

103-02868

**PHOENIX**  
TECHNOLOGY SERVICES



## **EQT Production - Marcellus**

Wetzel County, WV  
Wetzel County 514380  
Well 514380

**Main Wellbore**

**Design: As Drilled Surveys**

## **Standard Survey Report**

09 December, 2013

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Office of Oil and Gas  
JAN 02 2015  
WV Department of  
Environmental Protection



Where energy meets innovation.

01/23/2015

<b>Database:</b> EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b> Site Wetzel County 514380	RECEIVED Office of Oil and Gas  JAN 02 2015
<b>Company:</b> EQT Production - Marcellus	<b>TVD Reference:</b> KB @ 1346.0usft	
<b>Project:</b> Wetzel County, WV	<b>MD Reference:</b> KB @ 1346.0usft	
<b>Site:</b> Wetzel County 514380	<b>North Reference:</b> Grid	
<b>Well:</b> Well 514380	<b>Survey Calculation Method:</b> Minimum Curvature	
<b>Wellbore:</b> Main Wellbore		
<b>Design:</b> As Drilled Surveys		

<b>Project</b> Wetzel County, WV	WV Department of Environmental Protection	
<b>Map System:</b> US State Plane 1927 (Exact solution)	<b>System Datum:</b> Mean Sea Level	Using geodetic scale factor
<b>Geo Datum:</b> NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b> West Virginia North 4701		

<b>Site</b> Wetzel County 514380					
<b>Site Position:</b>	<b>Northing:</b> 385,139.00 usft	<b>Latitude:</b> 39.55			
<b>From:</b> Map	<b>Easting:</b> 1,678,304.00 usft	<b>Longitude:</b> -80.64			
<b>Position Uncertainty:</b> 0.0 usft	<b>Slot Radius:</b> 13-3/16 "	<b>Grid Convergence:</b> -0.73 °			

<b>Well</b> Well 514380					
<b>Well Position</b> +N/-S	0.0 usft	<b>Northing:</b> 385,139.00 usft	<b>Latitude:</b> 39° 33' 6.564 N		
+E/-W	0.0 usft	<b>Easting:</b> 1,678,304.00 usft	<b>Longitude:</b> 80° 38' 27.205 W		
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b> usft	<b>Ground Level:</b> 1,330.0 usft		

<b>Wellbore</b> Main Wellbore					
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010_14	12/10/2012	-8.57	67.14	52,595

<b>Design</b> As Drilled Surveys					
<b>Audit Notes:</b>					
<b>Version:</b> 1.0	<b>Phase:</b> ACTUAL	<b>Tie On Depth:</b> 0.0			
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	144.85	

<b>Survey Program</b> Date 12/9/2013					
<b>From (')</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
0.00	6,263.0	514380 Gyrodata Gyro (Main Wellbore)	GYD_DP_MS	Gyrodata gyro-compassing and drop	
0.00	10,612.0	514380 MWD (Main Wellbore)	MWD	MWD - Standard	

<b>Survey</b>											
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)	
0.0	0.00	0.00	0.0	-1,346.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
103.0	0.60	206.10	103.0	-1,243.0	-0.5	-0.2	0.3	0.58	0.58	0.00	
203.0	0.51	206.31	203.0	-1,143.0	-1.4	-0.7	0.7	0.09	-0.09	0.21	
303.0	0.45	205.60	303.0	-1,043.0	-2.1	-1.0	1.1	0.06	-0.06	-0.71	
403.0	0.12	171.02	403.0	-943.0	-2.6	-1.2	1.4	0.36	-0.33	-34.58	
503.0	0.08	162.68	503.0	-843.0	-2.7	-1.1	1.6	0.04	-0.04	-8.34	
603.0	0.07	188.66	603.0	-743.0	-2.9	-1.1	1.7	0.04	-0.01	25.98	
703.0	0.03	239.58	703.0	-643.0	-2.9	-1.2	1.7	0.06	-0.04	50.92	

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<b>Project:</b>	Wetzel County, WV	<b>MD Reference:</b>	KB @ 1346.0usft
<b>Site:</b>	Wetzel County 514380	<b>North Reference:</b>	Grid
<b>Well:</b>	Well 514380	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Main Wellbore		
<b>Design:</b>	As Drilled Surveys		

**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)
803.0	0.04	234.84	803.0	-543.0	-3.0	-1.2	1.7	0.01	0.01	-4.74
903.0	0.04	229.06	903.0	-443.0	-3.0	-1.3	1.7	0.00	0.00	-5.78
1,003.0	0.06	105.47	1,003.0	-343.0	-3.0	-1.3	1.8	0.09	0.02	-123.59
1,103.0	0.19	91.90	1,103.0	-243.0	-3.1	-1.0	1.9	0.13	0.13	-13.57
1,203.0	0.27	104.06	1,203.0	-143.0	-3.1	-0.6	2.2	0.09	0.08	12.16
1,303.0	0.34	107.36	1,303.0	-43.0	-3.3	-0.1	2.6	0.07	0.07	3.30
1,403.0	0.34	105.47	1,403.0	57.0	-3.4	0.4	3.1	0.01	0.00	-1.89
1,503.0	0.44	107.17	1,503.0	157.0	-3.6	1.1	3.6	0.10	0.10	1.70
1,603.0	0.46	111.16	1,603.0	257.0	-3.9	1.8	4.2	0.04	0.02	3.99
1,703.0	0.62	124.61	1,703.0	357.0	-4.3	2.7	5.1	0.20	0.16	13.45
1,803.0	0.83	125.84	1,803.0	457.0	-5.1	3.7	6.3	0.21	0.21	1.23
1,903.0	1.15	123.83	1,903.0	557.0	-6.1	5.1	7.9	0.32	0.32	-2.01
2,003.0	1.18	123.96	2,002.9	656.9	-7.2	6.8	9.8	0.03	0.03	0.13
2,103.0	1.11	124.25	2,102.9	756.9	-8.3	8.5	11.7	0.07	-0.07	0.29
2,203.0	1.03	124.41	2,202.9	856.9	-9.4	10.0	13.4	0.08	-0.08	0.16
2,303.0	0.84	122.75	2,302.9	956.9	-10.3	11.4	14.9	0.19	-0.19	-1.66
2,403.0	0.80	124.21	2,402.9	1,056.9	-11.1	12.5	16.3	0.05	-0.04	1.46
2,503.0	0.81	123.98	2,502.9	1,156.9	-11.8	13.7	17.6	0.01	0.01	-0.23
2,603.0	0.77	128.90	2,602.8	1,256.8	-12.7	14.8	18.9	0.08	-0.04	4.92
2,703.0	0.72	130.03	2,702.8	1,356.8	-13.5	15.8	20.1	0.05	-0.05	1.13
2,803.0	0.65	129.77	2,802.8	1,456.8	-14.3	16.7	21.3	0.07	-0.07	-0.26
2,903.0	0.67	129.42	2,902.8	1,556.8	-15.0	17.6	22.4	0.02	0.02	-0.35
3,003.0	0.67	129.29	3,002.8	1,656.8	-15.7	18.5	23.5	0.00	0.00	-0.13
3,103.0	0.77	128.73	3,102.8	1,756.8	-16.5	19.5	24.7	0.10	0.10	-0.56
3,203.0	0.79	131.04	3,202.8	1,856.8	-17.4	20.6	26.1	0.04	0.02	2.31
3,303.0	0.81	132.05	3,302.8	1,956.8	-18.3	21.6	27.4	0.02	0.02	1.01
3,403.0	0.84	128.96	3,402.8	2,056.8	-19.3	22.7	28.8	0.05	0.03	-3.09
3,503.0	0.64	128.22	3,502.8	2,156.8	-20.1	23.7	30.1	0.20	-0.20	-0.74
3,603.0	0.37	126.13	3,602.8	2,256.8	-20.6	24.4	30.9	0.27	-0.27	-2.09
3,703.0	0.20	113.51	3,702.8	2,356.8	-20.9	24.8	31.3	0.18	-0.17	-12.62
3,803.0	0.18	105.73	3,802.8	2,456.8	-21.0	25.1	31.6	0.03	-0.02	-7.78
3,903.0	0.10	82.67	3,902.8	2,556.8	-21.0	25.4	31.8	0.10	-0.08	-23.06
4,003.0	0.04	188.43	4,002.8	2,656.8	-21.0	25.4	31.8	0.12	-0.06	105.76
4,103.0	0.06	310.34	4,102.8	2,756.8	-21.0	25.4	31.8	0.09	0.02	121.91
4,203.0	0.02	182.90	4,202.8	2,856.8	-21.0	25.4	31.8	0.07	-0.04	-127.44
4,303.0	0.05	5.35	4,302.8	2,956.8	-21.0	25.4	31.8	0.07	0.03	-177.55
4,403.0	0.06	57.19	4,402.8	3,056.8	-20.9	25.4	31.7	0.05	0.01	57.84
4,503.0	0.20	90.16	4,502.8	3,156.8	-20.9	25.6	31.8	0.15	0.14	32.97
4,603.0	0.27	81.55	4,602.8	3,256.8	-20.9	26.0	32.0	0.08	0.07	-8.61
4,703.0	0.38	72.19	4,702.8	3,356.8	-20.7	26.6	32.2	0.12	0.11	-9.36
4,803.0	0.56	57.37	4,802.8	3,456.8	-20.4	27.3	32.4	0.22	0.18	-14.82
4,903.0	0.55	58.59	4,902.8	3,556.8	-19.8	28.1	32.4	0.02	-0.01	1.22

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Survey Report



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<b>Well:</b>	Well 514380	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Main Wellbore		
<b>Design:</b>	As Drilled Surveys		

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)	
5,003.0	0.59	56.27	5,002.8	3,656.8	-19.3	29.0	32.5	0.05	0.04	-2.32	
5,103.0	0.61	55.06	5,102.7	3,756.7	-18.7	29.8	32.5	0.02	0.02	-1.21	
5,203.0	0.59	63.40	5,202.7	3,856.7	-18.2	30.7	32.6	0.09	-0.02	8.34	
5,303.0	0.55	73.39	5,302.7	3,956.7	-17.8	31.7	32.8	0.11	-0.04	9.99	
5,403.0	0.58	73.87	5,402.7	4,056.7	-17.5	32.6	33.1	0.03	0.03	0.48	
5,503.0	0.51	88.01	5,502.7	4,156.7	-17.4	33.5	33.5	0.15	-0.07	14.14	
5,603.0	0.39	78.02	5,602.7	4,256.7	-17.3	34.3	33.9	0.14	-0.12	-9.99	
5,703.0	0.38	73.96	5,702.7	4,356.7	-17.1	35.0	34.1	0.03	-0.01	-4.06	
5,803.0	0.31	72.90	5,802.7	4,456.7	-17.0	35.5	34.3	0.07	-0.07	-1.06	
5,903.0	0.40	70.65	5,902.7	4,556.7	-16.8	36.1	34.5	0.09	0.09	-2.25	
6,003.0	0.44	82.59	6,002.7	4,656.7	-16.6	36.8	34.8	0.10	0.04	11.94	
6,103.0	0.61	109.47	6,102.7	4,756.7	-16.7	37.7	35.4	0.29	0.17	26.88	
6,203.0	0.62	131.36	6,202.7	4,856.7	-17.3	38.6	36.4	0.23	0.01	21.89	
<b>Gyro Tie In MD=6263'</b>											
6,263.0	0.59	142.14	6,262.7	4,916.7	-17.7	39.1	37.0	0.20	-0.05	17.97	
6,292.0	0.50	141.10	6,291.7	4,945.7	-17.9	39.2	37.3	0.31	-0.31	-3.59	
6,356.0	0.40	129.30	6,355.7	5,009.7	-18.3	39.6	37.7	0.21	-0.16	-18.44	
6,387.0	0.40	111.10	6,386.7	5,040.7	-18.4	39.8	37.9	0.41	0.00	-58.71	
6,419.0	1.80	99.20	6,418.7	5,072.7	-18.5	40.4	38.4	4.41	4.38	-37.19	
6,450.0	5.80	114.90	6,449.6	5,103.6	-19.3	42.3	40.1	13.21	12.90	50.65	
6,482.0	9.80	112.00	6,481.3	5,135.3	-21.0	46.3	43.8	12.56	12.50	-9.06	
6,514.0	11.10	112.70	6,512.8	5,166.8	-23.2	51.6	48.7	4.08	4.06	2.19	
6,545.0	12.00	112.50	6,543.2	5,197.2	-25.6	57.4	53.9	2.91	2.90	-0.65	
6,577.0	13.80	110.60	6,574.3	5,228.3	-28.2	64.0	59.9	5.78	5.63	-5.94	
6,608.0	16.10	108.70	6,604.3	5,258.3	-30.8	71.5	66.4	7.58	7.42	-6.13	
6,640.0	18.80	109.00	6,634.8	5,288.8	-33.9	80.6	74.2	8.44	8.44	0.94	
6,672.0	20.00	107.30	6,665.0	5,319.0	-37.3	90.7	82.7	4.14	3.75	-5.31	
6,703.0	21.60	103.30	6,694.0	5,348.0	-40.1	101.3	91.2	6.90	5.16	-12.90	
6,735.0	23.60	99.20	6,723.5	5,377.5	-42.5	113.4	100.1	7.95	6.25	-12.81	
6,767.0	25.70	97.90	6,752.6	5,406.6	-44.5	126.6	109.3	6.78	6.56	-4.06	
6,798.0	26.80	98.90	6,780.4	5,434.4	-46.5	140.2	118.7	3.82	3.55	3.23	
6,830.0	30.20	102.00	6,808.5	5,462.5	-49.3	155.2	129.6	11.58	10.63	9.69	
6,862.0	33.80	104.50	6,835.7	5,489.7	-53.2	171.7	142.3	11.99	11.25	7.81	
6,893.0	37.50	105.90	6,860.9	5,514.9	-57.9	189.1	156.2	12.22	11.94	4.52	
6,925.0	40.70	106.70	6,885.7	5,539.7	-63.6	208.5	172.0	10.12	10.00	2.50	
6,957.0	42.50	106.30	6,909.6	5,563.6	-69.6	228.8	188.7	5.69	5.63	-1.25	
6,988.0	42.40	105.40	6,932.5	5,586.5	-75.4	248.9	204.9	1.99	-0.32	-2.90	
7,020.0	42.20	104.30	6,956.2	5,610.2	-80.9	269.8	221.4	2.40	-0.63	-3.44	
7,052.0	41.70	103.80	6,980.0	5,634.0	-86.1	290.5	237.6	1.88	-1.56	-4.56	
7,083.0	41.00	102.50	7,003.2	5,657.2	-90.7	310.5	252.9	3.57	-2.26	-4.19	
7,115.0	40.30	101.60	7,027.5	5,681.5	-95.1	330.8	268.2	2.85	-2.19	-2.81	
7,147.0	40.10	103.40	7,051.9	5,705.9	-99.6	351.0	283.5	3.68	-0.63	-5.63	
7,178.0	42.50	107.20	7,075.2	5,729.2	-105.0	370.7	299.3	11.20	7.74	12.26	

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<b>Wellbore:</b>	Main Wellbore		
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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)
7,210.0	45.60	111.30	7,098.2	5,752.2	-112.3	391.7	317.4	13.16	9.69	12.81
7,242.0	47.50	113.90	7,120.2	5,774.2	-121.3	413.2	337.0	8.37	5.94	8.13
7,273.0	49.70	117.10	7,140.7	5,794.7	-131.3	434.1	357.3	10.50	7.10	10.32
7,305.0	51.30	119.60	7,161.1	5,815.1	-143.0	455.9	379.4	7.83	5.00	7.81
7,337.0	53.00	122.10	7,180.7	5,834.7	-156.0	477.5	402.5	8.14	5.31	7.81
7,368.0	55.50	124.50	7,198.9	5,852.9	-169.8	498.6	425.9	10.22	8.06	7.74
7,400.0	57.90	126.20	7,216.4	5,870.4	-185.3	520.4	451.1	8.72	7.50	5.31
7,432.0	59.80	128.70	7,233.0	5,887.0	-201.9	542.1	477.2	8.94	5.94	7.81
7,464.0	62.20	130.20	7,248.5	5,902.5	-219.7	563.7	504.2	8.55	7.50	4.69
7,495.0	65.50	133.00	7,262.2	5,916.2	-238.2	584.5	531.3	13.38	10.65	9.03
7,527.0	69.50	134.80	7,274.4	5,928.4	-258.7	605.8	560.3	13.54	12.50	5.63
7,559.0	72.50	137.20	7,284.8	5,938.8	-280.4	626.8	590.2	11.75	9.38	7.50
7,590.0	75.50	139.80	7,293.4	5,947.4	-302.8	646.5	619.8	12.59	9.68	8.39
7,622.0	77.10	143.00	7,300.9	5,954.9	-327.0	665.9	650.8	10.93	5.00	10.00
7,654.0	78.50	144.80	7,307.7	5,961.7	-352.3	684.4	682.1	7.03	4.38	5.63
7,685.0	80.50	144.90	7,313.4	5,967.4	-377.2	701.9	712.6	6.46	6.45	0.32
7,717.0	83.50	146.50	7,317.8	5,971.8	-403.4	719.8	744.2	10.60	9.38	5.00
7,749.0	85.30	149.90	7,320.9	5,974.9	-430.5	736.5	776.0	11.98	5.63	10.63
7,813.0	89.20	151.20	7,324.0	5,978.0	-486.1	768.0	839.6	6.42	6.09	2.03
7,876.0	90.80	152.80	7,324.0	5,978.0	-541.8	797.5	902.1	3.59	2.54	2.54
7,940.0	90.90	153.10	7,323.0	5,977.0	-598.7	826.6	965.5	0.49	0.16	0.47
8,003.0	91.60	153.50	7,321.7	5,975.7	-655.0	854.9	1,027.8	1.28	1.11	0.63
8,067.0	91.50	153.30	7,319.9	5,973.9	-712.2	883.6	1,091.1	0.35	-0.16	-0.31
8,130.0	90.30	152.20	7,319.0	5,973.0	-768.2	912.4	1,153.4	2.58	-1.90	-1.75
8,193.0	90.30	152.50	7,318.6	5,972.6	-824.0	941.7	1,215.9	0.48	0.00	0.48
8,257.0	90.20	153.40	7,318.3	5,972.3	-881.0	970.8	1,279.3	1.41	-0.16	1.41
8,320.0	90.10	153.50	7,318.2	5,972.2	-937.4	998.9	1,341.6	0.22	-0.16	0.16
8,383.0	88.90	153.70	7,318.7	5,972.7	-993.8	1,026.9	1,403.8	1.93	-1.90	0.32
8,447.0	88.80	153.70	7,320.0	5,974.0	-1,051.2	1,055.3	1,467.0	0.16	-0.16	0.00
8,510.0	88.10	153.40	7,321.7	5,975.7	-1,107.6	1,083.3	1,529.3	1.21	-1.11	-0.48
8,573.0	87.90	153.10	7,323.9	5,977.9	-1,163.8	1,111.7	1,591.6	0.57	-0.32	-0.48
8,637.0	86.70	151.90	7,326.9	5,980.9	-1,220.5	1,141.2	1,654.9	2.65	-1.88	-1.88
8,700.0	86.80	152.00	7,330.5	5,984.5	-1,276.0	1,170.8	1,717.4	0.22	0.16	0.16
8,764.0	88.30	151.90	7,333.2	5,987.2	-1,332.4	1,200.8	1,780.8	2.35	2.34	-0.16
8,827.0	91.50	151.90	7,333.3	5,987.3	-1,388.0	1,230.5	1,843.3	5.08	5.08	0.00
8,890.0	91.50	151.50	7,331.7	5,985.7	-1,443.4	1,260.4	1,905.8	0.63	0.00	-0.63
8,954.0	90.80	150.80	7,330.4	5,984.4	-1,499.5	1,291.2	1,969.4	1.55	-1.09	-1.09
9,017.0	90.50	151.30	7,329.7	5,983.7	-1,554.6	1,321.7	2,032.1	0.93	-0.48	0.79
9,081.0	90.80	151.70	7,329.0	5,983.0	-1,610.8	1,352.3	2,095.6	0.78	0.47	0.63
9,144.0	90.80	151.40	7,328.1	5,982.1	-1,666.2	1,382.3	2,158.2	0.48	0.00	-0.48
9,207.0	89.40	150.70	7,328.0	5,982.0	-1,721.4	1,412.8	2,220.8	2.48	-2.22	-1.11
9,271.0	89.00	150.60	7,328.9	5,982.9	-1,777.1	1,444.1	2,284.5	0.64	-0.63	-0.16
9,334.0	87.50	150.10	7,330.8	5,984.8	-1,831.9	1,475.3	2,347.2	2.51	-2.38	-0.79

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<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Site Wetzel County 514380
<b>Company:</b>	EQT Production - Marcellus	<b>TVD Reference:</b>	KB @ 1346.0usft
<b>Project:</b>	Wetzel County, WV	<b>MD Reference:</b>	KB @ 1346.0usft
<b>Site:</b>	Wetzel County 514380	<b>North Reference:</b>	Grid
<b>Well:</b>	Well 514380	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Main Wellbore		
<b>Design:</b>	As Drilled Surveys		

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)
9,398.0	88.50	150.90	7,333.0	5,987.0	-1,887.5	1,506.8	2,410.8	2.00	1.56	1.25
9,461.0	89.10	151.00	7,334.4	5,988.4	-1,942.6	1,537.4	2,473.5	0.97	0.95	0.16
9,524.0	89.40	151.20	7,335.2	5,989.2	-1,997.7	1,567.8	2,536.1	0.57	0.48	0.32
9,588.0	90.10	151.30	7,335.5	5,989.5	-2,053.9	1,598.6	2,599.7	1.10	1.09	0.16
9,651.0	90.20	152.20	7,335.3	5,989.3	-2,109.3	1,628.4	2,662.2	1.44	0.16	1.43
9,715.0	88.60	153.10	7,336.0	5,990.0	-2,166.2	1,657.8	2,725.6	2.87	-2.50	1.41
9,778.0	89.30	153.40	7,337.1	5,991.1	-2,222.4	1,686.2	2,787.9	1.21	1.11	0.48
9,841.0	89.80	153.30	7,337.6	5,991.6	-2,278.7	1,714.4	2,850.2	0.81	0.79	-0.16
9,905.0	90.40	153.00	7,337.5	5,991.5	-2,335.8	1,743.3	2,913.6	1.05	0.94	-0.47
9,968.0	90.30	153.00	7,337.1	5,991.1	-2,392.0	1,771.9	2,975.9	0.16	-0.16	0.00
10,031.0	89.00	153.40	7,337.5	5,991.5	-2,448.2	1,800.3	3,038.3	2.16	-2.06	0.63
10,095.0	89.50	153.80	7,338.3	5,992.3	-2,505.5	1,828.8	3,101.5	1.00	0.78	0.63
10,158.0	90.30	153.50	7,338.5	5,992.5	-2,562.0	1,856.8	3,163.8	1.36	1.27	-0.48
10,221.0	90.90	153.60	7,337.8	5,991.8	-2,618.4	1,884.8	3,226.0	0.97	0.95	0.16
10,285.0	90.70	152.60	7,336.9	5,990.9	-2,675.4	1,913.8	3,289.4	1.59	-0.31	-1.56
10,348.0	88.90	151.20	7,337.1	5,991.1	-2,731.0	1,943.4	3,351.9	3.62	-2.86	-2.22
10,411.0	89.60	151.50	7,337.9	5,991.9	-2,786.3	1,973.6	3,414.5	1.21	1.11	0.48
10,474.0	90.00	150.90	7,338.2	5,992.2	-2,841.5	2,004.0	3,477.1	1.14	0.63	-0.95
10,538.0	90.10	150.40	7,338.1	5,992.1	-2,897.3	2,035.4	3,540.8	0.80	0.16	-0.78
<b>Final Survey MD=10556'</b>										
10,556.0	90.30	150.40	7,338.0	5,992.0	-2,912.9	2,044.2	3,558.7	1.11	1.11	0.00
<b>Projection to Bit MD=10612'</b>										
10,612.0	90.30	150.40	7,337.7	5,991.7	-2,961.6	2,071.9	3,614.4	0.00	0.00	0.00

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,263.0	6,262.7	-17.7	39.1	Gyro Tie In MD=6263'
10,556.0	7,338.0	-2,912.9	2,044.2	Final Survey MD=10556'
10,612.0	7,337.7	-2,961.6	2,071.9	Projection to Bit MD=10612'

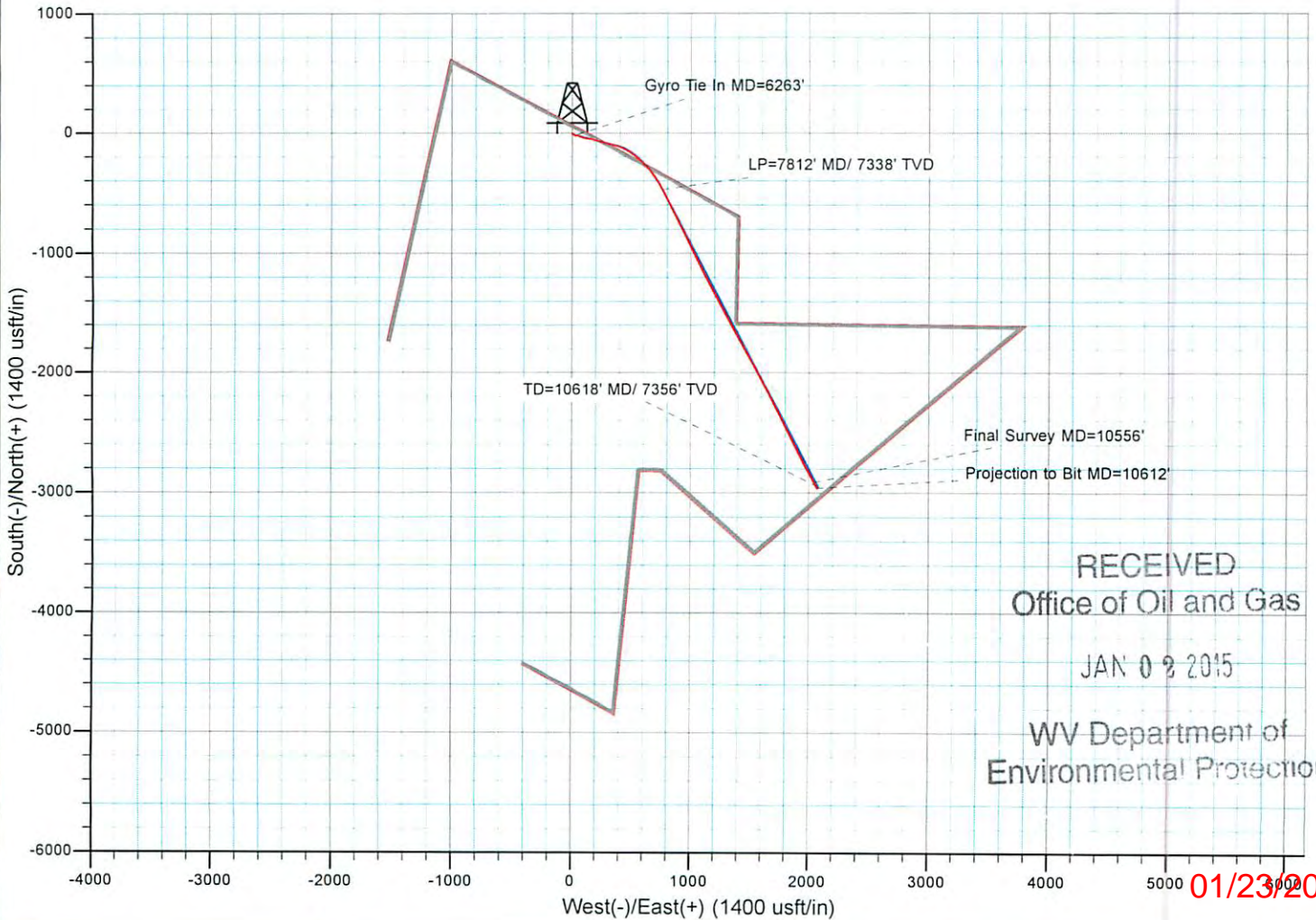
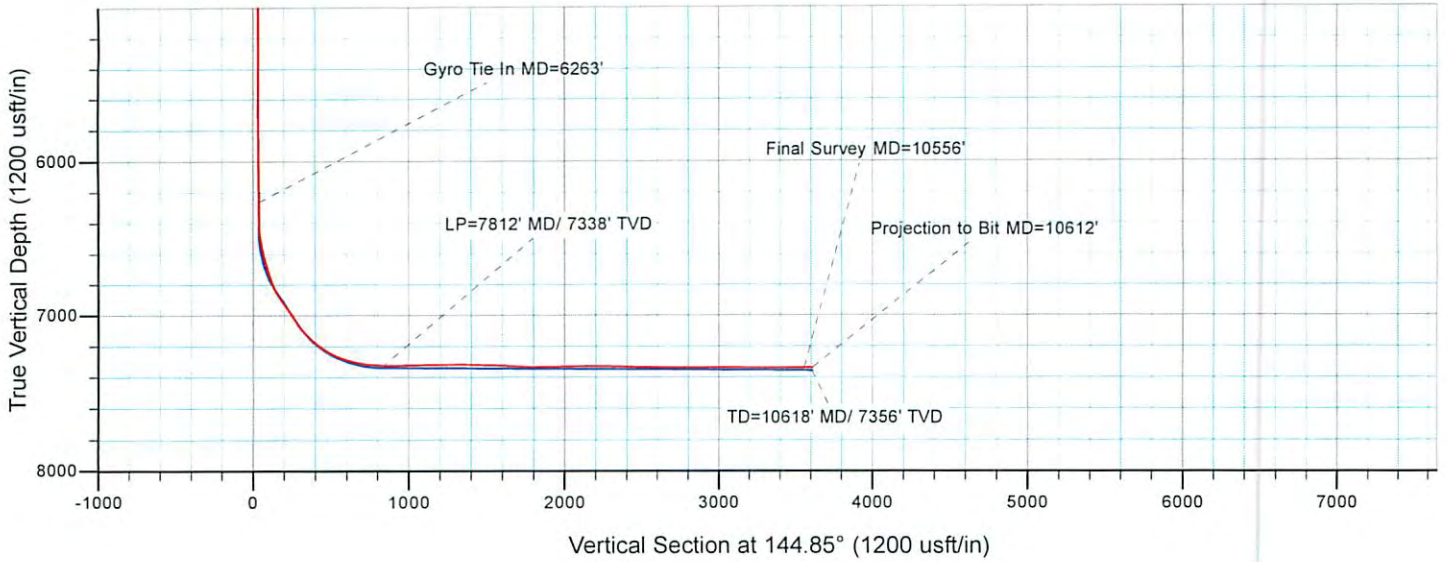
Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

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# EQT Production - Marcellus

Project: Wetzel County, WV  
 Site: Wetzel County 514380  
 Well: Well 514380  
 Wellbore: Main Wellbore  
 Design: As Drilled Surveys



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