



EQT (Chevron Data) 02-13-21

Marshall County, WV Chevron

Longworth

M05H

OH

Design: Longworth 5H As-Drilled

Standard Survey Report

26 July, 2021

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WV Department of Environmental Protection

12/16/2022



EQT
Survey Report

Database:	EDM_Definitive	Local Co-ordinate Reference:	Well M05H
Company:	EQT (Chevron Data) 02-13-21	TVD Reference:	H14 @ 1287.000usft (H14)
Project:	Marshall County, WV Chevron	MD Reference:	H14 @ 1287.000usft (H14)
Site:	Longworth	North Reference:	True
Well:	M05H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Longworth 5H As-Drilled		

Project Marshall County, WV Chevron

Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	West Virginia Northern Zone		

Site Longworth

Site Position:		Northing:	493,086.404 usft	Latitude:	39.85
From:	Map	Easting:	1,624,022.636 usft	Longitude:	-80.73
Position Uncertainty:	0.000 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.7825 °

Well M05H

Well Position	+N/-S	0.000 usft	Northing:	493,049.690 usft	Latitude:	39.8472138
	+E/-W	0.000 usft	Easting:	1,624,116.960 usft	Longitude:	80.7265963°W
Position Uncertainty		0.000 usft	Wellhead Elevation:	0.000 usft	Ground Level:	1,270.000 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	5/16/2016	-8.7190	67.0777	52,269.27599917

Design Longworth 5H As-Drilled

Audit Notes:

Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.000
Vertical Section:		Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
		0.000	0.000	0.000	200.814

Survey Program Date 7/26/2021

From (')	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	552.000	Surfac Gyro (OH)	SDI Standard Keeper 103 c	SDI Standard Wireline Keeper ver 1.0.3 c
0.00	5,384.000	Gyro to KOP (OH)	Standard Keeper 103 c	Standard Wireline Keeper ver 1.0.3 c
0.00	15,886.000	BHI ATC (OH)	09_MWD+IFR1 c	A005Mb: IFR declination correction only c

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.000	0.000	0.000	0.000	-1,287.000	0.000	0.000	0.000	0.00000	0.00000	0.00000
100.000	0.300	320.500	100.000	-1,187.000	0.202	-0.167	-0.130	0.30000	0.30000	0.00000
125.000	0.280	299.320	124.999	-1,162.001	0.282	-0.261	-0.171	0.43356	-0.08000	-84.72000
150.000	0.220	314.950	149.999	-1,137.001	0.346	-0.349	-0.200	0.36124	-0.24000	62.52000
175.000	0.360	320.590	174.999	-1,112.001	0.441	-0.432	-0.258	0.57085	0.56000	22.56000
200.000	0.310	327.260	199.998	-1,087.002	0.558	-0.519	-0.338	0.25332	-0.20000	26.68000
225.000	0.500	339.980	224.998	-1,062.002	0.718	-0.593	-0.460	0.83626	0.76000	50.88000



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Site:	Longworth	North Reference:	True
Well:	M05H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Longworth 5H As-Drilled		

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
250.000	0.550	346.660	249.997	-1,037.003	0.937	-0.658	-0.642	0.31581	0.20000	26.72000
275.000	0.440	330.340	274.996	-1,012.004	1.137	-0.733	-0.802	0.71107	-0.44000	-65.28000
300.000	0.380	339.180	299.995	-987.005	1.298	-0.810	-0.926	0.34807	-0.24000	35.36000
325.000	0.500	330.510	324.994	-962.006	1.471	-0.893	-1.057	0.54761	0.48000	-34.68000
350.000	0.550	329.370	349.993	-937.007	1.669	-1.008	-1.202	0.20431	0.20000	-4.56000
375.000	0.530	322.280	374.992	-912.008	1.863	-1.140	-1.337	0.27879	-0.08000	-28.36000
400.000	0.510	318.120	399.991	-887.009	2.038	-1.285	-1.448	0.17084	-0.08000	-16.64000
425.000	0.630	323.020	424.990	-862.010	2.230	-1.442	-1.572	0.51766	0.48000	19.60000
450.000	0.570	327.010	449.988	-837.011	2.444	-1.592	-1.719	0.29232	-0.24000	15.96000
475.000	0.560	324.810	474.987	-812.013	2.649	-1.730	-1.861	0.09554	-0.04000	-8.80000
500.000	0.510	322.410	499.986	-787.014	2.837	-1.869	-1.988	0.21913	-0.20000	-9.60000
525.000	0.590	337.290	524.985	-762.015	3.044	-1.986	-2.139	0.65214	0.32000	59.52000
550.000	0.640	323.940	549.984	-737.016	3.275	-2.118	-2.309	0.60539	0.20000	-53.40000
552.000	0.640	322.970	551.983	-735.017	3.293	-2.131	-2.321	0.54173	0.00000	-48.50000
575.000	0.550	322.380	574.982	-712.018	3.483	-2.276	-2.447	0.39220	-0.39130	-2.56522
600.000	0.580	329.010	599.981	-687.019	3.687	-2.415	-2.588	0.28751	0.12000	26.52000
625.000	0.680	327.720	624.979	-662.020	3.920	-2.559	-2.755	0.40398	0.40000	-5.16000
650.000	0.650	325.300	649.978	-637.022	4.162	-2.719	-2.925	0.16436	-0.12000	-9.68000
675.000	0.730	328.340	674.976	-612.024	4.415	-2.883	-3.102	0.35180	0.32000	12.16000
700.000	0.840	330.120	699.974	-587.026	4.709	-3.058	-3.315	0.45063	0.44000	7.12000
725.000	0.930	339.340	724.971	-562.029	5.058	-3.221	-3.583	0.67271	0.36000	36.88000
750.000	1.120	355.400	749.967	-537.033	5.491	-3.312	-3.956	1.37051	0.76000	64.24000
775.000	1.290	2.340	774.961	-512.039	6.016	-3.320	-4.444	0.89504	0.68000	27.76000
800.000	1.440	6.510	799.954	-487.046	6.609	-3.273	-5.015	0.71926	0.60000	16.68000
825.000	1.670	8.990	824.945	-462.055	7.281	-3.181	-5.676	0.95836	0.92000	9.92000
850.000	1.840	10.800	849.933	-437.067	8.035	-3.048	-6.428	0.71515	0.68000	7.24000
875.000	2.030	14.870	874.919	-412.081	8.857	-2.860	-7.263	0.93751	0.76000	16.28000
900.000	2.180	27.090	899.902	-387.098	9.709	-2.529	-8.176	1.88871	0.60000	48.88000
925.000	2.310	45.280	924.883	-362.117	10.486	-1.955	-9.107	2.88433	0.52000	72.76000
950.000	2.530	50.290	949.861	-337.139	11.194	-1.172	-10.046	1.22003	0.88000	20.04000
975.000	2.800	53.000	974.834	-312.166	11.914	-0.260	-11.044	1.19153	1.08000	10.84000
1,000.000	3.090	51.710	999.801	-287.199	12.699	0.756	-12.139	1.18984	1.16000	-5.16000
1,025.000	3.290	52.800	1,024.762	-262.238	13.550	1.857	-13.325	0.83595	0.80000	4.36000
1,050.000	3.470	51.660	1,049.719	-237.281	14.453	3.021	-14.583	0.76852	0.72000	-4.56000
1,075.000	3.720	50.860	1,074.669	-212.331	15.434	4.244	-15.935	1.01991	1.00000	-3.20000
1,100.000	3.770	50.150	1,099.616	-187.384	16.473	5.504	-17.353	0.27278	0.20000	-2.84000
1,125.000	3.540	50.000	1,124.565	-162.435	17.495	6.726	-18.744	0.92079	-0.92000	-0.60000
1,150.000	2.930	52.880	1,149.525	-137.475	18.377	7.827	-19.959	2.52436	-2.44000	11.52000
1,175.000	2.400	49.670	1,174.498	-112.502	19.102	8.735	-20.959	2.20164	-2.12000	-12.84000
1,200.000	2.230	45.780	1,199.478	-87.522	19.780	9.483	-21.858	0.92561	-0.68000	-15.56000
1,225.000	2.030	45.610	1,224.460	-62.540	20.428	10.148	-22.701	0.80040	-0.80000	-0.68000
1,250.000	1.340	45.210	1,249.449	-37.551	20.944	10.672	-23.369	2.76038	-2.76000	-1.60000
1,275.000	0.520	46.500	1,274.446	-12.554	21.228	10.962	-23.738	3.28086	-3.28000	5.16000

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Survey

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1,300.000	0.140	284.820	1,299.446	12.446	21.314	11.014	-23.837	2.42145	-1.52000	-486.72000
1,325.000	0.730	246.410	1,324.445	37.445	21.258	10.839	-23.722	2.50547	2.36000	0
1,350.000	1.240	251.180	1,349.441	62.441	21.107	10.437	-23.438	2.06444	2.04000	-153.64000
1,375.000	1.700	254.500	1,374.433	87.433	20.921	9.823	-23.046	1.87051	1.84000	0
1,400.000	1.970	248.110	1,399.420	112.420	20.662	9.067	-22.535	1.35350	1.08000	19.08000
1,425.000	2.400	244.320	1,424.402	137.402	20.274	8.197	-21.864	1.81359	1.72000	13.28000
1,450.000	3.000	245.230	1,449.374	162.374	19.774	7.131	-21.017	2.40604	2.40000	-25.56000
1,475.000	3.420	246.050	1,474.335	187.335	19.197	5.856	-20.025	1.68997	1.68000	0
1,500.000	3.770	244.870	1,499.285	212.285	18.545	4.430	-18.909	1.43087	1.40000	19.08000
1,525.000	3.730	247.340	1,524.232	237.232	17.883	2.936	-17.759	0.66564	-0.16000	13.28000
1,550.000	3.600	247.340	1,549.181	262.181	17.267	1.461	-16.659	0.52000	-0.52000	-25.56000
1,575.000	3.390	246.920	1,574.134	287.134	16.675	0.057	-15.607	0.84621	-0.84000	0
1,600.000	3.440	246.270	1,599.090	312.090	16.083	-1.310	-14.568	0.25295	0.20000	-153.64000
1,625.000	3.380	245.760	1,624.045	337.046	15.479	-2.669	-13.520	0.26893	-0.24000	0
1,650.000	2.960	248.800	1,649.007	362.007	14.943	-3.943	-12.567	1.80900	-1.68000	19.08000
1,675.000	2.470	248.370	1,673.979	386.979	14.511	-5.045	-11.771	1.96168	-1.96000	-25.56000
1,700.000	2.010	246.210	1,698.960	411.960	14.135	-5.947	-11.100	1.87041	-1.84000	0
1,725.000	1.570	244.550	1,723.948	436.948	13.811	-6.657	-10.544	1.77199	-1.76000	-153.64000
1,750.000	1.110	242.930	1,748.941	461.941	13.554	-7.182	-10.117	1.84605	-1.84000	0
1,775.000	0.800	244.450	1,773.937	486.937	13.369	-7.555	-9.811	1.24402	-1.24000	-6.48000
1,800.000	0.570	248.840	1,798.935	511.935	13.248	-7.829	-9.602	0.94298	-0.92000	6.08000
1,825.000	0.480	239.970	1,823.934	536.934	13.151	-8.035	-9.438	0.48405	-0.36000	0
1,850.000	0.380	241.730	1,848.934	561.934	13.059	-8.199	-9.294	0.40343	-0.40000	-17.56000
1,875.000	0.220	206.580	1,873.933	586.933	12.977	-8.294	-9.183	0.94733	-0.64000	-35.48000
1,900.000	0.110	140.940	1,898.933	611.933	12.916	-8.300	-9.124	0.80535	-0.44000	7.04000
1,925.000	0.410	93.800	1,923.933	636.933	12.891	-8.196	-9.138	1.37896	1.20000	-140.60000
1,950.000	0.570	84.450	1,948.932	661.932	12.897	-7.983	-9.219	0.71341	0.64000	0
1,975.000	0.780	88.740	1,973.930	686.930	12.913	-7.689	-9.338	0.86340	0.84000	-188.56000
2,000.000	0.910	85.230	1,998.928	711.928	12.933	-7.321	-9.488	0.55947	0.52000	0
2,025.000	1.050	95.890	2,023.924	736.924	12.926	-6.895	-9.633	0.91718	0.56000	-37.40000
2,050.000	1.130	98.490	2,048.919	761.919	12.866	-6.423	-9.744	0.37614	0.32000	17.16000
2,075.000	1.230	93.090	2,073.914	786.914	12.815	-5.912	-9.879	0.59780	0.40000	-14.04000
2,100.000	1.280	93.150	2,098.908	811.908	12.786	-5.365	-10.045	0.20007	0.20000	42.64000
2,125.000	1.330	95.440	2,123.902	836.902	12.743	-4.797	-10.207	0.28896	0.20000	0
2,150.000	1.290	92.280	2,148.895	861.895	12.704	-4.227	-10.373	0.33025	-0.16000	9.16000
2,175.000	1.250	85.840	2,173.889	886.889	12.713	-3.674	-10.578	0.59258	-0.16000	-12.64000
2,200.000	1.420	96.090	2,198.882	911.882	12.700	-3.094	-10.771	1.16993	0.68000	-25.76000
2,225.000	1.440	86.510	2,223.874	936.875	12.686	-2.473	-10.979	0.95851	0.08000	41.00000
2,250.000	1.670	90.320	2,248.865	961.865	12.703	-1.795	-11.236	1.00818	0.92000	-38.32000
										15.24000

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2,275.000	1.950	87.040	2,273.853	986.853	12.723	-1.006	-11.535	1.19376	1.12000	-13.12000
2,300.000	1.790	86.970	2,298.839	1,011.839	12.766	-0.191	-11.865	0.64007	-0.64000	-0.28000
2,325.000	1.630	89.860	2,323.828	1,036.828	12.787	0.554	-12.150	0.72685	-0.64000	11.56000
2,350.000	1.270	87.170	2,348.820	1,061.820	12.802	1.187	-12.388	1.46512	-1.44000	-10.76000
2,375.000	1.110	288.460	2,373.818	1,086.818	12.892	1.234	-12.489	9.35689	-0.64000	-634.84000
2,400.000	1.920	292.770	2,398.809	1,111.809	13.131	0.618	-12.493	3.26962	3.24000	17.24000
2,425.000	2.000	290.130	2,423.795	1,136.795	13.443	-0.178	-12.502	0.48246	0.32000	-10.56000
2,450.000	1.760	285.690	2,448.781	1,161.781	13.697	-0.957	-12.463	1.12228	-0.96000	-17.76000
2,475.000	1.550	298.880	2,473.771	1,186.771	13.964	-1.623	-12.476	1.73434	-0.84000	52.76000
2,500.000	1.040	5.120	2,498.766	1,211.766	14.353	-1.899	-12.742	5.91257	-2.04000	264.96000
2,525.000	1.040	12.760	2,523.762	1,236.762	14.801	-1.828	-13.185	0.55427	0.00000	30.56000
2,550.000	0.970	16.680	2,548.758	1,261.758	15.225	-1.717	-13.621	0.39232	-0.28000	15.68000
2,575.000	0.920	16.470	2,573.754	1,286.754	15.620	-1.600	-14.032	0.20048	-0.20000	-0.84000
2,600.000	0.940	15.980	2,598.751	1,311.751	16.009	-1.486	-14.436	0.08609	0.08000	-1.96000
2,625.000	0.980	20.460	2,623.747	1,336.748	16.407	-1.355	-14.855	0.34009	0.16000	17.92000
2,650.000	1.070	27.520	2,648.744	1,361.744	16.814	-1.173	-15.300	0.61967	0.36000	28.24000
2,675.000	1.200	24.590	2,673.739	1,386.739	17.259	-0.956	-15.793	0.56930	0.52000	-11.72000
2,700.000	1.120	78.420	2,698.734	1,411.734	17.546	-0.607	-16.185	4.21021	-0.32000	215.32000
2,725.000	1.170	103.040	2,723.729	1,436.729	17.538	-0.119	-16.351	1.96255	0.20000	98.48000
2,750.000	1.170	109.460	2,748.724	1,461.724	17.395	0.370	-16.391	0.52408	0.00000	25.68000
2,775.000	1.210	112.560	2,773.719	1,486.719	17.209	0.854	-16.389	0.30312	0.16000	12.40000
2,800.000	0.940	107.290	2,798.714	1,511.714	17.047	1.294	-16.394	1.14901	-1.08000	-21.08000
2,825.000	1.040	103.100	2,823.711	1,536.711	16.934	1.711	-16.437	0.49356	0.40000	-16.76000
2,850.000	0.910	98.560	2,848.707	1,561.707	16.853	2.128	-16.509	0.60450	-0.52000	-18.16000
KOP>2875' MD/ 2873' TVD										
2,875.000	1.050	94.950	2,873.703	1,586.703	16.804	2.552	-16.614	0.61177	0.56000	-14.44000
2,900.000	2.560	81.760	2,898.690	1,611.690	16.864	3.333	-16.948	6.22497	6.04000	-52.76000
2,925.000	2.990	82.540	2,923.661	1,636.661	17.029	4.532	-17.528	1.72658	1.72000	3.12000
2,950.000	2.800	83.730	2,948.629	1,661.629	17.180	5.786	-18.115	0.79708	-0.76000	4.76000
2,975.000	3.260	76.620	2,973.594	1,686.594	17.411	7.084	-18.792	2.37269	1.84000	-28.44000
3,000.000	5.190	73.480	2,998.525	1,711.525	17.897	8.860	-19.878	7.77238	7.72000	-12.56000
3,025.000	7.430	70.570	3,023.372	1,736.372	18.757	11.469	-21.608	9.04802	8.96000	-11.64000
3,050.000	8.350	70.500	3,048.135	1,761.135	19.900	14.704	-23.827	3.68020	3.68000	-0.28000
3,075.000	8.460	69.090	3,072.867	1,785.867	21.163	18.133	-26.225	0.93443	0.44000	-5.64000
3,100.000	8.420	67.760	3,097.596	1,810.596	22.512	21.545	-28.699	0.79704	-0.16000	-5.32000
3,125.000	8.270	66.710	3,122.331	1,835.331	23.916	24.891	-31.199	0.85529	-0.60000	-4.20000
3,150.000	8.180	66.060	3,147.074	1,860.074	25.348	28.168	-33.703	0.51764	-0.36000	-2.60000
3,175.000	8.030	66.010	3,171.824	1,884.824	26.780	31.389	-36.186	0.60066	-0.60000	-0.20000
3,200.000	8.880	61.420	3,196.553	1,909.553	28.413	34.679	-38.881	4.33882	3.40000	-18.36000
3,225.000	10.390	58.900	3,221.199	1,934.199	30.500	38.304	-42.121	6.26978	6.04000	-10.08000
3,250.000	10.340	58.600	3,245.791	1,958.791	32.834	42.149	-45.668	0.29430	-0.20000	-1.20000
3,275.000	10.240	57.610	3,270.389	1,983.389	35.193	45.941	-49.221	0.81262	-0.40000	-3.96000

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EQT
Survey Report

Database:	EDM_Definitive	Local Co-ordinate Reference:	Well M05H
Company:	EQT (Chevron Data) 02-13-21	TVD Reference:	H14 @ 1287.000usft (H14)
Project:	Marshall County, WV Chevron	MD Reference:	H14 @ 1287.000usft (H14)
Site:	Longworth	North Reference:	True
Well:	M05H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Longworth 5H As-Drilled		

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,300.000	9.980	57.840	3,295.001	2,008.001	37.537	49.651	-52.730	1.05246	-1.04000	0.92000
3,325.000	9.660	58.390	3,319.635	2,032.635	39.789	53.271	-56.122	1.33385	-1.28000	2.20000
3,350.000	9.840	55.510	3,344.274	2,057.274	42.098	56.818	-59.540	2.07926	0.72000	-11.52000
3,375.000	10.830	52.570	3,368.868	2,081.868	44.735	60.444	-63.294	4.48573	3.96000	-11.76000
3,400.000	10.860	52.600	3,393.422	2,106.422	47.593	64.180	-67.293	0.12211	0.12000	0.12000
3,425.000	10.690	52.160	3,417.981	2,130.981	50.446	67.882	-71.275	0.75542	-0.68000	-1.76000
3,450.000	11.500	50.970	3,442.513	2,155.513	53.438	71.649	-75.410	3.36683	3.24000	-4.76000
3,475.000	12.980	50.390	3,466.944	2,179.944	56.798	75.749	-80.007	5.94032	5.92000	-2.32000
3,500.000	13.130	50.260	3,491.298	2,204.298	60.403	80.095	-84.922	0.61139	0.60000	-0.52000
3,525.000	12.920	49.890	3,515.655	2,228.655	64.019	84.416	-89.837	0.90380	-0.84000	-1.48000
3,550.000	14.080	48.820	3,539.964	2,252.964	67.822	88.843	-94.965	4.74616	4.64000	-4.28000
3,575.000	14.230	49.570	3,564.205	2,277.205	71.817	93.470	-100.343	0.94774	0.60000	3.00000
3,600.000	14.120	48.940	3,588.444	2,301.444	75.813	98.109	-105.726	0.75790	-0.44000	-2.52000
3,625.000	13.940	48.980	3,612.698	2,325.698	79.792	102.680	-111.071	0.72104	-0.72000	0.16000
3,650.000	15.640	50.510	3,636.869	2,349.869	83.912	107.553	-116.653	6.97659	6.80000	6.12000
3,675.000	15.920	50.920	3,660.927	2,373.927	88.216	112.815	-122.546	1.20552	1.12000	1.64000
3,700.000	16.100	51.250	3,684.957	2,397.957	92.547	118.180	-128.501	0.80681	0.72000	1.32000
3,725.000	15.990	51.270	3,708.983	2,421.983	96.872	123.570	-134.458	0.44056	-0.44000	0.08000
3,750.000	17.640	52.430	3,732.913	2,445.913	101.336	129.259	-140.653	6.73479	6.60000	4.64000
3,775.000	17.910	52.870	3,756.720	2,469.720	105.966	135.326	-147.137	1.20626	1.08000	1.76000
3,800.000	18.250	51.670	3,780.486	2,493.486	110.714	141.461	-153.755	2.01703	1.36000	-4.80000
3,825.000	18.900	51.160	3,804.183	2,517.183	115.681	147.686	-160.610	2.67995	2.60000	-2.04000
3,850.000	18.870	51.360	3,827.837	2,540.837	120.745	153.997	-167.586	0.28539	-0.12000	0.80000
3,875.000	20.040	49.090	3,851.410	2,564.410	126.075	160.393	-174.840	5.57130	4.68000	-9.08000
3,900.000	21.460	51.690	3,874.788	2,587.788	131.715	167.219	-182.538	6.76917	5.68000	10.40000
3,925.000	21.690	52.790	3,898.037	2,611.037	137.344	174.486	-190.382	1.86120	0.92000	4.40000
3,950.000	22.360	53.050	3,921.212	2,634.212	142.996	181.966	-198.323	2.70822	2.68000	1.04000
3,975.000	23.450	54.000	3,944.241	2,657.241	148.779	189.791	-206.509	4.60388	4.36000	3.80000
4,000.000	23.060	54.000	3,967.209	2,680.210	154.581	197.776	-214.770	1.56000	-1.56000	0.00000
4,025.000	22.610	54.070	3,990.250	2,703.250	160.278	205.629	-222.886	1.80328	-1.80000	0.28000
4,050.000	23.520	52.790	4,013.252	2,726.252	166.115	213.493	-231.136	4.15591	3.64000	-5.12000
4,075.000	23.890	52.670	4,036.142	2,749.142	172.202	221.492	-239.668	1.49253	1.48000	-0.48000
4,100.000	23.260	52.360	4,059.055	2,772.056	178.286	229.426	-248.174	2.56833	-2.52000	-1.24000
4,125.000	23.090	51.440	4,082.038	2,795.038	184.356	237.168	-256.600	1.59991	-0.68000	-3.68000
4,150.000	23.710	48.540	4,104.983	2,817.983	190.740	244.768	-265.268	5.23132	2.48000	-11.60000
4,175.000	23.630	46.550	4,127.880	2,840.880	197.514	252.173	-274.230	3.21153	-0.32000	-7.96000
4,200.000	23.960	45.180	4,150.755	2,863.755	204.538	259.411	-283.368	2.57497	1.32000	-5.48000
4,225.000	24.750	43.830	4,173.530	2,886.530	211.892	266.636	-292.809	3.86565	3.16000	-5.40000
4,250.000	24.340	43.230	4,196.271	2,909.271	219.421	273.789	-302.388	1.91924	-1.64000	-2.40000
4,275.000	24.780	46.970	4,219.011	2,932.011	226.750	281.148	-311.854	6.46124	1.76000	14.96000
4,300.000	24.390	47.630	4,241.744	2,954.744	233.804	288.791	-321.163	1.90785	-1.56000	2.64000
4,325.000	23.730	47.290	4,264.572	2,977.572	240.695	296.301	-330.273	2.69759	-2.64000	-1.36000
4,350.000	23.150	46.810	4,287.509	3,000.509	247.470	303.581	-339.193	2.44246	-2.32000	-1.92000

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EQT
Survey Report

Database:	EDM_Definitive	Local Co-ordinate Reference:	Well M05H
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Project:	Marshall County, WV Chevron	MD Reference:	H14 @ 1287.000usft (H14)
Site:	Longworth	North Reference:	True
Well:	M05H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Longworth 5H As-Drilled		

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,375.000	22.610	46.160	4,310.542	3,023.542	254.162	310.630	-347.953	2.38482	-2.16000	-2.60000
4,400.000	23.670	48.070	4,333.531	3,046.531	260.844	317.830	-356.758	5.19486	4.24000	7.64000
4,425.000	23.400	49.160	4,356.451	3,069.451	267.444	325.319	-365.588	2.04872	-1.08000	4.36000
4,450.000	23.620	50.510	4,379.376	3,092.376	273.876	332.940	-374.308	2.32687	0.88000	5.40000
4,475.000	23.970	53.110	4,402.251	3,115.251	280.109	340.867	-382.951	4.42305	1.40000	10.40000
4,500.000	22.880	52.370	4,425.191	3,138.191	286.125	348.778	-391.386	4.51593	-4.36000	-2.96000
4,525.000	24.060	54.050	4,448.122	3,161.122	292.085	356.752	-399.790	5.42555	4.72000	6.72000
4,550.000	25.210	54.980	4,470.846	3,183.847	298.132	365.239	-408.458	4.85419	4.60000	3.72000
4,575.000	26.450	55.370	4,493.348	3,206.348	304.352	374.180	-417.449	5.00633	4.96000	1.56000
4,600.000	27.400	55.180	4,515.638	3,228.638	310.801	383.485	-426.783	3.81555	3.80000	-0.76000
4,625.000	27.060	54.750	4,537.867	3,250.868	317.367	392.851	-436.250	1.57129	-1.36000	-1.72000
4,650.000	28.470	54.660	4,559.989	3,272.989	324.096	402.356	-445.917	5.64249	5.64000	-0.36000
4,675.000	28.480	53.870	4,581.964	3,294.964	331.058	412.031	-455.862	1.50713	0.04000	-3.16000
4,700.000	27.940	55.140	4,603.995	3,316.995	337.920	421.651	-465.695	3.22976	-2.16000	5.08000
4,725.000	28.810	56.910	4,625.991	3,338.992	344.556	431.504	-475.399	4.84030	3.48000	7.08000
4,750.000	28.340	56.420	4,647.946	3,360.946	351.127	441.495	-485.091	2.10077	-1.88000	-1.96000
4,775.000	27.730	55.890	4,670.013	3,383.013	357.671	451.254	-494.676	2.63559	-2.44000	-2.12000
4,800.000	27.060	55.300	4,692.209	3,405.209	364.170	460.745	-504.123	2.89161	-2.68000	-2.36000
4,825.000	26.430	54.790	4,714.534	3,427.534	370.615	469.966	-513.424	2.68199	-2.52000	-2.04000
4,850.000	25.800	54.030	4,736.982	3,449.982	377.019	478.915	-522.590	2.85320	-2.52000	-3.04000
4,875.000	25.290	52.960	4,759.538	3,472.538	383.431	487.581	-531.663	2.75091	-2.04000	-4.28000
4,900.000	24.670	52.160	4,782.200	3,495.200	389.848	495.964	-540.640	2.82423	-2.48000	-3.20000
4,925.000	24.080	51.200	4,804.971	3,517.971	396.245	504.059	-549.496	2.84267	-2.36000	-3.84000
4,950.000	23.670	50.260	4,827.832	3,540.832	402.649	511.893	-558.266	2.23727	-1.64000	-3.76000
4,975.000	23.070	48.860	4,850.781	3,563.781	409.080	519.441	-566.959	3.27007	-2.40000	-5.60000
5,000.000	24.070	48.750	4,873.695	3,586.695	415.664	526.963	-575.786	4.00387	4.00000	-0.44000
5,025.000	23.910	48.000	4,896.536	3,609.536	422.415	534.561	-584.797	1.37743	-0.64000	-3.00000
5,050.000	23.660	47.630	4,919.412	3,632.412	429.186	542.032	-593.780	1.16459	-1.00000	-1.48000
5,075.000	23.320	46.680	4,942.341	3,655.341	435.962	549.338	-602.710	2.03558	-1.36000	-3.80000
5,100.000	22.820	45.800	4,965.341	3,678.341	442.736	556.414	-611.557	2.42947	-2.00000	-3.52000
5,125.000	22.270	45.020	4,988.431	3,701.431	449.465	563.240	-620.272	2.50415	-2.20000	-3.12000
5,150.000	23.160	47.810	5,011.492	3,724.492	456.115	570.234	-628.973	5.58880	3.56000	11.16000
5,175.000	22.890	49.240	5,034.501	3,747.501	462.591	577.559	-637.630	2.48424	-1.08000	5.72000
5,200.000	22.490	48.790	5,057.566	3,770.566	468.916	584.839	-646.129	1.74415	-1.60000	-1.80000
5,225.000	22.190	48.800	5,080.689	3,793.689	475.176	591.988	-654.520	1.20010	-1.20000	0.04000
5,250.000	23.700	51.550	5,103.711	3,816.711	481.410	599.476	-663.008	7.40604	6.04000	11.00000
5,275.000	23.280	51.820	5,126.639	3,839.640	487.588	607.294	-671.562	1.73427	-1.68000	1.08000
5,300.000	22.820	51.180	5,149.644	3,862.644	493.681	614.955	-679.979	2.09527	-1.84000	-2.56000
5,325.000	23.010	51.770	5,172.671	3,885.671	499.744	622.670	-688.352	1.19246	0.76000	2.36000
5,350.000	23.420	54.920	5,195.647	3,908.647	505.623	630.475	-696.656	5.22978	1.64000	12.60000
5,375.000	22.940	54.200	5,218.629	3,931.629	511.329	638.492	-704.838	2.22966	-1.92000	-2.88000
5,384.000	23.140	53.610	5,226.911	3,939.911	513.404	641.338	-707.789	3.39423	2.22222	-6.55556

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Survey Report

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Wellbore:	OH		
Design:	Longworth 5H As-Drilled		

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,392.000	23.140	53.610	5,234.268	3,947.268	515.269	643.869	-710.432	0.00000	0.00000	0.00000
5,484.000	22.460	52.080	5,319.079	4,032.079	536.794	672.285	-740.650	0.98058	-0.73913	-1.66304
5,573.000	22.780	50.940	5,401.233	4,114.233	558.100	699.076	-770.084	0.60989	0.35955	-1.28090
5,662.000	22.250	51.320	5,483.449	4,196.449	579.488	725.609	-799.505	0.61754	-0.59551	0.42697
5,752.000	22.830	51.570	5,566.574	4,279.574	600.989	752.588	-829.190	0.65318	0.64444	0.27778
5,841.000	22.810	51.760	5,648.608	4,361.608	622.399	779.664	-858.823	0.08579	-0.02247	0.21348
5,930.000	23.110	56.340	5,730.564	4,443.564	642.760	807.753	-887.837	2.03504	0.33708	5.14607
6,020.000	23.880	68.940	5,813.154	4,526.154	659.106	839.476	-914.388	5.63651	0.85556	14.00000
6,109.000	26.740	83.950	5,893.686	4,606.686	667.701	876.244	-935.487	7.86858	3.21348	16.86517
6,199.000	31.900	101.030	5,972.268	4,685.269	665.279	919.825	-948.709	10.86906	5.73333	18.97778
6,288.000	38.510	112.460	6,045.029	4,758.029	650.161	968.619	-951.917	10.46081	7.42697	12.84270
6,377.000	43.980	122.240	6,111.993	4,824.993	623.042	1,020.456	-944.987	9.48641	6.14607	10.98876
6,467.000	51.110	130.290	6,172.759	4,885.759	583.636	1,073.720	-927.079	10.29961	7.92222	8.94444
6,556.000	56.880	131.270	6,225.057	4,938.057	536.614	1,128.200	-902.484	6.54392	6.48315	1.10112
6,646.000	56.890	127.620	6,274.237	4,987.238	488.734	1,186.396	-878.409	3.39668	0.01111	-4.05556
6,735.000	56.920	123.970	6,322.846	5,035.846	445.137	1,246.858	-859.140	3.43578	0.03371	-4.10112
6,825.000	56.850	125.540	6,372.017	5,085.017	402.166	1,308.789	-840.981	1.46316	-0.07778	1.74444
6,914.000	56.770	127.720	6,420.741	5,133.741	357.733	1,368.554	-820.684	2.05177	-0.08989	2.44944
7,004.000	60.910	128.490	6,467.300	5,180.300	310.208	1,429.135	-797.787	4.65784	4.60000	0.85556
7,093.000	67.290	132.450	6,506.168	5,219.168	258.229	1,489.944	-770.808	8.20845	7.16854	4.44944
Top of Marcellus @ 6533' TVD										
7,170.811	72.511	133.883	6,532.900	5,245.900	208.246	1,543.211	-743.015	6.92927	6.71003	1.84226
7,183.000	73.330	134.100	6,536.479	5,249.479	200.154	1,551.592	-738.429	6.92927	6.71800	1.77636
M05H LP										
7,238.415	77.464	136.566	6,550.450	5,263.450	162.019	1,589.271	-716.172	8.61226	7.45943	4.44928
7,272.000	79.980	138.020	6,557.018	5,270.018	137.819	1,611.606	-701.487	8.61226	7.49250	4.33060
LP=7362' MD/ 6368' TVD										
7,362.000	88.980	141.290	6,565.669	5,278.669	69.609	1,669.519	-658.307	10.63256	10.00000	3.63333
M05H LP2										
7,371.020	89.002	141.232	6,565.827	5,278.827	62.575	1,675.162	-653.737	0.68642	0.24714	-0.64049
7,451.000	89.200	140.720	6,567.082	5,280.082	0.447	1,725.515	-613.557	0.68642	0.24720	-0.64045
7,540.000	89.260	141.610	6,568.278	5,281.278	-68.873	1,781.319	-568.590	1.00218	0.06742	1.00000
7,630.000	89.170	141.630	6,569.511	5,282.511	-139.418	1,837.193	-522.502	0.10244	-0.10000	0.02222
7,719.000	89.200	140.870	6,570.777	5,283.777	-208.820	1,892.894	-477.422	0.85451	0.03371	-0.85393
7,809.000	89.290	139.630	6,571.963	5,284.963	-278.008	1,950.437	-433.196	1.38128	0.10000	-1.37778
7,898.000	89.630	138.160	6,572.802	5,285.802	-345.066	2,008.945	-391.305	1.69522	0.38202	-1.65169
7,988.000	89.480	137.690	6,573.501	5,286.501	-411.867	2,069.253	-350.293	0.54816	-0.16667	-0.52222
8,077.000	89.510	136.240	6,574.285	5,287.286	-476.917	2,129.986	-311.069	1.62950	0.03371	-1.62921
8,166.000	89.540	137.390	6,575.023	5,288.023	-541.807	2,190.891	-272.055	1.29253	0.03371	1.29213
8,256.000	89.660	140.800	6,575.652	5,288.652	-609.817	2,249.813	-229.421	3.79114	0.13333	3.78889
8,345.000	89.510	141.890	6,576.296	5,289.297	-679.316	2,305.403	-184.210	1.23623	-0.16854	1.22472
8,434.000	89.820	141.980	6,576.817	5,289.817	-749.386	2,360.275	-138.212	0.36270	0.34831	0.10112
8,523.000	89.910	143.580	6,577.027	5,290.027	-820.256	2,414.107	-91.096	1.80059	0.10112	1.79775
8,613.000	90.000	144.860	6,577.097	5,290.097	-893.268	2,466.727	-41.546	1.42573	0.10000	1.42222

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EQT
Survey Report

Database:	EDM_Definitive	Local Co-ordinate Reference:	Well M05H
Company:	EQT (Chevron Data) 02-13-21	TVD Reference:	H14 @ 1287.000usft (H14)
Project:	Marshall County, WV Chevron	MD Reference:	H14 @ 1287.000usft (H14)
Site:	Longworth	North Reference:	True
Well:	M05H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Longworth 5H As-Drilled		

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,702.000	90.340	144.370	6,576.833	5,289.833	-965.828	2,518.264	7.965	0.67012	0.38202	-0.55056
8,791.000	90.220	143.400	6,576.398	5,289.398	-1,037.723	2,570.720	56.529	1.09818	-0.13483	-1.08989
8,881.000	90.520	141.850	6,575.817	5,288.817	-1,109.241	2,625.349	103.968	1.75415	0.33333	-1.72222
8,970.000	90.740	140.140	6,574.838	5,287.838	-1,178.395	2,681.359	148.706	1.93707	0.24719	-1.92135
9,060.000	90.340	143.770	6,573.990	5,286.990	-1,249.257	2,736.813	195.240	4.05756	-0.44444	4.03333
9,149.000	90.220	140.570	6,573.555	5,286.555	-1,319.542	2,791.390	241.544	3.59799	-0.13483	-3.59551
9,239.000	90.150	138.080	6,573.264	5,286.264	-1,387.794	2,850.045	284.500	2.76775	-0.07778	-2.76667
9,328.000	90.340	136.960	6,572.884	5,285.884	-1,453.431	2,910.148	324.497	1.27639	0.21348	-1.25843
9,418.000	90.370	137.660	6,572.326	5,285.326	-1,519.583	2,971.169	364.648	0.77848	0.03333	0.77778
9,507.000	90.430	138.900	6,571.705	5,284.705	-1,586.010	3,030.395	405.695	1.39485	0.06742	1.39326
9,597.000	88.340	138.390	6,572.671	5,285.671	-1,653.559	3,089.853	447.708	2.39035	-2.32222	-0.56667
9,686.000	88.220	137.760	6,575.342	5,288.342	-1,719.746	3,149.292	488.455	0.72028	-0.13483	-0.70787
9,776.000	91.350	138.550	6,575.680	5,288.680	-1,786.783	3,209.324	529.785	3.58681	3.47778	0.87778
9,865.000	90.120	138.130	6,574.538	5,287.538	-1,853.268	3,268.477	570.912	1.46036	-1.38202	-0.47191
9,955.000	88.950	138.510	6,575.268	5,288.268	-1,920.483	3,328.321	612.475	1.36684	-1.30000	0.42222
10,044.000	88.280	140.380	6,577.420	5,290.420	-1,988.080	3,386.167	655.106	2.23133	-0.75281	2.10112
10,133.000	89.170	144.530	6,579.401	5,292.401	-2,058.613	3,440.376	701.773	4.76777	1.00000	4.66292
10,223.000	88.430	146.080	6,581.286	5,294.286	-2,132.591	3,491.592	752.725	1.90808	-0.82222	1.72222
10,313.000	88.520	145.280	6,583.681	5,296.681	-2,206.895	3,542.317	804.156	0.89418	0.10000	-0.88889
10,402.000	87.970	146.490	6,586.407	5,299.407	-2,280.543	3,592.209	855.269	1.49282	-0.61798	1.35955
10,491.000	88.090	146.330	6,589.466	5,302.466	-2,354.638	3,641.419	907.042	0.22463	0.13483	-0.17978
10,581.000	89.910	149.840	6,591.037	5,304.037	-2,431.007	3,688.981	961.526	4.39243	2.02222	3.90000
10,670.000	90.180	150.540	6,590.968	5,303.968	-2,508.229	3,733.224	1,017.988	0.84300	0.30337	0.78652
10,759.000	87.660	146.390	6,592.646	5,305.646	-2,584.051	3,779.750	1,072.329	5.45424	-2.83146	-4.66292
10,848.000	87.940	143.850	6,596.063	5,309.063	-2,657.002	3,830.604	1,122.449	2.86913	0.31461	-2.85393
10,938.000	87.840	143.770	6,599.376	5,312.376	-2,729.588	3,883.710	1,171.428	0.14225	-0.11111	-0.08889
11,027.000	89.110	141.980	6,601.745	5,314.745	-2,800.520	3,937.404	1,218.651	2.46542	1.42697	-2.01124
11,117.000	89.750	142.570	6,602.640	5,315.640	-2,871.702	3,992.469	1,265.620	0.96715	0.71111	0.65556
11,206.000	89.780	141.120	6,603.005	5,316.006	-2,941.684	4,047.451	1,311.498	1.62955	0.03371	-1.62921
11,296.000	89.820	138.210	6,603.320	5,316.320	-3,010.281	4,105.697	1,354.921	3.23362	0.04444	-3.23333
11,386.000	89.660	135.470	6,603.728	5,316.728	-3,075.924	4,167.254	1,394.407	3.04960	-0.17778	-3.04444
11,475.000	89.750	135.700	6,604.186	5,317.186	-3,139.495	4,229.540	1,431.697	0.27750	0.10112	0.25843
11,564.000	89.600	138.870	6,604.691	5,317.691	-3,204.877	4,289.904	1,471.362	3.56572	-0.16854	3.56180
11,654.000	89.420	140.060	6,605.461	5,318.461	-3,273.274	4,348.393	1,514.513	1.33721	-0.20000	1.32222
11,744.000	89.320	142.890	6,606.451	5,319.451	-3,343.673	4,404.441	1,560.401	3.14622	-0.11111	3.14444

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EQT
Survey Report

Database:	EDM_Definitive	Local Co-ordinate Reference:	Well M05H
Company:	EQT (Chevron Data) 02-13-21	TVD Reference:	H14 @ 1287.000usft (H14)
Project:	Marshall County, WV Chevron	MD Reference:	H14 @ 1287.000usft (H14)
Site:	Longworth	North Reference:	True
Well:	M05H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Longworth 5H AS-Drilled		

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,833.000	89.480	145.090	6,607.383	5,320.383	-3,415.658	4,456.761	1,609.097	2.47830	0.17978	2.47191
11,922.000	89.480	145.150	6,608.191	5,321.191	-3,488.666	4,507.654	1,659.257	0.06741	0.00000	0.06742
12,012.000	89.450	142.920	6,609.031	5,322.031	-3,561.502	4,560.505	1,708.560	2.47789	-0.03333	-2.47778
0										
12,101.000	89.420	142.100	6,609.909	5,322.909	-3,632.116	4,614.669	1,755.319	0.92192	-0.03371	-0.92135
0										
12,191.000	89.480	143.330	6,610.773	5,323.773	-3,703.718	4,669.186	1,802.876	1.36823	0.06667	1.36667
0										
12,280.000	89.450	141.520	6,611.604	5,324.604	-3,774.250	4,723.453	1,849.521	2.03390	-0.03371	-2.03371
0										
12,370.000	89.630	137.550	6,612.327	5,325.327	-3,842.706	4,781.848	1,892.760	4.41550	0.20000	-4.41111
0										
12,459.000	89.420	136.510	6,613.065	5,326.065	-3,907.825	4,842.509	1,932.075	1.19208	-0.23596	-1.16854
0										
12,549.000	89.380	137.820	6,614.007	5,327.007	-3,973.818	4,903.694	1,972.020	1.45615	-0.04444	1.45556
0										
12,639.000	89.450	139.850	6,614.926	5,327.926	-4,041.565	4,962.929	2,014.297	2.25678	0.07778	2.25556
0										
12,728.000	89.380	141.610	6,615.835	5,328.835	-4,110.460	5,019.258	2,058.679	1.97899	-0.07865	1.97753
0										
12,817.000	89.450	141.900	6,616.743	5,329.744	-4,180.354	5,074.349	2,104.437	0.33518	0.07865	0.32584
0										
12,907.000	89.940	142.680	6,617.223	5,330.223	-4,251.553	5,129.397	2,151.428	1.02348	0.54444	0.86667
0										
12,996.000	89.690	138.820	6,617.510	5,330.510	-4,320.460	5,185.697	2,195.833	4.34614	-0.28090	-4.33708
0										
13,086.000	89.420	135.470	6,618.209	5,331.209	-4,386.426	5,246.899	2,235.746	3.73418	-0.30000	-3.72222
0										
13,175.000	89.320	136.310	6,619.188	5,332.188	-4,450.324	5,308.842	2,273.464	0.95043	-0.11236	0.94382
0										
13,265.000	89.380	139.640	6,620.209	5,333.209	-4,517.167	5,369.081	2,314.540	3.70036	0.06667	3.70000
0										
13,354.000	89.660	141.350	6,620.955	5,333.955	-4,585.832	5,425.694	2,358.606	1.94687	0.31461	1.92135
0										
13,444.000	89.600	138.210	6,621.536	5,334.536	-4,654.543	5,483.800	2,402.186	3.48945	-0.06667	-3.48889
0										
13,533.000	89.320	135.450	6,622.375	5,335.375	-4,719.444	5,544.682	2,441.218	3.11690	-0.31461	-3.10112
0										
13,622.000	89.380	134.950	6,623.385	5,336.385	-4,782.591	5,607.391	2,477.962	0.56579	0.06742	-0.56180
0										
13,711.000	89.320	134.800	6,624.394	5,337.394	-4,845.382	5,670.456	2,514.245	0.18151	-0.06742	-0.16854
13,801.000	89.320	136.150	6,625.463	5,338.463	-4,909.541	5,733.560	2,551.794	1.49989	0.00000	1.50000
0										
13,890.000	89.140	138.840	6,626.659	5,339.659	-4,975.142	5,793.682	2,591.750	3.02896	-0.20225	3.02247
0										
13,980.000	89.350	139.620	6,627.845	5,340.845	-5,043.296	5,852.449	2,634.574	0.89745	0.23333	0.86667
0										
14,069.000	89.230	138.280	6,628.948	5,341.948	-5,110.407	5,910.891	2,676.539	1.51153	-0.13483	-1.50562
0										

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EQT
Survey Report

Database:	EDM_Definitive	Local Co-ordinate Reference:	Well M05H
Company:	EQT (Chevron Data) 02-13-21	TVD Reference:	H14 @ 1287.000usft (H14)
Project:	Marshall County, WV Chevron	MD Reference:	H14 @ 1287.000usft (H14)
Site:	Longworth	North Reference:	True
Well:	M05H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Longworth 5H As-Drilled		

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,158.00	89.010	139.640	6,630.315	5,343.315	-5,177.526	5,969.319	2,718.516	1.54778	-0.24719	1.52809
0										
14,248.00	89.050	139.070	6,631.838	5,344.838	-5,245.804	6,027.934	2,761.510	0.63480	0.04444	-0.63333
0										
14,337.00	88.980	141.760	6,633.368	5,346.369	-5,314.378	6,084.633	2,805.462	3.02305	-0.07865	3.02247
0										
14,426.00	89.050	145.060	6,634.899	5,347.899	-5,385.818	6,137.669	2,853.394	3.70815	0.07865	3.70787
0										
14,516.00	89.080	145.990	6,636.367	5,349.368	-5,460.001	6,188.606	2,904.635	1.03373	0.03333	1.03333
0										
14,605.00	89.110	146.220	6,637.773	5,350.773	-5,533.867	6,238.233	2,956.047	0.26058	0.03371	0.25843
0										
14,694.00	89.110	146.310	6,639.156	5,352.156	-5,607.872	6,287.653	3,007.661	0.10111	0.00000	0.10112
0										
14,783.00	89.140	147.160	6,640.515	5,353.515	-5,682.279	6,336.464	3,059.868	0.95554	0.03371	0.95506
0										
14,872.00	89.420	143.560	6,641.634	5,354.634	-5,755.485	6,387.041	3,110.325	4.05684	0.31461	-4.04494
0										
14,962.00	89.170	138.910	6,642.742	5,355.742	-5,825.635	6,443.373	3,155.880	5.17373	-0.27778	-5.16667
0										
15,051.00	88.770	140.050	6,644.341	5,357.341	-5,893.279	6,501.187	3,198.566	1.35726	-0.44944	1.28090
0										
15,141.00	88.770	141.230	6,646.273	5,359.273	-5,962.848	6,558.250	3,243.318	1.31081	0.00000	1.31111
0										
15,230.00	88.860	140.960	6,648.114	5,361.114	-6,032.091	6,614.133	3,288.185	0.31972	0.10112	-0.30337
0										
15,319.00	88.620	140.420	6,650.071	5,363.071	-6,100.936	6,670.502	3,332.508	0.66383	-0.26966	-0.60674
0										
M05H BHL Short										
15,343.18	88.617	140.372	6,650.654	5,363.654	-6,119.567	6,685.917	3,344.445	0.20025	-0.01112	-0.20000
9										
15,409.00	88.610	140.240	6,652.246	5,365.246	-6,170.192	6,727.938	3,376.834	0.20025	-0.01111	-0.20000
0										
15,498.00	88.650	140.460	6,654.374	5,367.374	-6,238.699	6,784.712	3,420.696	0.25117	0.04494	0.24719
0										
15,588.00	88.580	140.490	6,656.550	5,369.550	-6,308.100	6,841.973	3,465.221	0.08462	-0.07778	0.03333
0										
15,677.00	88.650	139.780	6,658.701	5,371.701	-6,376.392	6,899.003	3,508.791	0.80139	0.07865	-0.79775
0										
15,767.00	88.650	141.680	6,660.821	5,373.821	-6,446.045	6,955.952	3,553.663	2.11053	0.00000	2.11111
0										
Final Survey=15856' MD/ 6603' TVD										
15,856.00	88.740	144.170	6,662.849	5,375.849	-6,517.029	7,009.589	3,600.955	2.79885	0.10112	2.79775
0										
M05H BHL										
15,885.39	88.740	144.170	6,663.495	5,376.495	-6,540.857	7,026.793	3,617.115	0.00000	0.00000	0.00000
7										
Projection to BHL/ Deepest Point of Well=15886' MD/ 6664' TVD										
15,886.00	88.740	144.170	6,663.508	5,376.508	-6,541.346	7,027.146	3,617.447	0.00000	0.00000	0.00000
0										

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EQT
Survey Report

Database: EDM_Definlive	Local Co-ordinate Reference:	Well M05H
Company: EQT (Chevron Data) 02-13-21	TVD Reference:	H14 @ 1287.000usft (H14)
Project: Marshall County, WV Chevron	MD Reference:	H14 @ 1287.000usft (H14)
Site: Longworth	North Reference:	True
Well: M05H	Survey Calculation Method:	Minimum Curvature
Wellbore: OH		
Design: Longworth 5H As-Drilled		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (16.804)	+E/-W (2.552)	Northing (usft)	Easting (usft)	Latitude	Longitude
Longworth 5H KOP - actual wellpath hits target center - Point	0.000	0.000	2,873.70 3	16.804	2.552	493,066.457	1,624,119.741	39.8472599	80.7265872°W
Longworth 5H LP - actual wellpath hits target center - Point	0.000	0.000	6,565.66 9	69.609	1,669.519	493,096.498	1,625,787.273	39.8474047	80.7206501°W
Longworth 5H BHL - actual wellpath hits target center - Point	0.000	0.000	6,663.50 8	-6,541.346	7,027.146	486,413.011	1,631,054.141	39.8292530	80.7015748°W

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,170.811	6,532.900	Top of Marcellus@6533' TVD		0.0000	

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,875.000	2,873.703	16.804	2.552	KOP=2875' MD/ 2873' TVD
7,362.000	6,565.669	69.609	1,669.519	LP=7362' MD/ 6366' TVD
15,856.000	6,662.849	-6,517.029	7,009.589	Final Survey=15856' MD/ 6603' TVD
15,886.000	6,663.508	-6,541.346	7,027.146	Projection to BHL/ Deepest Point of Well=15886' MD/ 6664' TVD

Checked By: _____ Approved By: _____ Date: _____

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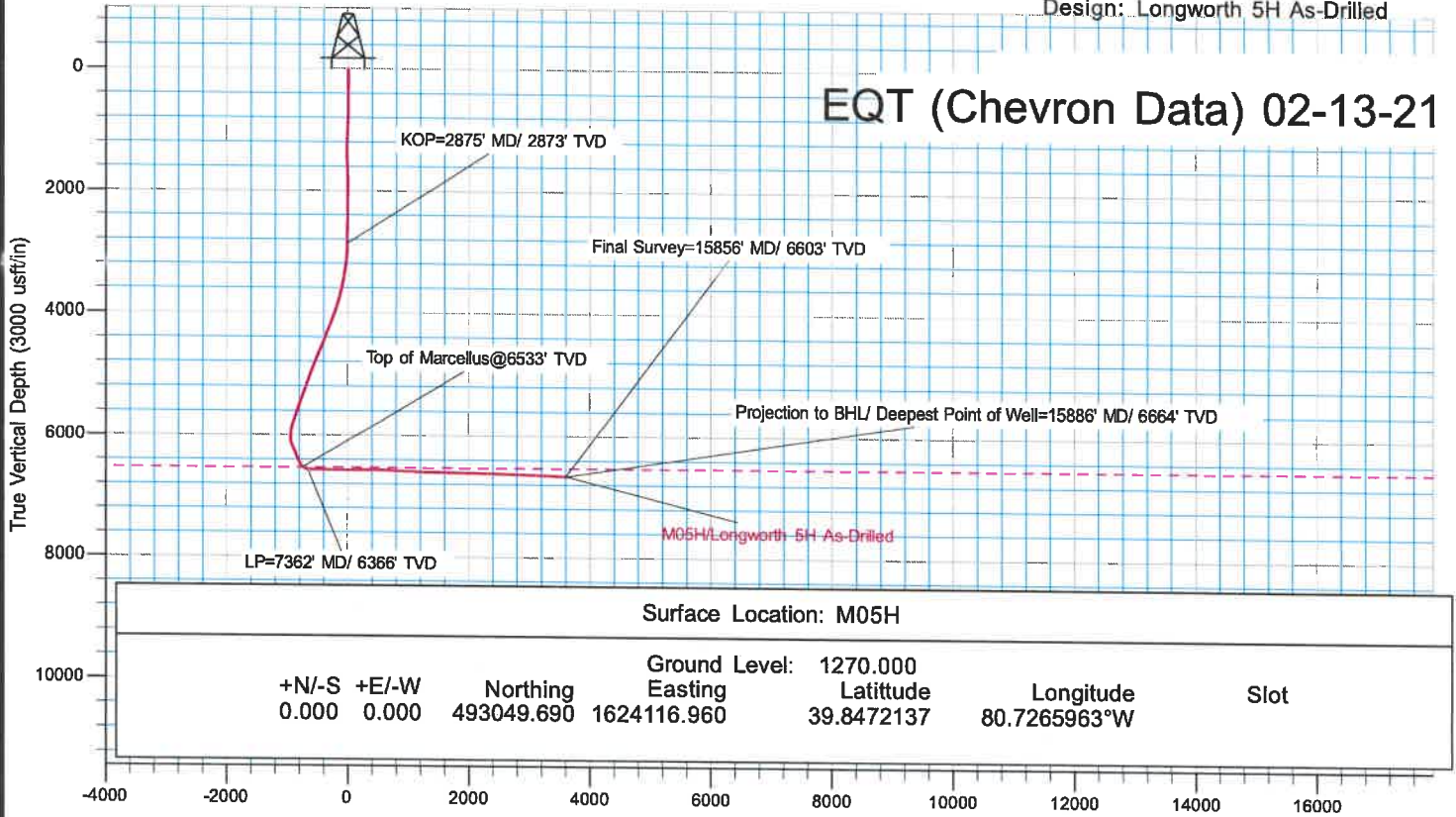
WV Department of
Environmental Protection



KB Elevation= H14 @ 1287.000usft (H14)
 Ground Elevation= 1270.000
 All measurements were taken from KB Elevation

Project: Marshall County, WV Chevron
 Site: Longworth
 Well: M05H
 Wellbore: OH
 Design: Longworth 5H As-Drilled

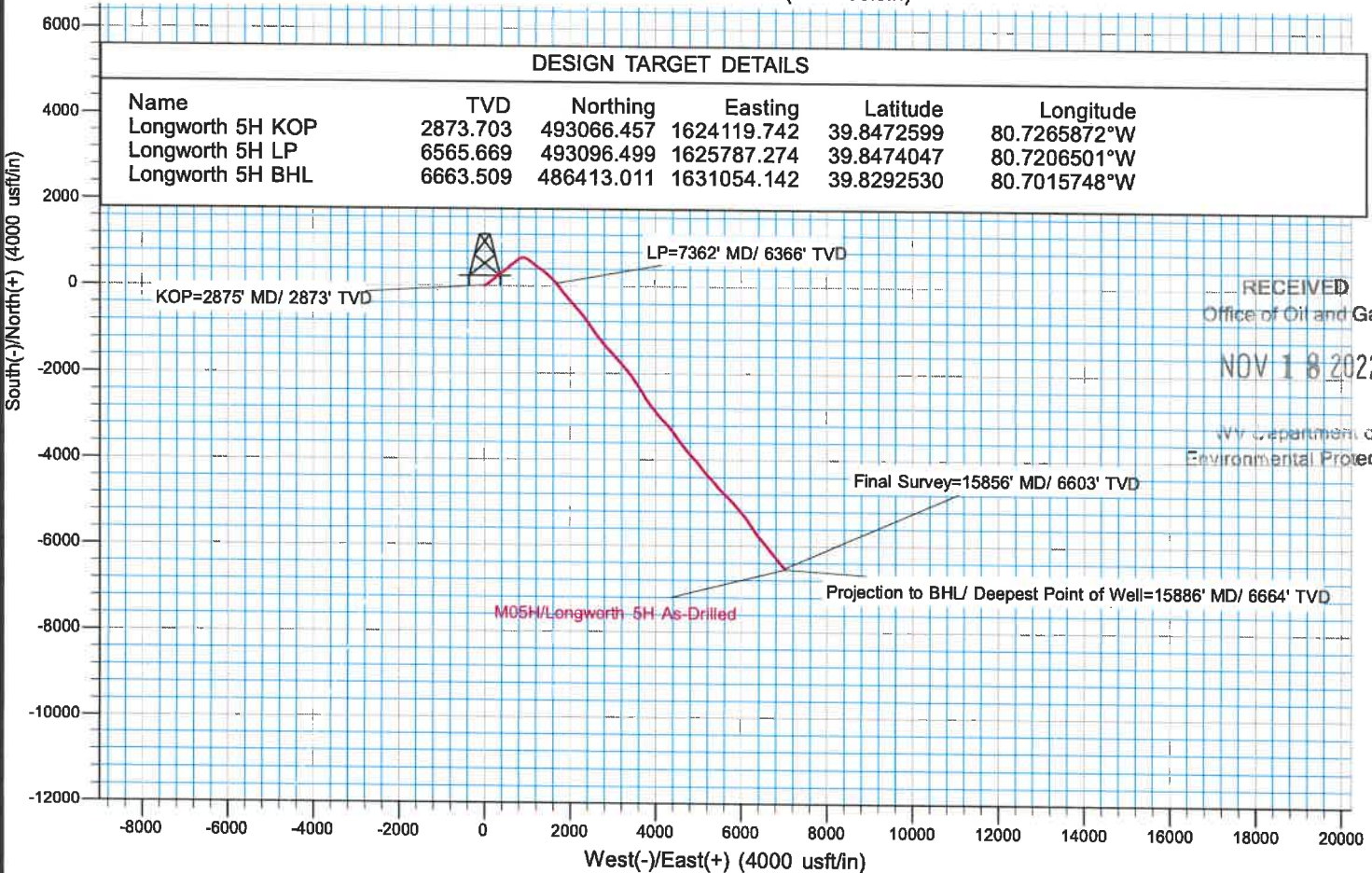
EQT (Chevron Data) 02-13-21



Surface Location: M05H

+N/-S	+E/-W	Ground Level:	1270.000	Longitude	Slot
0.000	0.000	493049.690	1624116.960	39.8472137	80.7265963°W
Northing	Easting	Latitude			

Vertical Section at 200.814° (3000 usft/in)



DESIGN TARGET DETAILS

Name	TVD	Northing	Easting	Latitude	Longitude
Longworth 5H KOP	2873.703	493066.457	1624119.742	39.8472599	80.7265872°W
Longworth 5H LP	6565.669	493096.499	1625787.274	39.8474047	80.7206501°W
Longworth 5H BHL	6663.509	486413.011	1631054.142	39.8292530	80.7015748°W

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