



EQT Production - Marcellus

Doddridge County, WV Grid

Doddridge County 514095

Well #514095

Main Wellbore

Design: 514095 As Drilled Surveys

Standard Survey Report

20 March, 2015



| | | | |
|-----------|----------------------------|------------------------------|-------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Site: Doddridge County 514095 |
| Company: | EQT Production - Marcellus | TVD Reference: | KB@23 ft @ 1275.0usft |
| Project: | Doddridge County, WV Grid | MD Reference: | KB@23 ft @ 1275.0usft |
| Site: | Doddridge County 514095 | North Reference: | Gnd |
| Well: | Well #514095 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Main Wellbore | | |
| Design: | 514095 As Drilled Surveys | | |

| | | | |
|------------------------------------|--------------------------------------|---------------|-----------------------------|
| Project: Doddridge County, WV Grid | | | |
| Map System: | US State Plane 1927 (Exact solution) | System Datum: | Mean Sea Level |
| Geo Datum: | NAD 1927 (NADCON CONUS) | | |
| Map Zone: | West Virginia North 4701 | | Using geodetic scale factor |

| | | | |
|-------------------------------|----------|-------------------|-------------------|
| Site: Doddridge County 514095 | | | |
| Site Position: | | Northing: | 260,320.20 usft |
| From: | Map | Easting: | 1,642,371.60 usft |
| Position Uncertainty: | 0.0 usft | Slot Radius: | 13-3/16 " |
| | | Latitude: | 39.21 |
| | | Longitude: | -80.76 |
| | | Grid Convergence: | -0.80 ° |

| | | | |
|----------------------|-------|----------|-----------------------------|
| Well: Well #514095 | | | |
| Well Position | +N/-S | 0.0 usft | Northing: 260,320.20 usft |
| | +E/-W | 0.0 usft | Easting: 1,642,371.60 usft |
| Position Uncertainty | | 0.0 usft | Wellhead Elevation: usft |
| | | | Latitude: 39° 12' 28.207 N |
| | | | Longitude: 80° 45' 43.522 W |
| | | | Ground Level: 1,252.0 usft |

| | | | | | |
|-------------------------|------------|-------------|-----------------|---------------|---------------------|
| Wellbore: Main Wellbore | | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2015 | 2/2/2015 | -8.45 | 66.71 | 52,159 |

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|-----------------------------------|-------------------------|--------------|--------------|---------------|-----|
| Design: 514095 As Drilled Surveys | | | | | |
| Audit Notes: | | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) | |
| | 0.0 | 0.0 | 0.0 | 343.54 | |

| | | | | | | |
|----------------|-----------|--------------------------------------|-----------|-----------------------------------|--|--|
| Survey Program | | Date | 3/20/2015 | | | |
| From (') | To (usft) | Survey (Wellbore) | Tool Name | Description | | |
| 0.00 | 5,231.0 | 514095 Gyrodata Gyro (Main Wellbore) | GYD_DP_MS | Gyrodata gyro-compassing and drop | | |
| 0.00 | 20,294.0 | 514095 PHX MWD (Main Wellbore) | MWD+IGRF | MWD+IGRF v3:standard declination | | |

| 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 | -1,275.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 23.0 | 0.00 | 0.00 | 23.0 | -1,252.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 123.0 | 0.59 | 249.48 | 123.0 | -1,152.0 | -0.2 | -0.5 | 0.0 | 0.59 | 0.59 | 0.00 |
| 223.0 | 0.25 | 235.52 | 223.0 | -1,052.0 | -0.5 | -1.1 | -0.1 | 0.35 | -0.34 | -13.96 |
| 323.0 | 0.20 | 245.43 | 323.0 | -952.0 | -0.7 | -1.5 | -0.2 | 0.06 | -0.05 | 9.91 |
| 423.0 | 0.16 | 231.02 | 423.0 | -852.0 | -0.8 | -1.8 | -0.3 | 0.06 | -0.04 | -14.41 |
| 523.0 | 0.29 | 268.43 | 523.0 | -752.0 | -0.9 | -2.1 | -0.3 | 0.19 | 0.13 | 37.41 |
| 623.0 | 0.30 | 266.13 | 623.0 | -652.0 | -1.0 | -2.6 | -0.2 | 0.02 | 0.01 | -2.30 |

| | | | |
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| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Site Doddridge County 514095 |
| Company: | EQT Production - Marcellus | TVD Reference: | KB@23 R @ 1275.0usft |
| Project: | Doddridge County, WV Grid | MD Reference: | KB@23 R @ 1275.0usft |
| Site: | Doddridge County 514095 | North Reference: | Grid |
| Well: | Well #514095 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Main Wellbore | | |
| Design: | 514095 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) | |
| 723.0 | 0.29 | 265.23 | 723.0 | -552.0 | -1.0 | -3.1 | -0.1 | 0.01 | -0.01 | -0.90 | |
| 823.0 | 0.28 | 276.13 | 823.0 | -452.0 | -1.0 | -3.6 | 0.1 | 0.06 | -0.01 | 10.90 | |
| 923.0 | 0.14 | 253.61 | 923.0 | -352.0 | -1.0 | -4.0 | 0.2 | 0.16 | -0.14 | -22.52 | |
| 1,023.0 | 0.48 | 272.18 | 1,023.0 | -252.0 | -1.0 | -4.5 | 0.3 | 0.35 | 0.34 | 18.57 | |
| 1,123.0 | 0.44 | 272.01 | 1,123.0 | -152.0 | -1.0 | -5.3 | 0.6 | 0.04 | -0.04 | -0.17 | |
| 1,223.0 | 0.59 | 264.60 | 1,223.0 | -52.0 | -1.0 | -6.2 | 0.8 | 0.16 | 0.15 | -7.41 | |
| 1,323.0 | 0.92 | 277.27 | 1,323.0 | 48.0 | -1.0 | -7.5 | 1.2 | 0.37 | 0.33 | 12.67 | |
| 1,423.0 | 1.12 | 276.49 | 1,423.0 | 148.0 | -0.8 | -9.3 | 1.9 | 0.20 | 0.20 | -0.78 | |
| 1,523.0 | 1.22 | 269.04 | 1,522.9 | 247.9 | -0.7 | -11.3 | 2.6 | 0.18 | 0.10 | -7.45 | |
| 1,623.0 | 1.06 | 262.26 | 1,622.9 | 347.9 | -0.8 | -13.3 | 3.0 | 0.21 | -0.16 | -6.78 | |
| 1,723.0 | 1.00 | 264.96 | 1,722.9 | 447.9 | -1.0 | -15.1 | 3.3 | 0.08 | -0.06 | 2.70 | |
| 1,823.0 | 1.06 | 272.59 | 1,822.9 | 547.9 | -1.0 | -16.9 | 3.8 | 0.15 | 0.06 | 7.63 | |
| 1,923.0 | 1.10 | 276.26 | 1,922.9 | 647.9 | -0.9 | -18.8 | 4.5 | 0.08 | 0.04 | 3.67 | |
| 2,023.0 | 1.10 | 275.89 | 2,022.8 | 747.8 | -0.7 | -20.7 | 5.2 | 0.01 | 0.00 | -0.37 | |
| 2,123.0 | 1.14 | 288.44 | 2,122.8 | 847.8 | -0.3 | -22.6 | 6.1 | 0.25 | 0.04 | 12.55 | |
| 2,223.0 | 1.14 | 295.70 | 2,222.8 | 947.8 | 0.5 | -24.4 | 7.4 | 0.14 | 0.00 | 7.26 | |
| 2,323.0 | 1.14 | 293.50 | 2,322.8 | 1,047.8 | 1.3 | -26.2 | 8.7 | 0.04 | 0.00 | -2.20 | |
| 2,423.0 | 1.23 | 291.81 | 2,422.8 | 1,147.8 | 2.1 | -28.1 | 10.0 | 0.10 | 0.09 | -1.69 | |
| 2,523.0 | 1.29 | 300.70 | 2,522.7 | 1,247.7 | 3.1 | -30.1 | 11.5 | 0.20 | 0.06 | 8.89 | |
| 2,623.0 | 1.51 | 298.74 | 2,622.7 | 1,347.7 | 4.3 | -32.2 | 13.2 | 0.23 | 0.22 | -1.96 | |
| 2,723.0 | 1.57 | 298.10 | 2,722.7 | 1,447.7 | 5.5 | -34.6 | 15.1 | 0.06 | 0.06 | -0.64 | |
| 2,823.0 | 1.64 | 296.92 | 2,822.6 | 1,547.6 | 6.8 | -37.1 | 17.1 | 0.08 | 0.07 | -1.18 | |
| 2,923.0 | 1.79 | 293.71 | 2,922.6 | 1,647.6 | 8.1 | -39.8 | 19.1 | 0.18 | 0.15 | -3.21 | |
| 3,023.0 | 1.93 | 296.18 | 3,022.5 | 1,747.5 | 9.5 | -42.7 | 21.2 | 0.16 | 0.14 | 2.47 | |
| 3,123.0 | 1.88 | 295.71 | 3,122.5 | 1,847.5 | 10.9 | -45.7 | 23.4 | 0.05 | -0.05 | -0.47 | |
| 3,223.0 | 2.11 | 292.41 | 3,222.4 | 1,947.4 | 12.4 | -48.9 | 25.7 | 0.26 | 0.23 | -3.30 | |
| 3,323.0 | 2.17 | 295.97 | 3,322.4 | 2,047.4 | 13.9 | -52.3 | 28.1 | 0.15 | 0.06 | 3.56 | |
| 3,423.0 | 1.99 | 291.59 | 3,422.3 | 2,147.3 | 15.4 | -55.6 | 30.5 | 0.24 | -0.18 | -4.38 | |
| 3,523.0 | 2.16 | 297.30 | 3,522.2 | 2,247.2 | 16.9 | -58.9 | 32.9 | 0.27 | 0.17 | 5.71 | |
| 3,623.0 | 2.06 | 293.21 | 3,622.2 | 2,347.2 | 18.4 | -62.2 | 35.3 | 0.18 | -0.10 | -4.09 | |
| 3,723.0 | 2.10 | 303.59 | 3,722.1 | 2,447.1 | 20.2 | -65.4 | 37.9 | 0.38 | 0.04 | 10.38 | |
| 3,823.0 | 2.57 | 300.33 | 3,822.0 | 2,547.0 | 22.3 | -68.9 | 40.9 | 0.49 | 0.47 | -3.26 | |
| 3,923.0 | 3.27 | 299.22 | 3,921.9 | 2,646.9 | 24.8 | -73.3 | 44.6 | 0.70 | 0.70 | -1.11 | |
| 4,023.0 | 4.54 | 301.51 | 4,021.6 | 2,746.6 | 28.3 | -79.2 | 49.6 | 1.28 | 1.27 | 2.29 | |
| 4,123.0 | 5.50 | 300.91 | 4,121.3 | 2,846.3 | 32.8 | -86.6 | 56.0 | 0.96 | 0.96 | -0.60 | |
| 4,223.0 | 6.06 | 300.90 | 4,220.7 | 2,945.7 | 38.0 | -95.3 | 63.4 | 0.56 | 0.56 | -0.01 | |
| 4,323.0 | 6.23 | 301.46 | 4,320.2 | 3,045.2 | 43.5 | -104.4 | 71.3 | 0.18 | 0.17 | 0.56 | |
| 4,423.0 | 6.66 | 302.96 | 4,419.5 | 3,144.5 | 49.5 | -113.9 | 79.8 | 0.46 | 0.43 | 1.50 | |
| 4,523.0 | 7.15 | 303.41 | 4,518.8 | 3,243.8 | 56.1 | -124.0 | 88.9 | 0.49 | 0.49 | 0.45 | |
| 4,623.0 | 7.67 | 307.74 | 4,618.0 | 3,343.0 | 63.6 | -134.5 | 99.1 | 0.76 | 0.52 | 4.33 | |
| 4,723.0 | 8.05 | 310.69 | 4,717.0 | 3,442.0 | 72.3 | -145.1 | 110.4 | 0.55 | 0.38 | 2.95 | |
| 4,823.0 | 8.15 | 313.62 | 4,816.0 | 3,541.0 | 81.7 | -155.5 | 122.4 | 0.42 | 0.10 | 2.93 | |



PHX
Survey Report



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|------------------|----------------------------|-------------------------------------|------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Site Doddridge County 514095 |
| Company: | EQT Production - MicroLink | TVD Reference: | KB@23 ft @ 1275.0usft |
| Project: | Doddridge County, WV Grid | MD Reference: | KB@23 ft @ 1275.0usft |
| Site: | Doddridge County 514095 | North Reference: | Grid |
| Well: | Well #514095 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Main Wellbore | | |
| Design: | 514095 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) |
| 4,923.0 | 8.56 | 316.01 | 4,915.0 | 3,640.0 | 92.0 | -165.8 | 135.2 | 0.54 | 0.41 | 2.39 |
| 5,023.0 | 8.54 | 317.77 | 5,013.9 | 3,738.9 | 102.8 | -176.0 | 148.5 | 0.26 | -0.02 | 1.76 |
| 5,123.0 | 8.89 | 320.58 | 5,112.7 | 3,837.7 | 114.3 | -185.9 | 162.3 | 0.55 | 0.35 | 2.81 |
| 5,223.0 | 9.20 | 322.91 | 5,211.5 | 3,936.5 | 126.6 | -195.6 | 176.9 | 0.48 | 0.31 | 2.33 |
| Gyro Tie line 5231' MD | | | | | | | | | | |
| 5,231.1 | 9.21 | 323.24 | 5,219.5 | 3,944.5 | 127.7 | -196.4 | 178.1 | 0.67 | 0.11 | 4.10 |
| 5,296.0 | 9.29 | 325.88 | 5,283.5 | 4,008.5 | 136.2 | -202.4 | 187.9 | 0.67 | 0.13 | 4.06 |
| 5,389.0 | 8.60 | 332.60 | 5,375.4 | 4,100.4 | 148.5 | -209.8 | 201.9 | 1.35 | -0.74 | 7.23 |
| 5,421.0 | 8.10 | 343.00 | 5,407.1 | 4,132.1 | 152.8 | -211.6 | 206.5 | 4.96 | -1.56 | 32.50 |
| 5,452.0 | 8.40 | 354.60 | 5,437.7 | 4,162.7 | 157.2 | -212.4 | 210.9 | 5.45 | 0.97 | 37.42 |
| 5,484.0 | 8.40 | 5.20 | 5,469.4 | 4,194.4 | 161.8 | -212.4 | 215.4 | 4.83 | 0.00 | 33.13 |
| 5,515.0 | 9.00 | 13.40 | 5,500.0 | 4,225.0 | 166.4 | -211.7 | 219.6 | 4.44 | 1.94 | 26.45 |
| 5,546.0 | 9.30 | 21.10 | 5,530.7 | 4,255.7 | 171.1 | -210.2 | 223.7 | 4.06 | 0.97 | 24.84 |
| 5,578.0 | 11.30 | 33.00 | 5,562.1 | 4,287.1 | 176.2 | -207.6 | 227.8 | 9.09 | 6.25 | 37.19 |
| 5,609.0 | 14.40 | 37.70 | 5,592.4 | 4,317.4 | 181.8 | -203.6 | 232.0 | 10.55 | 10.00 | 15.16 |
| 5,641.0 | 17.10 | 40.50 | 5,623.2 | 4,348.2 | 188.5 | -198.1 | 236.9 | 8.76 | 8.44 | 8.75 |
| 5,672.0 | 18.30 | 41.40 | 5,652.7 | 4,377.7 | 195.6 | -191.9 | 242.0 | 3.97 | 3.87 | 2.90 |
| 5,704.0 | 20.00 | 42.90 | 5,682.9 | 4,407.9 | 203.4 | -184.8 | 247.4 | 5.53 | 5.31 | 4.69 |
| 5,735.0 | 21.00 | 43.50 | 5,712.0 | 4,437.0 | 211.3 | -177.4 | 252.9 | 3.30 | 3.23 | 1.94 |
| 5,767.0 | 23.50 | 43.90 | 5,741.6 | 4,466.6 | 220.1 | -169.0 | 258.9 | 7.83 | 7.81 | 1.25 |
| 5,798.0 | 26.40 | 42.40 | 5,769.7 | 4,494.7 | 229.6 | -160.1 | 265.6 | 9.57 | 9.35 | -4.84 |
| 5,830.0 | 29.50 | 42.50 | 5,797.9 | 4,522.9 | 240.7 | -150.0 | 273.3 | 9.69 | 9.69 | 0.31 |
| 5,861.0 | 31.30 | 42.50 | 5,824.7 | 4,549.7 | 252.2 | -139.4 | 281.4 | 5.81 | 5.81 | 0.00 |
| 5,892.0 | 31.10 | 41.90 | 5,851.2 | 4,576.2 | 264.1 | -128.6 | 289.7 | 1.19 | -0.65 | -1.94 |
| 5,924.0 | 33.10 | 43.40 | 5,878.3 | 4,603.3 | 276.6 | -117.1 | 298.5 | 6.73 | 6.25 | 4.69 |
| 5,955.0 | 34.90 | 45.40 | 5,904.0 | 4,629.0 | 289.0 | -104.9 | 306.9 | 6.84 | 5.81 | 6.45 |
| 5,987.0 | 37.00 | 47.10 | 5,929.9 | 4,654.9 | 302.0 | -91.4 | 315.5 | 7.27 | 6.56 | 5.31 |
| 6,019.0 | 39.40 | 47.80 | 5,955.0 | 4,680.0 | 315.4 | -76.8 | 324.2 | 7.62 | 7.50 | 2.19 |
| 6,050.0 | 43.30 | 47.80 | 5,978.3 | 4,703.3 | 329.1 | -61.6 | 333.1 | 12.58 | 12.58 | 0.00 |
| 6,082.0 | 46.60 | 48.90 | 6,001.0 | 4,726.0 | 344.1 | -44.7 | 342.7 | 10.59 | 10.31 | 3.44 |
| 6,113.0 | 49.90 | 48.00 | 6,021.6 | 4,746.6 | 359.5 | -27.4 | 352.5 | 10.86 | 10.65 | -2.90 |
| 6,145.0 | 52.50 | 46.30 | 6,041.6 | 4,766.6 | 376.5 | -9.1 | 363.6 | 9.12 | 8.13 | -5.31 |
| 6,176.0 | 55.70 | 45.20 | 6,059.8 | 4,784.8 | 394.0 | 8.8 | 375.3 | 10.72 | 10.32 | -3.55 |
| 6,208.0 | 58.50 | 45.30 | 6,077.2 | 4,802.2 | 412.9 | 27.9 | 388.1 | 8.75 | 8.75 | 0.31 |
| 6,239.0 | 61.80 | 45.50 | 6,092.6 | 4,817.6 | 431.8 | 47.1 | 400.7 | 10.66 | 10.65 | 0.65 |
| 6,271.0 | 64.50 | 46.10 | 6,107.1 | 4,832.1 | 451.7 | 67.5 | 414.0 | 8.60 | 8.44 | 1.88 |
| 6,302.0 | 66.70 | 47.20 | 6,119.9 | 4,844.9 | 471.0 | 88.1 | 426.8 | 7.80 | 7.10 | 3.55 |
| 6,396.0 | 70.40 | 46.30 | 6,154.3 | 4,879.3 | 531.0 | 151.8 | 466.2 | 4.04 | 3.94 | -0.96 |
| 6,490.0 | 71.60 | 46.40 | 6,184.9 | 4,909.9 | 592.3 | 216.1 | 506.8 | 1.28 | 1.28 | 0.11 |
| 6,584.0 | 71.50 | 45.70 | 6,214.6 | 4,939.6 | 654.2 | 280.3 | 548.0 | 0.71 | 0.11 | -0.74 |
| 6,678.0 | 69.70 | 45.40 | 6,245.8 | 4,970.8 | 716.3 | 343.6 | 589.6 | 1.94 | 1.94 | -0.32 |
| 6,773.0 | 70.80 | 45.80 | 6,277.9 | 5,002.9 | 778.9 | 407.4 | 631.5 | 1.22 | 1.16 | 0.42 |
| 6,868.0 | 69.20 | 43.30 | 6,310.4 | 5,035.4 | 842.5 | 470.1 | 674.7 | 2.99 | -1.68 | -2.63 |

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Office of Oil and Gas
NOV 13 2015

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|-----------|----------------------------|------------------------------|-------------------------------|
| Database: | EDM 5000.1 Single User Di | Local Co-ordinate Reference: | Site: Doddridge County 514095 |
| Company: | EQT Production - Marmellus | TVD Reference: | K3@23 ft @ 1275 Cust |
| Project: | Doddridge County, WV Grid | MD Reference: | K5@23 ft @ 1275 Cust |
| Site: | Doddridge County 514095 | North Reference: | Grid |
| Well: | Well #514095 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Main Wellbore | | |
| Design: | 514095 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) |
| 6,962.0 | 70.30 | 43.90 | 6,343.0 | 5,068.0 | 906.3 | 530.9 | 718.7 | 1.31 | 1.17 | 0.64 |
| 7,056.0 | 68.20 | 44.10 | 6,376.3 | 5,101.3 | 969.6 | 591.9 | 762.1 | 2.24 | -2.23 | 0.21 |
| 7,151.0 | 69.10 | 44.30 | 6,410.8 | 5,135.8 | 1,033.0 | 653.6 | 805.4 | 0.97 | 0.95 | 0.21 |
| 7,245.0 | 68.40 | 45.20 | 6,444.9 | 5,169.9 | 1,095.2 | 715.3 | 847.6 | 1.16 | -0.74 | 0.96 |
| 7,340.0 | 70.10 | 45.20 | 6,478.6 | 5,203.6 | 1,157.8 | 778.3 | 889.8 | 1.79 | 1.79 | 0.00 |
| 7,434.0 | 69.20 | 45.70 | 6,511.3 | 5,236.3 | 1,219.6 | 841.1 | 931.3 | 1.08 | -0.96 | 0.53 |
| 7,529.0 | 70.70 | 45.90 | 6,543.8 | 5,268.8 | 1,281.8 | 905.1 | 972.8 | 1.59 | 1.58 | 0.21 |
| 7,623.0 | 68.70 | 47.10 | 6,576.4 | 5,301.4 | 1,342.5 | 969.1 | 1,012.9 | 2.44 | -2.13 | 1.28 |
| 7,655.0 | 68.80 | 47.30 | 6,588.0 | 5,313.0 | 1,362.8 | 990.9 | 1,026.1 | 0.66 | 0.31 | 0.63 |
| 7,686.0 | 69.00 | 47.30 | 6,599.2 | 5,324.2 | 1,382.4 | 1,012.2 | 1,038.9 | 0.65 | 0.65 | 0.00 |
| 7,718.0 | 69.10 | 45.40 | 6,610.6 | 5,335.6 | 1,403.0 | 1,033.8 | 1,052.6 | 5.55 | 0.31 | -5.94 |
| 7,749.0 | 70.20 | 40.90 | 6,621.4 | 5,346.4 | 1,424.2 | 1,053.7 | 1,067.3 | 14.06 | 3.55 | -14.52 |
| 7,780.0 | 71.10 | 37.10 | 6,631.7 | 5,356.7 | 1,447.0 | 1,072.1 | 1,083.9 | 11.92 | 2.90 | -12.26 |
| 7,812.0 | 72.00 | 34.90 | 6,641.8 | 5,366.8 | 1,471.5 | 1,089.9 | 1,102.4 | 7.10 | 2.81 | -6.88 |
| 7,843.0 | 73.00 | 32.20 | 6,651.2 | 5,376.2 | 1,496.2 | 1,106.3 | 1,121.4 | 8.91 | 3.23 | -8.71 |
| 7,875.0 | 74.40 | 29.10 | 6,660.1 | 5,385.1 | 1,522.6 | 1,121.9 | 1,142.3 | 10.28 | 4.38 | -9.69 |
| 7,906.0 | 75.10 | 26.50 | 6,668.3 | 5,393.3 | 1,549.0 | 1,135.9 | 1,163.7 | 8.40 | 2.26 | -8.39 |
| 7,937.0 | 75.20 | 23.80 | 6,676.2 | 5,401.2 | 1,576.1 | 1,148.6 | 1,186.1 | 8.42 | 0.32 | -8.71 |
| 7,969.0 | 74.40 | 21.60 | 6,684.6 | 5,409.6 | 1,604.6 | 1,160.5 | 1,210.0 | 7.09 | -2.50 | -6.88 |
| 8,000.0 | 74.60 | 19.50 | 6,692.9 | 5,417.9 | 1,632.6 | 1,171.0 | 1,233.9 | 6.56 | 0.65 | -6.77 |
| 8,032.0 | 75.80 | 18.20 | 6,701.1 | 5,426.1 | 1,661.9 | 1,181.0 | 1,259.1 | 5.43 | 3.75 | -4.06 |
| 8,063.0 | 76.70 | 16.30 | 6,708.5 | 5,433.5 | 1,690.6 | 1,189.9 | 1,284.2 | 6.62 | 2.90 | -6.13 |
| 8,095.0 | 77.20 | 14.40 | 6,715.7 | 5,440.7 | 1,720.7 | 1,198.2 | 1,310.7 | 5.99 | 1.56 | -5.94 |
| 8,127.0 | 78.00 | 12.00 | 6,722.6 | 5,447.6 | 1,751.1 | 1,205.3 | 1,337.8 | 7.74 | 2.50 | -7.50 |
| 8,158.0 | 79.00 | 10.10 | 6,728.7 | 5,453.7 | 1,780.9 | 1,211.1 | 1,364.8 | 6.82 | 3.23 | -6.13 |
| 8,190.0 | 79.30 | 7.70 | 6,734.8 | 5,459.8 | 1,812.0 | 1,216.0 | 1,393.2 | 7.43 | 0.94 | -7.50 |
| 8,221.0 | 80.10 | 5.00 | 6,740.3 | 5,465.3 | 1,842.3 | 1,219.4 | 1,421.3 | 8.95 | 2.58 | -8.71 |
| 8,252.0 | 81.10 | 2.70 | 6,745.4 | 5,470.4 | 1,872.8 | 1,221.4 | 1,450.0 | 8.00 | 3.23 | -7.42 |
| 8,284.0 | 81.80 | 0.50 | 6,750.1 | 5,475.1 | 1,904.4 | 1,222.3 | 1,480.0 | 7.14 | 2.19 | -6.88 |
| 8,316.0 | 81.50 | 358.20 | 6,754.8 | 5,479.8 | 1,936.1 | 1,221.9 | 1,510.5 | 7.17 | -0.94 | -7.19 |
| Top of Marmellus @ 5758' TVD | | | | | | | | | | |
| 8,338.2 | 81.78 | 356.48 | 6,758.0 | 5,483.0 | 1,958.0 | 1,220.9 | 1,531.8 | 7.77 | 1.28 | -7.74 |
| 8,347.0 | 81.90 | 355.80 | 6,759.3 | 5,484.3 | 1,966.7 | 1,220.3 | 1,540.3 | 7.77 | 1.31 | -7.74 |
| 8,379.0 | 83.30 | 353.60 | 6,763.4 | 5,488.4 | 1,998.3 | 1,217.4 | 1,571.5 | 8.10 | 4.38 | -6.88 |
| 8,410.0 | 84.80 | 350.50 | 6,766.6 | 5,491.6 | 2,028.8 | 1,213.1 | 1,602.0 | 11.06 | 4.84 | -10.00 |
| 8,442.0 | 86.10 | 348.80 | 6,769.1 | 5,494.1 | 2,060.2 | 1,207.4 | 1,633.7 | 6.67 | 4.06 | -5.31 |
| 8,473.0 | 87.00 | 346.90 | 6,771.0 | 5,496.0 | 2,090.5 | 1,200.9 | 1,664.5 | 6.77 | 2.90 | -6.13 |
| 8,504.0 | 87.50 | 343.70 | 6,772.5 | 5,497.5 | 2,120.4 | 1,193.0 | 1,695.5 | 10.44 | 1.61 | -10.32 |
| 8,536.0 | 87.70 | 340.50 | 6,773.8 | 5,498.8 | 2,150.8 | 1,183.2 | 1,727.4 | 10.01 | 0.63 | -10.00 |
| 8,568.0 | 87.10 | 337.90 | 6,775.3 | 5,500.3 | 2,180.7 | 1,171.9 | 1,759.3 | 8.33 | -1.88 | -8.13 |
| 8,599.0 | 85.80 | 335.00 | 6,777.2 | 5,502.2 | 2,209.1 | 1,159.5 | 1,790.0 | 10.24 | -4.19 | -9.35 |
| 8,662.0 | 86.00 | 335.00 | 6,781.7 | 5,506.7 | 2,266.0 | 1,132.9 | 1,852.1 | 0.32 | 0.32 | 0.00 |
| 8,756.0 | 90.60 | 336.40 | 6,784.5 | 5,509.5 | 2,351.6 | 1,094.3 | 1,945.2 | 5.11 | 4.89 | 1.49 |

| | | | |
|------------------|----------------------------|-------------------------------------|------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Site Doddridge County 514095 |
| Company: | EQT Production - Marcellus | TVD Reference: | KB@23 5 @ 1275.0usft |
| Project: | Doddridge County, WV Grid | MD Reference: | KB@23 5 @ 1275.0usft |
| Site: | Doddridge County 514095 | North Reference: | Grid |
| Well: | Well #514095 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Main Wellbore | | |
| Design: | 514095 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) | |
| 8,844.0 | 90.90 | 334.40 | 6,783.3 | 5,508.3 | 2,431.6 | 1,057.7 | 2,032.3 | 2.30 | 0.34 | -2.27 | |
| 8,938.0 | 90.90 | 334.50 | 6,781.9 | 5,506.9 | 2,516.4 | 1,017.1 | 2,125.1 | 0.11 | 0.00 | 0.11 | |
| 9,033.0 | 90.90 | 334.53 | 6,780.4 | 5,505.4 | 2,602.2 | 976.3 | 2,218.9 | 0.03 | 0.00 | 0.03 | |
| 9,127.0 | 90.81 | 334.27 | 6,779.0 | 5,504.0 | 2,687.0 | 935.6 | 2,311.7 | 0.29 | -0.10 | -0.28 | |
| 9,221.0 | 90.90 | 335.06 | 6,777.6 | 5,502.6 | 2,771.9 | 895.4 | 2,404.6 | 0.85 | 0.10 | 0.84 | |
| 9,316.0 | 90.82 | 334.84 | 6,776.1 | 5,501.1 | 2,858.0 | 855.2 | 2,498.5 | 0.25 | -0.08 | -0.23 | |
| 9,412.0 | 90.90 | 335.77 | 6,774.7 | 5,499.7 | 2,945.2 | 815.1 | 2,593.5 | 0.97 | 0.08 | 0.97 | |
| 9,506.0 | 90.72 | 333.56 | 6,773.4 | 5,498.4 | 3,030.1 | 774.9 | 2,686.4 | 2.36 | -0.19 | -2.35 | |
| 9,600.0 | 90.54 | 334.84 | 6,772.3 | 5,497.3 | 3,114.7 | 734.0 | 2,779.1 | 1.38 | -0.19 | 1.36 | |
| 9,695.0 | 90.81 | 334.84 | 6,771.2 | 5,496.2 | 3,200.7 | 693.6 | 2,873.0 | 0.28 | 0.28 | 0.00 | |
| 9,789.0 | 90.90 | 334.45 | 6,769.8 | 5,494.8 | 3,285.7 | 653.3 | 2,965.9 | 0.43 | 0.10 | -0.41 | |
| 9,884.0 | 90.81 | 334.75 | 6,768.4 | 5,493.4 | 3,371.5 | 612.6 | 3,059.7 | 0.33 | -0.09 | 0.32 | |
| 9,978.0 | 90.81 | 335.37 | 6,767.1 | 5,492.1 | 3,456.7 | 573.0 | 3,152.7 | 0.66 | 0.00 | 0.66 | |
| 10,072.0 | 90.81 | 334.67 | 6,765.7 | 5,490.7 | 3,541.9 | 533.3 | 3,245.6 | 0.74 | 0.00 | -0.74 | |
| 10,167.0 | 90.81 | 334.75 | 6,764.4 | 5,489.4 | 3,627.8 | 492.7 | 3,339.5 | 0.08 | 0.00 | 0.08 | |
| 10,262.0 | 90.90 | 334.53 | 6,763.0 | 5,488.0 | 3,713.6 | 452.0 | 3,433.3 | 0.25 | 0.09 | -0.23 | |
| 10,356.0 | 90.72 | 334.45 | 6,761.6 | 5,486.6 | 3,798.4 | 411.5 | 3,526.1 | 0.21 | -0.19 | -0.09 | |
| 10,450.0 | 90.99 | 336.16 | 6,760.2 | 5,485.2 | 3,883.8 | 372.3 | 3,619.2 | 1.84 | 0.29 | 1.82 | |
| 10,545.0 | 91.12 | 334.36 | 6,758.5 | 5,483.5 | 3,970.1 | 332.5 | 3,713.2 | 1.90 | 0.14 | -1.89 | |
| 10,639.0 | 91.60 | 336.03 | 6,756.3 | 5,481.3 | 4,055.4 | 293.1 | 3,806.1 | 1.85 | 0.51 | 1.78 | |
| 10,734.0 | 91.78 | 334.67 | 6,753.5 | 5,478.5 | 4,141.7 | 253.5 | 3,900.1 | 1.44 | 0.19 | -1.43 | |
| 10,828.0 | 91.91 | 335.86 | 6,750.4 | 5,475.4 | 4,227.0 | 214.2 | 3,993.1 | 1.27 | 0.14 | 1.27 | |
| 10,923.0 | 91.78 | 335.15 | 6,747.4 | 5,472.4 | 4,313.4 | 174.8 | 4,087.1 | 0.76 | -0.14 | -0.75 | |
| 11,017.0 | 91.30 | 335.46 | 6,744.8 | 5,469.8 | 4,398.8 | 135.6 | 4,180.1 | 0.61 | -0.51 | 0.33 | |
| 11,112.0 | 91.30 | 335.15 | 6,742.7 | 5,467.7 | 4,485.1 | 95.9 | 4,274.1 | 0.33 | 0.00 | -0.33 | |
| 11,206.0 | 91.30 | 335.06 | 6,740.6 | 5,465.6 | 4,570.3 | 56.3 | 4,367.1 | 0.10 | 0.00 | -0.10 | |
| 11,300.0 | 91.38 | 335.15 | 6,738.4 | 5,463.4 | 4,655.6 | 16.8 | 4,460.0 | 0.13 | 0.09 | 0.10 | |
| 11,395.0 | 91.78 | 334.75 | 6,735.7 | 5,460.7 | 4,741.6 | -23.5 | 4,553.9 | 0.60 | 0.42 | -0.42 | |
| 11,489.0 | 91.91 | 335.63 | 6,732.7 | 5,457.7 | 4,826.9 | -62.9 | 4,646.9 | 0.95 | 0.14 | 0.94 | |
| 11,583.0 | 91.91 | 334.93 | 6,729.6 | 5,454.6 | 4,912.2 | -102.2 | 4,739.8 | 0.74 | 0.00 | -0.74 | |
| 11,678.0 | 91.69 | 335.06 | 6,726.6 | 5,451.6 | 4,998.3 | -142.3 | 4,833.7 | 0.27 | -0.23 | 0.14 | |
| 11,772.0 | 91.30 | 334.53 | 6,724.1 | 5,449.1 | 5,083.3 | -182.3 | 4,926.6 | 0.70 | -0.41 | -0.56 | |
| 11,866.0 | 91.38 | 335.94 | 6,721.9 | 5,446.9 | 5,168.6 | -221.7 | 5,019.6 | 1.50 | 0.09 | 1.50 | |
| 11,961.0 | 91.38 | 336.25 | 6,719.7 | 5,444.7 | 5,255.4 | -260.2 | 5,113.8 | 0.33 | 0.00 | 0.33 | |
| 12,055.0 | 91.38 | 334.93 | 6,717.4 | 5,442.4 | 5,341.0 | -299.0 | 5,206.8 | 1.40 | 0.00 | -1.40 | |
| 12,149.0 | 91.30 | 335.55 | 6,715.2 | 5,440.2 | 5,426.4 | -338.4 | 5,299.8 | 0.66 | -0.09 | 0.66 | |
| 12,243.0 | 91.38 | 335.15 | 6,713.0 | 5,438.0 | 5,511.8 | -377.6 | 5,392.8 | 0.43 | 0.09 | -0.43 | |
| 12,337.0 | 91.30 | 335.15 | 6,710.8 | 5,435.8 | 5,597.0 | -417.0 | 5,485.8 | 0.09 | -0.09 | 0.00 | |
| 12,431.0 | 91.38 | 336.43 | 6,708.6 | 5,433.6 | 5,682.7 | -455.6 | 5,578.9 | 1.36 | 0.09 | 1.36 | |
| 12,525.0 | 91.38 | 335.94 | 6,706.3 | 5,431.3 | 5,768.7 | -493.5 | 5,672.1 | 0.52 | 0.00 | -0.52 | |
| 12,619.0 | 91.38 | 334.75 | 6,704.1 | 5,429.1 | 5,854.1 | -532.7 | 5,765.1 | 1.27 | 0.00 | -1.27 | |
| 12,713.0 | 91.52 | 335.37 | 6,701.7 | 5,426.7 | 5,939.3 | -572.3 | 5,858.1 | 0.68 | 0.15 | 0.66 | |



PHX
Survey Report



| | | | |
|-----------|----------------------------|------------------------------|-------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Site: Doddridge County 514095 |
| Company: | EQT Production - Marcellus | TVD Reference: | KB@23 ft @ 1275 bush |
| Project: | Doddridge County WV G 10 | MD Reference: | KB@23 ft @ 1275 bush |
| Site: | Doddridge County 514095 | North Reference: | Grid |
| Well: | Well #514095 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Main Wellbore | | |
| Design: | 514095 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) |
| 12,808.0 | 91.38 | 334.36 | 6,699.3 | 5,424.3 | 6,025.3 | -612.7 | 5,952.0 | 1.07 | -0.15 | -1.06 |
| 12,902.0 | 91.30 | 334.14 | 6,697.1 | 5,422.1 | 6,109.9 | -653.5 | 6,044.7 | 0.25 | -0.09 | -0.23 |
| 12,997.0 | 91.38 | 333.83 | 6,694.9 | 5,419.9 | 6,195.3 | -695.2 | 6,138.4 | 0.34 | 0.08 | -0.33 |
| 13,092.0 | 91.30 | 334.75 | 6,692.6 | 5,417.6 | 6,280.9 | -736.4 | 6,232.1 | 0.97 | -0.08 | 0.97 |
| 13,186.0 | 91.38 | 333.83 | 6,690.5 | 5,415.5 | 6,365.5 | -777.1 | 6,324.9 | 0.98 | 0.09 | -0.98 |
| 13,280.0 | 91.30 | 332.95 | 6,688.3 | 5,413.3 | 6,449.6 | -819.2 | 6,417.4 | 0.94 | -0.09 | -0.94 |
| 13,375.0 | 91.20 | 333.96 | 6,686.2 | 5,411.2 | 6,534.5 | -861.7 | 6,510.9 | 1.07 | -0.11 | 1.06 |
| 13,469.0 | 91.20 | 333.83 | 6,684.2 | 5,409.2 | 6,618.9 | -903.0 | 6,603.5 | 0.14 | 0.00 | -0.14 |
| 13,564.0 | 91.30 | 334.36 | 6,682.1 | 5,407.1 | 6,704.3 | -944.5 | 6,697.2 | 0.57 | 0.11 | 0.56 |
| 13,658.0 | 91.38 | 335.77 | 6,679.9 | 5,404.9 | 6,789.6 | -984.1 | 6,790.1 | 1.50 | 0.09 | 1.50 |
| 13,752.0 | 91.52 | 335.55 | 6,677.6 | 5,402.6 | 6,875.2 | -1,022.9 | 6,883.2 | 0.28 | 0.15 | -0.23 |
| 13,847.0 | 91.30 | 335.37 | 6,675.2 | 5,400.2 | 6,961.6 | -1,062.3 | 6,977.3 | 0.30 | -0.23 | -0.19 |
| 13,942.0 | 91.52 | 335.55 | 6,672.9 | 5,397.9 | 7,048.0 | -1,101.8 | 7,071.3 | 0.30 | 0.23 | 0.19 |
| 14,036.0 | 91.78 | 334.45 | 6,670.2 | 5,395.2 | 7,133.1 | -1,141.5 | 7,164.2 | 1.20 | 0.28 | -1.17 |
| 14,130.0 | 91.78 | 335.86 | 6,667.3 | 5,392.3 | 7,218.4 | -1,180.9 | 7,257.2 | 1.50 | 0.00 | 1.50 |
| 14,224.0 | 91.91 | 335.46 | 6,664.2 | 5,389.2 | 7,304.0 | -1,219.7 | 7,350.2 | 0.45 | 0.14 | -0.43 |
| 14,318.0 | 90.99 | 333.74 | 6,661.9 | 5,386.9 | 7,388.9 | -1,260.0 | 7,443.0 | 2.07 | -0.98 | -1.83 |
| 14,413.0 | 92.09 | 333.56 | 6,659.3 | 5,384.3 | 7,474.0 | -1,302.1 | 7,536.6 | 1.17 | 1.16 | -0.19 |
| 14,507.0 | 92.49 | 334.53 | 6,655.5 | 5,380.5 | 7,558.4 | -1,343.2 | 7,629.2 | 1.12 | 0.43 | 1.03 |
| 14,601.0 | 92.89 | 336.03 | 6,651.1 | 5,376.1 | 7,643.7 | -1,382.5 | 7,722.2 | 1.65 | 0.43 | 1.60 |
| 14,696.0 | 92.89 | 336.34 | 6,646.3 | 5,371.3 | 7,730.5 | -1,420.8 | 7,816.3 | 0.33 | 0.00 | 0.33 |
| 14,790.0 | 92.89 | 336.56 | 6,641.6 | 5,366.6 | 7,816.6 | -1,458.3 | 7,909.4 | 0.23 | 0.00 | 0.23 |
| 14,885.0 | 92.62 | 335.06 | 6,637.0 | 5,362.0 | 7,903.1 | -1,497.2 | 8,003.4 | 1.60 | -0.28 | -1.58 |
| 14,980.0 | 92.31 | 336.16 | 6,633.0 | 5,358.0 | 7,989.5 | -1,536.4 | 8,097.4 | 1.20 | -0.33 | 1.16 |
| 15,074.0 | 91.12 | 335.21 | 6,630.1 | 5,355.1 | 8,075.2 | -1,575.1 | 8,190.5 | 1.62 | -1.27 | -1.01 |
| 15,169.0 | 90.41 | 335.46 | 6,628.9 | 5,353.9 | 8,161.5 | -1,614.7 | 8,284.5 | 0.79 | -0.75 | 0.26 |
| 15,264.0 | 90.01 | 335.06 | 6,628.5 | 5,353.5 | 8,247.8 | -1,654.5 | 8,378.5 | 0.60 | -0.42 | -0.42 |
| 15,359.0 | 89.79 | 335.77 | 6,628.7 | 5,353.7 | 8,334.2 | -1,694.0 | 8,472.6 | 0.78 | -0.23 | 0.75 |
| 15,454.0 | 89.31 | 335.46 | 6,629.4 | 5,354.4 | 8,420.7 | -1,733.2 | 8,566.7 | 0.60 | -0.51 | -0.33 |
| 15,548.0 | 89.88 | 335.63 | 6,630.1 | 5,355.1 | 8,506.2 | -1,772.1 | 8,659.8 | 0.63 | 0.61 | 0.18 |
| 15,643.0 | 89.88 | 336.74 | 6,630.3 | 5,355.3 | 8,593.2 | -1,810.5 | 8,754.0 | 1.17 | 0.00 | 1.17 |
| 15,738.0 | 90.01 | 336.25 | 6,630.4 | 5,355.4 | 8,680.3 | -1,848.4 | 8,848.3 | 0.53 | 0.14 | -0.52 |
| 15,833.0 | 90.10 | 336.43 | 6,630.3 | 5,355.3 | 8,767.3 | -1,886.5 | 8,942.5 | 0.21 | 0.09 | 0.19 |
| 15,927.0 | 90.50 | 337.13 | 6,629.8 | 5,354.8 | 8,853.7 | -1,923.6 | 9,035.9 | 0.86 | 0.43 | 0.74 |
| 16,023.0 | 88.82 | 334.75 | 6,630.4 | 5,355.4 | 8,941.3 | -1,962.7 | 9,131.0 | 3.03 | -1.75 | -2.48 |
| 16,118.0 | 86.48 | 334.75 | 6,634.3 | 5,359.3 | 9,027.2 | -2,003.2 | 9,224.8 | 2.46 | -2.46 | 0.00 |
| 16,213.0 | 87.80 | 334.45 | 6,639.0 | 5,364.0 | 9,112.9 | -2,043.9 | 9,318.5 | 1.42 | 1.39 | -0.32 |
| 16,307.0 | 87.98 | 334.84 | 6,642.5 | 5,367.5 | 9,197.8 | -2,084.1 | 9,411.3 | 0.46 | 0.19 | 0.41 |
| 16,402.0 | 87.40 | 335.15 | 6,646.3 | 5,371.3 | 9,283.8 | -2,124.2 | 9,505.2 | 0.69 | -0.61 | 0.39 |
| 16,496.0 | 87.72 | 335.63 | 6,650.3 | 5,375.3 | 9,369.2 | -2,163.3 | 9,598.2 | 0.61 | 0.34 | 0.51 |
| 16,592.0 | 88.69 | 335.15 | 6,653.3 | 5,378.3 | 9,456.4 | -2,203.3 | 9,693.2 | 1.13 | 1.01 | -0.50 |
| 16,687.0 | 89.40 | 335.55 | 6,654.9 | 5,379.9 | 9,542.7 | -2,242.9 | 9,787.2 | 0.86 | 0.75 | 0.42 |
| 16,782.0 | 89.48 | 334.36 | 6,655.8 | 5,380.8 | 9,628.8 | -2,283.1 | 9,881.1 | 1.26 | 0.08 | -1.25 |

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|-----------|----------------------------|------------------------------|------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Site Doddridge County 514095 |
| Company: | EQT Production - Marcellus | TVD Reference: | KB@23 ft @ 1275.0usft |
| Project: | Doddridge County, WV Grid | MD Reference: | KB@23 ft @ 1275.0usft |
| Site: | Doddridge County 514095 | North Reference: | Grid |
| Well: | Well #514095 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Main Wellbore | | |
| Design: | 514095 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) | Buill Rate (°/100usft) | Turn Rate (°/100usft) |
|---------------------------------------|-----------------|-------------|-----------------------|---------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 16,877.0 | 89.48 | 335.55 | 6,656.7 | 5,381.7 | 9,714.9 | -2,323.3 | 9,975.0 | 1.25 | 0.00 | 1.25 |
| 16,973.0 | 89.48 | 336.25 | 6,657.6 | 5,382.6 | 9,802.5 | -2,362.5 | 10,070.2 | 0.73 | 0.00 | 0.73 |
| 17,068.0 | 89.70 | 334.53 | 6,658.2 | 5,383.2 | 9,888.9 | -2,402.1 | 10,164.2 | 1.83 | 0.23 | -1.81 |
| 17,162.0 | 88.82 | 333.74 | 6,659.4 | 5,384.4 | 9,973.4 | -2,443.1 | 10,256.9 | 1.26 | -0.94 | -0.84 |
| 17,257.0 | 89.00 | 334.27 | 6,661.3 | 5,386.3 | 10,058.8 | -2,484.7 | 10,350.6 | 0.59 | 0.19 | 0.56 |
| 17,351.0 | 88.82 | 334.53 | 6,663.0 | 5,388.0 | 10,143.6 | -2,525.3 | 10,443.4 | 0.34 | -0.19 | 0.28 |
| 17,446.0 | 89.09 | 335.15 | 6,664.8 | 5,389.8 | 10,229.5 | -2,565.7 | 10,537.3 | 0.71 | 0.28 | 0.65 |
| 17,540.0 | 88.82 | 334.75 | 6,666.5 | 5,391.5 | 10,314.7 | -2,605.5 | 10,630.2 | 0.51 | -0.29 | -0.43 |
| 17,635.0 | 88.69 | 334.27 | 6,668.6 | 5,393.6 | 10,400.4 | -2,646.4 | 10,724.0 | 0.52 | -0.14 | -0.51 |
| 17,730.0 | 89.22 | 335.06 | 6,670.3 | 5,395.3 | 10,486.3 | -2,687.0 | 10,817.9 | 1.00 | 0.56 | 0.83 |
| 17,825.0 | 88.82 | 334.36 | 6,671.9 | 5,396.9 | 10,572.1 | -2,727.6 | 10,911.7 | 0.85 | -0.42 | -0.74 |
| 17,919.0 | 89.22 | 334.27 | 6,673.5 | 5,398.5 | 10,656.8 | -2,768.3 | 11,004.5 | 0.44 | 0.43 | -0.10 |
| 18,014.0 | 89.88 | 335.94 | 6,674.3 | 5,399.3 | 10,743.0 | -2,808.3 | 11,098.5 | 1.89 | 0.69 | 1.76 |
| 18,109.0 | 88.91 | 334.14 | 6,675.3 | 5,400.3 | 10,829.1 | -2,848.4 | 11,192.4 | 2.15 | -1.02 | -1.89 |
| 18,204.0 | 89.31 | 334.84 | 6,676.7 | 5,401.7 | 10,914.8 | -2,889.3 | 11,286.2 | 0.85 | 0.42 | 0.74 |
| 18,298.0 | 89.31 | 333.83 | 6,677.9 | 5,402.9 | 10,999.6 | -2,930.0 | 11,379.0 | 1.07 | 0.00 | -1.07 |
| 18,393.0 | 89.22 | 335.77 | 6,679.1 | 5,404.1 | 11,085.5 | -2,970.5 | 11,472.9 | 2.04 | -0.09 | 2.04 |
| 18,487.0 | 89.09 | 336.03 | 6,680.5 | 5,405.5 | 11,171.3 | -3,008.9 | 11,566.0 | 0.31 | -0.14 | 0.28 |
| 18,582.0 | 89.31 | 335.55 | 6,681.8 | 5,406.8 | 11,257.9 | -3,047.8 | 11,660.2 | 0.56 | 0.23 | -0.51 |
| 18,677.0 | 89.48 | 336.43 | 6,682.8 | 5,407.8 | 11,344.7 | -3,086.5 | 11,754.3 | 0.94 | 0.18 | 0.93 |
| 18,772.0 | 89.09 | 335.24 | 6,684.0 | 5,409.0 | 11,431.4 | -3,125.3 | 11,848.5 | 1.32 | -0.41 | -1.25 |
| 18,867.0 | 89.09 | 334.14 | 6,685.5 | 5,410.5 | 11,517.3 | -3,166.0 | 11,942.3 | 1.16 | 0.00 | -1.16 |
| 18,962.0 | 89.40 | 333.65 | 6,686.8 | 5,411.8 | 11,602.6 | -3,207.8 | 12,036.0 | 0.61 | 0.33 | -0.52 |
| 19,057.0 | 88.91 | 333.03 | 6,688.2 | 5,413.2 | 11,687.4 | -3,250.4 | 12,129.4 | 0.83 | -0.52 | -0.65 |
| 19,152.0 | 89.22 | 334.84 | 6,689.7 | 5,414.7 | 11,772.8 | -3,292.1 | 12,223.1 | 1.93 | 0.33 | 1.91 |
| 19,247.0 | 89.09 | 334.36 | 6,691.1 | 5,416.1 | 11,858.6 | -3,332.9 | 12,316.9 | 0.52 | -0.14 | -0.51 |
| 19,342.0 | 89.00 | 334.36 | 6,692.7 | 5,417.7 | 11,944.2 | -3,374.0 | 12,410.7 | 0.09 | -0.09 | 0.00 |
| 19,436.0 | 89.00 | 334.53 | 6,694.3 | 5,419.3 | 12,029.0 | -3,414.5 | 12,503.5 | 0.18 | 0.00 | 0.18 |
| 19,531.0 | 89.00 | 334.14 | 6,696.0 | 5,421.0 | 12,114.6 | -3,455.6 | 12,597.3 | 0.41 | 0.00 | -0.41 |
| 19,626.0 | 89.00 | 334.45 | 6,697.7 | 5,422.7 | 12,200.2 | -3,496.8 | 12,691.0 | 0.33 | 0.00 | 0.33 |
| 19,721.0 | 89.00 | 334.05 | 6,699.3 | 5,424.3 | 12,285.8 | -3,538.1 | 12,784.8 | 0.42 | 0.00 | -0.42 |
| Final Survey=19753' MD/ 6700' TVD | | | | | | | | | | |
| 19,753.0 | 89.00 | 334.05 | 6,699.9 | 5,424.9 | 12,314.5 | -3,552.1 | 12,816.3 | 0.00 | 0.00 | 0.00 |
| Projection to TD=20294' MD/ 6709' TVD | | | | | | | | | | |
| 20,294.0 | 89.00 | 334.05 | 6,709.3 | 5,434.3 | 12,800.9 | -3,788.8 | 13,349.8 | 0.00 | 0.00 | 0.00 |

| Measured Depth (usft) | Vertical Depth (usft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|-----------------------|-----------------------|----------------------------|-----------|---------|-------------------|
| 8,338.1 | 6,758.0 | Top of Marcellus@6758' TVD | | 0.00 | |

| | | | |
|------------------|----------------------------|-------------------------------------|------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Site Doddridge County 514095 |
| Company: | EQT Production - Marcellus | TVD Reference: | KB@23 ft @ 1275.0usft |
| Project: | Doddridge County, WV Grid | MD Reference: | KB@23 ft @ 1275.0usft |
| Site: | Doddridge County 514095 | North Reference: | Grid |
| Well: | Well #514095 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Main Wellbore | | |
| Design: | 514095 As Drilled Surveys | | |

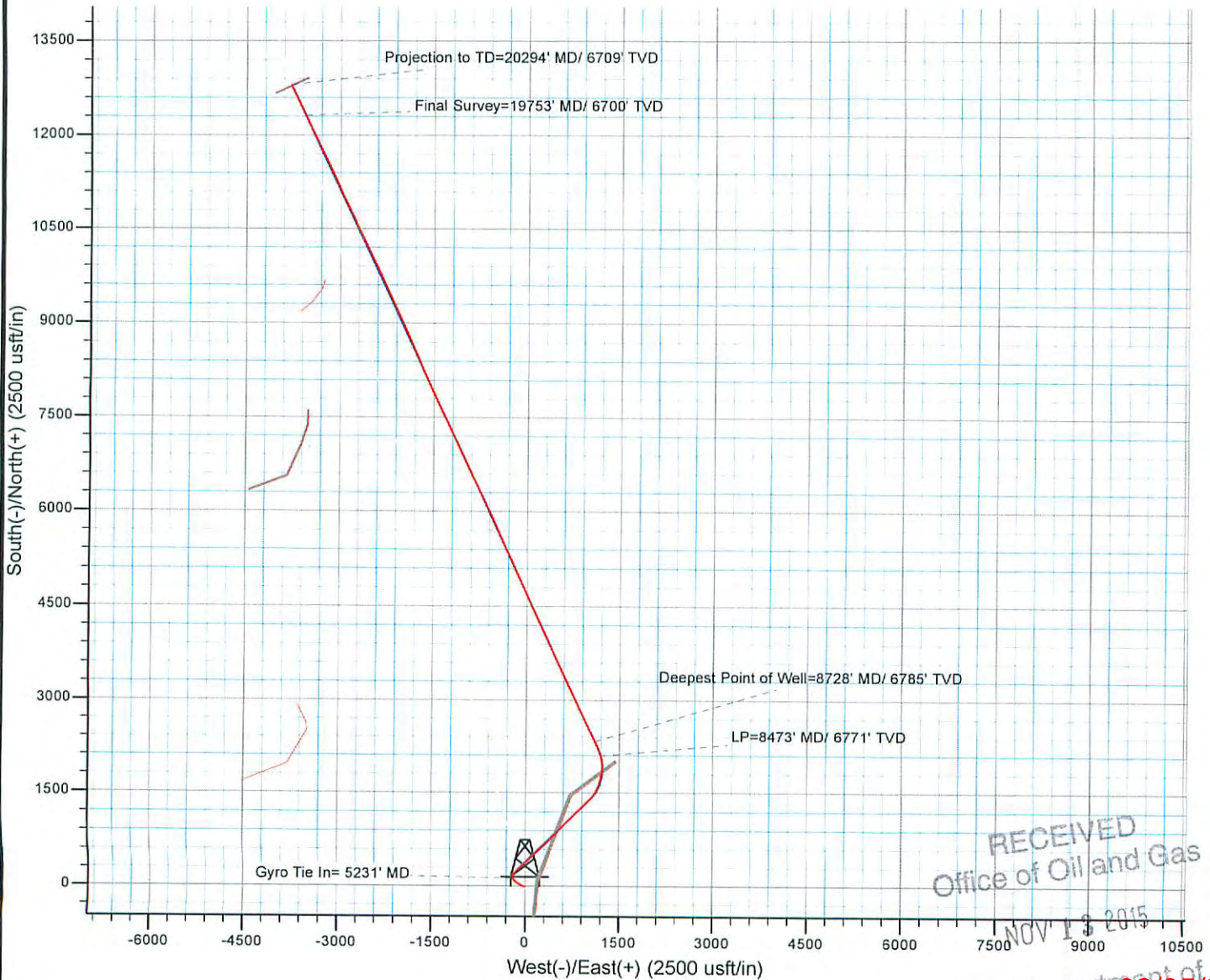
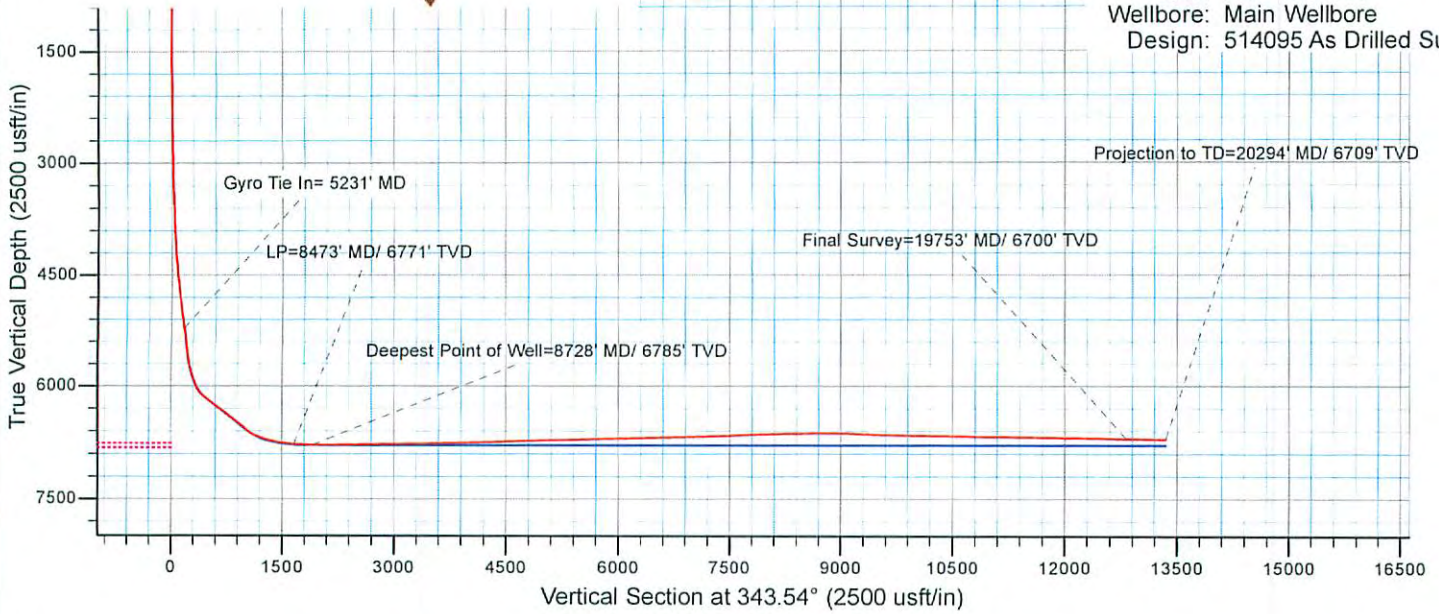
| Design Annotations | | | | | |
|-----------------------|-----------------------|-------------------|--------------|---------------------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | Comment | |
| | | +N/-S (usft) | +E/-W (usft) | | |
| 5,231.1 | 5,219.5 | 127.7 | -196.4 | Gyro Tie In= 5231' MD | |
| 19,753.0 | 6,699.9 | 12,314.5 | -3,552.1 | Final Survey=19753' MD/ 6700' TVD | |
| 20,294.0 | 6,709.3 | 12,800.9 | -3,788.8 | Projection to TD=20294' MD/ 6709' TVD | |

Checked By: _____ Approved By: _____ Date: _____



EQT Production - Marcellus

Project: Doddridge County, WV Grid
 Site: Doddridge County 514095
 Well: Well #514095
 Wellbore: Main Wellbore
 Design: 514095 As Drilled Surveys



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