



Project: Weld County, CO NAD 83
 Site: Janssen
 Well: Janssen 5
 Wellbore: OH
 Design: Plan 3



T M
 Azimuths to True North
 Magnetic North: 8.49°
 Magnetic Field
 Strength: 52644.5snT
 Dip Angle: 67.05°
 Date: 10/28/2015
 Model: BGGM2015

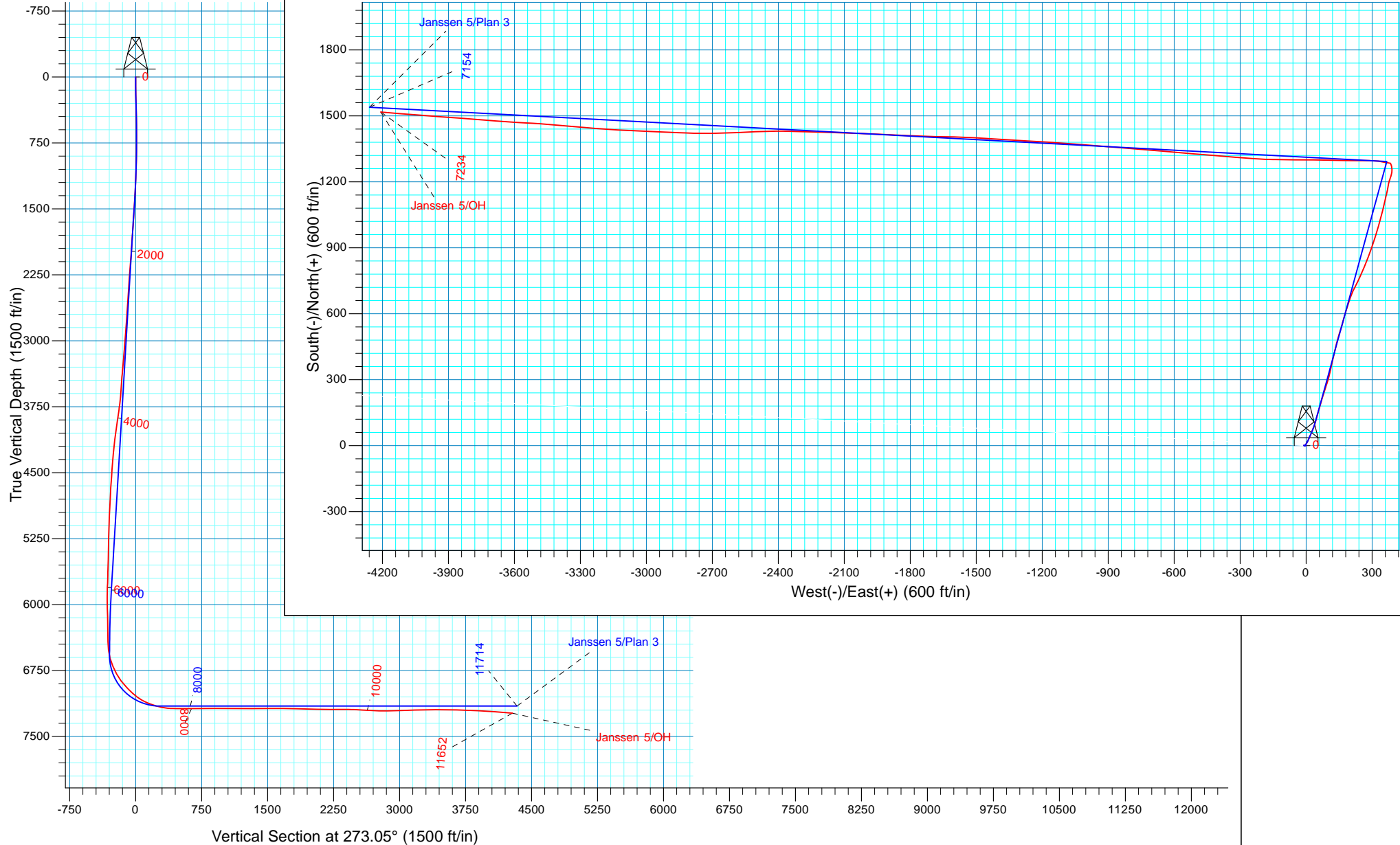
Plan: Plan 3 (Janssen 5/OH)
 Created By: Seth Burstad Date: 12-23-2015

WELL DETAILS: Janssen 5

PROJECT DETAILS: Weld County, CO NAD 83

GL 4778' & KB 24.5' @ 4802.50ft (Patterson 346) 4778.00
 Northing Easting Latitude Longitude
 1427148.98 3225728.00 40° 30' 11.120 N 104° 41' 17.776 W

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: Colorado Northern Zone
 System Datum: Mean Sea Level
 Local North: True





Extraction Oil & Gas

Weld County, CO NAD 83

Janssen

Janssen 5

OH

Design: OH

Standard Survey Report

28 December, 2015



| | | | |
|------------------|------------------------|-------------------------------------|---|
| Company: | Extraction Oil & Gas | Local Co-ordinate Reference: | Well Janssen 5 |
| Project: | Weld County, CO NAD 83 | TVD Reference: | GL 4778' & KB 24.5' @ 4802.50ft (Patterson 346) |
| Site: | Janssen | MD Reference: | GL 4778' & KB 24.5' @ 4802.50ft (Patterson 346) |
| Well: | Janssen 5 | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Casper District |

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|--------------------|---------------------------|----------------------|----------------|
| Project | Weld County, CO NAD 83 | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Northern Zone | | |

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|-----------------------|----------------------------------|--------------|-------------------|-------------------|-------------------|
| Site | Janssen, Site Center : Janssen 7 | | | | |
| Site Position: | | Northing: | 1,427,092.90 usft | Latitude: | 40° 30' 10.566 N |
| From: | Lat/Long | Easting: | 3,225,727.96 usft | Longitude: | 104° 41' 17.783 W |
| Position Uncertainty: | 0.00 ft | Slot Radius: | 13.200 in | Grid Convergence: | 0.52 ° |

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|----------------------|---|---------|---------------------|-------------------|---------------|-------------------|
| Well | Janssen 5, 2231' FNL 2397' FWL Sec 8 T6N R65W | | | | | |
| Well Position | +N/-S | 0.00 ft | Northing: | 1,427,148.99 usft | Latitude: | 40° 30' 11.120 N |
| | +E/-W | 0.00 ft | Easting: | 3,225,728.00 usft | Longitude: | 104° 41' 17.776 W |
| Position Uncertainty | | 0.00 ft | Wellhead Elevation: | 0.00 ft | Ground Level: | 4,778.00 ft |

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|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | OH | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | BGGM2015 | 10/28/2015 | 8.49 | 67.05 | 52,644 |

| | | | | | |
|--------------------------|------------------------------|-------------------|-------------------|----------------------|------|
| Design | OH | | | | |
| Audit Notes: | | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) | |
| | 0.00 | 0.00 | 0.00 | 273.05 | |

| | | | | | |
|-----------------------|----------------|---|------------------|------------------------------|--|
| Survey Program | Date | 12/28/2015 | | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description | |
| 203.00 | 1,519.00 | Survey #1 - Surface (OH) | SDI MWD | SDI MWD - Standard ver 1.0.1 | |
| 1,677.00 | 11,652.00 | Survey #2 - Vertical / Curve / Lateral (OH) | SDI MWD | SDI MWD - Standard ver 1.0.1 | |

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|-----------------------------|------------------------|--------------------|----------------------------|-------------------|-------------------|------------------------------|------------------------------|-----------------------------|----------------------------|--|
| Survey | | | | | | | | | | |
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 203.00 | 1.08 | 268.66 | 202.99 | -0.04 | -1.91 | 1.91 | 0.53 | 0.53 | 0.00 | |
| First SDI MWD Survey | | | | | | | | | | |
| 295.00 | 1.38 | 271.42 | 294.97 | -0.04 | -3.89 | 3.88 | 0.33 | 0.33 | 3.00 | |
| 387.00 | 1.30 | 274.01 | 386.94 | 0.06 | -6.04 | 6.03 | 0.11 | -0.09 | 2.82 | |
| 479.00 | 1.16 | 283.62 | 478.92 | 0.36 | -7.98 | 7.99 | 0.27 | -0.15 | 10.45 | |
| 573.00 | 1.24 | 302.91 | 572.90 | 1.13 | -9.76 | 9.81 | 0.44 | 0.09 | 20.52 | |
| 668.00 | 0.35 | 325.78 | 667.89 | 1.93 | -10.79 | 10.87 | 0.98 | -0.94 | 24.07 | |

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|------------------|------------------------|-------------------------------------|---|
| Company: | Extraction Oil & Gas | Local Co-ordinate Reference: | Well Janssen 5 |
| Project: | Weld County, CO NAD 83 | TVD Reference: | GL 4778' & KB 24.5' @ 4802.50ft (Patterson 346) |
| Site: | Janssen | MD Reference: | GL 4778' & KB 24.5' @ 4802.50ft (Patterson 346) |
| Well: | Janssen 5 | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Casper District |

| Survey | | | | | | | | | |
|-------------------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 762.00 | 1.01 | 128.97 | 761.89 | 1.65 | -10.30 | 10.38 | 1.43 | 0.70 | 173.61 |
| 856.00 | 0.85 | 129.25 | 855.87 | 0.68 | -9.12 | 9.14 | 0.17 | -0.17 | 0.30 |
| 950.00 | 1.32 | 71.56 | 949.86 | 0.59 | -7.55 | 7.57 | 1.20 | 0.50 | -61.37 |
| 1,045.00 | 2.70 | 53.05 | 1,044.80 | 2.28 | -4.73 | 4.84 | 1.59 | 1.45 | -19.48 |
| 1,139.00 | 3.82 | 37.33 | 1,138.65 | 6.10 | -1.06 | 1.38 | 1.51 | 1.19 | -16.72 |
| 1,234.00 | 5.53 | 26.06 | 1,233.33 | 12.73 | 2.87 | -2.19 | 2.03 | 1.80 | -11.86 |
| 1,329.00 | 7.93 | 26.45 | 1,327.67 | 22.71 | 7.80 | -6.58 | 2.53 | 2.53 | 0.41 |
| 1,424.00 | 9.78 | 23.74 | 1,421.53 | 35.96 | 13.97 | -12.04 | 2.00 | 1.95 | -2.85 |
| 1,519.00 | 11.52 | 22.98 | 1,514.89 | 52.08 | 20.92 | -18.12 | 1.84 | 1.83 | -0.80 |
| Last SDI MWD Surface Survey | | | | | | | | | |
| 1,677.00 | 13.59 | 21.67 | 1,669.11 | 83.86 | 33.94 | -29.43 | 1.32 | 1.31 | -0.83 |
| First SDI MWD Vertical Survey | | | | | | | | | |
| 1,771.00 | 14.71 | 18.07 | 1,760.25 | 105.47 | 41.72 | -36.05 | 1.51 | 1.19 | -3.83 |
| 1,866.00 | 14.85 | 14.38 | 1,852.11 | 128.73 | 48.48 | -41.57 | 1.00 | 0.15 | -3.88 |
| 1,960.00 | 16.65 | 13.87 | 1,942.58 | 153.48 | 54.70 | -46.46 | 1.92 | 1.91 | -0.54 |
| 2,055.00 | 17.96 | 17.47 | 2,033.28 | 180.66 | 62.36 | -52.66 | 1.78 | 1.38 | 3.79 |
| 2,149.00 | 16.67 | 16.78 | 2,123.02 | 207.40 | 70.61 | -59.47 | 1.39 | -1.37 | -0.73 |
| 2,244.00 | 15.88 | 16.96 | 2,214.21 | 232.87 | 78.33 | -65.83 | 0.83 | -0.83 | 0.19 |
| 2,339.00 | 17.05 | 18.29 | 2,305.32 | 258.53 | 86.50 | -72.62 | 1.29 | 1.23 | 1.40 |
| 2,434.00 | 18.07 | 16.78 | 2,395.89 | 285.86 | 95.12 | -79.78 | 1.18 | 1.07 | -1.59 |
| 2,529.00 | 18.11 | 14.59 | 2,486.19 | 314.26 | 103.09 | -86.23 | 0.72 | 0.04 | -2.31 |
| 2,625.00 | 18.97 | 13.19 | 2,577.21 | 343.89 | 110.41 | -91.96 | 1.01 | 0.90 | -1.46 |
| 2,719.00 | 20.49 | 13.14 | 2,665.69 | 374.79 | 117.64 | -97.53 | 1.62 | 1.62 | -0.05 |
| 2,814.00 | 20.42 | 11.57 | 2,754.70 | 407.21 | 124.74 | -102.90 | 0.58 | -0.07 | -1.65 |
| 2,908.00 | 19.59 | 12.04 | 2,843.03 | 438.69 | 131.32 | -107.79 | 0.90 | -0.88 | 0.50 |
| 3,003.00 | 21.62 | 17.54 | 2,931.95 | 470.96 | 139.92 | -114.66 | 2.95 | 2.14 | 5.79 |
| 3,099.00 | 21.61 | 16.33 | 3,021.20 | 504.79 | 150.22 | -123.15 | 0.46 | -0.01 | -1.26 |
| 3,193.00 | 19.84 | 15.64 | 3,109.12 | 536.76 | 159.39 | -130.60 | 1.90 | -1.88 | -0.73 |
| 3,289.00 | 21.13 | 15.25 | 3,199.04 | 569.15 | 168.33 | -137.81 | 1.35 | 1.34 | -0.41 |
| 3,384.00 | 19.65 | 16.78 | 3,288.09 | 600.96 | 177.44 | -145.22 | 1.66 | -1.56 | 1.61 |
| 3,479.00 | 17.79 | 17.95 | 3,378.06 | 630.06 | 186.53 | -152.74 | 2.00 | -1.96 | 1.23 |
| 3,574.00 | 15.54 | 18.44 | 3,469.07 | 655.95 | 195.03 | -159.85 | 2.37 | -2.37 | 0.52 |
| 3,669.00 | 14.13 | 18.48 | 3,560.90 | 679.02 | 202.73 | -166.31 | 1.48 | -1.48 | 0.04 |
| 3,764.00 | 14.60 | 24.57 | 3,652.93 | 700.91 | 211.38 | -173.79 | 1.66 | 0.49 | 6.41 |
| 3,860.00 | 16.82 | 28.78 | 3,745.34 | 724.09 | 223.10 | -184.26 | 2.60 | 2.31 | 4.39 |
| 3,955.00 | 21.03 | 25.09 | 3,835.19 | 751.59 | 236.96 | -196.63 | 4.61 | 4.43 | -3.88 |
| 4,050.00 | 22.76 | 23.20 | 3,923.34 | 783.92 | 251.43 | -209.36 | 1.97 | 1.82 | -1.99 |
| 4,146.00 | 22.83 | 22.55 | 4,011.84 | 818.18 | 265.88 | -221.97 | 0.27 | 0.07 | -0.68 |
| 4,240.00 | 22.43 | 21.65 | 4,098.60 | 851.69 | 279.49 | -233.78 | 0.56 | -0.43 | -0.96 |
| 4,336.00 | 19.51 | 20.42 | 4,188.23 | 883.75 | 291.84 | -244.41 | 3.08 | -3.04 | -1.28 |
| 4,431.00 | 18.40 | 18.80 | 4,278.08 | 912.81 | 302.21 | -253.22 | 1.29 | -1.17 | -1.71 |
| 4,527.00 | 17.64 | 18.01 | 4,369.37 | 940.98 | 311.59 | -261.08 | 0.83 | -0.79 | -0.82 |

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| Well: | Janssen 5 | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Casper District |

| Survey | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 4,622.00 | 17.77 | 16.14 | 4,459.87 | 968.60 | 320.07 | -268.08 | 0.61 | 0.14 | -1.97 |
| 4,716.00 | 17.07 | 15.76 | 4,549.56 | 995.66 | 327.81 | -274.37 | 0.75 | -0.74 | -0.40 |
| 4,811.00 | 18.43 | 16.02 | 4,640.04 | 1,023.51 | 335.74 | -280.81 | 1.43 | 1.43 | 0.27 |
| 4,906.00 | 15.72 | 12.47 | 4,730.84 | 1,050.52 | 342.66 | -286.28 | 3.06 | -2.85 | -3.74 |
| 5,000.00 | 14.06 | 14.91 | 4,821.68 | 1,073.98 | 348.35 | -290.71 | 1.89 | -1.77 | 2.60 |
| 5,095.00 | 13.39 | 13.69 | 4,913.97 | 1,095.82 | 353.92 | -295.12 | 0.77 | -0.71 | -1.28 |
| 5,190.00 | 12.73 | 13.33 | 5,006.51 | 1,116.70 | 358.94 | -299.02 | 0.70 | -0.69 | -0.38 |
| 5,286.00 | 12.49 | 13.39 | 5,100.20 | 1,137.09 | 363.78 | -302.77 | 0.25 | -0.25 | 0.06 |
| 5,380.00 | 9.92 | 11.13 | 5,192.40 | 1,154.92 | 367.70 | -305.73 | 2.77 | -2.73 | -2.40 |
| 5,475.00 | 9.77 | 10.82 | 5,286.00 | 1,170.87 | 370.79 | -307.97 | 0.17 | -0.16 | -0.33 |
| 5,571.00 | 6.79 | 9.32 | 5,380.99 | 1,184.47 | 373.24 | -309.69 | 3.11 | -3.10 | -1.56 |
| 5,666.00 | 6.15 | 13.33 | 5,475.38 | 1,194.97 | 375.33 | -311.21 | 0.82 | -0.67 | 4.22 |
| 5,762.00 | 7.90 | 19.83 | 5,570.66 | 1,206.18 | 378.75 | -314.04 | 2.00 | 1.82 | 6.77 |
| 5,857.00 | 5.64 | 15.21 | 5,664.99 | 1,216.83 | 382.19 | -316.90 | 2.45 | -2.38 | -4.86 |
| 5,952.00 | 6.52 | 21.52 | 5,759.46 | 1,226.35 | 385.39 | -319.60 | 1.16 | 0.93 | 6.64 |
| 6,047.00 | 8.82 | 11.19 | 5,853.61 | 1,238.51 | 388.78 | -322.34 | 2.81 | 2.42 | -10.87 |
| 6,142.00 | 7.76 | 0.71 | 5,947.62 | 1,252.07 | 390.28 | -323.11 | 1.94 | -1.12 | -11.03 |
| 6,236.00 | 5.50 | 351.13 | 6,040.99 | 1,262.87 | 389.66 | -321.92 | 2.67 | -2.40 | -10.19 |
| 6,332.00 | 4.36 | 345.93 | 6,136.63 | 1,270.96 | 388.07 | -319.89 | 1.27 | -1.19 | -5.42 |
| 6,427.00 | 3.36 | 345.07 | 6,231.41 | 1,277.15 | 386.47 | -317.97 | 1.05 | -1.05 | -0.91 |
| 6,522.00 | 2.52 | 334.22 | 6,326.29 | 1,281.72 | 384.84 | -316.10 | 1.06 | -0.88 | -11.42 |
| 6,618.00 | 1.55 | 321.68 | 6,422.23 | 1,284.64 | 383.12 | -314.23 | 1.11 | -1.01 | -13.06 |
| 6,713.00 | 6.42 | 271.43 | 6,516.99 | 1,285.78 | 377.01 | -308.06 | 5.85 | 5.13 | -52.89 |
| 6,809.00 | 15.08 | 285.48 | 6,611.22 | 1,289.25 | 359.57 | -290.47 | 9.36 | 9.02 | 14.64 |
| 6,904.00 | 23.13 | 276.69 | 6,700.94 | 1,294.74 | 329.08 | -259.72 | 8.98 | 8.47 | -9.25 |
| 7,000.00 | 29.09 | 269.24 | 6,787.12 | 1,296.63 | 286.97 | -217.57 | 7.07 | 6.21 | -7.76 |
| 7,095.00 | 36.89 | 271.06 | 6,866.75 | 1,296.85 | 235.28 | -165.95 | 8.28 | 8.21 | 1.92 |
| 7,190.00 | 43.61 | 270.48 | 6,939.21 | 1,297.65 | 173.94 | -104.65 | 7.08 | 7.07 | -0.61 |
| 7,286.00 | 46.87 | 271.03 | 7,006.80 | 1,298.56 | 105.79 | -36.55 | 3.42 | 3.40 | 0.57 |
| 7,381.00 | 56.35 | 270.67 | 7,065.73 | 1,299.64 | 31.43 | 37.77 | 9.98 | 9.98 | -0.38 |
| 7,476.00 | 66.00 | 270.78 | 7,111.48 | 1,300.70 | -51.70 | 120.83 | 10.16 | 10.16 | 0.12 |
| 7,571.00 | 72.18 | 270.45 | 7,145.37 | 1,301.65 | -140.39 | 209.45 | 6.51 | 6.51 | -0.35 |
| 7,666.00 | 79.06 | 274.36 | 7,168.96 | 1,305.55 | -232.26 | 301.40 | 8.27 | 7.24 | 4.12 |
| 7,760.00 | 87.45 | 274.32 | 7,179.99 | 1,312.61 | -325.26 | 394.64 | 8.93 | 8.93 | -0.04 |
| 7,855.00 | 90.27 | 274.82 | 7,181.88 | 1,320.18 | -419.93 | 489.58 | 3.01 | 2.97 | 0.53 |
| 7,951.00 | 90.10 | 274.78 | 7,181.57 | 1,328.21 | -515.59 | 585.53 | 0.18 | -0.18 | -0.04 |
| 8,045.00 | 90.03 | 274.70 | 7,181.46 | 1,335.98 | -609.27 | 679.49 | 0.11 | -0.07 | -0.09 |
| 8,140.00 | 90.13 | 274.96 | 7,181.33 | 1,343.98 | -703.93 | 774.44 | 0.29 | 0.11 | 0.27 |
| 8,235.00 | 90.07 | 274.99 | 7,181.16 | 1,352.22 | -798.57 | 869.39 | 0.07 | -0.06 | 0.03 |
| 8,330.00 | 90.00 | 274.21 | 7,181.10 | 1,359.84 | -893.27 | 964.35 | 0.82 | -0.07 | -0.82 |
| 8,424.00 | 90.27 | 274.67 | 7,180.88 | 1,367.11 | -986.98 | 1,058.33 | 0.57 | 0.29 | 0.49 |
| 8,519.00 | 89.56 | 274.11 | 7,181.02 | 1,374.38 | -1,081.70 | 1,153.30 | 0.95 | -0.75 | -0.59 |

| | | | |
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| Well: | Janssen 5 | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Casper District |

| Survey | | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|--|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | |
| 8,613.00 | 89.56 | 273.70 | 7,181.74 | 1,380.79 | -1,175.48 | 1,247.29 | 0.44 | 0.00 | -0.44 | |
| 8,707.00 | 89.60 | 273.06 | 7,182.43 | 1,386.33 | -1,269.32 | 1,341.28 | 0.68 | 0.04 | -0.68 | |
| 8,802.00 | 90.67 | 273.71 | 7,182.21 | 1,391.94 | -1,364.15 | 1,436.28 | 1.32 | 1.13 | 0.68 | |
| 8,897.00 | 90.80 | 273.62 | 7,180.99 | 1,398.01 | -1,458.95 | 1,531.26 | 0.17 | 0.14 | -0.09 | |
| 8,992.00 | 90.17 | 272.24 | 7,180.19 | 1,402.86 | -1,553.82 | 1,626.26 | 1.60 | -0.66 | -1.45 | |
| 9,087.00 | 89.16 | 270.89 | 7,180.74 | 1,405.46 | -1,648.78 | 1,721.22 | 1.77 | -1.06 | -1.42 | |
| 9,182.00 | 87.58 | 272.15 | 7,183.45 | 1,407.98 | -1,743.70 | 1,816.14 | 2.13 | -1.66 | 1.33 | |
| 9,277.00 | 87.85 | 272.42 | 7,187.23 | 1,411.76 | -1,838.55 | 1,911.06 | 0.40 | 0.28 | 0.28 | |
| 9,372.00 | 88.99 | 273.13 | 7,189.85 | 1,416.36 | -1,933.40 | 2,006.02 | 1.41 | 1.20 | 0.75 | |
| 9,467.00 | 89.53 | 272.13 | 7,191.08 | 1,420.72 | -2,028.29 | 2,101.01 | 1.20 | 0.57 | -1.05 | |
| 9,563.00 | 89.77 | 271.52 | 7,191.67 | 1,423.78 | -2,124.24 | 2,196.98 | 0.68 | 0.25 | -0.64 | |
| 9,658.00 | 89.77 | 271.87 | 7,192.05 | 1,426.59 | -2,219.19 | 2,291.96 | 0.37 | 0.00 | 0.37 | |
| 9,754.00 | 89.56 | 271.44 | 7,192.61 | 1,429.36 | -2,315.15 | 2,387.93 | 0.50 | -0.22 | -0.45 | |
| 9,849.00 | 88.12 | 269.85 | 7,194.53 | 1,430.43 | -2,410.12 | 2,482.82 | 2.26 | -1.52 | -1.67 | |
| 9,944.00 | 86.51 | 267.81 | 7,198.98 | 1,428.49 | -2,504.99 | 2,577.45 | 2.73 | -1.69 | -2.15 | |
| 10,040.00 | 86.98 | 267.09 | 7,204.43 | 1,424.23 | -2,600.74 | 2,672.83 | 0.89 | 0.49 | -0.75 | |
| 10,135.00 | 88.79 | 269.19 | 7,207.94 | 1,421.15 | -2,695.61 | 2,767.41 | 2.92 | 1.91 | 2.21 | |
| 10,230.00 | 90.44 | 271.43 | 7,208.58 | 1,421.66 | -2,790.60 | 2,862.29 | 2.93 | 1.74 | 2.36 | |
| 10,326.00 | 92.38 | 273.03 | 7,206.22 | 1,425.39 | -2,886.49 | 2,958.25 | 2.62 | 2.02 | 1.67 | |
| 10,421.00 | 92.21 | 272.05 | 7,202.41 | 1,429.60 | -2,981.32 | 3,053.16 | 1.05 | -0.18 | -1.03 | |
| 10,517.00 | 91.11 | 272.55 | 7,199.63 | 1,433.45 | -3,077.20 | 3,149.11 | 1.26 | -1.15 | 0.52 | |
| 10,611.00 | 91.51 | 274.31 | 7,197.48 | 1,439.07 | -3,171.01 | 3,243.08 | 1.92 | 0.43 | 1.87 | |
| 10,706.00 | 90.77 | 274.24 | 7,195.59 | 1,446.15 | -3,265.72 | 3,338.04 | 0.78 | -0.78 | -0.07 | |
| 10,801.00 | 89.63 | 275.16 | 7,195.26 | 1,453.94 | -3,360.40 | 3,433.00 | 1.54 | -1.20 | 0.97 | |
| 10,896.00 | 89.40 | 274.79 | 7,196.06 | 1,462.18 | -3,455.04 | 3,527.94 | 0.46 | -0.24 | -0.39 | |
| 10,992.00 | 89.03 | 272.71 | 7,197.38 | 1,468.45 | -3,550.82 | 3,623.92 | 2.20 | -0.39 | -2.17 | |
| 11,087.00 | 88.12 | 274.80 | 7,199.74 | 1,474.67 | -3,645.58 | 3,718.88 | 2.40 | -0.96 | 2.20 | |
| 11,182.00 | 87.38 | 273.98 | 7,203.47 | 1,481.94 | -3,740.23 | 3,813.78 | 1.16 | -0.78 | -0.86 | |
| 11,278.00 | 87.22 | 274.07 | 7,207.99 | 1,488.67 | -3,835.88 | 3,909.66 | 0.19 | -0.17 | 0.09 | |
| 11,373.00 | 86.74 | 274.55 | 7,213.00 | 1,495.80 | -3,930.48 | 4,004.50 | 0.71 | -0.51 | 0.51 | |
| 11,468.00 | 85.67 | 274.17 | 7,219.29 | 1,503.01 | -4,025.00 | 4,099.27 | 1.19 | -1.13 | -0.40 | |
| 11,563.00 | 85.27 | 274.65 | 7,226.79 | 1,510.29 | -4,119.42 | 4,193.94 | 0.66 | -0.42 | 0.51 | |
| 11,593.00 | 85.00 | 274.74 | 7,229.33 | 1,512.74 | -4,149.21 | 4,223.82 | 0.95 | -0.90 | 0.30 | |
| Last SDI MWD Survey | | | | | | | | | | |
| 11,652.00 | 85.00 | 274.74 | 7,234.48 | 1,517.59 | -4,207.79 | 4,282.57 | 0.00 | 0.00 | 0.00 | |
| Projection to TD | | | | | | | | | | |

| | | | |
|------------------|------------------------|-------------------------------------|---|
| Company: | Extraction Oil & Gas | Local Co-ordinate Reference: | Well Janssen 5 |
| Project: | Weld County, CO NAD 83 | TVD Reference: | GL 4778' & KB 24.5' @ 4802.50ft (Patterson 346) |
| Site: | Janssen | MD Reference: | GL 4778' & KB 24.5' @ 4802.50ft (Patterson 346) |
| Well: | Janssen 5 | North Reference: | True |
| Wellbore: | OH | Survey Calculation Method: | Minimum Curvature |
| Design: | OH | Database: | Casper District |

| Design Annotations | | | | |
|---------------------------|---------------------------|-------------------|---------------|-------------------------------|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment |
| | | +N/-S (ft) | +E/-W (ft) | |
| 203.00 | 202.99 | -0.04 | -1.91 | First SDI MWD Survey |
| 1,519.00 | 1,514.89 | 52.08 | 20.92 | Last SDI MWD Surface Survey |
| 1,677.00 | 1,669.11 | 83.86 | 33.94 | First SDI MWD Vertical Survey |
| 11,593.00 | 7,229.33 | 1,512.74 | -4,149.21 | Last SDI MWD Survey |
| 11,652.00 | 7,234.48 | 1,517.59 | -4,207.79 | Projection to TD |

| | | |
|-------------------|--------------------|-------------|
| Checked By: _____ | Approved By: _____ | Date: _____ |
|-------------------|--------------------|-------------|