



Actual Wellpath Report

Hudson S-10HM AWP Proj: 17584'

Page 1 of 11



REFERENCE WELLPATH IDENTIFICATION			
Operator	EQT (TUG HILL OPERATING, LLC)	Well	Hudson S-10HM
Field	Marshall	API	47-051-02381-0000
Facility	Hudson	Wellbore	Hudson S-10HM AWB
Slot	Slot 10		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Scurdan
Scale	0.999610	Report Generated	1/17/2024 at 2:13:14 PM
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	46.12	24.35	1732327.99	14464595.25	39°49'44.0113"N	80°40'21.4356"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 10)	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	114.32°

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Page 2 of 11



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WELLPATH DATA (228 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	290.610	0.00	0.00	0.00	0.00	1732327.99	14464595.25	39°49'44.0113"N	80°40'21.4356"W	0.00	0.000	0.00	0.00	0.00
28.00	0.000	290.610	28.00	0.00	0.00	0.00	1732327.99	14464595.25	39°49'44.0113"N	80°40'21.4356"W	0.00	0.000	0.00	0.00	0.00
115.00	0.550	290.610	115.00	-0.42	0.15	-0.39	1732327.60	14464595.40	39°49'44.0127"N	80°40'21.4406"W	0.42	290.610	0.63	0.63	0.00
215.00	0.820	293.800	214.99	-1.61	0.60	-1.49	1732326.50	14464595.85	39°49'44.0173"N	80°40'21.4547"W	1.61	292.025	0.27	0.27	3.19
315.00	0.890	299.580	314.98	-3.10	1.28	-2.82	1732325.17	14464596.53	39°49'44.0240"N	80°40'21.4717"W	3.10	294.322	0.11	0.07	5.78
415.00	0.990	299.640	414.97	-4.73	2.09	-4.25	1732323.74	14464597.34	39°49'44.0320"N	80°40'21.4900"W	4.74	296.152	0.10	0.10	0.06
515.00	1.050	304.070	514.95	-6.50	3.03	-5.76	1732322.23	14464598.28	39°49'44.0414"N	80°40'21.5093"W	6.51	297.726	0.10	0.06	4.43
615.00	1.040	311.670	614.93	-8.27	4.14	-7.20	1732320.79	14464599.39	39°49'44.0525"N	80°40'21.5276"W	8.31	299.934	0.14	-0.01	7.60
715.00	0.800	320.060	714.92	-9.76	5.28	-8.32	1732319.67	14464600.53	39°49'44.0638"N	80°40'21.5420"W	9.86	302.403	0.27	-0.24	8.39
815.00	0.580	327.900	814.91	-10.81	6.25	-9.04	1732318.95	14464601.49	39°49'44.0733"N	80°40'21.5512"W	10.99	304.644	0.24	-0.22	7.84
915.00	0.840	316.630	914.91	-11.91	7.21	-9.81	1732318.18	14464602.46	39°49'44.0828"N	80°40'21.5610"W	12.18	306.301	0.29	0.26	-11.27
920.00	0.880	318.770	919.91	-11.98	7.26	-9.86	1732318.13	14464602.51	39°49'44.0834"N	80°40'21.5617"W	12.25	306.370	1.03	0.80	42.80
1015.00	0.320	327.390	1014.90	-12.87	8.04	-10.49	1732317.51	14464603.28	39°49'44.0911"N	80°40'21.5696"W	13.21	307.462	0.60	-0.59	9.07
1115.00	0.140	304.510	1114.90	-13.22	8.34	-10.74	1732317.26	14464603.59	39°49'44.0941"N	80°40'21.5728"W	13.60	307.837	0.20	-0.18	-22.88
1215.00	0.230	247.480	1214.90	-13.48	8.33	-11.02	1732316.97	14464603.58	39°49'44.0940"N	80°40'21.5765"W	13.82	307.084	0.19	0.09	-57.03
1315.00	0.370	266.720	1314.90	-13.90	8.24	-11.53	1732316.46	14464603.48	39°49'44.0931"N	80°40'21.5830"W	14.17	305.539	0.17	0.14	19.24
1348.00	0.450	240.810	1347.90	-14.07	8.17	-11.75	1732316.24	14464603.42	39°49'44.0924"N	80°40'21.5858"W	14.31	304.802	0.61	0.24	-78.52
1376.00	0.140	359.540	1375.90	-14.15	8.15	-11.85	1732316.15	14464603.40	39°49'44.0922"N	80°40'21.5871"W	14.38	304.520	1.90	-1.11	424.04
1418.00	0.420	29.900	1417.90	-14.16	8.33	-11.77	1732316.22	14464603.58	39°49'44.0940"N	80°40'21.5861"W	14.42	305.296	0.73	0.67	72.29
1460.00	0.650	33.220	1459.89	-14.11	8.67	-11.56	1732316.43	14464603.91	39°49'44.0973"N	80°40'21.5834"W	14.45	306.848	0.55	0.55	7.90
1503.00	0.780	28.320	1502.89	-14.05	9.13	-11.29	1732316.70	14464604.37	39°49'44.1019"N	80°40'21.5799"W	14.52	308.951	0.33	0.30	-11.40
1545.00	0.970	29.170	1544.89	-14.00	9.69	-10.98	1732317.01	14464604.94	39°49'44.1074"N	80°40'21.5759"W	14.65	311.421	0.45	0.45	2.02
1588.00	1.240	33.460	1587.88	-13.90	10.40	-10.55	1732317.44	14464605.64	39°49'44.1144"N	80°40'21.5703"W	14.81	314.581	0.66	0.63	9.98
1630.00	1.650	35.780	1629.86	-13.70	11.27	-9.95	1732318.05	14464606.51	39°49'44.1229"N	80°40'21.5625"W	15.03	318.563	0.99	0.98	5.52
1674.00	1.950	36.620	1673.84	-13.42	12.38	-9.13	1732318.86	14464607.63	39°49'44.1339"N	80°40'21.5520"W	15.38	323.598	0.68	0.68	1.91
1716.00	2.220	36.380	1715.81	-13.10	13.61	-8.22	1732319.77	14464608.85	39°49'44.1460"N	80°40'21.5403"W	15.90	328.869	0.64	0.64	-0.57
1759.00	2.720	39.430	1758.77	-12.66	15.07	-7.08	1732320.91	14464610.31	39°49'44.1604"N	80°40'21.5256"W	16.65	334.839	1.20	1.16	7.09
1801.00	3.490	38.360	1800.71	-12.09	16.84	-5.65	1732322.34	14464612.98	39°49'44.1779"N	80°40'21.5072"W	17.76	341.448	1.84	1.83	-2.55
1843.00	4.620	40.660	1842.61	-11.30	19.13	-3.76	1732324.24	14464614.37	39°49'44.2004"N	80°40'21.4828"W	19.49	348.889	2.72	2.69	5.48
1884.00	5.930	41.980	1883.43	-10.19	21.95	-1.26	1732326.73	14464617.19	39°49'44.2282"N	80°40'21.4507"W	21.99	356.706	3.21	3.20	3.22

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Page 3 of 11


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Facility	Hudson	Wellbore	Hudson S-10HM AWB
Slot	Slot 10		

WELLPATH DATA (228 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]
1928.00	7.350	48.760	1927.14	-8.34	25.50	2.37	1732330.36	14464620.74	39°49'44.2632"N	80°40'21.4039"W	25.61	5.318	3.68	3.23	15.41
1971.00	8.690	45.210	1969.72	-6.04	29.60	6.75	1732334.73	14464624.84	39°49'44.3035"N	80°40'21.3477"W	30.36	12.841	3.32	3.12	-8.26
2014.00	9.420	42.950	2012.18	-3.76	34.46	11.45	1732339.44	14464629.70	39°49'44.3514"N	80°40'21.2872"W	36.32	18.379	1.89	1.70	-5.26
2057.00	10.070	40.700	2054.56	-1.57	39.89	16.30	1732344.28	14464635.12	39°49'44.4049"N	80°40'21.2248"W	43.09	22.226	1.75	1.51	-5.23
2100.00	10.490	41.910	2096.87	0.67	45.65	21.37	1732349.35	14464640.89	39°49'44.4616"N	80°40'21.1596"W	50.41	25.080	1.10	0.98	2.81
2143.00	10.740	41.920	2139.13	3.06	51.55	26.66	1732354.64	14464646.78	39°49'44.5197"N	80°40'21.0915"W	58.03	27.345	0.58	0.58	0.02
2185.00	10.990	40.580	2180.38	5.37	57.50	31.88	1732359.85	14464652.73	39°49'44.5783"N	80°40'21.0243"W	65.74	29.002	0.85	0.60	-3.19
2227.00	11.420	40.670	2221.58	7.66	63.69	37.19	1732365.17	14464658.92	39°49'44.6394"N	80°40'20.9559"W	73.76	30.280	1.02	1.02	0.21
2269.00	11.070	41.710	2262.77	10.03	69.86	42.58	1732370.56	14464665.08	39°49'44.7001"N	80°40'20.8865"W	81.81	31.365	0.96	-0.83	2.48
2311.00	11.030	43.820	2303.99	12.58	75.77	48.05	1732376.02	14464670.99	39°49'44.7583"N	80°40'20.8162"W	89.72	32.381	0.97	-0.10	5.02
2353.00	11.280	44.330	2345.20	15.33	81.60	53.70	1732381.67	14464676.82	39°49'44.8158"N	80°40'20.7434"W	97.69	33.347	0.64	0.60	1.21
2395.00	10.860	43.790	2386.42	18.05	87.40	59.31	1732387.27	14464682.61	39°49'44.8728"N	80°40'20.6713"W	105.62	34.160	1.03	-1.00	-1.29
2437.00	9.930	41.610	2427.73	20.45	92.96	64.45	1732392.42	14464688.18	39°49'44.9276"N	80°40'20.6051"W	113.12	34.734	2.40	-2.21	-5.19
2523.00	10.120	39.070	2512.42	24.57	104.37	74.14	1732402.10	14464699.58	39°49'45.0400"N	80°40'20.4804"W	128.02	35.387	0.56	0.22	-2.95
2565.00	10.430	37.370	2553.74	26.37	110.26	78.77	1732406.73	14464705.47	39°49'45.0980"N	80°40'20.4207"W	135.51	35.542	1.03	0.74	-4.05
2607.00	10.530	35.820	2595.04	28.00	116.39	83.32	1732411.28	14464711.60	39°49'45.1585"N	80°40'20.3621"W	143.14	35.598	0.71	0.24	-3.69
2650.00	10.570	34.240	2637.32	29.46	122.84	87.84	1732415.80	14464718.04	39°49'45.2220"N	80°40'20.3039"W	151.02	35.569	0.68	0.09	-3.67
2692.00	10.580	36.970	2678.60	30.97	129.10	92.33	1732420.28	14464724.30	39°49'45.2838"N	80°40'20.2461"W	158.72	35.570	1.19	0.02	6.50
2734.00	11.250	40.150	2719.84	32.93	135.32	97.29	1732425.24	14464730.51	39°49'45.3450"N	80°40'20.1822"W	166.66	35.715	2.14	1.60	7.57
2778.00	12.630	37.290	2762.89	35.18	142.42	102.97	1732430.92	14464737.62	39°49'45.4150"N	80°40'20.1090"W	175.75	35.867	3.41	3.14	-6.50
2820.00	13.490	36.460	2803.80	37.24	150.02	108.66	1732436.61	14464745.21	39°49'45.4899"N	80°40'20.0357"W	185.24	35.918	2.10	2.05	-1.98
2862.00	14.430	35.980	2844.56	39.33	158.19	114.65	1732442.60	14464753.38	39°49'45.5704"N	80°40'19.9586"W	195.37	35.933	2.25	2.24	-1.14
2905.00	15.320	35.920	2886.12	41.55	167.13	121.13	1732449.07	14464762.31	39°49'45.6585"N	80°40'19.8751"W	206.41	35.934	2.07	2.07	-0.14
2948.00	16.120	35.590	2927.51	43.86	176.58	127.94	1732455.88	14464771.76	39°49'45.7517"N	80°40'19.7874"W	218.06	35.924	1.87	1.86	-0.77
2991.00	17.030	36.230	2968.73	46.33	186.52	135.13	1732463.07	14464781.69	39°49'45.8496"N	80°40'19.6947"W	230.33	35.924	2.16	2.12	1.49
3033.00	17.390	36.290	3008.85	48.90	196.54	142.48	1732470.42	14464791.71	39°49'45.9484"N	80°40'19.6000"W	242.75	35.941	0.86	0.86	0.14
3075.00	18.120	36.240	3048.84	51.55	206.86	150.06	1732477.99	14464802.03	39°49'46.0502"N	80°40'19.5024"W	255.56	35.957	1.74	1.74	-0.12
3117.00	19.180	36.830	3088.64	54.39	217.65	158.06	1732485.98	14464812.82	39°49'46.1565"N	80°40'19.3994"W	268.99	35.986	2.56	2.52	1.40
3159.00	20.440	36.600	3128.15	57.45	229.06	166.56	1732494.49	14464824.22	39°49'46.2690"N	80°40'19.2898"W	283.22	36.023	3.01	3.00	-0.55
3201.00	21.420	35.890	3167.38	60.55	241.17	175.43	1732503.35	14464836.32	39°49'46.3882"N	80°40'19.1756"W	298.22	36.034	2.41	2.33	-1.69



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 DEC 23 2014

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Page 4 of 11



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3245.00	22.090	33.940	3208.25	63.54	254.54	184.76	1732512.68	14464849.69	39°49'46.5201"N	80°40'19.0554"W	314.53	35.975	2.24	1.52	-4.43
3287.00	22.760	30.930	3247.07	65.80	268.06	193.35	1732521.26	14464863.21	39°49'46.6534"N	80°40'18.9447"W	330.51	35.802	3.16	1.60	-7.17
3329.00	23.450	28.590	3285.70	67.35	282.37	201.52	1732529.43	14464877.51	39°49'46.7945"N	80°40'18.8392"W	346.91	35.515	2.73	1.64	-5.57
3372.00	24.400	27.820	3325.01	68.53	297.74	209.76	1732537.67	14464892.87	39°49'46.9460"N	80°40'18.7329"W	364.21	35.166	2.33	2.21	-1.79
3414.00	25.440	27.840	3363.10	69.62	313.39	218.02	1732545.93	14464908.51	39°49'47.1004"N	80°40'18.6263"W	381.77	34.827	2.48	2.48	0.05
3456.00	26.470	27.960	3400.86	70.77	329.63	226.63	1732554.53	14464924.75	39°49'47.2606"N	80°40'18.5153"W	400.02	34.509	2.46	2.45	0.29
3500.00	27.310	28.850	3440.10	72.19	347.13	236.09	1732563.99	14464942.25	39°49'47.4333"N	80°40'18.3931"W	419.81	34.221	2.12	1.91	2.02
3543.00	28.580	29.400	3478.09	73.88	364.74	245.90	1732573.80	14464959.84	39°49'47.6069"N	80°40'18.2665"W	439.89	33.988	3.01	2.95	1.28
3586.00	29.400	30.470	3515.70	75.92	382.79	256.31	1732584.19	14464977.89	39°49'47.7849"N	80°40'18.1323"W	460.68	33.805	2.26	1.91	2.49
3629.00	30.470	30.960	3552.96	78.31	401.24	267.27	1732595.15	14464996.33	39°49'47.9668"N	80°40'17.9910"W	482.10	33.668	2.55	2.49	1.14
3673.00	31.810	31.570	3590.62	81.06	420.69	279.08	1732606.96	14465015.77	39°49'48.1586"N	80°40'17.8387"W	504.84	33.560	3.13	3.05	1.39
3715.00	32.630	32.880	3626.16	84.14	439.63	291.02	1732618.90	14465034.71	39°49'48.3454"N	80°40'17.6847"W	527.22	33.503	2.56	1.95	3.12
3757.00	33.810	33.220	3661.29	87.64	458.91	303.57	1732631.44	14465053.98	39°49'48.5355"N	80°40'17.5229"W	550.23	33.484	2.84	2.81	0.81
3799.00	35.280	32.840	3695.89	91.24	478.88	316.55	1732644.42	14465073.94	39°49'48.7323"N	80°40'17.3556"W	574.05	33.465	3.54	3.50	-0.90
3841.00	35.500	32.260	3730.12	94.72	499.38	329.64	1732657.50	14465094.44	39°49'48.9345"N	80°40'17.1869"W	598.37	33.428	0.96	0.52	-1.38
3883.00	36.080	31.610	3764.19	97.98	520.23	342.63	1732670.48	14465115.27	39°49'49.1400"N	80°40'17.0194"W	622.92	33.369	1.65	1.38	-1.55
3926.00	36.490	31.060	3798.86	101.09	541.96	355.86	1732683.71	14465137.00	39°49'49.3543"N	80°40'16.8488"W	648.35	33.289	1.22	0.95	-1.28
3969.00	36.920	30.080	3833.33	103.88	564.09	368.93	1732696.78	14465159.12	39°49'49.5726"N	80°40'16.6802"W	674.03	33.186	1.69	1.00	-2.28
4012.00	37.190	29.500	3867.65	106.35	586.58	381.80	1732709.64	14465181.60	39°49'49.7943"N	80°40'16.5141"W	699.89	33.060	1.03	0.63	-1.35
4056.00	37.800	28.970	3902.56	108.65	609.95	394.88	1732722.72	14465204.96	39°49'50.0248"N	80°40'16.3454"W	726.62	32.919	1.57	1.39	-1.20
4099.00	38.530	28.220	3936.36	110.63	633.28	407.60	1732735.43	14465228.28	39°49'50.2549"N	80°40'16.1813"W	753.11	32.767	2.01	1.70	-1.74
4142.00	39.340	28.710	3969.81	112.58	657.04	420.48	1732748.30	14465252.03	39°49'50.4892"N	80°40'16.0151"W	780.06	32.618	2.02	1.88	1.14
4186.00	39.930	28.660	4003.70	114.72	681.66	433.95	1732761.77	14465276.64	39°49'50.7320"N	80°40'15.8412"W	808.07	32.481	1.34	1.34	-0.11
4272.00	40.120	28.710	4069.55	118.93	730.18	460.50	1732788.31	14465325.14	39°49'51.2106"N	80°40'15.4986"W	863.26	32.238	0.22	0.22	0.06
4358.00	38.700	29.850	4136.00	123.64	777.80	487.19	1732814.99	14465372.75	39°49'51.6803"N	80°40'15.1542"W	917.79	32.062	1.85	-1.65	1.33
4443.00	38.820	29.810	4202.28	128.75	823.97	513.66	1732841.45	14465418.89	39°49'52.1355"N	80°40'14.8128"W	970.97	31.939	0.14	0.14	-0.05
4529.00	39.130	29.570	4269.14	133.81	870.96	540.46	1732868.23	14465465.87	39°49'52.5989"N	80°40'14.4671"W	1025.02	31.821	0.40	0.36	-0.28
4613.00	39.340	30.880	4334.20	139.28	916.86	567.20	1732894.97	14465511.75	39°49'53.0516"N	80°40'14.1221"W	1078.13	31.742	1.02	0.25	1.56
4697.00	39.750	31.770	4398.98	145.80	962.55	595.01	1732922.76	14465557.42	39°49'53.5021"N	80°40'13.7636"W	1131.60	31.723	0.83	0.49	1.06
4783.00	40.540	31.340	4464.71	152.78	1009.80	624.02	1732951.77	14465604.65	39°49'53.9680"N	80°40'13.3894"W	1187.05	31.715	0.97	0.92	-0.50



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DEC 23 2012
WV Department of Environmental Protection

Actual Wellpath Report

Hudson S-10HM AWP Proj: 17584'

Page 5 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	EQT (TUG HILL OPERATING, LLC)	Well	Hudson S-10HM
Field	Marshall	API	47-051-02381-0000
Facility	Hudson	Wellbore	Hudson S-10HM AWB
Slot	Slot 10		

WELLPATH DATA (228 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]
4870.00	39.980	32.680	4531.11	160.30	1057.47	653.82	1732981.55	14465652.31	39°49'54.4380"N	80°40'13.0052"W	1243.27	31.728	1.19	-0.64	1.54
4955.00	39.780	33.860	4596.34	168.78	1103.04	683.71	1733011.44	14465697.85	39°49'54.8872"N	80°40'12.6199"W	1297.75	31.793	0.92	-0.24	1.39
5031.00	39.590	34.360	4654.82	177.03	1143.22	710.93	1733038.64	14465738.02	39°49'55.2834"N	80°40'12.2691"W	1346.24	31.876	0.49	-0.25	0.66
5117.00	39.530	33.600	4721.13	186.23	1188.64	741.54	1733069.24	14465783.42	39°49'55.7311"N	80°40'11.8746"W	1400.98	31.958	0.57	-0.07	-0.88
5202.00	39.020	32.560	4786.93	194.42	1233.72	770.91	1733098.60	14465828.49	39°49'56.1756"N	80°40'11.4960"W	1454.78	32.000	0.98	-0.60	-1.22
5288.00	38.950	30.520	4853.78	201.22	1279.83	799.21	1733126.89	14465874.57	39°49'56.6302"N	80°40'11.1310"W	1508.87	31.983	1.49	-0.08	-2.37
5373.00	39.680	31.500	4919.54	207.50	1325.98	826.96	1733154.62	14465920.71	39°49'57.0853"N	80°40'10.7732"W	1562.72	31.950	1.13	0.86	1.15
5460.00	39.330	29.820	4986.67	213.61	1373.58	855.18	1733182.84	14465968.29	39°49'57.5547"N	80°40'10.4092"W	1618.04	31.906	1.29	-0.40	-1.93
5546.00	38.930	28.000	5053.38	217.96	1421.09	881.42	1733209.06	14466015.78	39°49'58.0232"N	80°40'10.0706"W	1672.24	31.809	1.41	-0.47	-2.12
5633.00	38.830	28.010	5121.11	221.47	1469.30	907.06	1733234.69	14466063.97	39°49'58.4987"N	80°40'9.7396"W	1726.73	31.689	0.12	-0.11	0.01
5719.00	38.280	27.140	5188.36	224.52	1516.81	931.87	1733259.50	14466111.47	39°49'58.9673"N	80°40'9.4193"W	1780.20	31.565	0.90	-0.64	-1.01
5805.00	39.500	29.520	5255.30	228.31	1564.32	957.51	1733285.12	14466158.96	39°49'59.4359"N	80°40'9.0885"W	1834.10	31.470	2.24	1.42	2.77
5892.00	40.190	30.270	5322.10	233.73	1612.64	985.29	1733312.89	14466207.26	39°49'59.9125"N	80°40'8.7300"W	1889.82	31.424	0.97	0.79	0.86
5979.00	40.560	31.420	5388.38	240.13	1661.03	1014.19	1733341.78	14466255.63	39°50'0.3895"N	80°40'8.3573"W	1946.17	31.407	0.96	0.43	1.32
6065.00	40.750	31.310	5453.62	247.00	1708.87	1043.35	1733370.93	14466303.45	39°50'0.8613"N	80°40'7.9813"W	2002.20	31.406	0.24	0.22	-0.13
6152.00	40.320	31.750	5519.74	254.10	1757.06	1072.92	1733400.48	14466351.63	39°50'1.3365"N	80°40'7.6000"W	2058.74	31.409	0.59	-0.49	0.51
6193.00	40.590	33.880	5550.94	258.03	1779.42	1087.33	1733414.90	14466373.97	39°50'1.5569"N	80°40'7.4141"W	2085.33	31.427	3.43	0.66	5.20
6293.00	41.810	31.920	5626.19	267.84	1834.72	1123.09	1733450.64	14466429.25	39°50'2.1021"N	80°40'6.9531"W	2151.17	31.472	1.78	1.22	-1.96
6388.00	48.850	32.630	5692.93	277.21	1891.80	1159.17	1733486.70	14466486.30	39°50'2.6648"N	80°40'6.4879"W	2218.69	31.497	7.43	7.41	0.75
6483.00	57.460	32.670	5749.84	288.22	1955.75	1200.15	1733527.67	14466550.23	39°50'3.2953"N	80°40'5.9596"W	2294.62	31.535	9.06	9.06	0.04
6578.00	64.910	32.590	5795.60	300.24	2025.80	1245.00	1733572.50	14466620.25	39°50'3.9860"N	80°40'5.3814"W	2377.79	31.574	7.84	7.84	-0.08
6673.00	70.340	32.730	5831.75	312.98	2099.73	1292.39	1733619.87	14466694.15	39°50'4.7148"N	80°40'4.7703"W	2465.59	31.612	5.72	5.72	0.15
6768.00	70.110	32.140	5863.89	325.60	2175.18	1340.34	1733667.80	14466769.58	39°50'5.4587"N	80°40'4.1521"W	2554.98	31.641	0.63	-0.24	-0.62
6863.00	70.110	32.380	5896.21	337.94	2250.72	1388.02	1733715.46	14466845.09	39°50'6.2035"N	80°40'3.5373"W	2644.30	31.662	0.24	0.00	0.25
6958.00	70.170	32.380	5928.49	350.47	2326.18	1435.87	1733763.29	14466920.52	39°50'6.9475"N	80°40'2.9203"W	2733.65	31.686	0.06	0.06	0.00
7054.00	70.210	32.620	5961.02	363.32	2402.35	1484.40	1733811.80	14466996.66	39°50'7.6985"N	80°40'2.2946"W	2823.96	31.712	0.24	0.04	0.25
7149.00	70.180	31.310	5993.21	375.21	2478.18	1531.71	1733859.10	14467072.46	39°50'8.4461"N	80°40'1.6845"W	2913.33	31.719	1.30	-0.03	-1.38
7244.00	70.340	31.130	6025.30	385.95	2554.65	1578.06	1733905.43	14467148.90	39°50'9.2001"N	80°40'1.0867"W	3002.75	31.705	0.25	0.17	-0.19
7340.00	70.240	31.370	6057.67	396.86	2631.91	1624.94	1733952.30	14467226.13	39°50'9.9619"N	80°40'0.4820"W	3093.12	31.691	0.26	-0.10	0.25
7435.00	70.180	31.450	6089.84	407.89	2708.20	1671.53	1733998.86	14467302.39	39°50'10.7141"N	80°39'59.8812"W	3182.51	31.683	0.10	-0.06	0.08



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 DEC 23 2012

Actual Wellpath Report

Hudson S-10HM AWP Proj: 17584'

Page 6 of 11



REFERENCE WELLPATH IDENTIFICATION			
Operator	EQT (TUG HILL OPERATING, LLC)	Well	Hudson S-10HM
Field	Marshall	API	47-051-02381-0000
Facility	Hudson	Wellbore	Hudson S-10HM AWB
Slot	Slot 10		

WELLPATH DATA (228 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]
7529.00	70.280	31.630	6121.63	419.01	2783.59	1717.80	1734045.12	14467377.75	39°50'11.4575"N	80°39'59.2844"W	3270.97	31.679	0.21	0.11	0.19
7623.00	70.350	31.140	6153.30	429.90	2859.15	1763.90	1734091.19	14467453.28	39°50'12.2025"N	80°39'58.6899"W	3359.47	31.672	0.50	0.07	-0.52
7718.00	70.240	31.750	6185.33	440.99	2935.45	1810.55	1734137.83	14467529.55	39°50'12.9548"N	80°39'58.0882"W	3448.91	31.666	0.62	-0.12	0.64
7813.00	70.270	31.490	6217.42	452.35	3011.59	1857.43	1734184.69	14467605.66	39°50'13.7055"N	80°39'57.4836"W	3538.32	31.665	0.26	0.03	-0.27
7907.00	70.310	31.020	6249.13	463.04	3087.24	1903.35	1734230.59	14467681.28	39°50'14.4515"N	80°39'56.8914"W	3626.81	31.655	0.47	0.04	-0.50
8003.00	70.400	31.480	6281.40	473.95	3164.53	1950.25	1734277.47	14467758.54	39°50'15.2136"N	80°39'56.2864"W	3717.22	31.645	0.46	0.09	0.48
8098.00	70.300	31.610	6313.35	485.20	3240.78	1997.06	1734324.26	14467834.76	39°50'15.9654"N	80°39'55.6827"W	3806.69	31.642	0.17	-0.11	0.14
8193.00	70.340	31.320	6345.34	496.33	3317.08	2043.75	1734370.93	14467911.03	39°50'16.7177"N	80°39'55.0805"W	3896.14	31.638	0.29	0.04	-0.31
8288.00	70.310	31.660	6377.32	507.49	3393.36	2090.47	1734417.64	14467987.28	39°50'17.4698"N	80°39'54.4779"W	3985.59	31.635	0.34	-0.03	0.36
8383.00	70.300	31.760	6409.34	519.00	3469.45	2137.49	1734464.64	14468063.34	39°50'18.2200"N	80°39'53.8715"W	4075.04	31.637	0.10	-0.01	0.11
8478.00	69.780	31.740	6441.77	530.54	3545.38	2184.47	1734511.61	14468139.24	39°50'18.9686"N	80°39'53.2655"W	4164.33	31.639	0.55	-0.55	-0.02
8573.00	68.960	39.940	6475.29	548.26	3617.39	2236.46	1734563.57	14468211.22	39°50'19.6783"N	80°39'52.5956"W	4252.91	31.727	8.12	-0.86	8.63
8667.00	67.560	50.520	6510.19	579.33	3678.79	2298.31	1734625.40	14468272.60	39°50'20.2829"N	80°39'51.7998"W	4337.71	31.995	10.56	-1.49	11.26
8762.00	67.270	61.040	6546.77	625.02	3728.04	2370.70	1734697.76	14468321.83	39°50'20.7669"N	80°39'50.8694"W	4417.97	32.453	10.23	-0.31	11.07
8858.00	67.870	70.900	6583.47	683.91	3764.10	2451.62	1734778.65	14468357.87	39°50'21.1202"N	80°39'49.8303"W	4492.10	33.077	9.51	0.63	10.27
8952.00	68.040	73.980	6618.76	748.77	3790.38	2534.68	1734861.67	14468384.15	39°50'21.3769"N	80°39'48.7643"W	4559.78	33.771	3.04	0.18	3.28
9047.00	68.200	85.540	6654.27	821.22	3806.02	2621.24	1734948.21	14468399.77	39°50'21.5282"N	80°39'47.6538"W	4621.33	34.556	11.29	0.17	12.17
9142.00	70.440	96.440	6687.90	902.70	3804.42	2709.94	1735036.86	14468398.18	39°50'21.5091"N	80°39'46.5169"W	4670.91	35.463	10.99	2.36	11.47
9236.00	73.060	102.260	6717.36	988.90	3789.89	2797.96	1735124.86	14468383.66	39°50'21.3622"N	80°39'45.3891"W	4710.83	36.437	6.51	2.79	6.19
9331.00	76.350	109.490	6742.45	1079.46	3764.80	2886.01	1735212.87	14468358.58	39°50'21.1110"N	80°39'44.2616"W	4743.71	37.473	8.12	3.46	7.61
9426.00	79.900	119.450	6762.04	1172.29	3726.31	2970.48	1735297.30	14468320.10	39°50'20.7274"N	80°39'43.1807"W	4765.41	38.561	10.92	3.74	10.48
9521.00	81.900	126.440	6777.08	1264.96	3675.32	3049.13	1735375.93	14468269.12	39°50'20.2206"N	80°39'42.1748"W	4775.47	39.680	7.56	2.11	7.36
9616.00	84.470	135.990	6788.38	1355.10	3613.23	3119.99	1735446.75	14468207.06	39°50'19.6043"N	80°39'41.2695"W	4773.86	40.810	10.34	2.71	10.05
9710.00	84.810	144.400	6797.18	1439.23	3541.39	3179.84	1735506.59	14468135.25	39°50'18.8922"N	80°39'40.5057"W	4759.50	41.921	8.91	0.36	8.95
9805.00	84.410	146.470	6806.10	1520.20	3463.51	3233.50	1735560.22	14468057.40	39°50'18.1205"N	80°39'39.8216"W	4738.30	43.033	2.21	-0.42	2.18
9900.00	85.610	149.190	6814.37	1599.10	3383.41	3283.88	1735610.58	14467977.33	39°50'17.3270"N	80°39'39.1796"W	4715.01	44.145	3.12	1.26	2.86
9995.00	88.050	148.040	6819.62	1677.45	3302.44	3333.28	1735659.96	14467896.40	39°50'16.5250"N	80°39'38.5504"W	4692.21	45.266	2.84	2.57	-1.21
10090.00	87.680	150.060	6823.16	1755.47	3221.03	3382.10	1735708.76	14467815.02	39°50'15.7186"N	80°39'37.9285"W	4670.51	46.397	2.16	-0.39	2.13
10185.00	88.850	150.460	6826.04	1832.35	3138.58	3429.20	1735755.85	14467732.60	39°50'14.9021"N	80°39'37.3286"W	4648.67	47.534	1.30	1.23	0.42
10280.00	88.880	150.950	6827.92	1908.81	3055.75	3475.68	1735802.30	14467649.80	39°50'14.0817"N	80°39'36.7369"W	4627.95	48.679	0.52	0.03	0.52

Actual Wellpath Report

Hudson S-10HM AWP Proj: 17584'

Page 7 of 11



WV Dept of Environmental Protection
 DEC 28 2014
 Office of Oil and Gas
 RECORD

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Slot	Slot 10		

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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]
10375.00	88.750	150.320	6829.88	1985.34	2972.97	3522.25	1735848.86	14467567.06	39°50'13.2619"N	80°39'36.1439"W	4609.21	49.834	0.68	-0.14	-0.66
10470.00	89.310	150.460	6831.49	2062.12	2890.39	3569.18	1735895.77	14467484.51	39°50'12.4440"N	80°39'35.5463"W	4592.76	50.999	0.61	0.59	0.15
10565.00	89.180	150.100	6832.74	2139.01	2807.90	3616.28	1735942.85	14467402.04	39°50'11.6270"N	80°39'34.9466"W	4578.40	52.172	0.40	-0.14	-0.38
10660.00	88.510	150.860	6834.66	2215.69	2725.25	3663.08	1735989.63	14467319.43	39°50'10.8085"N	80°39'34.3507"W	4565.64	53.352	1.07	-0.71	0.80
10755.00	88.510	150.060	6837.13	2292.39	2642.62	3709.90	1736036.43	14467236.84	39°50'9.9902"N	80°39'33.7546"W	4554.87	54.537	0.84	0.00	-0.84
10850.00	88.480	149.050	6839.62	2369.95	2560.75	3758.02	1736084.53	14467155.00	39°50'9.1793"N	80°39'33.1417"W	4547.54	55.729	1.06	-0.03	-1.06
10945.00	89.210	151.260	6841.54	2446.95	2478.37	3805.28	1736131.78	14467072.65	39°50'8.3634"N	80°39'32.5399"W	4541.20	56.924	2.45	0.77	2.33
11041.00	89.210	151.260	6841.54	2446.95	2478.37	3805.28	1736131.78	14467072.65	39°50'8.3634"N	80°39'32.5399"W	4541.20	56.924	2.45	0.77	2.33
11041.00	88.630	151.070	6843.35	2523.76	2394.29	3851.57	1736178.05	14466988.60	39°50'7.5307"N	80°39'31.9506"W	4535.11	58.133	0.64	-0.60	-0.20
11135.00	88.230	150.620	6845.92	2599.27	2312.23	3897.35	1736223.81	14466906.57	39°50'6.7180"N	80°39'31.3678"W	4531.64	59.320	0.64	-0.43	-0.48
11230.00	88.940	149.210	6848.27	2676.49	2230.06	3944.96	1736271.40	14466824.43	39°50'5.9041"N	80°39'30.7616"W	4531.65	60.521	1.66	0.75	-1.48
11325.00	89.150	149.080	6849.85	2754.47	2148.51	3993.67	1736320.10	14466742.92	39°50'5.0964"N	80°39'30.1411"W	4534.92	61.721	0.26	0.22	-0.14
11420.00	89.060	149.310	6851.34	2832.39	2066.93	4042.32	1736368.72	14466661.37	39°50'4.2883"N	80°39'29.5215"W	4540.10	62.918	0.26	-0.09	0.24
11515.00	89.270	149.780	6852.72	2909.99	1985.04	4090.47	1736416.85	14466579.52	39°50'3.4773"N	80°39'28.9083"W	4546.68	64.113	0.54	0.22	0.49
11610.00	89.080	151.040	6854.09	2986.75	1902.44	4137.37	1736463.74	14466496.95	39°50'2.6592"N	80°39'28.3111"W	4553.80	65.306	1.34	-0.20	1.33
11705.00	88.620	147.150	6856.00	3064.75	1820.96	4186.14	1736512.49	14466415.50	39°50'1.8521"N	80°39'27.6899"W	4565.05	66.491	4.12	-0.48	-4.09
11799.00	87.760	149.520	6858.97	3142.62	1741.00	4235.46	1736561.79	14466335.57	39°50'1.0601"N	80°39'27.0617"W	4579.33	67.655	2.68	-0.91	2.52
11894.00	88.160	148.590	6862.35	3220.64	1659.58	4284.28	1736610.59	14466254.18	39°50'0.2535"N	80°39'26.4399"W	4594.48	68.825	1.07	0.42	-0.98
11989.00	88.620	149.640	6865.02	3298.62	1578.08	4333.02	1736659.31	14466172.72	39°49'59.4463"N	80°39'25.8191"W	4611.45	69.988	1.21	0.48	1.11
12084.00	88.490	149.720	6867.41	3376.07	1496.10	4380.97	1736707.24	14466090.77	39°49'58.6343"N	80°39'25.2085"W	4629.39	71.145	0.16	-0.14	0.08
12178.00	88.520	149.800	6869.87	3452.63	1414.92	4428.29	1736754.54	14466009.62	39°49'57.8303"N	80°39'24.6059"W	4648.85	72.280	0.09	0.03	0.09
12273.00	89.290	150.240	6871.68	3529.76	1332.65	4475.75	1736801.99	14465927.38	39°49'57.0154"N	80°39'24.0016"W	4669.94	73.419	0.93	0.81	0.46
12368.00	88.860	151.330	6873.21	3606.15	1249.75	4522.12	1736848.33	14465844.51	39°49'56.1943"N	80°39'23.4114"W	4691.63	74.551	1.23	-0.45	1.15
12463.00	88.680	148.710	6875.25	3683.28	1167.48	4569.57	1736895.77	14465762.28	39°49'55.3796"N	80°39'22.8071"W	4716.36	75.668	2.76	-0.19	-2.76
12558.00	88.920	148.550	6877.24	3761.73	1086.39	4619.01	1736945.19	14465681.21	39°49'54.5763"N	80°39'22.1774"W	4745.05	76.765	0.30	0.25	-0.17
12653.00	89.510	149.590	6878.55	3839.78	1004.91	4667.84	1736994.00	14465599.76	39°49'53.7692"N	80°39'21.5555"W	4774.78	77.851	1.26	0.62	1.09
12748.00	89.170	149.570	6879.64	3917.34	922.99	4715.94	1737042.08	14465517.88	39°49'52.9578"N	80°39'20.9431"W	4805.41	78.926	0.36	-0.36	-0.02
12843.00	88.460	150.060	6881.60	3994.67	840.89	4763.69	1737089.81	14465435.81	39°49'52.1446"N	80°39'20.3350"W	4837.34	79.989	0.91	-0.75	0.52
12937.00	88.710	149.070	6883.93	4071.41	759.87	4811.29	1737137.40	14465354.82	39°49'51.3421"N	80°39'19.7288"W	4870.93	81.025	1.09	0.27	-1.05
13032.00	89.010	149.140	6885.82	4149.42	678.37	4860.06	1737186.15	14465273.35	39°49'50.5348"N	80°39'19.1077"W	4907.18	82.054	0.32	0.32	0.07
13127.00	88.830	149.190	6887.61	4227.37	596.81	4908.75	1737234.81	14465191.82	39°49'49.7270"N	80°39'18.4877"W	4944.89	83.068	0.20	-0.19	0.05



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Actual Wellpath Report

Hudson S-10HM AWP Proj: 17584'

Page 8 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	EQT (TUG HILL OPERATING, LLC)	Well	Hudson S-10HM
Field	Marshall	API	47-051-02381-0000
Facility	Hudson	Wellbore	Hudson S-10HM AWB
Slot	Slot 10		

WELLPATH DATA (228 stations)

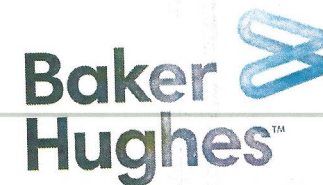
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
13221.00	88.800	149.170	6889.55	4304.49	516.10	4956.90	1737282.94	14465111.15	39°49'48.9275"N	80°39'17.8745"W	4983.69	84.056	0.04	-0.03	-0.02
13316.00	88.890	149.310	6891.47	4382.37	434.48	5005.48	1737331.50	14465029.56	39°49'48.1191"N	80°39'17.2559"W	5024.30	85.039	0.18	0.09	0.15
13411.00	88.550	149.140	6893.59	4460.26	352.88	5054.07	1737380.08	14464947.99	39°49'47.3108"N	80°39'16.6370"W	5066.38	86.006	0.40	-0.36	-0.18
13506.00	88.400	150.220	6896.12	4537.70	270.90	5102.01	1737428.00	14464866.05	39°49'46.4988"N	80°39'16.0266"W	5109.20	86.961	1.15	-0.16	1.14
13601.00	87.690	148.700	6899.36	4615.34	189.13	5150.26	1737476.22	14464784.31	39°49'45.6889"N	80°39'15.4123"W	5153.73	87.897	1.77	-0.75	-1.60
13696.00	87.720	150.100	6903.16	4693.02	107.43	5198.57	1737524.52	14464702.64	39°49'44.8796"N	80°39'14.7970"W	5199.68	88.816	1.47	0.03	1.47
13791.00	88.460	150.260	6906.33	4769.97	25.06	5245.79	1737571.72	14464620.30	39°49'44.0637"N	80°39'14.1959"W	5245.85	89.726	0.80	0.78	0.17
13886.00	87.780	148.230	6909.44	4847.81	-56.54	5294.34	1737620.25	14464538.74	39°49'43.2555"N	80°39'13.5777"W	5294.64	90.612	2.25	-0.72	-2.14
13981.00	88.240	147.350	6912.74	4927.01	-136.87	5344.95	1737670.84	14464458.44	39°49'42.4597"N	80°39'12.9330"W	5346.70	91.467	1.04	0.48	-0.93
14076.00	88.090	149.970	6915.79	5005.41	-217.96	5394.33	1737720.20	14464377.38	39°49'41.6565"N	80°39'12.3041"W	5398.73	92.314	2.76	-0.16	2.76
14171.00	88.300	149.360	6918.78	5082.86	-299.91	5442.28	1737768.14	14464295.46	39°49'40.8447"N	80°39'11.6935"W	5450.54	93.154	0.68	0.22	-0.64
14266.00	87.620	149.400	6922.16	5160.57	-381.61	5490.64	1737816.48	14464213.79	39°49'40.0355"N	80°39'11.0777"W	5503.89	93.976	0.72	-0.72	0.04
14361.00	87.810	148.620	6925.95	5238.62	-462.98	5539.52	1737865.33	14464132.45	39°49'39.2294"N	80°39'10.4553"W	5558.83	94.778	0.84	0.20	-0.82
14456.00	88.790	148.760	6928.77	5317.00	-544.11	5588.86	1737914.66	14464051.35	39°49'38.4258"N	80°39'9.8269"W	5615.29	95.561	1.04	1.03	0.15
14551.00	88.790	150.910	6930.77	5394.30	-626.22	5636.58	1737962.36	14463969.27	39°49'37.6125"N	80°39'9.2193"W	5671.26	96.340	2.26	0.00	2.26
14646.00	88.080	149.550	6933.37	5471.21	-708.65	5683.73	1738009.49	14463886.88	39°49'36.7961"N	80°39'8.6190"W	5727.74	97.107	1.61	-0.75	-1.43
14741.00	88.300	149.150	6936.37	5548.97	-790.34	5732.14	1738057.88	14463805.22	39°49'35.9869"N	80°39'8.0027"W	5786.37	97.850	0.48	0.23	-0.42
14837.00	88.660	148.830	6938.91	5627.89	-872.59	5781.58	1738107.30	14463723.00	39°49'35.1722"N	80°39'7.3731"W	5847.06	98.583	0.50	0.37	-0.33
14932.00	88.760	149.630	6941.05	5705.78	-954.20	5830.17	1738155.87	14463641.43	39°49'34.3638"N	80°39'6.7544"W	5907.74	99.295	0.85	0.11	0.84
15027.00	88.020	149.190	6943.72	5783.48	-1035.94	5878.50	1738204.18	14463559.72	39°49'33.5541"N	80°39'6.1391"W	5969.08	99.994	0.91	-0.78	-0.46
15121.00	88.290	148.820	6946.75	5860.73	-1116.48	5926.88	1738252.54	14463479.21	39°49'32.7564"N	80°39'5.5230"W	6031.12	100.668	0.49	0.29	-0.39
15216.00	88.600	148.990	6949.33	5938.92	-1197.80	5975.92	1738301.57	14463397.92	39°49'31.9508"N	80°39'4.8985"W	6094.78	101.334	0.37	0.33	0.18
15312.00	88.390	149.170	6951.85	6017.76	-1280.13	6025.23	1738350.86	14463315.63	39°49'31.1353"N	80°39'4.2705"W	6159.72	101.995	0.29	-0.22	0.19
15407.00	88.600	148.810	6954.34	6095.86	-1361.52	6074.16	1738399.77	14463234.26	39°49'30.3291"N	80°39'3.6475"W	6224.88	102.634	0.44	0.22	-0.38
15501.00	88.660	148.970	6956.59	6173.24	-1441.98	6122.71	1738448.30	14463153.84	39°49'29.5321"N	80°39'3.0292"W	6290.22	103.252	0.18	0.06	0.17
15597.00	88.230	149.640	6959.20	6251.86	-1524.50	6171.70	1738497.27	14463071.35	39°49'28.7147"N	80°39'2.4055"W	6357.20	103.875	0.83	-0.45	0.70
15692.00	88.350	148.990	6962.03	6329.65	-1606.16	6220.16	1738545.71	14462989.72	39°49'27.9058"N	80°39'1.7885"W	6424.18	104.479	0.70	0.13	-0.68
15787.00	88.450	148.890	6964.68	6407.80	-1687.51	6269.15	1738594.68	14462908.41	39°49'27.1000"N	80°39'1.1646"W	6492.30	105.066	0.15	0.11	-0.11
15881.00	88.320	149.080	6967.33	6485.08	-1768.03	6317.57	1738643.08	14462827.91	39°49'26.3023"N	80°39'0.5482"W	6560.31	105.635	0.24	-0.14	0.20
15976.00	88.480	149.380	6969.98	6562.96	-1849.63	6366.15	1738691.64	14462746.35	39°49'25.4940"N	80°38'59.9296"W	6629.40	106.201	0.36	0.17	0.32



Actual Wellpath Report

Hudson S-10HM AWP Proj: 17584'

Page 9 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	EQT (TUG HILL OPERATING, LLC)	Well	Hudson S-10HM
Field	Marshall	API	47-051-02381-0000
Facility	Hudson	Wellbore	Hudson S-10HM AWB
Slot	Slot 10		

WELLPATH DATA (228 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]
16071.00	88.540	150.090	6972.45	6640.35	-1931.65	6414.01	1738739.49	14462664.35	39°49'24.6816"N	80°38'59.3203"W	6698.57	106.760	0.75	0.06	0.75
16166.00	88.820	150.700	6974.64	6717.12	-2014.23	6460.93	1738786.39	14462581.81	39°49'23.8637"N	80°38'58.7231"W	6767.63	107.315	0.71	0.29	0.64
16261.00	88.420	150.360	6976.93	6793.75	-2096.91	6507.66	1738833.09	14462499.16	39°49'23.0448"N	80°38'58.1284"W	6837.15	107.860	0.55	-0.42	-0.36
16356.00	88.110	149.890	6979.81	6870.76	-2179.25	6554.96	1738880.37	14462416.85	39°49'22.2292"N	80°38'57.5263"W	6907.72	108.390	0.59	-0.33	-0.49
16452.00	88.140	150.190	6982.95	6948.65	-2262.38	6602.87	1738928.27	14462333.76	39°49'21.4059"N	80°38'56.9164"W	6979.70	108.913	0.31	0.03	0.31
16547.00	88.690	150.470	6985.58	7025.47	-2344.89	6649.88	1738975.26	14462251.28	39°49'20.5886"N	80°38'56.3181"W	7051.20	109.424	0.65	0.58	0.29
16642.00	88.390	149.850	6988.00	7102.46	-2427.27	6697.13	1739022.50	14462168.93	39°49'19.7727"N	80°38'55.7166"W	7123.43	109.922	0.72	-0.32	-0.65
16737.00	88.690	150.720	6990.42	7179.32	-2509.75	6744.21	1739069.55	14462086.49	39°49'18.9557"N	80°38'55.1174"W	7196.05	110.412	0.97	0.32	0.92
16830.00	89.900	149.920	6991.56	7254.55	-2590.54	6790.25	1739115.58	14462005.73	39°49'18.1555"N	80°38'54.5314"W	7267.63	110.882	1.56	1.30	-0.86
16925.00	88.270	151.160	6993.08	7331.18	-2673.24	6836.97	1739162.27	14461923.06	39°49'17.3364"N	80°38'53.9368"W	7341.00	111.355	2.16	-1.72	1.31
17020.00	88.450	149.660	6995.80	7407.91	-2755.81	6883.86	1739209.14	14461840.52	39°49'16.5186"N	80°38'53.3400"W	7414.98	111.818	1.59	0.19	-1.58
17115.00	88.240	148.500	6998.54	7485.93	-2837.28	6932.65	1739257.92	14461759.09	39°49'15.7116"N	80°38'52.7188"W	7490.78	112.257	1.24	-0.22	-1.22
17210.00	88.450	148.340	7001.29	7564.56	-2918.17	6982.38	1739307.63	14461678.22	39°49'14.9102"N	80°38'52.0855"W	7567.65	112.682	0.28	0.22	-0.17
17306.00	88.880	148.410	7003.52	7644.07	-2999.90	7032.70	1739357.93	14461596.53	39°49'14.1006"N	80°38'51.4447"W	7645.80	113.101	0.45	0.45	0.07
17401.00	88.300	148.000	7005.86	7722.91	-3080.62	7082.74	1739407.95	14461515.84	39°49'13.3009"N	80°38'50.8075"W	7723.69	113.506	0.75	-0.61	-0.43
17498.00	88.390	147.820	7008.66	7803.68	-3162.76	7134.25	1739459.44	14461433.73	39°49'12.4871"N	80°38'50.1515"W	7803.88	113.909	0.21	0.09	-0.19
17559.00	88.970	148.700	7010.07	7854.28	-3214.62	7166.33	1739491.51	14461381.89	39°49'11.9733"N	80°38'49.7430"W	7854.31	114.160	1.73	0.95	1.44
17584.00‡	88.970	148.700	7010.52	7874.91	-3235.98	7179.32	1739504.49	14461360.54	39°49'11.7618"N	80°38'49.5776"W	7874.91	114.263	0.00	0.00	0.00

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Actual Wellpath Report

Hudson S-10HM AWP Proj: 17584'

Page 10 of 11



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REFERENCE WELLPATH IDENTIFICATION			
Operator	EQT (TUG HILL OPERATING, LLC)	Well	Hudson S-10HM
Field	Marshall	API	47-051-02381-0000
Facility	Hudson	Wellbore	Hudson S-10HM AWB
Slot	Slot 10		

HOLE & CASING SECTIONS - Ref Wellbore: Hudson S-10HM AWB Ref Wellpath: Hudson S-10HM AWP Proj: 17584'									
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	148.00	0.00	0.00	0.27	-0.71
17.5in Open Hole	148.00	1327.00	1179.00	148.00	1326.90	0.27	-0.71	8.23	-11.61
13.375in Casing Surface	28.00	1327.00	1299.00	28.00	1326.90	0.00	0.00	8.23	-11.61
12.25in Open Hole	1327.00	2476.00	1149.00	1326.90	2466.14	8.23	-11.61	98.06	68.88
9.625in Casing Intermediate	28.00	2476.00	2448.00	28.00	2466.14	0.00	0.00	98.06	68.88
8.75in Open Hole	2476.00	6270.00	3794.00	2466.14	5609.00	98.06	68.88	1821.78	1114.96
8.5in Open Hole	6270.00	17584.00	11314.00	5609.00	7010.52	1821.78	1114.96	-3235.98	7179.32
6in Casing Production	28.00	17584.00	17556.00	28.00	7010.52	0.00	0.00	-3235.98	7179.32

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Hudson S-10HM LP Rev-1	6808.00	3500.31	3200.98	1735527.72	14468094.19	39°50'18.4854"N	80°39'40.2367"W	point
Hudson S-10HM BHL Rev-1	6944.59	-3243.22	7176.37	1739501.54	14461353.30	39°49'11.6903"N	80°38'49.6158"W	point

WELLPATH COMPOSITION - Ref Wellbore: Hudson S-10HM AWB Ref Wellpath: Hudson S-10HM AWP Proj: 17584'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
28.00	1348.00	Gyrodata 2015 - CT+WIR+DPIPE	01 Gyrodata Cont. Gyro<17-1/2">(115'-1348')	Hudson S-10HM AWB	12/9/2023
1348.00	2437.00	OWSG MWD rev2 + HRGM	02 SDI MWD<12-1/4">(1348')(1376'-2437')	Hudson S-10HM AWB	12/9/2023
2437.00	6193.00	OWSG MWD rev2 + HRGM	03 SDI MWD<8-3/4">(2437')(2523'-6193')	Hudson S-10HM AWB	12/9/2023
6193.00	17584.00	OWSG MWD rev2 + IFR1 + Sag + Multi-Station Correction	04 BH ATCurve +SQC IFR1+SAG+FDIR<8-1/2">(6193')(6293'-17559')	Hudson S-10HM AWB	1/6/2024



Actual Wellpath Report

Hudson S-10HM AWP Proj: 17584'

Page 11 of 11



REFERENCE WELLPATH IDENTIFICATION

Operator	EQT (TUG HILL OPERATING, LLC)	Well	Hudson S-10HM
Field	Marshall	API	47-051-02381-0000
Facility	Hudson	Wellbore	Hudson S-10HM AWB
Slot	Slot 10		

COMMENTS

Wellpath general comments

API: 47-051-02381-0000

BH Job #: 112078142

Rig: Patterson 294

Duration: 1/08/2024-1/12/2024

01_Gyrodala Cont. Gyro<17-1/2">(115'-1348')

02_SDI MWD<12-1/4">(1348')(1376'-2437')

03_SDI MWD<8-3/4">(2437')(2523'-6193')

04_BH ATCurve +SQC IFR1+SAG+FDIR<8-1/2">(6193')(6293'-17559')

Landing Pt. @ 9805' MD

Final Survey @ 17559' MD

Projected MD at TD: 17584'

RECEIVED
 Office of Oil and Gas
 WV Department of
 Environmental Protection
 DEC 23 2024



KB Elevation=1378 FT
 Ground Elevation=1346 FT
 All Survey Measurements were taken from KB Elevation

