,992.0	89.5	180.7	7,738.0	-12,620.7	1,677.9	12,730.8	0.51	-0.17	-0.48	
20,082.0	89.6	181.0	7,738.7	-12,710.7	1,676.6	12,819.9	0.41	0.07	0.40	
20,171.0	89.3	181.0	7,739.5	-12,799.6	1,675.1	12,908.1	0.39	-0.38	-0.07	
20,261.0	90.1	180.2	7,740.0	-12,889.6	1,674.2	12,997.3	1.30	0.96	-0.88	
20,350.0	89.6	181.1	7,740.3	-12,978.6	1,673.2	13,085.6	1.19	-0.62	1.01	
20,440.0	89.7	181.0	7,740.9	-13,068.6	1,671.6	13,174.7	0.17	0.13	-0.11	
20,530.0	90.6	181.3	7,740.6	-13,158.6	1,669.9	13,263.9	1.04	0.99	0.32	
20,619.0	90.2	180.7	7,740.0	-13,247.6	1,668.4	13,352.0	0.76	-0.40	-0.64	
20,709.0	90.0	180.8	7,739.9	-13,337.6	1,667.2	13,441.2	0.29	-0.24	0.16	
20,798.0	90.2	179.7	7,739.7	-13,426.6	1,666.8	13,529.5	1.30	0.25	-1.28	
20,888.0	90.5	178.7	7,739.1	-13,516.6	1,668.0	13,619.0	1.14	0.37	-1.08	
20,978.0	90.0	179.1	7,738.6	-13,606.5	1,669.7	13,708.6	0.74	-0.58	0.46	
21,067.0	88.9	179.0	7,739.5	-13,695.5	1,671.1	13,797.1	1.29	-1.28	-0.11	
21,156.0	89.1	179.2	7,741.0	-13,784.5	1,672.5	13,885.6	0.28	0.21	0.18	
21,246.0	89.2	178.8	7,742.4	-13,874.5	1,674.1	13,975.1	0.46	0.10	-0.44	
21,272.0	89.2	178.8	7,742.8	-13,900.5	1,674.7	14,001.0	0.00	0.00	0.00	