

17.06706

PHOENIX
TECHNOLOGY SERVICES



EQT Production - Marcellus

Doddridge County, WV Grid

Doddridge County 515939

Well #515939

API 47-1706706

Main Wellbore

Design: 515939 As Drilled Surveys

Standard Survey Report

01 June, 2015



Where energy meets innovation.

WV Department of
Environmental Protection

10/16/2015

| | | | |
|------------------|----------------------------|-------------------------------------|------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Site Doddridge County 515939 |
| Company: | EQT Production - Marcellus | TVD Reference: | KB@23 @ 1193.0usft |
| Project: | Doddridge County, WV Grid | MD Reference: | KB@23 @ 1193.0usft |
| Site: | Doddridge County 515939 | North Reference: | Gnd |
| Well: | Well #515939 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Main Wellbore | | |
| Design: | 515939 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) | |
| 810.0 | 0.13 | 128.75 | 810.0 | -383.0 | -1.7 | 0.5 | -1.6 | 0.03 | 0.02 | 10.81 | |
| 910.0 | 0.29 | 140.66 | 910.0 | -283.0 | -1.9 | 0.7 | -1.9 | 0.16 | 0.16 | 11.91 | |
| 1,010.0 | 0.26 | 144.52 | 1,010.0 | -183.0 | -2.3 | 1.0 | -2.4 | 0.04 | -0.03 | 3.86 | |
| 1,110.0 | 0.13 | 99.30 | 1,110.0 | -83.0 | -2.5 | 1.3 | -2.7 | 0.19 | -0.13 | -45.22 | |
| 1,210.0 | 0.43 | 41.81 | 1,210.0 | 17.0 | -2.2 | 1.6 | -2.8 | 0.38 | 0.30 | -57.49 | |
| 1,310.0 | 0.53 | 48.69 | 1,310.0 | 117.0 | -1.7 | 2.2 | -2.7 | 0.12 | 0.10 | 6.88 | |
| 1,410.0 | 0.51 | 44.88 | 1,410.0 | 217.0 | -1.0 | 2.9 | -2.7 | 0.04 | -0.02 | -3.81 | |
| 1,510.0 | 0.55 | 46.21 | 1,510.0 | 317.0 | -0.4 | 3.6 | -2.7 | 0.04 | 0.04 | 1.33 | |
| 1,610.0 | 0.56 | 47.31 | 1,610.0 | 417.0 | 0.3 | 4.3 | -2.7 | 0.01 | 0.01 | 1.10 | |
| 1,710.0 | 0.34 | 26.72 | 1,710.0 | 517.0 | 0.9 | 4.8 | -2.6 | 0.27 | -0.22 | -20.59 | |
| 1,810.0 | 0.31 | 296.82 | 1,810.0 | 617.0 | 1.3 | 4.6 | -2.2 | 0.46 | -0.03 | -89.90 | |
| 1,910.0 | 0.39 | 295.59 | 1,910.0 | 717.0 | 1.5 | 4.1 | -1.6 | 0.08 | 0.08 | -1.23 | |
| 2,010.0 | 0.31 | 304.19 | 2,010.0 | 817.0 | 1.8 | 3.6 | -1.1 | 0.10 | -0.08 | 8.60 | |
| 2,110.0 | 0.16 | 250.01 | 2,110.0 | 917.0 | 1.9 | 3.2 | -0.7 | 0.25 | -0.15 | -54.18 | |
| 2,210.0 | 3.76 | 156.07 | 2,209.9 | 1,016.9 | -1.1 | 4.4 | -3.8 | 3.77 | 3.60 | -93.94 | |
| 2,310.0 | 7.20 | 158.28 | 2,309.4 | 1,116.4 | -9.9 | 8.1 | -12.8 | 3.45 | 3.44 | 2.21 | |
| 2,410.0 | 8.22 | 170.73 | 2,408.5 | 1,215.5 | -22.8 | 11.5 | -24.6 | 1.95 | 1.02 | 12.45 | |
| 2,510.0 | 8.56 | 178.40 | 2,507.5 | 1,314.5 | -37.3 | 12.9 | -36.3 | 1.17 | 0.34 | 7.67 | |
| 2,610.0 | 6.30 | 184.91 | 2,606.6 | 1,413.6 | -50.2 | 12.6 | -45.6 | 2.41 | -2.26 | 6.51 | |
| 2,710.0 | 4.30 | 182.42 | 2,706.2 | 1,513.2 | -59.4 | 12.0 | -52.0 | 2.01 | -2.00 | -2.49 | |
| 2,810.0 | 3.47 | 179.95 | 2,806.0 | 1,613.0 | -66.2 | 11.8 | -56.9 | 0.85 | -0.83 | -2.47 | |
| 2,910.0 | 1.82 | 170.61 | 2,905.8 | 1,712.8 | -70.8 | 12.1 | -60.5 | 1.70 | -1.65 | -9.34 | |
| 3,010.0 | 0.26 | 169.78 | 3,005.8 | 1,812.8 | -72.6 | 12.4 | -62.0 | 1.56 | -1.56 | -0.83 | |
| 3,110.0 | 0.13 | 20.38 | 3,105.8 | 1,912.8 | -72.7 | 12.5 | -62.1 | 0.38 | -0.13 | -149.40 | |
| 3,210.0 | 0.12 | 354.33 | 3,205.8 | 2,012.8 | -72.5 | 12.5 | -62.0 | 0.06 | -0.01 | -26.05 | |
| 3,310.0 | 0.22 | 6.54 | 3,305.8 | 2,112.8 | -72.2 | 12.5 | -61.8 | 0.11 | 0.10 | 12.21 | |
| 3,410.0 | 0.11 | 337.33 | 3,405.8 | 2,212.8 | -71.9 | 12.5 | -61.6 | 0.14 | -0.11 | -29.21 | |
| 3,510.0 | 0.12 | 327.45 | 3,505.8 | 2,312.8 | -71.7 | 12.4 | -61.4 | 0.02 | 0.01 | -9.88 | |
| 3,610.0 | 0.18 | 333.00 | 3,605.8 | 2,412.8 | -71.5 | 12.3 | -61.1 | 0.06 | 0.06 | 5.55 | |
| 3,710.0 | 0.19 | 322.43 | 3,705.8 | 2,512.8 | -71.2 | 12.1 | -60.8 | 0.04 | 0.01 | -10.57 | |
| 3,810.0 | 0.18 | 295.00 | 3,805.8 | 2,612.8 | -71.0 | 11.9 | -60.5 | 0.09 | -0.01 | -27.43 | |
| 3,910.0 | 0.36 | 284.43 | 3,905.8 | 2,712.8 | -70.9 | 11.4 | -60.1 | 0.19 | 0.18 | -10.57 | |
| 4,010.0 | 0.51 | 286.86 | 4,005.8 | 2,812.8 | -70.7 | 10.7 | -59.5 | 0.15 | 0.15 | 2.43 | |
| 4,110.0 | 0.69 | 291.40 | 4,105.8 | 2,912.8 | -70.3 | 9.7 | -58.5 | 0.19 | 0.18 | 4.54 | |
| 4,210.0 | 0.86 | 293.24 | 4,205.8 | 3,012.8 | -69.8 | 8.5 | -57.3 | 0.17 | 0.17 | 1.84 | |
| 4,310.0 | 0.90 | 289.40 | 4,305.8 | 3,112.8 | -69.3 | 7.0 | -55.9 | 0.07 | 0.04 | 3.84 | |
| 4,410.0 | 1.08 | 291.55 | 4,405.8 | 3,212.8 | -68.7 | 5.4 | -54.4 | 0.18 | 0.18 | 2.15 | |
| 4,510.0 | 1.20 | 291.76 | 4,505.8 | 3,312.8 | -67.9 | 3.6 | -52.6 | 0.12 | 0.12 | 0.21 | |
| 4,610.0 | 1.50 | 295.93 | 4,605.7 | 3,412.7 | -67.0 | 1.4 | -50.5 | 0.32 | 0.30 | -1.83 | |
| 4,710.0 | 1.71 | 294.10 | 4,705.7 | 3,512.7 | -65.8 | -1.1 | -47.9 | 0.22 | 0.21 | 3.28 | |
| 4,810.0 | 1.85 | 297.38 | 4,805.6 | 3,612.6 | -64.4 | -3.9 | -45.0 | 0.17 | 0.14 | 0.90 | |
| 4,910.0 | 1.76 | 296.48 | 4,905.6 | 3,712.6 | -63.0 | -6.7 | -42.0 | 0.09 | -0.09 | 0.90 | |

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| Well: | Well #515939 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Main Wellbore | | |
| Design: | 515939 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) | |
| Gyro Tie In=5005' MD | | | | | | | | | | | |
| 5,006.0 | 2.09 | 295.83 | 5,001.5 | 3,808.5 | -61.6 | -9.6 | -39.0 | 0.34 | 0.34 | -0.68 | |
| 5,026.0 | 2.20 | 292.30 | 5,021.5 | 3,828.5 | -61.3 | -10.3 | -38.4 | 0.86 | 0.55 | -17.65 | |
| KOP=5088' MD | | | | | | | | | | | |
| 5,089.0 | 2.60 | 274.90 | 5,084.5 | 3,891.5 | -60.7 | -12.8 | -36.2 | 1.31 | 0.63 | -27.62 | |
| 5,121.0 | 5.10 | 226.60 | 5,116.4 | 3,923.4 | -61.6 | -14.6 | -35.7 | 12.15 | 7.81 | -150.94 | |
| 5,152.0 | 10.00 | 214.40 | 5,147.1 | 3,954.1 | -64.8 | -17.1 | -36.3 | 16.54 | 15.81 | -39.35 | |
| 5,184.0 | 13.90 | 213.50 | 5,178.4 | 3,985.4 | -70.3 | -20.8 | -37.9 | 12.20 | 12.19 | -2.81 | |
| 5,216.0 | 17.00 | 211.50 | 5,209.3 | 4,016.3 | -77.5 | -25.4 | -40.2 | 9.83 | 9.69 | -6.25 | |
| 5,247.0 | 19.80 | 209.60 | 5,238.7 | 4,045.7 | -85.9 | -30.3 | -43.1 | 9.24 | 9.03 | -6.13 | |
| 5,279.0 | 22.90 | 209.10 | 5,268.5 | 4,075.5 | -96.1 | -36.1 | -46.7 | 9.70 | 9.69 | -1.56 | |
| 5,311.0 | 25.10 | 209.10 | 5,297.7 | 4,104.7 | -107.4 | -42.4 | -50.9 | 6.88 | 6.88 | 0.00 | |
| 5,342.0 | 27.10 | 209.60 | 5,325.5 | 4,132.5 | -119.3 | -49.1 | -55.1 | 6.49 | 6.45 | 1.61 | |
| 5,372.0 | 28.90 | 210.70 | 5,352.0 | 4,159.0 | -131.5 | -56.1 | -59.4 | 6.24 | 6.00 | 3.67 | |
| 5,404.0 | 30.40 | 212.00 | 5,379.8 | 4,186.8 | -145.0 | -64.4 | -63.8 | 5.10 | 4.69 | 4.06 | |
| 5,436.0 | 31.70 | 212.10 | 5,407.3 | 4,214.3 | -159.0 | -73.1 | -68.3 | 4.07 | 4.06 | 0.31 | |
| 5,468.0 | 33.60 | 211.30 | 5,434.2 | 4,241.2 | -173.7 | -82.2 | -73.0 | 6.09 | 5.94 | -2.50 | |
| 5,499.0 | 35.50 | 211.70 | 5,459.7 | 4,266.7 | -188.7 | -91.4 | -77.9 | 6.17 | 6.13 | 1.29 | |
| 512419 Top of Perf | | | | | | | | | | | |
| 5,531.0 | 37.00 | 212.10 | 5,485.5 | 4,292.5 | -204.7 | -101.4 | -83.0 | 4.75 | 4.69 | 1.25 | |
| 516940 LP | | | | | | | | | | | |
| 5,579.7 | 38.00 | 212.96 | 5,524.2 | 4,331.2 | -229.8 | -117.4 | -90.8 | 2.32 | 2.06 | 1.76 | |
| 5,594.0 | 38.30 | 213.20 | 5,535.4 | 4,342.4 | -237.1 | -122.2 | -93.0 | 2.32 | 2.07 | 1.71 | |
| 5,689.0 | 39.80 | 212.90 | 5,609.2 | 4,416.2 | -287.3 | -154.8 | -108.1 | 1.59 | 1.58 | -0.32 | |
| 5,784.0 | 38.50 | 211.70 | 5,682.9 | 4,489.9 | -338.0 | -186.9 | -123.9 | 1.58 | -1.37 | -1.26 | |
| 5,877.0 | 41.10 | 211.10 | 5,754.3 | 4,561.3 | -388.8 | -217.9 | -140.6 | 2.83 | 2.80 | -0.65 | |
| 5,972.0 | 42.50 | 210.90 | 5,825.1 | 4,632.1 | -443.1 | -250.5 | -158.8 | 1.48 | 1.47 | -0.21 | |
| 6,067.0 | 42.50 | 213.60 | 5,895.2 | 4,702.2 | -497.4 | -284.7 | -175.8 | 1.92 | 0.00 | 2.84 | |
| 6,098.0 | 42.10 | 213.70 | 5,918.1 | 4,725.1 | -514.7 | -296.3 | -180.9 | 1.31 | -1.29 | 0.32 | |
| 6,130.0 | 41.80 | 217.70 | 5,941.9 | 4,748.9 | -532.1 | -308.7 | -185.3 | 8.41 | -0.94 | 12.50 | |
| 6,161.0 | 42.20 | 221.50 | 5,964.9 | 4,771.9 | -548.1 | -322.0 | -188.2 | 8.30 | 1.29 | 12.26 | |
| 6,193.0 | 42.20 | 224.80 | 5,988.7 | 4,795.7 | -563.7 | -336.7 | -189.9 | 6.93 | 0.00 | 10.31 | |
| 6,224.0 | 41.30 | 229.40 | 6,011.8 | 4,818.8 | -577.8 | -351.8 | -190.1 | 10.30 | -2.90 | 14.84 | |
| 6,255.0 | 40.40 | 234.30 | 6,035.2 | 4,842.2 | -590.3 | -367.7 | -188.6 | 10.74 | -2.90 | 15.81 | |
| 6,287.0 | 40.30 | 239.60 | 6,059.6 | 4,866.6 | -601.6 | -385.1 | -185.3 | 10.73 | -0.31 | 16.56 | |
| 6,319.0 | 40.70 | 243.90 | 6,084.0 | 4,891.0 | -611.4 | -403.4 | -180.2 | 8.81 | 1.25 | 13.44 | |
| 6,350.0 | 39.50 | 248.00 | 6,107.7 | 4,914.7 | -619.6 | -421.6 | -173.9 | 9.36 | -3.87 | 13.23 | |
| 510841 Top of Perf | | | | | | | | | | | |
| 6,355.2 | 39.30 | 248.95 | 6,111.7 | 4,918.7 | -620.8 | -424.6 | -172.8 | 12.27 | -3.84 | 18.37 | |
| 6,382.0 | 38.40 | 254.00 | 6,132.6 | 4,939.6 | -626.1 | -440.6 | -166.0 | 12.27 | -3.36 | 18.82 | |
| 6,413.0 | 38.70 | 259.00 | 6,156.8 | 4,963.8 | -630.6 | -459.3 | -156.7 | 10.10 | 0.97 | 16.13 | |
| 6,445.0 | 39.10 | 262.70 | 6,181.7 | 4,988.7 | -633.8 | -479.2 | -145.7 | 7.37 | 1.25 | 11.56 | |
| 6,476.0 | 38.80 | 268.40 | 6,205.9 | 5,012.9 | -635.3 | -498.6 | -133.7 | 11.60 | -0.97 | 18.39 | |
| 6,507.0 | 38.90 | 274.30 | 6,230.0 | 5,037.0 | -634.9 | -518.0 | -120.3 | 11.94 | 0.32 | 19.03 | |

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| Survey | | | | | | | | | | | |
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| 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) | |
| 6,539.0 | 39.90 | 278.60 | 6,254.7 | 5,061.7 | -632.6 | -538.2 | -105.0 | 9.08 | 3.13 | 13.44 | |
| 6,570.0 | 41.30 | 282.00 | 6,278.3 | 5,085.3 | -629.0 | -558.0 | -89.0 | 8.45 | 4.52 | 10.97 | |
| 6,602.0 | 42.90 | 286.00 | 6,302.0 | 5,109.0 | -623.8 | -578.8 | -71.1 | 9.76 | 5.00 | 12.50 | |
| 6,633.0 | 44.10 | 290.00 | 6,324.5 | 5,131.5 | -617.2 | -599.1 | -52.6 | 9.69 | 3.87 | 12.90 | |
| 6,665.0 | 45.60 | 294.00 | 6,347.2 | 5,154.2 | -608.7 | -620.0 | -32.3 | 9.98 | 4.69 | 12.50 | |
| 6,696.0 | 47.50 | 297.00 | 6,368.5 | 5,175.5 | -599.0 | -640.3 | -11.4 | 9.32 | 6.13 | 9.68 | |
| 6,728.0 | 49.90 | 300.00 | 6,389.7 | 5,196.7 | -587.5 | -661.4 | 11.3 | 10.29 | 7.50 | 9.38 | |
| 513773 Top of Perf | | | | | | | | | | | |
| 6,744.4 | 51.11 | 301.98 | 6,400.1 | 5,207.1 | -581.0 | -672.3 | 23.4 | 11.90 | 7.41 | 12.07 | |
| 6,760.0 | 52.30 | 303.80 | 6,409.7 | 5,216.7 | -574.4 | -682.6 | 35.3 | 11.90 | 7.60 | 11.67 | |
| 6,792.0 | 54.50 | 307.90 | 6,428.8 | 5,235.8 | -559.3 | -703.4 | 60.4 | 12.37 | 6.88 | 12.81 | |
| 6,823.0 | 55.70 | 311.10 | 6,446.6 | 5,253.6 | -543.2 | -723.0 | 85.6 | 9.31 | 3.87 | 10.32 | |
| 6,855.0 | 57.10 | 314.20 | 6,464.3 | 5,271.3 | -525.1 | -742.6 | 112.1 | 9.18 | 4.38 | 9.69 | |
| 6,886.0 | 59.90 | 317.20 | 6,480.5 | 5,287.5 | -506.2 | -761.0 | 138.5 | 12.23 | 9.03 | 9.68 | |
| 6,917.0 | 63.00 | 319.70 | 6,495.3 | 5,302.3 | -485.8 | -779.1 | 165.7 | 12.25 | 10.00 | 8.06 | |
| 6,949.0 | 66.90 | 322.40 | 6,508.8 | 5,315.8 | -463.3 | -797.3 | 194.7 | 14.38 | 12.19 | 8.44 | |
| 6,980.0 | 69.80 | 324.90 | 6,520.3 | 5,327.3 | -440.1 | -814.4 | 223.3 | 11.99 | 9.35 | 8.06 | |
| 7,012.0 | 72.20 | 326.00 | 6,530.7 | 5,337.7 | -415.1 | -831.5 | 253.3 | 8.17 | 7.50 | 3.44 | |
| 7,043.0 | 75.10 | 327.10 | 6,539.4 | 5,346.4 | -390.3 | -847.9 | 282.7 | 9.96 | 9.35 | 3.55 | |
| 7,075.0 | 78.10 | 327.70 | 6,546.8 | 5,353.8 | -364.1 | -864.7 | 313.4 | 9.55 | 9.38 | 1.88 | |
| 7,106.0 | 80.30 | 329.00 | 6,552.7 | 5,359.7 | -338.2 | -880.7 | 343.3 | 8.21 | 7.10 | 4.19 | |
| 7,137.0 | 81.80 | 331.00 | 6,557.5 | 5,364.5 | -311.7 | -896.0 | 373.2 | 8.00 | 4.84 | 6.45 | |
| 7,169.0 | 83.30 | 332.40 | 6,561.6 | 5,368.6 | -283.7 | -911.0 | 404.0 | 6.39 | 4.69 | 4.38 | |
| 7,201.0 | 84.40 | 333.50 | 6,565.1 | 5,372.1 | -255.4 | -925.5 | 434.6 | 4.85 | 3.44 | 3.44 | |
| 515939 LP | | | | | | | | | | | |
| 7,228.7 | 85.29 | 334.48 | 6,567.5 | 5,374.5 | -230.6 | -937.6 | 461.1 | 4.79 | 3.23 | 3.55 | |
| 7,232.0 | 85.40 | 334.60 | 6,567.8 | 5,374.8 | -227.6 | -939.0 | 464.3 | 4.79 | 3.23 | 3.54 | |
| LP=7296' MD/ 6572' TVD | | | | | | | | | | | |
| 7,296.0 | 87.70 | 334.40 | 6,571.7 | 5,378.7 | -170.0 | -966.5 | 525.4 | 3.61 | 3.59 | -0.31 | |
| 7,390.0 | 91.10 | 334.60 | 6,572.6 | 5,379.6 | -85.1 | -1,006.9 | 615.4 | 3.62 | 3.62 | 0.21 | |
| 7,485.0 | 91.40 | 334.00 | 6,570.6 | 5,377.6 | 0.4 | -1,048.1 | 706.4 | 0.71 | 0.32 | -0.63 | |
| 512418 Top of Perf | | | | | | | | | | | |
| 7,508.8 | 90.74 | 334.03 | 6,570.1 | 5,377.1 | 21.8 | -1,058.6 | 729.2 | 2.77 | -2.77 | 0.11 | |
| 7,579.0 | 88.80 | 334.10 | 6,570.4 | 5,377.4 | 85.0 | -1,089.3 | 796.5 | 2.77 | -2.77 | 0.11 | |
| Deepest Point of Well=7874' MD/ 6571' TVD | | | | | | | | | | | |
| 7,674.0 | 88.40 | 333.00 | 6,572.7 | 5,379.7 | 170.0 | -1,131.6 | 887.9 | 1.23 | -0.42 | -1.16 | |
| 7,768.0 | 91.70 | 335.50 | 6,572.6 | 5,379.6 | 254.6 | -1,172.4 | 977.9 | 4.40 | 3.51 | 2.66 | |
| 7,862.0 | 91.60 | 334.00 | 6,569.9 | 5,376.9 | 339.6 | -1,212.5 | 1,067.7 | 1.60 | -0.11 | -1.60 | |
| 7,957.0 | 91.50 | 334.90 | 6,567.4 | 5,374.4 | 425.3 | -1,253.4 | 1,158.6 | 0.95 | -0.11 | 0.95 | |
| 8,052.0 | 90.70 | 333.00 | 6,565.5 | 5,372.5 | 510.6 | -1,295.1 | 1,249.8 | 2.17 | -0.84 | -2.00 | |
| 8,147.0 | 91.20 | 334.70 | 6,564.0 | 5,371.0 | 595.9 | -1,337.0 | 1,341.0 | 1.87 | 0.58 | -1.79 | |
| 8,241.0 | 92.70 | 336.90 | 6,560.8 | 5,367.8 | 681.6 | -1,375.5 | 1,430.3 | 2.83 | 1.60 | 2.34 | |
| 8,335.0 | 92.30 | 334.60 | 6,556.7 | 5,363.7 | 767.2 | -1,414.1 | 1,519.5 | 2.48 | -0.43 | -2.45 | |

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|------------------|----------------------------|-------------------------------------|------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Site Doddridge County 515939 |
| Company: | EQT Production - Marcellus | TVD Reference: | KB@23 @ 1193.0usft |
| Project: | Doddridge County, WV Grid | MD Reference: | KB@23 @ 1193.0usft |
| Site: | Doddridge County 515939 | North Reference: | Grid |
| Well: | Well #515939 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Main Wellbore | | |
| Design: | 515939 As Drilled Surveys | | |

| 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) |
|--|-----------------|-------------|-----------------------|---------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 8,430.0 | 90.20 | 335.90 | 6,554.6 | 5,361.6 | 853.4 | -1,453.8 | 1,610.1 | 2.60 | -2.21 | 1.37 |
| 8,525.0 | 89.20 | 335.20 | 6,555.1 | 5,362.1 | 939.9 | -1,493.2 | 1,700.5 | 1.28 | -1.05 | -0.74 |
| 8,619.0 | 90.40 | 337.70 | 6,555.4 | 5,362.4 | 1,026.1 | -1,530.7 | 1,789.5 | 2.95 | 1.28 | 2.66 |
| 8,714.0 | 90.70 | 337.30 | 6,554.5 | 5,361.5 | 1,113.8 | -1,567.1 | 1,878.8 | 0.53 | 0.32 | -0.42 |
| 8,809.0 | 89.30 | 334.90 | 6,554.5 | 5,361.5 | 1,200.7 | -1,605.5 | 1,968.9 | 2.92 | -1.47 | -2.53 |
| 8,903.0 | 90.40 | 337.20 | 6,554.8 | 5,361.8 | 1,286.6 | -1,643.7 | 2,058.1 | 2.71 | 1.17 | 2.45 |
| 8,998.0 | 90.10 | 334.60 | 6,554.3 | 5,361.3 | 1,373.3 | -1,682.5 | 2,148.3 | 2.75 | -0.32 | -2.74 |
| 9,091.0 | 90.10 | 334.60 | 6,554.2 | 5,361.2 | 1,457.3 | -1,722.4 | 2,237.3 | 0.00 | 0.00 | 0.00 |
| 9,186.0 | 90.20 | 333.20 | 6,553.9 | 5,360.9 | 1,542.6 | -1,764.2 | 2,328.5 | 1.48 | 0.11 | -1.47 |
| 9,281.0 | 90.50 | 330.50 | 6,553.4 | 5,360.4 | 1,626.4 | -1,809.0 | 2,420.6 | 2.86 | 0.32 | -2.84 |
| 9,376.0 | 89.70 | 334.00 | 6,553.2 | 5,360.2 | 1,710.4 | -1,853.2 | 2,512.5 | 3.78 | -0.84 | 3.68 |
| 9,471.0 | 89.40 | 331.50 | 6,553.9 | 5,360.9 | 1,794.9 | -1,896.7 | 2,604.2 | 2.65 | -0.32 | -2.63 |
| 9,565.0 | 90.50 | 336.80 | 6,554.0 | 5,361.0 | 1,879.4 | -1,937.7 | 2,694.3 | 5.76 | 1.17 | 5.64 |
| 9,659.0 | 90.40 | 334.80 | 6,553.3 | 5,360.3 | 1,965.2 | -1,976.2 | 2,783.6 | 2.13 | -0.11 | -2.13 |
| 9,754.0 | 90.00 | 336.60 | 6,552.9 | 5,359.9 | 2,051.7 | -2,015.3 | 2,873.9 | 1.94 | -0.42 | 1.89 |
| 9,848.0 | 89.90 | 335.70 | 6,553.0 | 5,360.0 | 2,137.7 | -2,053.3 | 2,963.1 | 0.96 | -0.11 | -0.96 |
| 9,943.0 | 89.70 | 335.40 | 6,553.4 | 5,360.4 | 2,224.2 | -2,092.6 | 3,053.5 | 0.38 | -0.21 | -0.32 |
| 10,037.0 | 89.80 | 334.60 | 6,553.8 | 5,360.8 | 2,309.4 | -2,132.3 | 3,143.2 | 0.86 | 0.11 | -0.85 |
| Final Survey=10057' MD/ 6554' TVD | | | | | | | | | | |
| 10,057.0 | 89.90 | 334.30 | 6,553.8 | 5,360.8 | 2,327.4 | -2,141.0 | 3,162.4 | 1.58 | 0.50 | -1.50 |
| Projection to TD=10109' MD/ 6554' TVD - 515939 TD | | | | | | | | | | |
| 10,109.0 | 89.90 | 334.30 | 6,553.9 | 5,360.9 | 2,374.3 | -2,163.5 | 3,212.2 | 0.00 | 0.00 | 0.00 |

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | Comment |
|-----------------------|-----------------------|-------------------|--------------|---|
| | | +N/-S (usft) | +E/-W (usft) | |
| 5,006.0 | 5,001.5 | -61.6 | -9.6 | Gyro Tie In=5006' MD |
| 5,089.0 | 5,084.5 | -60.7 | -12.8 | KOP=5089' MD |
| 7,296.0 | 6,571.7 | -170.0 | -966.5 | LP=7296' MD/ 6572' TVD |
| 7,674.0 | 6,572.7 | 170.0 | -1,131.6 | Deepest Point of Well=7674' MD/ 6573' TVD |
| 10,057.0 | 6,553.8 | 2,327.4 | -2,141.0 | Final Survey=10057' MD/ 6554' TVD |
| 10,109.0 | 6,553.9 | 2,374.3 | -2,163.5 | Projection to TD=10109' MD/ 6554' TVD |

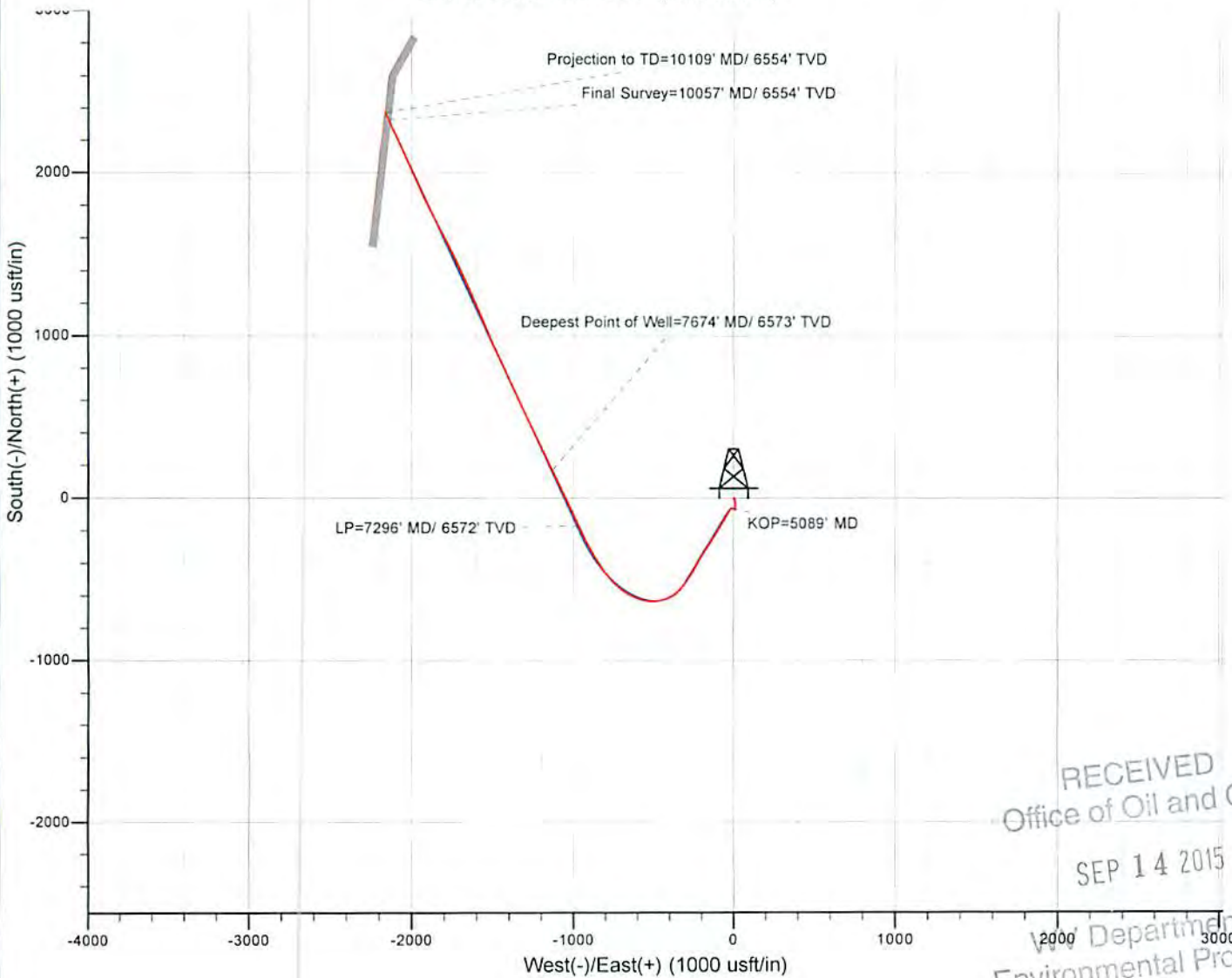
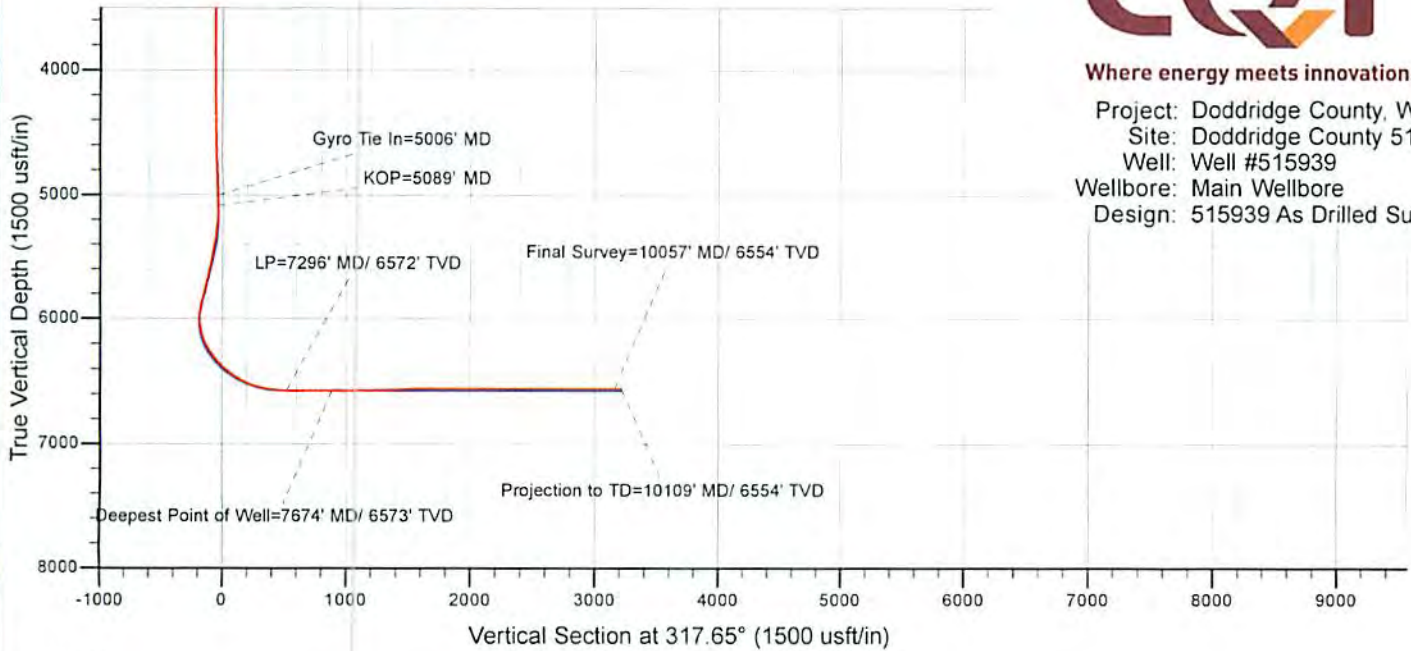
Checked By: _____ Approved By: _____ Date: _____

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Project: Doddridge County, WV Grid
 Site: Doddridge County 515939
 Well: Well #515939
 Wellbore: Main Wellbore
 Design: 515939 As Drilled Surveys



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