Actual Wellpath Report

Hudson S-1HM AWP Proj: 20835'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	**EQT (TUG HILL OPERATING, LLC)**	Well	**Hudson S-1HM**
Field	**Marshall**	API/Legal	
Facility	**Hudson**	Wellbore	**Hudson S-1HM AWB**
Slot	**Slot 01**		

REPORT SETUP INFORMATION			
Projection System	**NAD83 / UTM Zone 17 North, US feet**	Software System	**WellArchitect® 6.0**
North Reference	**Grid**	User	**Meyedavr**
Scale	**0.999610**	Report Generated	**3/27/2024 at 11:00:14 AM**
Convergence at slot	**0.21° East**	Database	**WA_MPL_EASTERNUS_Defn**

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	**East[ft]**	**Easting[US ft]**	**Northing[US ft]**	**Latitude**	**Longitude**
Slot Location	0.00	0.00	**1732303.65**	**14464549.15**	39°49'43.5564"N	80°40'21.7498"W
Facility Reference Pt			**1732303.65**	**14464549.15**	39°49'43.5564"N	80°40'21.7498"W
Field Reference Pt			1920470.12	14528304.49	**40°00'0.0000"N**	**80°00'0.0000"W**

WELLPATH DATUM			
Calculation method	**Minimum curvature**	Patterson 294 (RKB) to Facility Vertical Datum	**1374.00ft**
Horizontal Reference Pt	**Slot**	Patterson 294 (RKB) to Mean Sea Level	**1374.00ft**
Vertical Reference Pt	**Patterson 294 (RKB)**	Patterson 294 (RKB) to Ground Level at Slot (Slot 01)	**28.00ft**
MD Reference Pt	**Patterson 294 (RKB)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**157.04°**

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Slot	Slot 01		

WELLPATH DATA (268 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
0.00†	0.000	330.160	0.00	0.00	0.00	0.00	1732303.65	14464549.15	39°49'43.5564"N	80°40'21.7498"W	0.00	0.000	0.00	0.00	0.00
28.00	0.000	330.160	28.00	0.00	0.00	0.00	1732303.65	14464549.15	39°49'43.5564"N	80°40'21.7498"W	0.00	0.000	0.00	0.00	0.00
173.00	1.540	330.160	172.98	-1.93	1.69	-0.97	1732302.68	14464550.84	39°49'43.5731"N	80°40'21.7622"W	1.95	330.160	1.06	1.06	0.00
201.00	2.030	347.090	200.97	-2.80	2.50	-1.27	1732302.38	14464551.65	39°49'43.5811"N	80°40'21.7660"W	2.80	333.113	2.55	1.75	60.46
230.00	1.910	354.460	229.95	-3.76	3.48	-1.43	1732302.22	14464552.63	39°49'43.5908"N	80°40'21.7680"W	3.76	337.685	0.97	-0.41	25.41
259.00	1.950	349.100	258.94	-4.71	4.45	-1.57	1732302.08	14464553.60	39°49'43.6004"N	80°40'21.7697"W	4.72	340.567	0.64	0.14	-18.48
289.00	1.810	1.270	288.92	-5.64	5.42	-1.65	1732302.00	14464554.57	39°49'43.6100"N	80°40'21.7708"W	5.67	343.026	1.41	-0.47	40.57
320.00	1.550	2.910	319.91	-6.46	6.33	-1.62	1732302.03	14464555.48	39°49'43.6190"N	80°40'21.7703"W	6.53	345.621	0.85	-0.84	5.29
350.00	1.420	4.160	349.90	-7.16	7.11	-1.58	1732302.07	14464556.26	39°49'43.6267"N	80°40'21.7697"W	7.28	347.501	0.45	-0.43	4.17
410.00	1.060	355.590	409.88	-8.35	8.40	-1.56	1732302.09	14464557.55	39°49'43.6395"N	80°40'21.7695"W	8.55	349.454	0.67	-0.60	-14.28
413.00	0.980	359.530	412.88	-8.40	8.45	-1.57	1732302.08	14464557.60	39°49'43.6400"N	80°40'21.7695"W	8.60	349.504	3.54	-2.67	131.33
445.00	0.500	7.140	444.88	-8.77	8.87	-1.55	1732302.10	14464558.02	39°49'43.6441"N	80°40'21.7693"W	9.00	350.076	1.53	-1.50	23.78
482.00	0.360	109.680	481.88	-8.83	8.99	-1.42	1732302.23	14464558.14	39°49'43.6453"N	80°40'21.7676"W	9.10	351.011	1.83	-0.38	277.14
492.00	0.700	165.610	491.88	-8.75	8.92	-1.38	1732302.27	14464558.07	39°49'43.6446"N	80°40'21.7671"W	9.02	351.223	5.81	3.40	559.30
509.00	1.270	175.830	508.88	-8.47	8.63	-1.34	1732302.31	14464557.78	39°49'43.6417"N	80°40'21.7666"W	8.73	351.190	3.50	3.35	60.12
555.00	3.480	179.500	554.83	-6.69	6.72	-1.29	1732302.36	14464555.87	39°49'43.6229"N	80°40'21.7660"W	6.85	349.156	4.81	4.80	7.98
567.00	3.300	180.570	566.81	-6.04	6.02	-1.29	1732302.36	14464555.17	39°49'43.6159"N	80°40'21.7661"W	6.15	347.910	1.59	-1.50	8.92
600.00	2.400	180.380	599.77	-4.54	4.37	-1.30	1732302.35	14464553.52	39°49'43.5997"N	80°40'21.7663"W	4.56	343.419	2.73	-2.73	-0.58
603.00	2.280	178.800	602.77	-4.42	4.25	-1.30	1732302.35	14464553.40	39°49'43.5985"N	80°40'21.7663"W	4.45	342.979	4.54	-4.00	-52.67
618.00	1.840	181.630	617.76	-3.93	3.71	-1.30	1732302.35	14464552.86	39°49'43.5931"N	80°40'21.7664"W	3.93	340.672	3.01	-2.93	18.87
635.00	1.450	177.880	634.75	-3.48	3.23	-1.30	1732302.35	14464552.38	39°49'43.5883"N	80°40'21.7664"W	3.48	338.015	2.38	-2.29	-22.06
650.00	1.240	182.370	649.75	-3.15	2.87	-1.30	1732302.35	14464552.02	39°49'43.5848"N	80°40'21.7664"W	3.15	335.627	1.57	-1.40	29.93
667.00	1.020	163.280	666.74	-2.84	2.54	-1.27	1732302.38	14464551.69	39°49'43.5816"N	80°40'21.7659"W	2.84	333.551	2.55	-1.29	-112.29
683.00	0.710	169.570	682.74	-2.60	2.31	-1.21	1732302.44	14464551.46	39°49'43.5793"N	80°40'21.7652"W	2.61	332.421	2.02	-1.94	39.31
699.00	0.590	159.840	698.74	-2.42	2.14	-1.16	1732302.49	14464551.29	39°49'43.5775"N	80°40'21.7646"W	2.43	331.481	1.02	-0.75	-60.81
714.00	0.500	182.530	713.74	-2.28	2.00	-1.14	1732302.51	14464551.15	39°49'43.5762"N	80°40'21.7643"W	2.30	330.360	1.55	-0.60	151.27
730.00	0.300	211.480	729.74	-2.20	1.89	-1.16	1732302.49	14464551.04	39°49'43.5751"N	80°40'21.7646"W	2.22	328.454	1.74	-1.25	180.94
745.00	0.170	221.570	744.74	-2.16	1.84	-1.20	1732302.45	14464550.99	39°49'43.5746"N	80°40'21.7651"W	2.20	326.986	0.91	-0.87	67.27
760.00	0.230	252.700	759.74	-2.16	1.82	-1.24	1732302.41	14464550.97	39°49'43.5744"N	80°40'21.7657"W	2.20	325.672	0.81	0.40	207.53
792.00	0.770	296.400	791.74	-2.33	1.89	-1.49	1732302.16	14464551.04	39°49'43.5751"N	80°40'21.7689"W	2.41	321.713	1.95	1.69	136.56
824.00	0.710	290.860	823.74	-2.63	2.06	-1.87	1732301.78	14464551.21	39°49'43.5768"N	80°40'21.7737"W	2.78	317.724	0.29	-0.19	-17.31
855.00	0.820	289.070	854.73	-2.91	2.20	-2.26	1732301.39	14464551.35	39°49'43.5782"N	80°40'21.7787"W	3.16	314.214	0.36	0.35	-5.77
887.00	1.240	284.100	886.73	-3.27	2.36	-2.81	1732300.84	14464551.51	39°49'43.5798"N	80°40'21.7858"W	3.67	309.982	1.34	1.31	-15.53
903.00	1.420	293.690	902.72	-3.52	2.48	-3.16	1732300.49	14464551.63	39°49'43.5810"N	80°40'21.7903"W	4.02	308.112	1.79	1.12	59.94
919.00	1.290	293.350	918.72	-3.79	2.63	-3.51	1732300.14	14464551.78	39°49'43.5825"N	80°40'21.7947"W	4.39	306.868	0.81	-0.81	-2.12
950.00	1.750	285.170	949.71	-4.34	2.89	-4.29	1732299.36	14464552.04	39°49'43.5851"N	80°40'21.8047"W	5.17	304.025	1.64	1.48	-26.39
982.00	1.970	286.600	981.69	-4.99	3.18	-5.29	1732298.36	14464552.33	39°49'43.5880"N	80°40'21.8175"W	6.17	301.027	0.70	0.69	4.47
1013.00	1.920	291.490	1012.67	-5.69	3.52	-6.28	1732297.37	14464552.67	39°49'43.5914"N	80°40'21.8302"W	7.20	299.285	0.56	-0.16	15.77
1045.00	1.990	290.430	1044.65	-6.45	3.91	-7.30	1732296.35	14464553.06	39°49'43.5953"N	80°40'21.8432"W	8.28	298.191	0.25	0.22	-3.31
1065.00	1.810	284.690	1064.64	-6.88	4.11	-7.93	1732295.72	14464553.26	39°49'43.5973"N	80°40'21.8513"W	8.93	297.417	1.31	-0.90	-28.70
1140.00	1.870	266.380	1139.61	-8.01	4.34	-10.30	1732293.35	14464553.49	39°49'43.5996"N	80°40'21.8817"W	11.17	292.839	0.78	0.08	-24.41
1172.00	1.720	262.910	1171.59	-8.31	4.24	-11.29	1732292.36	14464553.39	39°49'43.5987"N	80°40'21.8945"W	12.07	290.596	0.58	-0.47	-10.84
1202.00	1.800	259.350	1201.58	-8.54	4.10	-12.20	1732291.45	14464553.25	39°49'43.5974"N	80°40'21.9061"W	12.88	288.577	0.45	0.27	-11.87
1233.00	1.560	267.550	1232.56	-8.79	3.99	-13.10	1732290.55	14464553.14	39°49'43.5963"N	80°40'21.9177"W	13.70	286.949	1.09	-0.77	26.45
1265.00	1.450	283.090	1264.55	-9.18	4.07	-13.93	1732289.72	14464553.22	39°49'43.5971"N	80°40'21.9283"W	14.52	286.270	1.32	-0.34	48.56

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Field	Marshall	API/Legal	
Facility	Hudson	Wellbore	Hudson S-1HM AWB
Slot	Slot 01		

WELLPATH DATA (268 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
1296.00	1.940	300.200	1295.54	-9.83	4.42	-14.77	1732288.88	14464553.57	39°49'43.6006"N	80°40'21.9390"W	15.42	286.659	2.26	1.58	55.19
1328.00	2.900	302.090	1327.51	-10.93	5.12	-15.92	1732287.73	14464554.27	39°49'43.6076"N	80°40'21.9538"W	16.73	287.831	3.01	3.00	5.91
1359.00	3.690	308.570	1358.46	-12.45	6.16	-17.37	1732286.28	14464555.31	39°49'43.6179"N	80°40'21.9722"W	18.43	289.530	2.81	2.55	20.90
1391.00	4.310	306.360	1390.38	-14.39	7.52	-19.14	1732284.51	14464556.67	39°49'43.6314"N	80°40'21.9949"W	20.56	291.437	2.00	1.94	-6.91
1423.00	4.910	309.350	1422.28	-16.63	9.10	-21.17	1732282.48	14464558.25	39°49'43.6471"N	80°40'22.0208"W	23.04	293.254	2.02	1.87	9.34
1455.00	5.650	306.370	1454.14	-19.20	10.90	-23.50	1732280.15	14464560.05	39°49'43.6650"N	80°40'22.0506"W	25.90	294.885	2.47	2.31	-9.31
1487.00	7.010	304.970	1485.94	-22.21	12.95	-26.36	1732277.29	14464562.10	39°49'43.6854"N	80°40'22.0873"W	29.37	296.164	4.28	4.25	-4.37
1518.00	8.490	302.960	1516.66	-25.71	15.28	-29.84	1732273.81	14464564.43	39°49'43.7085"N	80°40'22.1317"W	33.52	297.122	4.85	4.77	-6.48
1550.00	9.770	301.850	1548.25	-29.88	18.00	-34.12	1732269.53	14464567.15	39°49'43.7356"N	80°40'22.1865"W	38.58	297.811	4.04	4.00	-3.47
1582.00	10.460	301.500	1579.76	-34.47	20.95	-38.91	1732264.74	14464570.10	39°49'43.7649"N	80°40'22.2477"W	44.19	298.302	2.16	2.16	-1.09
1614.00	11.260	301.110	1611.18	-39.36	24.08	-44.06	1732259.59	14464573.23	39°49'43.7961"N	80°40'22.3136"W	50.21	298.661	2.51	2.50	-1.22
1645.00	11.650	300.140	1641.57	-44.31	27.22	-49.36	1732254.29	14464576.37	39°49'43.8272"N	80°40'22.3814"W	56.36	298.875	1.40	1.26	-3.13
1677.00	12.050	300.330	1672.88	-49.58	30.53	-55.03	1732248.62	14464579.68	39°49'43.8602"N	80°40'22.4541"W	62.93	299.017	1.26	1.25	0.59
1709.00	12.380	299.350	1704.16	-54.97	33.90	-60.91	1732242.74	14464583.05	39°49'43.8937"N	80°40'22.5292"W	69.70	299.096	1.22	1.03	-3.06
1741.00	12.650	297.880	1735.40	-60.40	37.21	-66.99	1732236.66	14464586.36	39°49'43.9267"N	80°40'22.6071"W	76.64	299.052	1.30	0.84	-4.59
1772.00	12.980	297.230	1765.63	-65.71	40.40	-73.09	1732230.56	14464589.55	39°49'43.9584"N	80°40'22.6851"W	83.51	298.928	1.16	1.06	-2.10
1804.00	13.100	295.860	1796.80	-71.20	43.62	-79.55	1732224.10	14464592.77	39°49'43.9905"N	80°40'22.7678"W	90.72	298.739	1.04	0.37	-4.28
1836.00	13.500	295.240	1827.94	-76.71	46.80	-86.19	1732217.46	14464595.95	39°49'44.0221"N	80°40'22.8528"W	98.08	298.499	1.33	1.25	-1.94
1868.00	13.680	295.340	1859.05	-82.32	50.01	-92.99	1732210.66	14464599.16	39°49'44.0541"N	80°40'22.9399"W	105.58	298.271	0.57	0.56	0.31
1900.00	14.550	296.920	1890.08	-88.22	53.45	-99.99	1732203.66	14464602.60	39°49'44.0884"N	80°40'23.0295"W	113.38	298.125	2.97	2.72	4.94
1931.00	15.510	300.170	1920.02	-94.51	57.29	-107.05	1732196.60	14464606.44	39°49'44.1267"N	80°40'23.1198"W	121.42	298.156	4.12	3.10	10.48
1943.00	16.020	301.920	1931.57	-97.15	58.98	-109.84	1732193.81	14464608.13	39°49'44.1434"N	80°40'23.1555"W	124.67	298.232	5.81	4.25	14.58
1981.00	17.090	304.260	1967.99	-106.13	64.89	-118.91	1732184.74	14464614.04	39°49'44.2022"N	80°40'23.2715"W	135.46	298.623	3.32	2.82	6.16
2075.00	16.840	305.500	2057.90	-129.35	80.57	-141.41	1732162.24	14464629.72	39°49'44.3581"N	80°40'23.5593"W	162.75	299.674	0.47	-0.27	1.32
2170.00	18.300	303.770	2148.47	-153.55	96.86	-165.01	1732138.64	14464646.01	39°49'44.5199"N	80°40'23.8612"W	191.34	300.412	1.63	1.54	-1.82
2264.00	20.150	302.350	2237.22	-179.20	113.72	-190.96	1732112.69	14464662.87	39°49'44.6876"N	80°40'24.1931"W	222.26	300.776	2.03	1.97	-1.51
2359.00	21.070	303.450	2326.14	-206.88	131.89	-219.03	1732084.62	14464681.04	39°49'44.8682"N	80°40'24.5522"W	255.68	301.055	1.05	0.97	1.16
2454.00	20.690	301.240	2414.91	-234.72	150.01	-247.63	1732056.02	14464699.16	39°49'45.0484"N	80°40'24.9180"W	289.52	301.207	0.92	-0.40	-2.33
2549.00	22.160	301.760	2503.34	-262.96	168.15	-277.21	1732026.44	14464717.30	39°49'45.2287"N	80°40'25.2965"W	324.22	301.239	1.56	1.55	0.55
2644.00	26.290	303.740	2589.96	-295.18	189.27	-309.96	1731993.69	14464738.42	39°49'45.4388"N	80°40'25.7154"W	363.18	301.410	4.43	4.35	2.08
2739.00	29.220	310.130	2674.04	-333.46	215.91	-345.20	1731958.46	14464765.06	39°49'45.7034"N	80°40'26.1660"W	407.16	302.025	4.39	3.08	6.73
2834.00	30.400	311.040	2756.46	-375.74	246.64	-381.06	1731922.60	14464795.79	39°49'46.0085"N	80°40'26.6244"W	453.91	302.913	1.33	1.24	0.96
2928.00	31.980	308.000	2836.88	-418.89	277.59	-418.61	1731885.04	14464826.74	39°49'46.3158"N	80°40'27.1046"W	502.29	303.549	2.37	1.68	-3.23
3023.00	35.980	306.140	2915.64	-464.84	309.55	-460.99	1731842.66	14464858.70	39°49'46.6333"N	80°40'27.6465"W	555.28	303.880	4.35	4.21	-1.96
3117.00	37.640	307.650	2990.90	-513.55	343.37	-506.02	1731797.63	14464892.52	39°49'46.9693"N	80°40'28.2223"W	611.52	304.159	2.01	1.77	1.61
3213.00	39.100	307.590	3066.16	-565.45	379.74	-553.22	1731750.43	14464928.89	39°49'47.3306"N	80°40'28.8259"W	671.01	304.466	1.52	1.52	-0.06
3308.00	39.480	305.250	3139.69	-617.21	415.45	-601.63	1731702.03	14464964.60	39°49'47.6853"N	80°40'29.4449"W	731.13	304.627	1.61	0.40	-2.46
3402.00	37.880	304.120	3213.07	-666.84	448.88	-649.92	1731653.73	14464998.03	39°49'48.0177"N	80°40'30.0626"W	789.87	304.632	1.86	-1.70	-1.20
3497.00	38.240	303.460	3287.87	-715.82	481.45	-698.60	1731605.05	14465030.60	39°49'48.3414"N	80°40'30.6853"W	848.43	304.574	0.57	0.38	-0.69
3592.00	39.290	303.230	3361.95	-765.30	514.15	-748.29	1731555.36	14465063.30	39°49'48.6664"N	80°40'31.3209"W	907.90	304.493	1.12	1.11	-0.24
3687.00	39.340	303.740	3435.45	-815.46	547.36	-798.49	1731505.16	14465096.51	39°49'48.9965"N	80°40'31.9631"W	968.08	304.430	0.34	0.05	0.54
3781.00	39.430	305.050	3508.10	-865.68	581.05	-847.70	1731455.95	14465130.20	39°49'49.3314"N	80°40'32.5926"W	1027.73	304.428	0.89	0.10	1.39
3876.00	38.030	307.120	3582.21	-916.64	616.04	-895.74	1731407.91	14465165.19	39°49'49.6790"N	80°40'33.2069"W	1087.13	304.518	2.01	-1.47	2.18
3970.00	37.660	306.660	3656.44	-966.51	650.66	-941.86	1731361.79	14465199.81	39°49'50.0229"N	80°40'33.7967"W	1144.75	304.638	0.50	-0.39	-0.49
4065.00	37.180	305.350	3731.89	-1015.97	684.59	-988.56	1731315.09	14465233.74	39°49'50.3601"N	80°40'34.3939"W	1202.46	304.703	0.98	-0.51	-1.38

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Actual Wellpath Report

Hudson S-1HM AWP Proj: 20835'

REFERENCE WELLPATH IDENTIFICATION			
Operator	EQT (TUG HILL OPERATING, LLC)	Well	Hudson S-1HM
Field	Marshall	API/Legal	
Facility	Hudson	Wellbore	Hudson S-1HM AWB
Slot	Slot 01		

WELLPATH DATA (268 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
4159.00	36.590	304.720	3807.07	-1063.81	716.99	-1034.75	1731268.90	14465266.13	39°49'50.6820"N	80°40'34.9848"W	1258.88	304.718	0.75	-0.63	-0.67
4254.00	36.140	304.150	3883.57	-1111.26	748.84	-1081.21	1731222.44	14465297.99	39°49'50.9986"N	80°40'35.5790"W	1315.21	304.706	0.59	-0.47	-0.60
4349.00	36.920	303.740	3959.91	-1158.63	780.41	-1128.12	1731175.53	14465329.56	39°49'51.3124"N	80°40'36.1791"W	1371.75	304.675	0.86	0.82	-0.43
4444.00	37.500	303.950	4035.57	-1206.71	812.41	-1175.83	1731127.82	14465361.56	39°49'51.6304"N	80°40'36.7895"W	1429.19	304.641	0.62	0.61	0.22
4538.00	37.320	305.020	4110.24	-1254.84	844.74	-1222.90	1731080.75	14465393.89	39°49'51.9518"N	80°40'37.3915"W	1486.30	304.635	0.72	-0.19	1.14
4633.00	37.380	305.890	4185.76	-1303.94	878.17	-1269.85	1731033.80	14465427.32	39°49'52.2840"N	80°40'37.9920"W	1543.93	304.666	0.56	0.06	0.92
4728.00	38.990	309.990	4260.44	-1355.24	914.29	-1316.12	1730987.53	14465463.44	39°49'52.6427"N	80°40'38.5836"W	1602.53	304.787	3.16	1.69	4.32
4823.00	37.820	309.090	4334.88	-1407.59	951.87	-1361.63	1730942.03	14465501.01	39°49'53.0158"N	80°40'39.1654"W	1661.35	304.956	1.36	-1.23	-0.95
4918.00	36.290	307.460	4410.70	-1457.77	987.33	-1406.55	1730897.10	14465536.48	39°49'53.3680"N	80°40'39.7399"W	1718.49	305.067	1.91	-1.61	-1.72
5013.00	35.530	306.340	4487.64	-1505.96	1020.79	-1451.11	1730852.55	14465569.94	39°49'53.7004"N	80°40'40.3097"W	1774.18	305.125	1.06	-0.80	-1.18
5108.00	37.000	307.360	4564.24	-1554.53	1054.50	-1496.07	1730807.59	14465603.64	39°49'54.0352"N	80°40'40.8846"W	1830.35	305.178	1.67	1.55	1.07
5203.00	37.680	306.870	4639.77	-1604.47	1089.26	-1542.02	1730761.64	14465638.41	39°49'54.3806"N	80°40'41.4722"W	1887.94	305.237	0.78	0.72	-0.52
5298.00	38.090	306.950	4714.75	-1654.92	1124.30	-1588.66	1730714.99	14465673.45	39°49'54.7286"N	80°40'42.0688"W	1946.25	305.287	0.43	0.43	0.08
5393.00	38.120	305.860	4789.50	-1705.36	1159.09	-1635.84	1730667.81	14465708.24	39°49'55.0743"N	80°40'42.6722"W	2004.86	305.320	0.71	0.03	-1.15
5488.00	37.950	306.140	4864.33	-1755.51	1193.50	-1683.20	1730620.46	14465742.64	39°49'55.4161"N	80°40'43.2778"W	2063.39	305.339	0.25	-0.18	0.29
5583.00	39.580	305.950	4938.40	-1806.50	1228.49	-1731.29	1730572.36	14465777.64	39°49'55.7638"N	80°40'43.8929"W	2122.87	305.359	1.72	1.72	-0.20
5678.00	40.060	306.210	5011.36	-1858.67	1264.32	-1780.46	1730523.20	14465813.47	39°49'56.1197"N	80°40'44.5218"W	2183.70	305.379	0.53	0.51	0.27
5773.00	38.070	309.500	5085.13	-1910.90	1301.02	-1827.73	1730475.92	14465850.17	39°49'56.4842"N	80°40'45.1263"W	2243.49	305.444	3.02	-2.09	3.46
5868.00	37.860	309.660	5160.02	-1962.76	1338.26	-1872.78	1730430.88	14465887.40	39°49'56.8540"N	80°40'45.7022"W	2301.79	305.549	0.24	-0.22	0.17
5963.00	39.480	309.260	5234.19	-2015.36	1375.98	-1918.61	1730385.05	14465925.12	39°49'57.2285"N	80°40'46.2882"W	2361.01	305.647	1.73	1.71	-0.42
6058.00	41.990	307.070	5306.18	-2069.62	1414.25	-1967.36	1730336.30	14465963.40	39°49'57.6086"N	80°40'46.9115"W	2422.93	305.711	3.04	2.64	-2.31
6104.00	42.030	303.980	5340.36	-2095.86	1432.14	-1992.41	1730311.25	14465981.28	39°49'57.7863"N	80°40'47.2319"W	2453.71	305.708	4.50	0.09	-6.72
6199.00	39.560	304.870	5412.28	-2148.13	1467.21	-2043.61	1730260.05	14466016.36	39°49'58.1349"N	80°40'47.8869"W	2515.76	305.677	2.67	-2.60	0.94
6293.00	38.100	305.910	5485.50	-2198.30	1501.34	-2091.66	1730212.00	14466050.48	39°49'58.4740"N	80°40'48.5015"W	2574.69	305.670	1.70	-1.55	1.11
6388.00	38.140	306.770	5560.24	-2248.72	1536.09	-2138.90	1730164.76	14466085.23	39°49'58.8192"N	80°40'49.1057"W	2633.33	305.685	0.56	0.04	0.91
6483.00	38.100	306.870	5634.98	-2299.39	1571.23	-2185.84	1730117.81	14466120.38	39°49'59.1684"N	80°40'49.7061"W	2691.97	305.709	0.08	-0.04	0.11
6578.00	38.140	307.000	5709.72	-2350.13	1606.47	-2232.72	1730070.94	14466155.62	39°49'59.5184"N	80°40'50.3055"W	2750.60	305.736	0.09	0.04	0.14
6673.00	37.750	307.170	5784.63	-2400.74	1641.70	-2279.32	1730024.34	14466190.84	39°49'59.8683"N	80°40'50.9015"W	2809.00	305.764	0.43	-0.41	0.18
6768.00	29.310	299.500	5863.79	-2444.49	1670.78	-2322.83	1729980.83	14466219.93	39°50'0.1574"N	80°40'51.4581"W	2861.30	305.727	9.93	-8.88	-8.07
6864.00	22.850	287.130	5950.03	-2475.18	1687.87	-2361.16	1729942.49	14466237.02	39°50'0.3277"N	80°40'51.9489"W	2902.41	305.559	8.76	-6.73	-12.89
6959.00	18.480	269.450	6038.99	-2492.82	1693.17	-2393.89	1729909.76	14466242.32	39°50'0.3812"N	80°40'52.3684"W	2932.16	305.271	7.97	-4.60	-18.61
7054.00	18.090	244.670	6129.33	-2497.96	1686.71	-2422.32	1729881.33	14466235.85	39°50'0.3183"N	80°40'52.7332"W	2951.71	304.850	8.14	-0.41	-26.08
7149.00	17.800	216.610	6219.87	-2489.98	1668.71	-2444.35	1729859.30	14466217.85	39°50'0.1411"N	80°40'53.0166"W	2959.64	304.321	9.02	-0.31	-29.54
7245.00	21.940	194.640	6310.26	-2468.30	1639.52	-2457.66	1729845.99	14466188.67	39°49'59.8531"N	80°40'53.1886"W	2954.34	303.708	8.82	4.31	-22.89
7340.00	27.910	181.260	6396.44	-2433.90	1600.06	-2462.64	1729841.01	14466149.20	39°49'59.4631"N	80°40'53.2543"W	2936.80	303.013	8.61	6.28	-14.08
7435.00	33.950	173.700	6477.93	-2388.15	1551.40	-2460.22	1729843.44	14466100.54	39°49'58.9819"N	80°40'53.2254"W	2908.52	302.235	7.55	6.36	-7.96
7529.00	42.270	169.380	6551.84	-2332.01	1494.12	-2451.49	1729852.16	14466043.27	39°49'58.4154"N	80°40'53.1161"W	2870.93	301.361	9.29	8.85	-4.60
7624.00	51.380	164.470	6616.79	-2263.84	1426.80	-2435.63	1729868.02	14465975.95	39°49'57.7492"N	80°40'52.9158"W	2822.78	300.362	10.30	9.59	-5.17
7718.00	58.190	157.620	6671.01	-2187.33	1354.35	-2410.54	1729893.11	14465903.49	39°49'57.0320"N	80°40'52.5974"W	2764.95	299.329	9.37	7.24	-7.29
7814.00	64.510	153.550	6717.03	-2103.19	1277.73	-2375.67	1729927.99	14465826.88	39°49'56.2734"N	80°40'52.1537"W	2697.48	298.273	7.56	6.58	-4.24
7908.00	72.070	153.870	6751.77	-2016.06	1199.49	-2337.02	1729966.63	14465748.64	39°49'55.4985"N	80°40'51.6617"W	2626.87	297.169	8.05	8.04	0.34
8003.00	79.500	153.760	6775.09	-1924.18	1116.91	-2296.41	1730007.24	14465666.05	39°49'54.6806"N	80°40'51.1447"W	2553.62	295.937	7.82	7.82	-0.12
8098.00	88.580	153.540	6784.94	-1829.96	1032.33	-2254.51	1730049.14	14465581.47	39°49'53.8429"N	80°40'50.6113"W	2479.62	294.603	9.56	9.56	-0.23
8193.00	90.210	149.370	6785.94	-1735.44	948.90	-2209.13	1730094.52	14465498.05	39°49'53.0165"N	80°40'50.0332"W	2404.30	293.245	4.71	1.72	-4.39
8288.00	90.080	148.090	6785.70	-1641.44	867.70	-2159.82	1730143.83	14465416.85	39°49'52.2120"N	80°40'49.4046"W	2327.60	291.888	1.35	-0.14	-1.35

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Actual Wellpath Report

Hudson S-1HM AWP Proj: 20835'

REFERENCE WELLPATH IDENTIFICATION			
Operator	EQT (TUG HILL OPERATING, LLC)	Well	Hudson S-1HM
Field	Marshall	API/Legal	
Facility	Hudson	Wellbore	Hudson S-1HM AWB
Slot	Slot 01		

WELLPATH DATA (268 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
8383.00	90.850	149.620	6784.93	-1547.42	786.40	-2110.69	1730192.96	14465335.55	39°49'51.4065"N	80°40'48.7783"W	2252.43	290.434	1.80	0.81	1.61
8478.00	90.150	149.350	6784.10	-1453.25	704.56	-2062.46	1730241.20	14465253.71	39°49'50.5957"N	80°40'48.1636"W	2179.48	288.861	0.79	-0.74	-0.28
8573.00	89.070	149.330	6784.75	-1359.11	622.85	-2014.01	1730289.64	14465172.00	39°49'49.7861"N	80°40'47.5461"W	2108.12	287.185	1.14	-1.14	-0.02
8668.00	89.130	149.960	6786.24	-1264.91	540.88	-1966.01	1730337.64	14465090.03	39°49'48.9741"N	80°40'46.9344"W	2039.06	285.382	0.67	0.06	0.66
8762.00	88.670	149.910	6788.05	-1171.65	459.54	-1918.93	1730384.73	14465008.69	39°49'48.1683"N	80°40'46.3343"W	1973.18	283.468	0.49	-0.49	-0.05
8858.00	88.520	149.170	6790.40	-1076.50	376.82	-1870.28	1730433.38	14464925.97	39°49'47.3487"N	80°40'45.7143"W	1907.86	281.391	0.79	-0.16	-0.77
8953.00	88.670	149.580	6792.73	-982.38	295.09	-1821.90	1730481.76	14464844.24	39°49'46.5390"N	80°40'45.0977"W	1845.64	279.200	0.46	0.16	0.43
9047.00	88.550	149.850	6795.01	-889.17	213.95	-1774.51	1730529.15	14464763.10	39°49'45.7351"N	80°40'44.4938"W	1787.36	276.875	0.31	-0.13	0.29
9142.00	88.640	149.400	6797.34	-795.00	132.01	-1726.48	1730577.17	14464681.16	39°49'44.9233"N	80°40'43.8817"W	1731.52	274.372	0.48	0.09	-0.47
9237.00	88.490	149.590	6799.72	-700.85	50.19	-1678.27	1730625.38	14464599.34	39°49'44.1127"N	80°40'43.2674"W	1679.02	271.713	0.25	-0.16	0.20
9332.00	88.830	149.310	6801.94	-606.71	-31.60	-1630.00	1730673.65	14464517.55	39°49'43.3024"N	80°40'42.6521"W	1630.31	268.889	0.46	0.36	-0.29
9427.00	89.010	149.210	6803.73	-512.60	-113.24	-1581.45	1730722.20	14464435.91	39°49'42.4935"N	80°40'42.0334"W	1585.50	265.904	0.22	0.19	-0.11
9522.00	88.950	149.730	6805.42	-418.44	-195.06	-1533.20	1730770.45	14464354.09	39°49'41.6829"N	80°40'41.4184"W	1545.56	262.750	0.55	-0.06	0.55
9617.00	88.860	149.050	6807.24	-324.31	-276.80	-1484.83	1730818.82	14464272.35	39°49'40.8730"N	80°40'40.8020"W	1510.42	259.440	0.72	-0.09	-0.72
9711.00	88.800	149.290	6809.16	-231.21	-357.50	-1436.67	1730866.98	14464191.65	39°49'40.0735"N	80°40'40.1882"W	1480.48	256.026	0.26	-0.06	0.26
9806.00	88.800	149.060	6811.15	-137.12	-439.07	-1388.00	1730915.65	14464110.08	39°49'39.2654"N	80°40'39.5679"W	1455.79	252.446	0.24	0.00	-0.24
9901.00	88.950	149.700	6813.01	-42.99	-520.80	-1339.62	1730964.03	14464028.35	39°49'38.4556"N	80°40'38.9514"W	1437.30	248.755	0.69	0.16	0.67
9995.00	88.890	149.160	6814.78	50.16	-601.72	-1291.82	1731011.83	14463947.43	39°49'37.6539"N	80°40'38.3422"W	1425.09	245.024	0.58	-0.06	-0.57
10091.00	88.700	149.150	6816.80	145.23	-684.13	-1242.61	1731061.04	14463865.02	39°49'36.8374"N	80°40'37.7150"W	1418.49	241.165	0.20	-0.20	-0.01
10186.00	88.830	149.410	6818.85	239.34	-765.78	-1194.10	1731109.56	14463783.37	39°49'36.0285"N	80°40'37.0967"W	1418.55	237.328	0.31	0.14	0.27
10280.00	88.760	149.350	6820.83	332.48	-846.65	-1146.23	1731157.42	14463702.50	39°49'35.2272"N	80°40'36.4867"W	1425.01	233.549	0.10	-0.07	-0.06
10375.00	88.830	149.440	6822.82	426.62	-928.40	-1097.87	1731205.78	14463620.75	39°49'34.4173"N	80°40'35.8705"W	1437.79	229.781	0.12	0.07	0.09
10470.00	88.730	149.460	6824.85	520.76	-1010.20	-1049.60	1731254.06	14463538.96	39°49'33.6069"N	80°40'35.2552"W	1456.76	226.096	0.11	-0.11	0.02
10565.00	88.490	149.500	6827.15	614.91	-1092.01	-1001.37	1731302.29	14463457.14	39°49'32.7963"N	80°40'34.6406"W	1481.63	222.521	0.26	-0.25	0.04
10660.00	88.490	149.120	6829.65	709.01	-1173.67	-952.90	1731350.76	14463375.48	39°49'31.9872"N	80°40'34.0229"W	1511.79	219.073	0.40	0.00	-0.40
10755.00	88.520	149.280	6832.13	803.09	-1255.25	-904.27	1731399.38	14463293.90	39°49'31.1790"N	80°40'33.4032"W	1547.05	215.769	0.17	0.03	0.17
10851.00	88.490	149.330	6834.64	898.19	-1337.77	-855.28	1731448.37	14463211.38	39°49'30.3614"N	80°40'32.7789"W	1587.81	212.592	0.06	-0.03	0.05
10946.00	88.430	149.320	6837.19	992.29	-1419.45	-806.83	1731496.82	14463129.71	39°49'29.5522"N	80°40'32.1615"W	1632.73	209.614	0.06	-0.06	-0.01
11041.00	88.520	149.320	6839.72	1086.40	-1501.12	-758.38	1731545.28	14463048.03	39°49'28.7430"N	80°40'31.5440"W	1681.81	206.803	0.09	0.09	0.00
11136.00	88.180	149.340	6842.45	1180.50	-1582.80	-709.94	1731593.71	14462966.35	39°49'27.9337"N	80°40'30.9267"W	1734.72	204.158	0.36	-0.36	0.02
11231.00	88.060	149.040	6845.57	1274.56	-1664.35	-661.30	1731642.35	14462884.81	39°49'27.1258"N	80°40'30.3070"W	1790.92	201.670	0.34	-0.13	-0.32
11326.00	88.150	149.730	6848.71	1368.66	-1746.06	-612.95	1731690.70	14462803.09	39°49'26.3162"N	80°40'29.6908"W	1850.52	199.344	0.73	0.09	0.73
11421.00	88.150	149.390	6851.78	1462.80	-1827.92	-564.85	1731738.81	14462721.23	39°49'25.5051"N	80°40'29.0778"W	1913.20	197.172	0.36	0.00	-0.36
11516.00	88.150	149.580	6854.85	1556.93	-1909.72	-516.63	1731787.02	14462639.43	39°49'24.6947"N	80°40'28.4635"W	1978.37	195.138	0.20	0.00	0.20
11610.00	88.240	149.990	6857.81	1650.13	-1990.91	-469.35	1731834.30	14462558.24	39°49'23.8903"N	80°40'27.8611"W	2045.49	193.265	0.45	0.10	0.44
11705.00	88.120	149.440	6860.82	1744.30	-2072.90	-421.47	1731882.18	14462476.25	39°49'23.0780"N	80°40'27.2509"W	2115.32	191.493	0.59	-0.13	-0.58
11800.00	88.180	149.420	6863.89	1838.42	-2154.66	-373.18	1731930.47	14462394.50	39°49'22.2680"N	80°40'26.6356"W	2186.74	189.826	0.07	0.06	-0.02
11895.00	88.670	150.140	6866.50	1932.62	-2236.72	-325.38	1731978.27	14462312.44	39°49'21.4550"N	80°40'26.0266"W	2260.26	188.277	0.92	0.52	0.76
11989.00	88.460	148.700	6868.86	2025.76	-2317.61	-277.57	1732026.08	14462231.54	39°49'20.6535"N	80°40'25.4174"W	2334.18	186.830	1.55	-0.22	-1.53
12084.00	88.950	149.670	6871.00	2119.84	-2399.18	-228.92	1732074.73	14462149.97	39°49'19.8453"N	80°40'24.7975"W	2410.08	185.450	1.14	0.52	1.02
12179.00	88.390	149.250	6873.21	2213.98	-2480.98	-180.66	1732122.99	14462068.18	39°49'19.0349"N	80°40'24.1825"W	2487.55	184.165	0.74	-0.59	-0.44
12274.00	88.360	149.040	6875.90	2308.04	-2562.50	-131.96	1732171.69	14461986.65	39°49'18.2272"N	80°40'23.5619"W	2565.90	182.948	0.22	-0.03	-0.22
12368.00	88.430	149.430	6878.54	2401.14	-2643.24	-83.90	1732219.75	14461905.91	39°49'17.4272"N	80°40'22.9495"W	2644.57	181.818	0.42	0.07	0.41
12463.00	88.390	149.240	6881.17	2495.24	-2724.92	-35.46	1732268.19	14461824.23	39°49'16.6179"N	80°40'22.3323"W	2725.16	180.746	0.20	-0.04	-0.20
12558.00	88.270	149.220	6883.94	2589.32	-2806.52	13.12	1732316.77	14461742.64	39°49'15.8095"N	80°40'21.7133"W	2806.55	179.732	0.13	-0.13	-0.02

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Actual Wellpath Report

Hudson S-1HM AWP Proj: 20835'

REFERENCE WELLPATH IDENTIFICATION			
Operator	EQT (TUG HILL OPERATING, LLC)	Well	Hudson S-1HM
Field	Marshall	API/Legal	
Facility	Hudson	Wellbore	Hudson S-1HM AWB
Slot	Slot 01		

WELLPATH DATA (268 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
12653.00	88.330	147.810	6886.76	2683.23	-2887.49	62.71	1732366.36	14461661.66	39°49'15.0071"N	80°40'21.0812"W	2888.17	178.756	1.48	0.06	-1.48
12748.00	88.240	149.490	6889.60	2777.16	-2968.58	112.11	1732415.76	14461580.57	39°49'14.2037"N	80°40'20.4517"W	2970.70	177.837	1.77	-0.09	1.77
12843.00	88.180	149.660	6892.57	2871.31	-3050.46	160.20	1732463.85	14461498.69	39°49'13.3924"N	80°40'19.8390"W	3054.67	176.994	0.19	-0.06	0.18
12938.00	88.150	149.670	6895.61	2965.48	-3132.41	208.15	1732511.80	14461416.74	39°49'12.5805"N	80°40'19.2280"W	3139.32	176.198	0.03	-0.03	0.01
13032.00	88.090	146.810	6898.70	3058.31	-3212.29	257.60	1732561.25	14461336.87	39°49'11.7890"N	80°40'18.5978"W	3222.60	175.415	3.04	-0.06	-3.04
13127.00	88.090	149.940	6901.86	3152.16	-3293.12	307.38	1732611.03	14461256.03	39°49'10.9880"N	80°40'17.9634"W	3307.44	174.667	3.29	0.00	3.29
13222.00	88.210	150.590	6904.93	3246.45	-3375.57	354.47	1732658.12	14461173.59	39°49'10.1712"N	80°40'17.3635"W	3394.13	174.005	0.70	0.13	0.68
13316.00	88.300	150.700	6907.79	3339.82	-3457.46	400.53	1732704.18	14461091.69	39°49'9.3599"N	80°40'16.7768"W	3480.59	173.392	0.15	0.10	0.12
13411.00	88.180	150.400	6910.71	3434.17	-3540.15	447.22	1732750.87	14461009.01	39°49'8.5408"N	80°40'16.1822"W	3568.29	172.800	0.34	-0.13	-0.32
13506.00	88.120	150.300	6913.78	3528.47	-3622.67	494.19	1732797.84	14460926.49	39°49'7.7233"N	80°40'15.5838"W	3656.22	172.232	0.12	-0.06	-0.11
13601.00	88.120	150.330	6916.89	3622.77	-3705.15	541.21	1732844.86	14460844.00	39°49'6.9060"N	80°40'14.9849"W	3744.47	171.690	0.03	0.00	0.03
13696.00	88.240	150.370	6919.91	3717.07	-3787.67	588.19	1732891.83	14460761.48	39°49'6.0885"N	80°40'14.3866"W	3833.07	171.173	0.13	0.13	0.04
13791.00	88.120	149.900	6922.93	3811.33	-3870.02	635.47	1732939.12	14460679.14	39°49'5.2727"N	80°40'13.7843"W	3921.84	170.675	0.51	-0.13	-0.49
13886.00	88.120	150.130	6926.04	3905.57	-3952.26	682.92	1732986.57	14460596.90	39°49'4.4579"N	80°40'13.1798"W	4010.82	170.197	0.24	0.00	0.24
13981.00	88.090	149.750	6929.19	3999.79	-4034.43	730.48	1733034.13	14460514.72	39°49'3.6437"N	80°40'12.5739"W	4100.03	169.737	0.40	-0.03	-0.40
14077.00	88.330	150.070	6932.18	4095.00	-4117.46	778.59	1733082.24	14460431.70	39°49'2.8212"N	80°40'11.9611"W	4190.42	169.292	0.42	0.25	0.33
14171.00	88.060	149.290	6935.15	4188.18	-4198.56	826.02	1733129.67	14460350.60	39°49'2.0177"N	80°40'11.3568"W	4279.04	168.870	0.88	-0.29	-0.83
14267.00	88.210	151.130	6938.27	4283.44	-4281.82	873.68	1733177.33	14460267.33	39°49'1.1927"N	80°40'10.7497"W	4370.05	168.467	1.92	0.16	1.92
14361.00	88.460	150.530	6941.00	4376.85	-4363.87	919.48	1733223.13	14460185.29	39°49'0.3799"N	80°40'10.1664"W	4459.69	168.102	0.69	0.27	-0.64
14456.00	88.020	149.480	6943.92	4471.09	-4446.10	966.95	1733270.60	14460103.05	39°48'59.5652"N	80°40'9.5617"W	4550.04	167.730	1.20	-0.46	-1.11
14551.00	88.090	150.200	6947.14	4565.29	-4528.20	1014.65	1733318.30	14460020.96	39°48'58.7518"N	80°40'8.9541"W	4640.48	167.370	0.76	0.07	0.76
14646.00	88.090	150.350	6950.31	4659.57	-4610.65	1061.73	1733365.38	14459938.51	39°48'57.9349"N	80°40'8.3544"W	4731.32	167.032	0.16	0.00	0.16
14742.00	88.270	150.730	6953.36	4754.91	-4694.19	1108.92	1733412.57	14459854.96	39°48'57.1073"N	80°40'7.7534"W	4823.40	166.709	0.44	0.19	0.40
14837.00	88.760	152.290	6955.82	4849.43	-4777.66	1154.22	1733457.87	14459771.50	39°48'56.2804"N	80°40'7.1766"W	4915.10	166.418	1.72	0.52	1.64
14932.00	89.440	150.410	6957.31	4943.94	-4861.01	1199.76	1733503.41	14459688.15	39°48'55.4547"N	80°40'6.5967"W	5006.88	166.136	2.10	0.72	-1.98
15027.00	89.410	149.210	6958.27	5038.18	-4943.12	1247.53	1733551.18	14459606.04	39°48'54.6412"N	80°40'5.9882"W	5098.12	165.836	1.26	-0.03	-1.26
15122.00	88.920	149.210	6959.65	5132.28	-5024.72	1296.15	1733599.80	14459524.44	39°48'53.8327"N	80°40'5.3688"W	5189.21	165.536	0.52	-0.52	0.00
15217.00	88.700	149.790	6961.62	5226.44	-5106.56	1344.36	1733648.01	14459442.60	39°48'53.0218"N	80°40'4.7546"W	5280.55	165.251	0.65	-0.23	0.61
15312.00	88.490	149.380	6963.95	5320.61	-5188.46	1392.44	1733696.09	14459360.70	39°48'52.2103"N	80°40'4.1422"W	5372.06	164.977	0.48	-0.22	-0.43
15407.00	88.860	149.770	6966.15	5414.78	-5270.36	1440.54	1733744.18	14459278.80	39°48'51.3989"N	80°40'3.5295"W	5463.68	164.713	0.57	0.39	0.41
15502.00	88.760	149.790	6968.12	5509.00	-5352.43	1488.34	1733791.99	14459196.73	39°48'50.5858"N	80°40'2.9205"W	5555.51	164.460	0.11	-0.11	0.02
15597.00	88.760	149.680	6970.18	5603.20	-5434.46	1536.21	1733839.86	14459114.70	39°48'49.7730"N	80°40'2.3108"W	5647.42	164.216	0.12	0.00	-0.12
15692.00	88.760	149.640	6972.23	5697.39	-5516.43	1584.19	1733887.83	14459032.73	39°48'48.9608"N	80°40'1.6996"W	5739.39	163.977	0.04	0.00	-0.04
15787.00	88.760	149.730	6974.29	5791.59	-5598.42	1632.13	1733935.77	14458950.74	39°48'48.1485"N	80°40'1.0890"W	5831.48	163.747	0.09	0.00	0.09
15882.00	88.640	149.410	6976.45	5885.76	-5680.31	1680.23	1733983.88	14458868.85	39°48'47.3371"N	80°40'0.4762"W	5923.61	163.522	0.36	-0.13	-0.34
15977.00	88.980	149.310	6978.42	5979.89	-5762.03	1728.64	1734032.28	14458787.13	39°48'46.5274"N	80°39'59.8595"W	6015.75	163.301	0.37	0.36	-0.11
16072.00	89.410	149.270	6979.75	6074.01	-5843.70	1777.15	1734080.79	14458705.46	39°48'45.7182"N	80°39'59.2416"W	6107.95	163.085	0.45	0.45	-0.04
16167.00	89.220	149.910	6980.89	6168.20	-5925.63	1825.23	1734128.88	14458623.54	39°48'44.9065"N	80°39'58.6291"W	6200.36	162.880	0.70	-0.20	0.67
16262.00	89.260	149.680	6982.15	6262.43	-6007.72	1873.02	1734176.67	14458541.44	39°48'44.0931"N	80°39'58.0203"W	6292.93	162.684	0.25	0.04	-0.24
16357.00	89.220	149.600	6983.41	6356.63	-6089.69	1921.03	1734224.68	14458459.48	39°48'43.2810"N	80°39'57.4088"W	6385.50	162.492	0.09	-0.04	-0.08
16452.00	89.320	149.520	6984.62	6450.82	-6171.58	1969.16	1734272.80	14458377.58	39°48'42.4695"N	80°39'56.7957"W	6478.12	162.304	0.13	0.11	-0.08
16547.00	89.350	149.230	6985.72	6544.96	-6253.33	2017.55	1734321.20	14458295.83	39°48'41.6596"N	80°39'56.1793"W	6570.74	162.118	0.31	0.03	-0.31
16642.00	89.290	149.510	6986.85	6639.10	-6335.07	2065.95	1734369.59	14458214.09	39°48'40.8497"N	80°39'55.5628"W	6663.42	161.938	0.30	-0.06	0.29
16737.00	89.130	149.330	6988.16	6733.26	-6416.85	2114.27	1734417.92	14458132.32	39°48'40.0394"N	80°39'54.9472"W	6756.19	161.764	0.25	-0.17	-0.19
16832.00	89.320	149.280	6989.44	6827.38	-6498.53	2162.76	1734466.41	14458050.63	39°48'39.2300"N	80°39'54.3295"W	6848.97	161.592	0.21	0.20	-0.05

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Actual Wellpath Report

Hudson S-1HM AWP Proj: 20835'

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Field	Marshall	API/Legal	
Facility	Hudson	Wellbore	Hudson S-1HM AWB
Slot	Slot 01		

WELLPATH DATA (268 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
16927.00	89.350	149.070	6990.55	6921.48	-6580.10	2211.44	1734515.09	14457969.06	39°48'38.4218"N	80°39'53.7094"W	6941.77	161.424	0.22	0.03	-0.22
17022.00	89.560	149.280	6991.45	7015.58	-6661.68	2260.12	1734563.76	14457887.48	39°48'37.6135"N	80°39'53.0893"W	7034.64	161.259	0.31	0.22	0.22
17117.00	89.620	148.740	6992.13	7109.65	-6743.12	2309.03	1734612.68	14457806.05	39°48'36.8065"N	80°39'52.4662"W	7127.50	161.097	0.57	0.06	-0.57
17212.00	89.470	149.050	6992.88	7203.69	-6824.46	2358.11	1734661.75	14457724.71	39°48'36.0006"N	80°39'51.8410"W	7220.38	160.938	0.36	-0.16	0.33
17308.00	89.500	148.750	6993.75	7298.72	-6906.65	2407.69	1734711.34	14457642.51	39°48'35.1861"N	80°39'51.2094"W	7314.29	160.781	0.31	0.03	-0.31
17403.00	89.530	148.920	6994.55	7392.74	-6987.94	2456.85	1734760.50	14457561.22	39°48'34.3806"N	80°39'50.5831"W	7407.26	160.629	0.18	0.03	0.18
17498.00	89.620	149.180	6995.26	7486.81	-7069.41	2505.71	1734809.35	14457479.75	39°48'33.5733"N	80°39'49.9607"W	7500.34	160.483	0.29	0.09	0.27
17593.00	89.720	149.510	6995.80	7580.96	-7151.13	2554.15	1734857.79	14457398.03	39°48'32.7636"N	80°39'49.3437"W	7593.58	160.345	0.36	0.11	0.35
17688.00	89.500	149.190	6996.45	7675.10	-7232.86	2602.57	1734906.22	14457316.30	39°48'31.9538"N	80°39'48.7269"W	7686.85	160.210	0.41	-0.23	-0.34
17782.00	89.220	149.390	6997.50	7768.23	-7313.67	2650.58	1734954.22	14457235.49	39°48'31.1531"N	80°39'48.1154"W	7779.16	160.079	0.37	-0.30	0.21
17877.00	88.980	148.970	6998.99	7862.33	-7395.25	2699.24	1735002.89	14457153.92	39°48'30.3448"N	80°39'47.4955"W	7872.46	159.948	0.51	-0.25	-0.44
17972.00	90.330	149.190	6999.56	7956.41	-7476.74	2748.06	1735051.70	14457072.42	39°48'29.5373"N	80°39'46.8737"W	7965.77	159.819	1.44	1.42	0.23
18066.00	90.360	149.300	6999.00	8049.54	-7557.52	2796.12	1735099.77	14456991.64	39°48'28.7369"N	80°39'46.2615"W	8058.19	159.697	0.12	0.03	0.12
18161.00	89.840	149.310	6998.83	8143.67	-7639.21	2844.62	1735148.26	14456909.95	39°48'27.9275"N	80°39'45.6438"W	8151.65	159.576	0.55	-0.55	0.01
18256.00	89.840	149.220	6999.10	8237.80	-7720.87	2893.17	1735196.81	14456828.30	39°48'27.1184"N	80°39'45.0254"W	8245.13	159.458	0.09	0.00	-0.09
18351.00	89.810	148.240	6999.39	8331.80	-7802.07	2942.48	1735246.12	14456747.10	39°48'26.3138"N	80°39'44.3972"W	8338.49	159.336	1.03	-0.03	-1.03
18446.00	89.680	148.730	6999.81	8425.74	-7883.05	2992.14	1735295.78	14456666.11	39°48'25.5112"N	80°39'43.7646"W	8431.81	159.215	0.53	-0.14	0.52
18541.00	89.650	150.790	7000.37	8519.97	-7965.12	3039.98	1735343.62	14456584.05	39°48'24.6981"N	80°39'43.1553"W	8525.53	159.110	2.17	-0.03	2.17
18636.00	89.440	149.180	7001.12	8614.24	-8047.37	3087.50	1735391.14	14456501.79	39°48'23.8831"N	80°39'42.5501"W	8619.33	159.010	1.71	-0.22	-1.69
18731.00	89.500	149.250	7002.00	8708.36	-8128.98	3136.12	1735439.76	14456420.18	39°48'23.0745"N	80°39'41.9309"W	8712.96	158.904	0.10	0.06	0.07
18826.00	90.210	149.810	7002.24	8802.54	-8210.86	3184.29	1735487.93	14456338.30	39°48'22.2632"N	80°39'41.3173"W	8806.70	158.803	0.95	0.75	0.59
18921.00	89.840	148.820	7002.20	8896.67	-8292.56	3232.77	1735536.41	14456256.61	39°48'21.4537"N	80°39'40.6999"W	8900.41	158.702	1.11	-0.39	-1.04
19016.00	90.670	149.000	7001.78	8990.72	-8373.91	3281.83	1735585.47	14456175.25	39°48'20.6476"N	80°39'40.0750"W	8994.04	158.599	0.89	0.87	0.19
19111.00	90.540	149.440	7000.77	9084.83	-8455.53	3330.44	1735634.08	14456093.64	39°48'19.8389"N	80°39'39.4558"W	9087.78	158.502	0.48	-0.14	0.46
19206.00	90.880	149.440	6999.60	9178.99	-8537.32	3378.74	1735682.38	14456011.84	39°48'19.0284"N	80°39'38.8407"W	9181.60	158.408	0.36	0.36	0.00
19301.00	90.850	149.150	6998.16	9273.11	-8619.00	3427.24	1735730.88	14455930.17	39°48'18.2191"N	80°39'38.2230"W	9275.40	158.315	0.31	-0.03	-0.31
19397.00	91.030	149.050	6996.59	9368.18	-8701.36	3476.53	1735780.18	14455847.81	39°48'17.4030"N	80°39'37.5951"W	9370.16	158.221	0.21	0.19	-0.10
19492.00	90.360	148.940	6995.43	9462.23	-8782.78	3525.46	1735829.11	14455766.39	39°48'16.5962"N	80°39'36.9719"W	9463.94	158.129	0.71	-0.71	-0.12
19587.00	90.420	149.300	6994.79	9556.32	-8864.31	3574.22	1735877.86	14455684.86	39°48'15.7883"N	80°39'36.3509"W	9557.78	158.040	0.38	0.06	0.38
19681.00	89.930	149.320	6994.50	9649.47	-8945.14	3622.20	1735925.84	14455604.02	39°48'14.9873"N	80°39'35.7398"W	9650.70	157.955	0.52	-0.52	0.02
19776.00	89.770	149.230	6994.75	9743.60	-9026.81	3670.73	1735974.38	14455522.36	39°48'14.1781"N	80°39'35.1217"W	9744.62	157.871	0.19	-0.17	-0.09
19872.00	89.560	148.630	6995.31	9838.63	-9109.04	3720.28	1736023.92	14455440.13	39°48'13.3634"N	80°39'34.4906"W	9839.46	157.784	0.66	-0.22	-0.62
19966.00	89.930	149.520	6995.73	9931.72	-9189.67	3768.58	1736072.23	14455359.50	39°48'12.5644"N	80°39'33.8754"W	9932.39	157.702	1.03	0.39	0.95
20061.00	90.420	149.480	6995.44	10025.90	-9271.52	3816.80	1736120.44	14455277.64	39°48'11.7533"N	80°39'33.2613"W	10026.42	157.625	0.52	0.52	-0.04
20156.00	90.330	149.140	6994.82	10120.04	-9353.22	3865.29	1736168.93	14455195.95	39°48'10.9438"N	80°39'32.6438"W	10120.43	157.547	0.37	-0.09	-0.36
20251.00	89.400	149.180	6995.04	10214.14	-9434.78	3913.99	1736217.63	14455114.39	39°48'10.1356"N	80°39'32.0236"W	10214.42	157.469	0.98	-0.98	0.04
20346.00	88.670	149.170	6996.64	10308.23	-9516.35	3962.66	1736266.30	14455032.82	39°48'9.3273"N	80°39'31.4037"W	10308.42	157.393	0.77	-0.77	-0.01
20441.00	88.600	149.070	6998.90	10402.30	-9597.86	4011.40	1736315.05	14454951.31	39°48'8.5197"N	80°39'30.7829"W	10402.42	157.318	0.13	-0.07	-0.11
20536.00	88.630	149.330	7001.20	10496.38	-9679.44	4060.03	1736363.68	14454869.73	39°48'7.7113"N	80°39'30.1636"W	10496.45	157.244	0.28	0.03	0.27
20632.00	88.360	148.990	7003.72	10591.44	-9761.84	4109.23	1736412.87	14454787.33	39°48'6.8948"N	80°39'29.5370"W	10591.47	157.171	0.45	-0.28	-0.35
20726.00	89.400	149.230	7005.56	10684.52	-9842.49	4157.48	1736461.12	14454706.68	39°48'6.0957"N	80°39'28.9225"W	10684.53	157.101	1.14	1.11	0.26
20810.00	89.500	149.270	7006.36	10767.74	-9914.67	4200.43	1736504.07	14454634.50	39°48'5.3804"N	80°39'28.3756"W	10767.74	157.040	0.13	0.12	0.05
20835.00‡	89.500	149.270	7006.58	10792.51	-9936.16	4213.20	1736516.84	14454613.01	39°48'5.1675"N	80°39'28.2129"W	10792.51	157.022	0.00	0.00	0.00

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Actual Wellpath Report

Hudson S-1HM AWP Proj: 20835'

REFERENCE WELLPATH IDENTIFICATION			
Operator	**EQT (TUG HILL OPERATING, LLC)**	Well	**Hudson S-1HM**
Field	**Marshall**	API/Legal	
Facility	**Hudson**	Wellbore	**Hudson S-1HM AWB**
Slot	**Slot 01**		

HOLE & CASING SECTIONS - Ref Wellbore: Hudson S-1HM AWB Ref Wellpath: Hudson S-1HM AWP Proj: 20835'

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
30in Conductor	28.00	148.00	120.00	28.00	147.99	0.00	0.00	1.16	-0.66
13.375in Casing Surface	28.00	1099.00	1071.00	28.00	1098.63	0.00	0.00	4.31	-8.98
9.625in Casing Intermediate	28.00	1495.00	1467.00	28.00	1493.88	0.00	0.00	13.52	-27.19
8.75in Open Hole	1495.00	6600.00	5105.00	1493.88	5727.03	13.52	-27.19	1614.65	-2243.56

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Hudson 1HM T1	6777.00	1041.50	-2262.68	**1730040.97**	**14465590.64**	39°49'53.9339"N	80°40'50.7157"W	point
Hudson 1HM T2	6999.50	-9938.89	4210.33	**1736513.98**	**14454610.28**	39°48'5.1406"N	80°39'28.2498"W	point

WELLPATH COMPOSITION - Ref Wellbore: Hudson S-1HM AWB Ref Wellpath: Hudson S-1HM AWP Proj: 20835'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
28.00	603.00	OWSG MWD rev2 - Standard	01_MWD<17-1/2">(173'-601')	Hudson S-1HM AWB	12/7/2023
603.00	1943.00	OWSG MWD rev2 - Standard	02_MWD<12-1/4">(618'-1943')	Hudson S-1HM AWB	12/7/2023
1943.00	6058.00	OWSG MWD rev2 - Standard	03_MWD<8-3/4">(1981-3876')	Hudson S-1HM AWB	3/17/2024
6058.00	20835.00	OWSG MWD rev2 + IFR1 + Sag + Multi-Station Correction	04_BH Lucida+SuperiorQC IFR1+Sag+FDIR <8 1/2"> (6104-20810)	Hudson S-1HM AWB	3/17/2024

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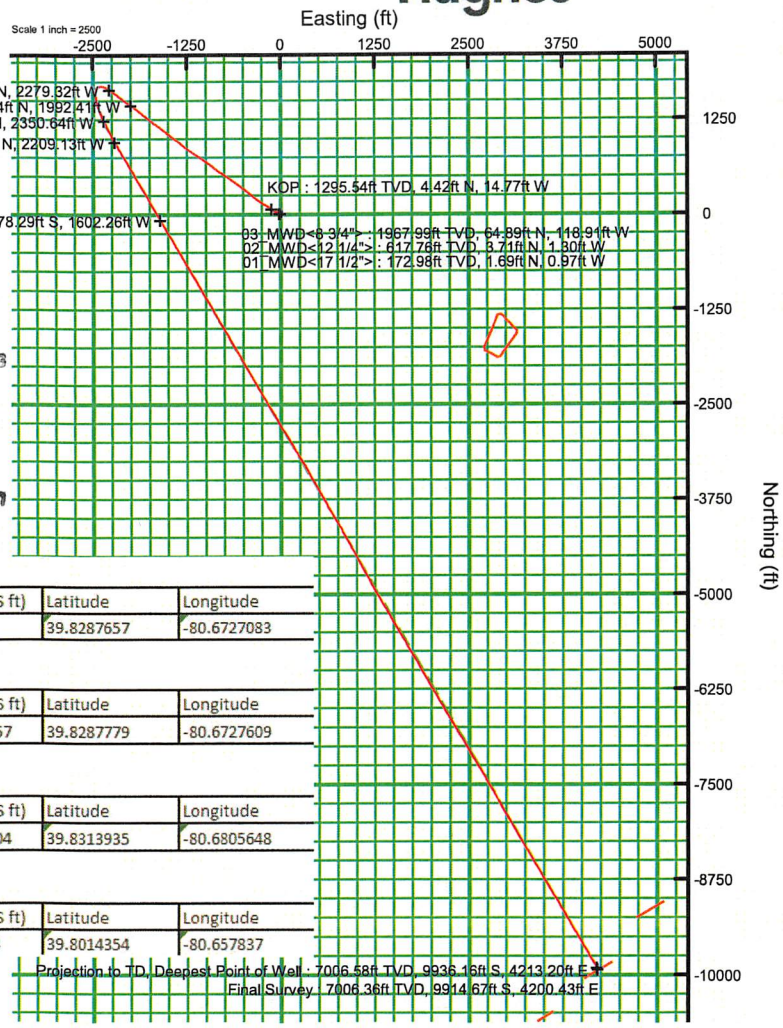
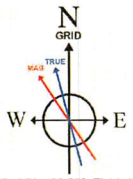
EQT (TUG HILL OPERATING, LLC)

Location: Marshall County, WV
Field: Marshall
Facility: Hudson

Slot: Slot 01
Well: Hudson S-1HM
Wellbore: Hudson S-1HM AWB





User specified Dip: 66.25° Field: 51562.7 nT
Magnetic North is 8.53 degrees West of True North (at 3/10/2024)
Grid North is 0.21 degrees East of True North
To correct azimuth from True to Grid subtract 0.21 degrees
To correct azimuth from Magnetic to Grid subtract 8.74 degrees

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Surface Location

Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
1732303.65	14464549.15	39.8287657	-80.6727083

KOP

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	North	East	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
1296	1.94	300.2	1295.54	4.42	-14.78	1732288.87	14464553.57	39.8287779	-80.6727609

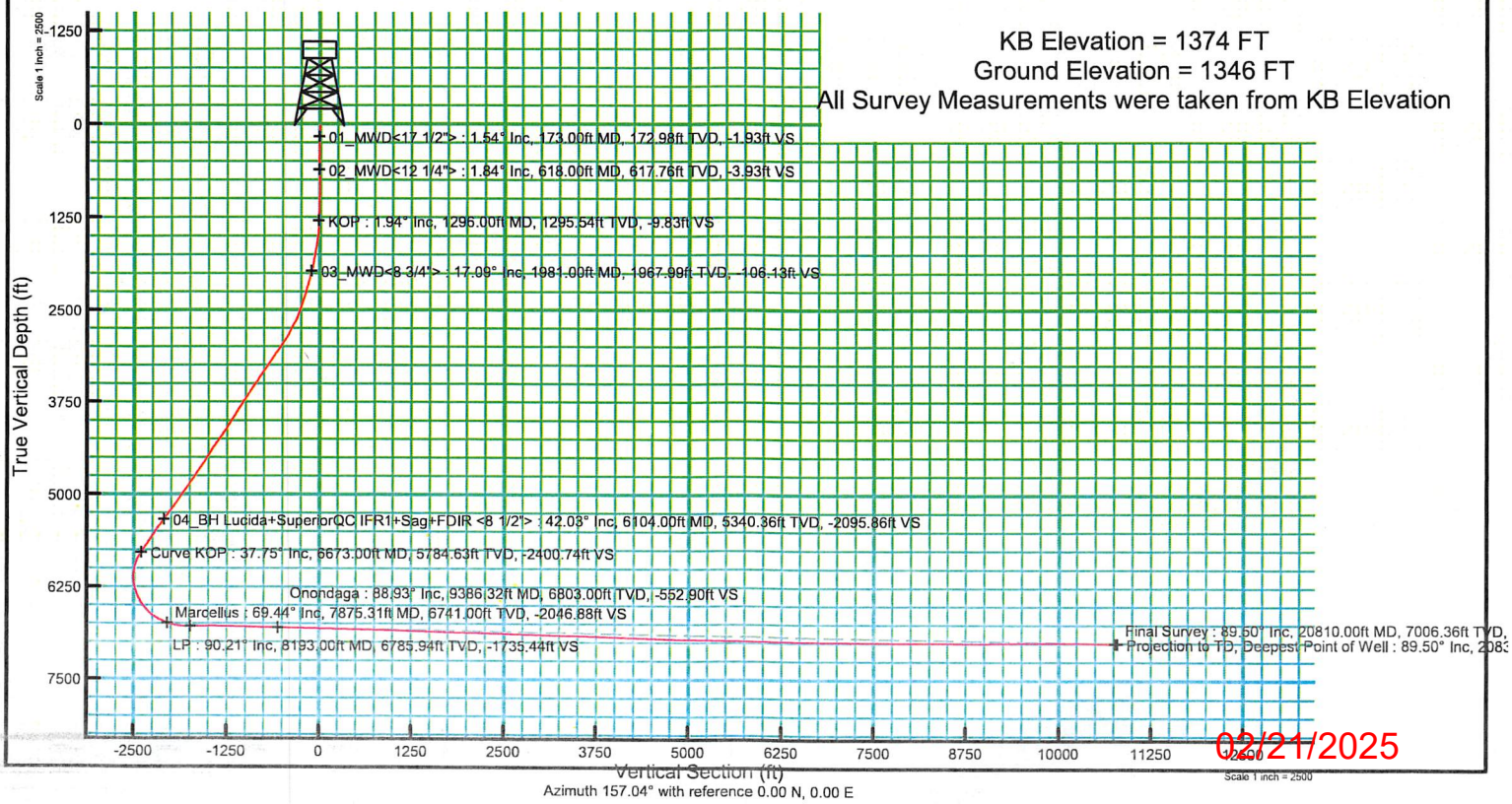
Landing Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	North	East	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
8193	90.21	149.37	6785.94	948.9	-2209.14	1730094.51	14465498.04	39.8313935	-80.6805648

Bottom Hole Location

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	North	East	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
20835	89.5	149.27	7006.58	-9936.17	4213.19	1736516.83	14454613	39.8014354	-80.657837

KB Elevation = 1374 FT
Ground Elevation = 1346 FT
All Survey Measurements were taken from KB Elevation



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