



EQT (Chevron Data) 02-13-21

Marshall County, WV Chevron

Longworth

M08H

OH

Design: Longworth 8H As Drilled

Standard Survey Report

26 July, 2021

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Office of Oil and Gas

NOV 18 2022

WV Department of
Environmental Protection



EQT
Survey Report

Database:	EDM_Definitive	Local Co-ordinate Reference:	Well M08H
Company:	EQT (Chevron Data) 02-13-21	TVD Reference:	Air RKB @ 1294.000usft (Highlands 9)
Project:	Marshall County, WV Chevron	MD Reference:	Air RKB @ 1294.000usft (Highlands 9)
Site:	Longworth	North Reference:	True
Well:	M08H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Longworth 8H 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 °

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Well:	M08H					
Well Position	+N/-S	0.000 usft	Northing:	493,024.306 usft	Latitude:	39.8471455
	+E/-W	0.000 usft	Easting:	1,624,154.114 usft	Longitude:	80.7264627°W
Position Uncertainty		0.000 usft	Wellhead Elevation:	0.000 usft	Ground Level:	1,270.000 usft

WV Department of
Environmental Protection

Wellbore:	OH				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	5/16/2016	-8.7191	67.0776	52,269.22635094

Design:	Longworth 8H As Drilled				
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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	145.835	

Survey Program	Date	7/26/2021			
From (')	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	586.270	Surface Gyro (OH)	NS-GYRO-MS c	North sensing gyrocompassing m/s c	
0.00	16,783.000	Magvar corrections and SDI RSS (OH)	11_MWD+IFR1+AX+Sag c	A007Mb: IFR dec & axial + sag corrections c	

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	-1,294.000	0.000	0.000	0.000	0.00000	0.00000	0.00000
100.000	0.650	273.700	99.998	-1,194.002	0.037	-0.566	-0.348	0.65000	0.65000	0.00000
125.000	0.460	291.210	124.997	-1,169.003	0.082	-0.801	-0.518	1.01041	-0.76000	70.04000
150.000	0.380	332.680	149.996	-1,144.004	0.192	-0.933	-0.683	1.22665	-0.32000	165.88000
175.000	0.350	334.130	174.996	-1,119.004	0.334	-1.004	-0.841	0.12555	-0.12000	5.80000
200.000	0.330	345.800	199.995	-1,094.005	0.473	-1.055	-0.984	0.28775	-0.08000	46.68000
225.000	0.430	357.560	224.995	-1,069.005	0.636	-1.077	-1.131	0.50528	0.40000	47.04000
250.000	0.500	348.350	249.994	-1,044.006	0.837	-1.103	-1.312	0.40877	0.28000	-36.84000



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Wellbore:	OH		
Design:	Longworth BH 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)
275.000	0.420	328.200	274.993	-1,019.007	1.022	-1.173	-1.504	0.71673	-0.32000	-80.60000
300.000	0.250	328.910	299.993	-994.007	1.146	-1.249	-1.650	0.68019	-0.68000	2.84000
325.000	0.240	324.340	324.992	-969.008	1.236	-1.308	-1.757	0.08777	-0.04000	-18.28000
350.000	0.330	312.560	349.992	-944.008	1.327	-1.392	-1.879	0.42776	0.36000	-47.12000
375.000	0.270	343.720	374.992	-919.008	1.432	-1.461	-2.005	0.68480	-0.24000	124.64000
400.000	0.320	348.560	399.991	-894.009	1.557	-1.492	-2.126	0.22329	0.20000	19.36000
425.000	0.460	348.110	424.991	-869.009	1.724	-1.526	-2.283	0.56013	0.56000	-1.80000
450.000	0.410	359.720	449.990	-844.010	1.911	-1.547	-2.450	0.40432	-0.20000	46.44000
475.000	0.470	342.000	474.989	-819.011	2.098	-1.579	-2.623	0.59174	0.24000	-70.88000
500.000	0.500	349.580	499.988	-794.012	2.303	-1.631	-2.821	0.28304	0.12000	30.32000
525.000	0.490	352.440	524.987	-769.012	2.516	-1.665	-3.017	0.10661	-0.04000	11.44000
550.000	0.420	350.280	549.987	-744.013	2.713	-1.694	-3.196	0.28823	-0.28000	-8.64000
575.000	0.330	12.160	574.986	-719.014	2.873	-1.694	-3.329	0.67013	-0.36000	87.52000
586.270	0.310	25.420	586.256	-707.744	2.932	-1.675	-3.367	0.67894	-0.17746	117.65750
727.000	0.830	344.460	726.979	-567.021	4.258	-1.784	-4.525	0.44738	0.36950	-29.10538
728.000	0.830	343.890	727.979	-566.021	4.272	-1.788	-4.539	0.82568	0.00000	-57.00000
822.000	0.060	280.320	821.975	-472.025	4.935	-2.025	-5.221	0.85648	-0.81915	-67.62766
916.000	2.110	180.770	915.954	-378.046	3.214	-2.097	-3.837	2.25615	2.18085	-105.90426
1,009.000	3.430	181.370	1,008.844	-285.156	-1.280	-2.187	-0.169	1.41968	1.41935	0.64516
1,103.000	3.680	178.640	1,102.663	-191.337	-7.107	-2.182	4.655	0.32112	0.26596	-2.90426
1,197.000	3.300	188.460	1,196.489	-97.511	-12.799	-2.509	9.181	0.75211	-0.40426	10.44681
1,290.000	3.730	189.330	1,289.314	-4.686	-18.431	-3.393	13.345	0.46590	0.46237	0.93548
1,384.000	4.880	198.070	1,383.048	89.048	-25.250	-5.129	18.012	1.40508	1.22340	9.29787
1,478.000	5.480	206.800	1,476.665	182.665	-33.057	-8.393	22.639	1.05205	0.63830	9.28723
1,571.000	7.200	207.690	1,569.093	275.093	-42.182	-13.104	27.544	1.85242	1.84946	0.95699
1,665.000	7.290	204.070	1,662.343	368.343	-52.844	-18.273	33.462	0.49493	0.09574	-3.85106
1,759.000	6.730	199.800	1,755.641	461.641	-63.472	-22.572	39.842	0.81340	-0.59574	-4.54255
1,852.000	5.700	206.990	1,848.094	554.094	-72.714	-26.514	45.276	1.38616	-1.10753	7.73118
1,946.000	5.690	215.730	1,941.632	647.632	-80.657	-31.353	49.130	0.92183	-0.01064	9.29787
2,040.000	5.350	210.250	2,035.197	741.197	-88.225	-36.282	52.625	0.66691	-0.36170	-5.82979
2,133.000	5.790	205.570	2,127.758	833.758	-96.202	-40.491	56.861	0.67964	0.47312	-5.03226
2,195.000	6.000	202.980	2,189.430	895.430	-102.007	-43.106	60.195	0.54655	0.33871	-4.17742
2,210.000	6.150	204.560	2,204.346	910.346	-103.459	-43.746	61.038	1.49746	1.00000	10.53333
2,304.000	5.700	201.260	2,297.844	1,003.844	-112.389	-47.532	66.301	0.60023	-0.47872	-3.51064
2,398.000	8.340	208.240	2,391.132	1,097.132	-122.747	-52.451	72.109	2.94642	2.80851	7.42553
2,491.000	10.510	213.940	2,482.873	1,188.873	-135.728	-60.379	78.397	2.53728	2.33333	6.12903
2,585.000	10.450	221.220	2,575.309	1,281.309	-149.253	-70.784	83.745	1.40922	-0.06383	7.74468
2,679.000	10.810	229.270	2,667.701	1,373.701	-161.418	-83.082	86.905	1.62406	0.38298	8.56383
2,772.000	10.410	228.510	2,759.111	1,465.111	-172.675	-95.984	88.973	0.45566	-0.43011	-0.81720
2,866.000	10.090	227.310	2,851.611	1,557.611	-183.884	-108.398	91.276	0.40924	-0.34043	-1.27660
2,960.000	9.900	227.330	2,944.184	1,650.184	-194.944	-120.392	93.692	0.20216	-0.20213	0.02128
3,054.000	9.490	225.070	3,036.842	1,742.842	-205.894	-131.820	96.335	0.59505	-0.43617	-2.40426



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3,152.000	9.160	225.820	3,133.547	1,839.547	-217.036	-143.134	99.200	0.35884	-0.33673	0.76531
3,247.000	10.000	220.310	3,227.223	1,933.223	-228.596	-153.893	102.723	1.30809	0.88421	-5.80000
3,342.000	9.790	219.850	3,320.810	2,026.810	-241.086	-164.404	107.155	0.23619	-0.22105	-0.48421
3,437.000	9.480	219.400	3,414.470	2,120.470	-253.332	-174.546	111.593	0.33581	-0.32632	-0.47368
3,531.000	10.390	217.810	3,507.059	2,213.059	-266.011	-184.656	116.406	1.01103	0.96809	-1.69149
3,626.000	10.180	219.770	3,600.533	2,306.533	-279.232	-195.278	121.380	0.42957	-0.22105	2.06316
3,721.000	9.650	219.840	3,694.114	2,400.114	-291.798	-205.749	125.897	0.55804	-0.55789	0.07368
3,816.000	10.220	218.690	3,787.689	2,493.689	-304.491	-216.119	130.576	0.63528	0.60000	-1.21053
3,911.000	9.900	215.120	3,881.229	2,587.229	-317.749	-226.086	135.949	0.73764	-0.33684	-3.75789
4,005.000	9.170	226.310	3,973.938	2,679.938	-329.533	-236.151	140.047	2.11519	-0.77660	11.90429
4,100.000	9.230	228.440	4,067.716	2,773.716	-339.817	-247.326	142.281	0.36397	0.06316	2.24211
4,197.000	10.270	229.430	4,163.314	2,869.314	-350.602	-259.715	144.247	1.08597	1.07216	1.02062
4,290.000	9.830	223.430	4,254.889	2,960.889	-361.759	-271.471	146.877	1.22052	-0.47312	-6.45161
4,384.000	8.840	221.910	4,347.643	3,053.643	-372.962	-281.812	150.339	1.08527	-1.05319	-1.61702
4,478.000	9.480	218.070	4,440.445	3,146.445	-384.431	-291.410	154.439	0.94117	0.68085	-4.08511
4,571.000	10.770	211.960	4,531.997	3,237.997	-397.834	-300.733	160.293	1.80316	1.38710	-6.56989
4,665.000	11.000	217.140	4,624.308	3,330.308	-412.435	-310.797	166.723	1.06861	0.24468	5.51064
4,759.000	9.800	220.170	4,716.763	3,422.763	-425.697	-321.372	171.758	1.40253	-1.27660	3.22340
4,852.000	10.040	216.650	4,808.373	3,514.373	-438.249	-331.317	176.559	0.70112	0.25806	-3.78495
4,946.000	10.540	215.010	4,900.861	3,606.861	-451.865	-341.140	182.308	0.61644	0.53191	-1.74468
5,039.000	9.890	215.650	4,992.387	3,698.387	-465.322	-350.675	188.088	0.70949	-0.69892	0.68817
5,136.000	8.880	222.700	5,088.090	3,794.090	-477.593	-360.608	192.664	1.57578	-1.04124	7.26804
5,230.000	8.880	225.460	5,180.964	3,886.964	-488.014	-370.700	195.619	0.45320	0.00000	2.93617
5,323.000	9.650	222.600	5,272.750	3,978.751	-498.787	-381.092	198.697	0.96446	0.82796	-3.07527
5,417.000	10.140	221.170	5,365.352	4,071.352	-510.815	-391.872	202.595	0.58312	0.52128	-1.52128
5,510.000	9.210	224.780	5,457.029	4,163.029	-522.261	-402.504	206.095	1.19351	-1.00000	3.88172
5,604.000	9.180	224.490	5,549.821	4,255.821	-532.949	-413.057	209.013	0.05873	-0.03191	-0.30851
5,697.000	9.310	219.990	5,641.614	4,347.614	-544.005	-423.091	212.526	0.78963	0.13978	-4.83871
5,791.000	11.090	217.800	5,734.125	4,440.125	-556.975	-433.519	217.402	1.93770	1.89362	-2.32979
5,822.000	11.500	215.240	5,764.525	4,470.525	-561.855	-437.129	219.412	2.08903	1.32258	-8.25806
KOP=5923' MD										
5,923.000	11.610	205.390	5,863.488	4,569.488	-579.261	-447.297	228.104	1.95421	0.10891	-9.75248
6,015.000	15.440	183.500	5,952.978	4,658.978	-599.869	-452.019	242.504	6.88024	4.16304	-23.79348
6,108.000	19.570	168.570	6,041.696	4,747.696	-627.518	-449.686	266.691	6.52728	4.44086	-16.05376
6,200.000	24.120	160.770	6,127.086	4,833.086	-660.394	-440.434	299.089	5.85626	4.94565	-8.47826
6,292.000	29.840	161.070	6,209.039	4,915.039	-699.826	-426.807	339.370	6.21913	6.21739	0.32609
6,385.000	37.510	153.360	6,286.411	4,992.411	-747.113	-406.565	389.863	9.42772	8.24731	-8.29032
6,477.000	45.590	148.110	6,355.226	5,061.226	-800.153	-376.588	450.584	9.55720	8.78261	-5.70652
6,569.000	53.290	146.830	6,415.004	5,121.005	-859.011	-338.995	520.397	8.43573	8.36957	-1.39130
6,662.000	60.510	146.560	6,465.758	5,171.758	-924.076	-296.238	598.244	7.76724	7.76344	-0.29032
6,754.000	69.970	146.750	6,504.246	5,210.246	-993.789	-250.373	681.683	10.28431	10.28261	0.20652
Top of Marcellus @ 6524' TVD										
6,819.854	75.481	143.120	6,523.800	5,229.800	-1,045.213	-214.242	744.522	9.88510	8.36906	-5.51193

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6,847.000	77.770	141.680	6,530.079	5,236.079	-1,066.134	-198.129	770.881	9.88510	8.43086	-5.30528
6,940.000	82.860	141.290	6,545.719	5,251.719	-1,137.839	-141.059	862.261	5.48870	5.47312	-0.41935
M08H LP										
7,017.173	86.173	141.693	6,553.092	5,259.092	-1,197.944	-93.235	938.850	4.32480	4.29345	0.52222
7,032.000	86.810	141.770	6,554.000	5,260.000	-1,209.563	-84.070	953.611	4.32480	4.29363	0.51925
LP=7125' MD/ 8557' TVD										
7,125.000	89.400	141.940	6,557.075	5,263.075	-1,282.656	-26.664	1,046.328	2.79093	2.78495	0.18280
7,217.000	89.430	140.540	6,558.014	5,264.014	-1,354.390	30.929	1,138.025	1.52201	0.03261	-1.52174
7,310.000	89.600	140.790	6,558.801	5,264.801	-1,426.319	89.875	1,230.643	0.32507	0.18280	0.26882
7,403.000	89.530	140.710	6,559.507	5,265.507	-1,498.335	148.715	1,323.275	0.11430	-0.07527	-0.08602
7,495.000	89.530	142.210	6,560.262	5,266.262	-1,570.290	206.033	1,415.001	1.63038	0.00000	1.63043
7,588.000	89.090	141.290	6,561.382	5,267.382	-1,643.319	263.604	1,507.757	1.09650	-0.47312	-0.98925
7,681.000	89.160	141.760	6,562.802	5,268.802	-1,716.118	321.459	1,600.483	0.51089	0.07527	0.50538
7,773.000	89.030	141.500	6,564.255	5,270.255	-1,788.238	378.559	1,692.223	0.31593	-0.14130	-0.28261
7,866.000	89.090	141.620	6,565.781	5,271.781	-1,861.072	436.369	1,784.952	0.14425	0.06452	0.12903
7,959.000	89.060	141.890	6,567.282	5,273.283	-1,934.102	493.931	1,877.704	0.29207	-0.03226	0.29032
8,051.000	89.060	141.320	6,568.792	5,274.792	-2,006.196	551.062	1,969.441	0.61948	0.00000	-0.61957
8,144.000	88.960	141.890	6,570.399	5,276.399	-2,079.074	608.814	2,062.173	0.62217	-0.10753	0.61290
8,237.000	89.090	140.760	6,571.981	5,277.981	-2,151.667	666.920	2,154.870	1.22289	0.13978	-1.21505
8,329.000	89.300	141.230	6,573.274	5,279.274	-2,223.153	724.818	2,246.533	0.55950	0.22826	0.51087
8,422.000	89.260	140.900	6,574.442	5,280.442	-2,295.488	783.258	2,339.203	0.35741	-0.04301	-0.35484
8,515.000	89.260	140.930	6,575.643	5,281.644	-2,367.669	841.887	2,431.853	0.03226	0.00000	0.03226
8,607.000	89.130	140.900	6,576.936	5,282.936	-2,439.074	899.885	2,523.505	0.14502	-0.14130	-0.03261
8,700.000	89.500	140.730	6,578.048	5,284.048	-2,511.154	958.641	2,616.141	0.43783	0.39785	-0.18280
8,792.000	89.500	141.350	6,578.851	5,284.851	-2,582.688	1,016.486	2,707.815	0.67389	0.00000	0.67391
8,885.000	89.630	141.980	6,579.557	5,285.557	-2,655.635	1,074.168	2,800.566	0.69167	0.13978	0.67742
8,978.000	89.700	141.600	6,580.101	5,286.101	-2,728.708	1,131.691	2,893.333	0.41547	0.07527	-0.40860
9,070.000	89.560	141.630	6,580.695	5,286.695	-2,800.821	1,188.817	2,985.081	0.15563	-0.15217	0.03261
9,163.000	89.870	141.500	6,581.157	5,287.157	-2,873.668	1,246.627	3,077.822	0.36146	0.33333	-0.13978
9,255.000	89.930	141.790	6,581.318	5,287.318	-2,945.813	1,303.716	3,169.576	0.32189	0.06522	0.31522
9,348.000	89.630	142.210	6,581.675	5,287.675	-3,019.097	1,360.972	3,262.366	0.55499	-0.32258	0.45161
9,441.000	89.530	141.330	6,582.357	5,288.357	-3,092.149	1,418.520	3,355.129	0.95230	-0.10753	-0.94624
9,534.000	89.230	141.370	6,583.363	5,289.363	-3,164.775	1,476.601	3,447.839	0.32544	-0.32258	0.04301
9,626.000	89.260	140.780	6,584.575	5,290.575	-3,236.342	1,534.399	3,539.513	0.64208	0.03261	-0.64130
9,719.000	89.600	141.160	6,585.500	5,291.500	-3,308.582	1,592.961	3,632.173	0.54827	0.36559	0.40860
9,811.000	89.460	141.230	6,586.255	5,292.255	-3,380.274	1,650.613	3,723.868	0.17013	-0.15217	0.07609
9,904.000	89.430	140.920	6,587.156	5,293.156	-3,452.621	1,709.042	3,816.543	0.33488	-0.03226	-0.33333
9,997.000	89.500	141.560	6,588.024	5,294.024	-3,525.137	1,767.263	3,909.239	0.69225	0.07527	0.68817
10,089.000	89.030	141.700	6,589.204	5,295.205	-3,597.261	1,824.366	4,000.984	0.53305	-0.51087	0.15217
10,182.000	88.730	141.420	6,591.022	5,297.022	-3,670.090	1,882.172	4,093.707	0.44121	-0.32258	-0.30108
10,274.000	89.460	141.340	6,592.475	5,298.475	-3,741.960	1,939.587	4,185.417	0.79823	0.79348	-0.08696

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EQT
Survey Report

Database:	EDM Definitive	Local Co-ordinate Reference:	Well: M08H
Company:	EQT (Chevron Data) 02-13-21	TVD Reference:	Air RKB @ 1294.000usft (Highlands 9)
Project:	Marshall County, WV Chevron	MD Reference:	Air RKB @ 1294.000usft (Highlands 9)
Site:	Longworth	North Reference:	True
Well:	M08H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Longworth 8H 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)
10,367.00	89.360	141.010	6,593.433	5,299.433	-3,814.409	1,997.889	4,278.105	0.37075	-0.10753	-0.35484
0										
10,459.00	89.300	140.590	6,594.509	5,300.509	-3,885.699	2,056.032	4,369.743	0.46113	-0.06522	-0.45652
0										
10,552.00	89.400	141.520	6,595.564	5,301.564	-3,958.024	2,114.485	4,462.413	1.00570	0.10753	1.00000
0										
10,644.00	89.160	141.600	6,596.720	5,302.720	-4,030.078	2,171.676	4,554.149	0.27498	-0.26087	0.08696
0										
10,737.00	89.130	141.380	6,598.108	5,304.108	-4,102.843	2,229.576	4,646.872	0.23872	-0.03226	-0.23656
0										
10,830.00	89.430	141.700	6,599.276	5,305.276	-4,175.660	2,287.415	4,739.603	0.47163	0.32258	0.34409
0										
10,922.00	88.520	140.840	6,600.922	5,306.922	-4,247.416	2,344.964	4,831.295	1.36085	-0.98913	-0.93478
0										
11,014.000	88.760	141.360	6,603.106	5,309.106	-4,318.994	2,402.720	4,922.954	0.62237	0.26087	0.56522
11,107.000	88.890	141.190	6,605.013	5,311.013	-4,391.533	2,460.887	5,015.640	0.23009	0.13978	-0.18280
11,199.000	88.830	141.220	6,606.843	5,312.843	-4,463.223	2,518.517	5,107.322	0.07291	-0.06522	0.03261
11,291.000	88.760	140.800	6,608.778	5,314.778	-4,534.715	2,576.389	5,198.976	0.46272	-0.07609	-0.45652
11,384.000	88.730	141.170	6,610.815	5,316.815	-4,606.957	2,634.921	5,291.620	0.39906	-0.03226	0.39785
11,476.000	88.790	141.880	6,612.806	5,318.806	-4,678.964	2,692.147	5,383.338	0.77431	0.06522	0.77174
11,569.000	88.930	141.880	6,614.656	5,320.656	-4,752.115	2,749.545	5,476.098	0.15054	0.15054	0.00000
11,660.000	89.400	141.850	6,615.982	5,321.982	-4,823.684	2,805.733	5,566.870	0.51753	0.51648	-0.03297
11,753.000	89.430	142.150	6,616.932	5,322.932	-4,896.965	2,862.987	5,659.657	0.32417	0.03226	0.32258
11,845.000	89.260	141.930	6,617.983	5,323.983	-4,969.497	2,919.573	5,751.449	0.30219	-0.18478	-0.23913
11,938.000	89.260	141.820	6,619.184	5,325.185	-5,042.650	2,976.985	5,844.219	0.11827	0.00000	-0.11828
12,031.00	89.530	141.980	6,620.166	5,326.167	-5,115.831	3,034.366	5,936.994	0.33747	0.29032	0.17204
0										
12,123.00	89.430	142.140	6,621.001	5,327.001	-5,188.384	3,090.928	6,028.791	0.20508	-0.10870	0.17391
0										
12,215.00	89.600	142.430	6,621.780	5,327.780	-5,261.159	3,147.206	6,120.611	0.36538	0.18478	0.31522
0										
12,308.00	89.560	142.510	6,622.462	5,328.462	-5,334.910	3,203.857	6,213.448	0.09617	-0.04301	0.08602
0										
12,400.00	89.260	142.360	6,623.409	5,329.409	-5,407.831	3,259.943	6,305.281	0.36457	-0.32609	-0.16304
0										
12,492.00	89.300	142.130	6,624.565	5,330.565	-5,480.563	3,316.269	6,397.093	0.25373	0.04348	-0.25000
0										
12,585.00	89.400	142.160	6,625.620	5,331.620	-5,553.988	3,373.336	6,489.894	0.11226	0.10753	0.03226
0										
12,677.00	89.330	142.110	6,626.640	5,332.640	-5,626.614	3,429.803	6,581.697	0.09350	-0.07609	-0.05435
0										
12,769.00	89.200	142.530	6,627.820	5,333.820	-5,699.420	3,486.033	6,673.516	0.47785	-0.14130	0.45652
0										
12,862.00	89.230	141.550	6,629.094	5,335.094	-5,772.737	3,543.232	6,766.302	1.05416	0.03226	-1.05376
0										
12,954.00	89.300	141.430	6,630.274	5,336.275	-5,844.721	3,600.511	6,858.030	0.15100	0.07609	-0.13043
0										
13,047.00	89.230	141.310	6,631.467	5,337.468	-5,917.366	3,658.566	6,950.740	0.14937	-0.07527	-0.12903
0										

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EQT
Survey Report

Database:	EDM_Definitive	Local Co-ordinate Reference:	Well M08H
Company:	EQT (Chevron Data) 02-13-21	TVD Reference:	Air RKB @ 1294.000usft (Highlands 9)
Project:	Marshall County, WV Chevron	MD Reference:	Air RKB @ 1294.000usft (Highlands 9)
Site:	Longworth	North Reference:	True
Well:	M08H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Longworth 8H 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)
13,139.00 0	88.960	141.870	6,632.921	5,338.921	-5,989.447	3,715.716	7,042.476	0.67568	-0.29348	0.60870
13,231.00 0	89.090	141.420	6,634.486	5,340.486	-6,061.581	3,772.797	7,134.217	0.50906	0.14130	-0.48913
13,323.00 0	89.060	142.150	6,635.971	5,341.971	-6,133.855	3,829.702	7,225.974	0.79404	-0.03261	0.79348
13,416.00 0	89.130	141.540	6,637.440	5,343.440	-6,206.975	3,887.149	7,318.737	0.66014	0.07527	-0.65591
13,508.00 0	89.060	141.850	6,638.893	5,344.893	-6,279.160	3,944.167	7,410.485	0.34540	-0.07609	0.33696
13,601.00 0	88.760	142.050	6,640.662	5,346.662	-6,352.382	4,001.477	7,503.254	0.38767	-0.32258	0.21505
13,693.00 0	88.990	141.800	6,642.469	5,348.469	-6,424.791	4,058.202	7,595.022	0.36921	0.25000	-0.27174
13,785.00 0	88.760	140.770	6,644.275	5,350.275	-6,496.561	4,115.731	7,686.714	1.14693	-0.25000	-1.11957
13,877.00 0	88.890	140.990	6,646.162	5,352.162	-6,567.921	4,173.766	7,778.350	0.27772	0.14130	0.23913
13,969.00 0	88.790	140.410	6,648.024	5,354.024	-6,639.100	4,232.025	7,869.962	0.63961	-0.10870	-0.63043
14,061.00 0	88.830	141.470	6,649.935	5,355.935	-6,710.520	4,289.984	7,961.605	1.15275	0.04348	1.15217
14,154.00 0	89.030	140.460	6,651.672	5,357.672	-6,782.745	4,348.544	8,054.252	1.10692	0.21505	-1.08602
14,246.00 0	88.960	140.770	6,653.285	5,359.285	-6,853.841	4,406.911	8,145.856	0.34539	-0.07609	0.33696
14,338.00 0	88.860	140.740	6,655.035	5,361.035	-6,925.077	4,465.104	8,237.478	0.11348	-0.10870	-0.03261
14,430.00 0	88.930	140.810	6,656.810	5,362.810	-6,996.334	4,523.271	8,329.103	0.10759	0.07609	0.07609
14,523.00 0	88.790	140.990	6,658.660	5,364.660	-7,068.492	4,581.912	8,421.740	0.24517	-0.15054	0.19355
14,615.00 0	88.790	140.490	6,660.603	5,366.603	-7,139.710	4,640.120	8,513.355	0.54336	0.00000	-0.54348
14,708.00 0	88.790	140.930	6,662.566	5,368.567	-7,211.671	4,698.998	8,605.963	0.47301	0.00000	0.47312
14,800.00 0	88.960	141.510	6,664.373	5,370.373	-7,283.376	4,756.610	8,697.646	0.65684	0.18478	0.63043
14,892.00 0	88.730	141.410	6,666.227	5,372.227	-7,355.321	4,813.919	8,789.359	0.27260	-0.25000	-0.10870
14,984.00 0	88.660	141.470	6,668.322	5,374.323	-7,427.242	4,871.251	8,881.065	0.10020	-0.07609	0.06522
15,077.00 0	88.690	141.350	6,670.473	5,376.473	-7,499.914	4,929.244	8,973.763	0.13297	0.03226	-0.12903
15,169.00 0	89.200	141.430	6,672.167	5,378.167	-7,571.792	4,986.643	9,065.470	0.56112	0.55435	0.08696
15,262.00 0	89.130	140.920	6,673.522	5,379.522	-7,644.237	5,044.943	9,158.153	0.55347	-0.07527	-0.54839
15,354.00 0	88.890	141.240	6,675.112	5,381.112	-7,715.804	5,102.732	9,249.822	0.43474	-0.26087	0.34783

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EQT
Survey Report

Database:	EDM_Definitive	Local Co-ordinate Reference:	Well M08H
Company:	EQT (Chevron Data) 02-13-21	TVD Reference:	Air RKB @ 1294.000usft (Highlands 9)
Project:	Marshall County, WV Chevron	MD Reference:	Air RKB @ 1294.000usft (Highlands 9)
Site:	Longworth	North Reference:	True
Well:	M08H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Longworth 8H 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)	Buird Rate (°/100usft)	Turn Rate (°/100usft)
15,446.00	89.130	141.250	6,676.701	5,382.701	-7,787.538	5,160.314	9,341.513	0.26110	0.26087	0.01087
0										
15,539.00	89.090	141.510	6,678.146	5,384.146	-7,860.190	5,218.353	9,434.221	0.28283	-0.04301	0.27957
0										
15,631.00	88.990	141.300	6,679.687	5,385.687	-7,932.085	5,275.736	9,525.933	0.25279	-0.10870	-0.22826
0										
15,724.00	88.620	141.340	6,681.627	5,387.627	-8,004.669	5,333.845	9,618.624	0.40017	-0.39785	0.04301
0										
15,816.00	88.790	141.590	6,683.706	5,389.706	-8,076.616	5,391.146	9,710.333	0.32856	0.18478	0.27174
0										
15,908.00	88.760	141.580	6,685.673	5,391.673	-8,148.684	5,448.297	9,802.059	0.03437	-0.03261	-0.01087
0										
16,000.00	88.760	141.370	6,687.664	5,393.664	-8,220.642	5,505.587	9,893.772	0.22821	0.00000	-0.22826
0										
16,093.00	88.460	141.300	6,689.920	5,395.920	-8,293.236	5,563.673	9,986.457	0.33124	-0.32258	-0.07527
0										
16,187.00	88.420	141.260	6,692.479	5,398.479	-8,366.549	5,622.449	10,080.12	0.06017	-0.04255	-0.04255
0							6			
16,279.00	88.420	141.500	6,695.015	5,401.016	-8,438.401	5,679.850	10,171.81	0.26077	0.00000	0.26087
0							3			
16,372.00	88.490	141.220	6,697.523	5,403.523	-8,511.016	5,737.900	10,264.49	0.31024	0.07527	-0.30108
0							6			
16,464.00	88.420	141.330	6,700.003	5,406.004	-8,582.764	5,795.433	10,356.17	0.14169	-0.07609	0.11957
0							1			
16,556.00	88.490	141.300	6,702.484	5,408.484	-8,654.553	5,852.915	10,447.85	0.08278	0.07609	-0.03261
0							1			
16,649.00	88.560	141.570	6,704.878	5,410.878	-8,727.245	5,910.872	10,540.54	0.29983	0.07527	0.29032
0							7			
16,741.00	88.460	141.360	6,707.270	5,413.270	-8,799.186	5,968.168	10,632.24	0.25275	-0.10870	-0.22826
0							9			
Last Survey=16761' MD/ 6703' TVD										
16,761.00	88.620	141.500	6,707.780	5,413.780	-8,814.818	5,980.634	10,652.18	1.06286	0.80000	0.70000
0							3			
Projection to TD/Deepest End of Well=16783' MD/ 6705' TVD, M08H BHL										
16,783.00	88.620	141.500	6,708.310	5,414.310	-8,832.030	5,994.325	10,674.114	0.00000	0.00000	0.00000
0										

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Survey Report

Database:	EDM_Definitive	Local Co-ordinate Reference:	Well M08H
Company:	EQT (Chevron Data) 02-13-21	TVD Reference:	Air RKB @ 1294.000usft (Highlands 9)
Project:	Marshall County, WV Chevron	MD Reference:	Air RKB @ 1294.000usft (Highlands 9)
Site:	Longworth	North Reference:	True
Well:	M08H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Longworth 8H As Drilled		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(-579.261)	(-447.297)	(usft)	(usft)		
- Shape									
Longworth 8H KOP	0.000	0.000	5,863.48 8	-579.261	-447.297	492,451.205	1,623,698.951	39.8455552	80.7280558°W
- actual wellpath hits target center									
- Point									
Longworth 8H LP	0.000	0.000	6,557.07 5	-1,282.656	-26.664	491,742.133	1,624,109.942	39.8436242	80.7265577°W
- actual wellpath hits target center									
- Point									
Longworth 8H TD	0.000	0.000	6,708.31 0	-8,832.030	5,994.325	484,111.266	1,630,027.309	39.8228968	80.7051208°W
- actual wellpath hits target center									
- Point									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
6,819.854	6,523.800	Top of Marcellus@6524' TVD		0.0000		

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
5,923.000	5,863.488	-579.261	-447.297	KOP=5923' MD	
7,125.000	6,557.075	-1,282.656	-26.664	LP=7125' MD/ 6557' TVD	
16,761.000	6,707.780	-8,814.818	5,980.634	Last Survey=16761' MD/ 6708' TVD	
16,783.000	6,708.310	-8,832.030	5,994.325	Projection to TD/Deepest Point of Well=16783' MD/ 6708' TVD	

Checked By: _____ Approved By: _____ Date: _____

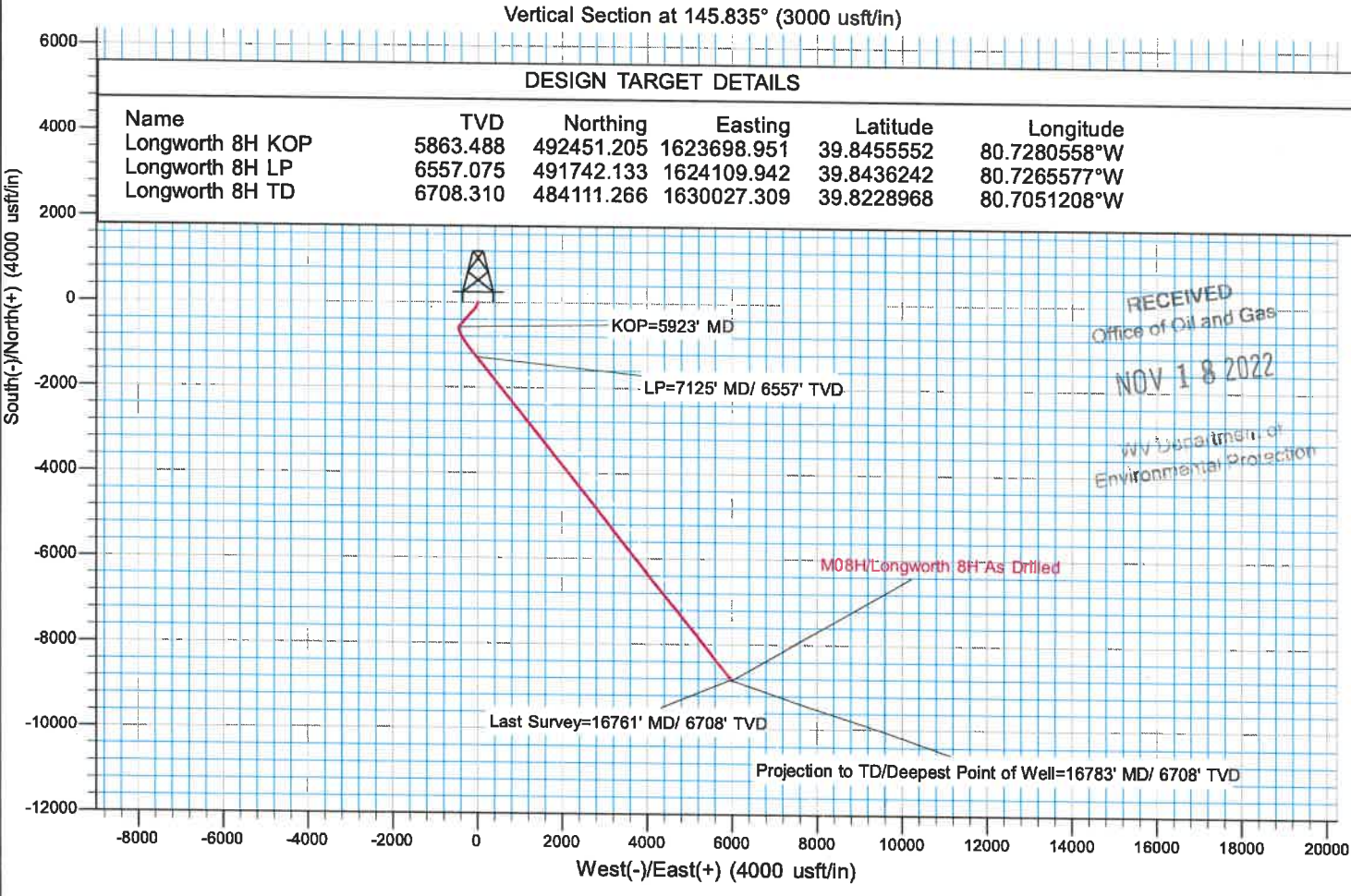
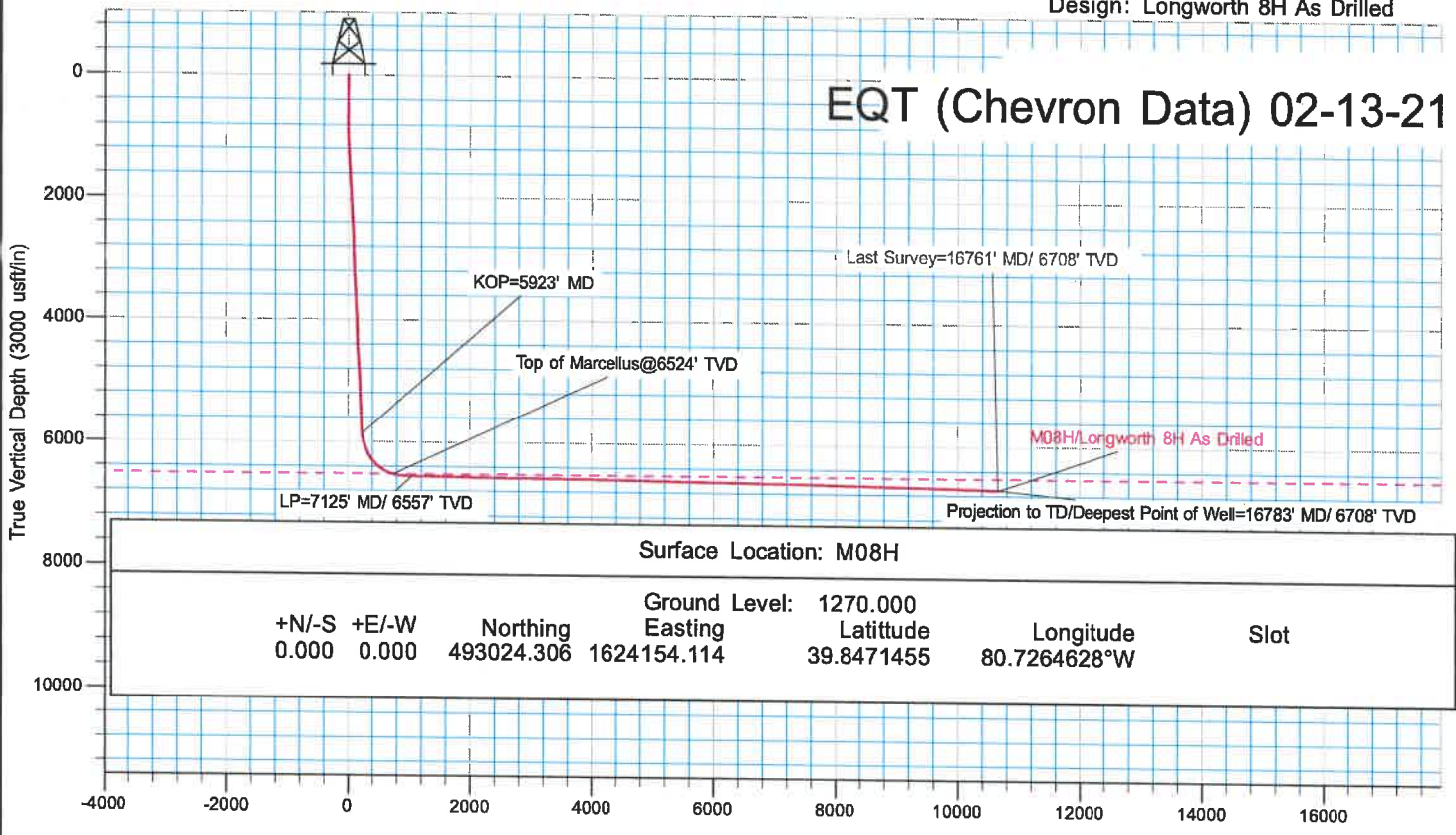
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KB Elevation= Air RKB @ 1294.000usft (Highlands 9)
 Ground Elevation= 1270.000
 All measurements were taken from KB Elevation

Project: Marshall County, WV Chevron
 Site: Longworth
 Well: M08H
 Wellbore: OH
 Design: Longworth 8H As Drilled

EQT (Chevron Data) 02-13-21



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