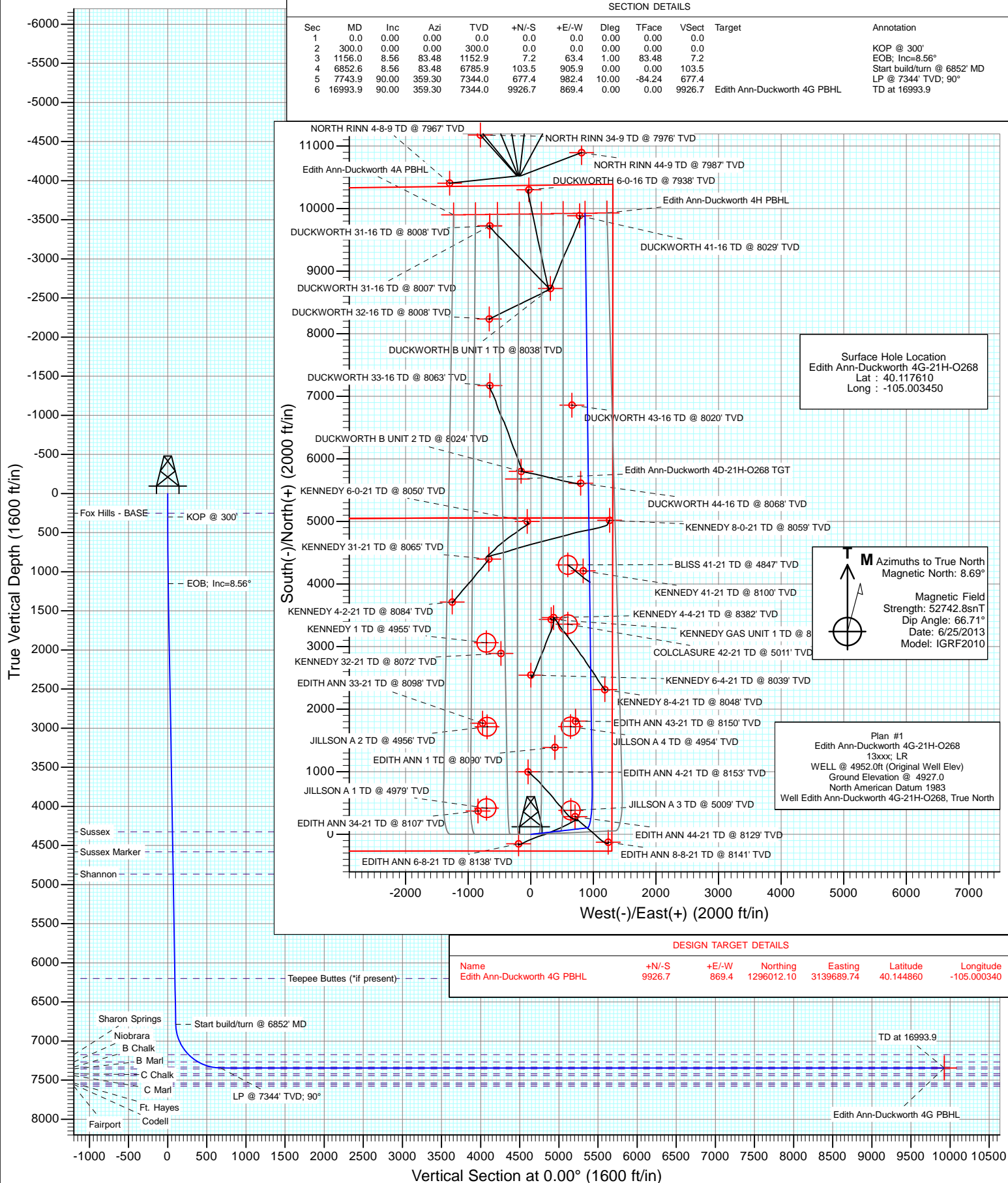




Project: DJ Wattenberg
Site: S21-T2N-R68W (Edith Ann-Duckworth)
Well: Edith Ann-Duckworth 4G-21H-O268
Vellbore: Hz
Design: Plan #1



Planning Report

| | | | |
|------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Project: | DJ Wattenberg | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site: | S21-T2N-R68W (Edith Ann-Duckworth) | North Reference: | True |
| Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Hz | | |
| Design: | Plan #1 | | |

| | | | |
|--------------------|---------------------------|----------------------|----------------|
| Project | DJ Wattenberg | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Northern Zone | | |

| | | | | | |
|-----------------------|----------|------------------------------------|-----------------|-------------------|-------------|
| Site | | S21-T2N-R68W (Edith Ann-Duckworth) | | | |
| Site Position: | | Northing: | 1,290,455.50 ft | Latitude: | 40.129630 |
| From: | Lat/Long | Easting: | 3,138,171.93 ft | Longitude: | -105.005880 |
| Position Uncertainty: | 0.0 ft | Slot Radius: | 13.200 in | Grid Convergence: | 0.32 ° |

| | | | | | | |
|----------------------|---------------------------------|--------|---------------------|-----------------|---------------|-------------|
| Well | Edith Ann-Duckworth 4G-21H-O268 | | | | | |
| Well Position | +N/-S | 0.0 ft | Northing: | 1,286,080.68 ft | Latitude: | 40.117610 |
| | +E/-W | 0.0 ft | Easting: | 3,138,875.91 ft | Longitude: | -105.003450 |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: | ft | Ground Level: | 4,927.0 ft |

| | | | | | |
|------------------|-------------------|--------------------|--------------------|------------------|-----------------------|
| Wellbore | Hz | | | | |
| Magnetics | Model Name | Sample Date | Declination | Dip Angle | Field Strength |
| | | | (°) | (°) | (nT) |
| | IGRF2010 | 6/25/2013 | 8.69 | 66.71 | 52,743 |

| | | | | |
|--------------------------|-------------------------|--------------|----------------------|------------------|
| Design | Plan #1 | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) | +N/-S | +E/-W | Direction |
| | (ft) | (ft) | (ft) | (°) |
| | 0.0 | 0.0 | 0.0 | 0.00 |

| Plan Sections | | | | | | | | | | |
|----------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|----------------------|---------------------|---------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,156.0 | 8.56 | 83.48 | 1,152.9 | 7.2 | 63.4 | 1.00 | 1.00 | 0.00 | 83.48 | |
| 6,852.6 | 8.56 | 83.48 | 6,785.9 | 103.5 | 905.9 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 7,743.9 | 90.00 | 359.30 | 7,344.0 | 677.4 | 982.4 | 10.00 | 9.14 | -9.44 | -84.24 | |
| 16,993.9 | 90.00 | 359.30 | 7,344.0 | 9,926.7 | 869.4 | 0.00 | 0.00 | 0.00 | 0.00 | Edith Ann-Duckworth |

Planning Report

| | | | |
|------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Project: | DJ Wattenberg | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site: | S21-T2N-R68W (Edith Ann-Duckworth) | North Reference: | True |
| Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Hz | | |
| Design: | Plan #1 | | |

Planned Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Comments / Formations |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|-----------------------|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 100.0 | 0.00 | 0.00 | 100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 252.0 | 0.00 | 0.00 | 252.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | Fox Hills - BASE |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | KOP @ 300' |
| 400.0 | 1.00 | 83.48 | 400.0 | 0.1 | 0.9 | 0.1 | 1.00 | 1.00 | |
| 500.0 | 2.00 | 83.48 | 500.0 | 0.4 | 3.5 | 0.4 | 1.00 | 1.00 | |
| 600.0 | 3.00 | 83.48 | 599.9 | 0.9 | 7.8 | 0.9 | 1.00 | 1.00 | |
| 700.0 | 4.00 | 83.48 | 699.7 | 1.6 | 13.9 | 1.6 | 1.00 | 1.00 | |
| 800.0 | 5.00 | 83.48 | 799.4 | 2.5 | 21.7 | 2.5 | 1.00 | 1.00 | |
| 900.0 | 6.00 | 83.48 | 898.9 | 3.6 | 31.2 | 3.6 | 1.00 | 1.00 | |
| 1,000.0 | 7.00 | 83.48 | 998.3 | 4.8 | 42.4 | 4.8 | 1.00 | 1.00 | |
| 1,100.0 | 8.00 | 83.48 | 1,097.4 | 6.3 | 55.4 | 6.3 | 1.00 | 1.00 | |
| 1,156.0 | 8.56 | 83.48 | 1,152.9 | 7.2 | 63.4 | 7.2 | 1.00 | 1.00 | EOB; Inc=8.56° |
| 1,200.0 | 8.56 | 83.48 | 1,196.3 | 8.0 | 69.9 | 8.0 | 0.00 | 0.00 | |
| 1,300.0 | 8.56 | 83.48 | 1,295.2 | 9.7 | 84.7 | 9.7 | 0.00 | 0.00 | |
| 1,400.0 | 8.56 | 83.48 | 1,394.1 | 11.4 | 99.5 | 11.4 | 0.00 | 0.00 | |
| 1,500.0 | 8.56 | 83.48 | 1,493.0 | 13.1 | 114.3 | 13.1 | 0.00 | 0.00 | |
| 1,600.0 | 8.56 | 83.48 | 1,591.9 | 14.8 | 129.1 | 14.8 | 0.00 | 0.00 | |
| 1,700.0 | 8.56 | 83.48 | 1,690.8 | 16.4 | 143.9 | 16.4 | 0.00 | 0.00 | |
| 1,800.0 | 8.56 | 83.48 | 1,789.6 | 18.1 | 158.7 | 18.1 | 0.00 | 0.00 | |
| 1,900.0 | 8.56 | 83.48 | 1,888.5 | 19.8 | 173.4 | 19.8 | 0.00 | 0.00 | |
| 2,000.0 | 8.56 | 83.48 | 1,987.4 | 21.5 | 188.2 | 21.5 | 0.00 | 0.00 | |
| 2,100.0 | 8.56 | 83.48 | 2,086.3 | 23.2 | 203.0 | 23.2 | 0.00 | 0.00 | |
| 2,200.0 | 8.56 | 83.48 | 2,185.2 | 24.9 | 217.8 | 24.9 | 0.00 | 0.00 | |
| 2,300.0 | 8.56 | 83.48 | 2,284.1 | 26.6 | 232.6 | 26.6 | 0.00 | 0.00 | |
| 2,400.0 | 8.56 | 83.48 | 2,383.0 | 28.3 | 247.4 | 28.3 | 0.00 | 0.00 | |
| 2,500.0 | 8.56 | 83.48 | 2,481.8 | 30.0 | 262.2 | 30.0 | 0.00 | 0.00 | |
| 2,600.0 | 8.56 | 83.48 | 2,580.7 | 31.7 | 277.0 | 31.7 | 0.00 | 0.00 | |
| 2,700.0 | 8.56 | 83.48 | 2,679.6 | 33.3 | 291.8 | 33.3 | 0.00 | 0.00 | |
| 2,800.0 | 8.56 | 83.48 | 2,778.5 | 35.0 | 306.5 | 35.0 | 0.00 | 0.00 | |
| 2,900.0 | 8.56 | 83.48 | 2,877.4 | 36.7 | 321.3 | 36.7 | 0.00 | 0.00 | |
| 3,000.0 | 8.56 | 83.48 | 2,976.3 | 38.4 | 336.1 | 38.4 | 0.00 | 0.00 | |
| 3,100.0 | 8.56 | 83.48 | 3,075.2 | 40.1 | 350.9 | 40.1 | 0.00 | 0.00 | |
| 3,200.0 | 8.56 | 83.48 | 3,174.0 | 41.8 | 365.7 | 41.8 | 0.00 | 0.00 | |
| 3,300.0 | 8.56 | 83.48 | 3,272.9 | 43.5 | 380.5 | 43.5 | 0.00 | 0.00 | |
| 3,400.0 | 8.56 | 83.48 | 3,371.8 | 45.2 | 395.3 | 45.2 | 0.00 | 0.00 | |
| 3,500.0 | 8.56 | 83.48 | 3,470.7 | 46.9 | 410.1 | 46.9 | 0.00 | 0.00 | |
| 3,600.0 | 8.56 | 83.48 | 3,569.6 | 48.6 | 424.9 | 48.6 | 0.00 | 0.00 | |
| 3,700.0 | 8.56 | 83.48 | 3,668.5 | 50.2 | 439.6 | 50.2 | 0.00 | 0.00 | |
| 3,800.0 | 8.56 | 83.48 | 3,767.4 | 51.9 | 454.4 | 51.9 | 0.00 | 0.00 | |
| 3,900.0 | 8.56 | 83.48 | 3,866.2 | 53.6 | 469.2 | 53.6 | 0.00 | 0.00 | |
| 4,000.0 | 8.56 | 83.48 | 3,965.1 | 55.3 | 484.0 | 55.3 | 0.00 | 0.00 | |
| 4,100.0 | 8.56 | 83.48 | 4,064.0 | 57.0 | 498.8 | 57.0 | 0.00 | 0.00 | |
| 4,200.0 | 8.56 | 83.48 | 4,162.9 | 58.7 | 513.6 | 58.7 | 0.00 | 0.00 | |
| 4,300.0 | 8.56 | 83.48 | 4,261.8 | 60.4 | 528.4 | 60.4 | 0.00 | 0.00 | |
| 4,363.9 | 8.56 | 83.48 | 4,325.0 | 61.5 | 537.8 | 61.5 | 0.00 | 0.00 | Sussex |
| 4,400.0 | 8.56 | 83.48 | 4,360.7 | 62.1 | 543.2 | 62.1 | 0.00 | 0.00 | |
| 4,500.0 | 8.56 | 83.48 | 4,459.6 | 63.8 | 558.0 | 63.8 | 0.00 | 0.00 | |
| 4,600.0 | 8.56 | 83.48 | 4,558.5 | 65.5 | 572.7 | 65.5 | 0.00 | 0.00 | |
| 4,623.8 | 8.56 | 83.48 | 4,582.0 | 65.9 | 576.3 | 65.9 | 0.00 | 0.00 | Sussex Marker |
| 4,700.0 | 8.56 | 83.48 | 4,657.3 | 67.1 | 587.5 | 67.1 | 0.00 | 0.00 | |

Planning Report

| | | | |
|------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Project: | DJ Wattenberg | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site: | S21-T2N-R68W (Edith Ann-Duckworth) | North Reference: | True |
| Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Hz | | |
| Design: | Plan #1 | | |

Planned Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Comments / Formations |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|-----------------------------|
| 4,800.0 | 8.56 | 83.48 | 4,756.2 | 68.8 | 602.3 | 68.8 | 0.00 | 0.00 | |
| 4,900.0 | 8.56 | 83.48 | 4,855.1 | 70.5 | 617.1 | 70.5 | 0.00 | 0.00 | |
| 4,912.0 | 8.56 | 83.48 | 4,867.0 | 70.7 | 618.9 | 70.7 | 0.00 | 0.00 | Shannon |
| 5,000.0 | 8.56 | 83.48 | 4,954.0 | 72.2 | 631.9 | 72.2 | 0.00 | 0.00 | |
| 5,100.0 | 8.56 | 83.48 | 5,052.9 | 73.9 | 646.7 | 73.9 | 0.00 | 0.00 | |
| 5,200.0 | 8.56 | 83.48 | 5,151.8 | 75.6 | 661.5 | 75.6 | 0.00 | 0.00 | |
| 5,300.0 | 8.56 | 83.48 | 5,250.7 | 77.3 | 676.3 | 77.3 | 0.00 | 0.00 | |
| 5,400.0 | 8.56 | 83.48 | 5,349.5 | 79.0 | 691.1 | 79.0 | 0.00 | 0.00 | |
| 5,500.0 | 8.56 | 83.48 | 5,448.4 | 80.7 | 705.8 | 80.7 | 0.00 | 0.00 | |
| 5,600.0 | 8.56 | 83.48 | 5,547.3 | 82.4 | 720.6 | 82.4 | 0.00 | 0.00 | |
| 5,700.0 | 8.56 | 83.48 | 5,646.2 | 84.0 | 735.4 | 84.0 | 0.00 | 0.00 | |
| 5,800.0 | 8.56 | 83.48 | 5,745.1 | 85.7 | 750.2 | 85.7 | 0.00 | 0.00 | |
| 5,900.0 | 8.56 | 83.48 | 5,844.0 | 87.4 | 765.0 | 87.4 | 0.00 | 0.00 | |
| 6,000.0 | 8.56 | 83.48 | 5,942.9 | 89.1 | 779.8 | 89.1 | 0.00 | 0.00 | |
| 6,100.0 | 8.56 | 83.48 | 6,041.7 | 90.8 | 794.6 | 90.8 | 0.00 | 0.00 | |
| 6,200.0 | 8.56 | 83.48 | 6,140.6 | 92.5 | 809.4 | 92.5 | 0.00 | 0.00 | |
| 6,260.0 | 8.56 | 83.48 | 6,200.0 | 93.5 | 818.2 | 93.5 | 0.00 | 0.00 | Teepee Buttes (*if present) |
| 6,300.0 | 8.56 | 83.48 | 6,239.5 | 94.2 | 824.1 | 94.2 | 0.00 | 0.00 | |
| 6,400.0 | 8.56 | 83.48 | 6,338.4 | 95.9 | 838.9 | 95.9 | 0.00 | 0.00 | |
| 6,500.0 | 8.56 | 83.48 | 6,437.3 | 97.6 | 853.7 | 97.6 | 0.00 | 0.00 | |
| 6,600.0 | 8.56 | 83.48 | 6,536.2 | 99.3 | 868.5 | 99.3 | 0.00 | 0.00 | |
| 6,700.0 | 8.56 | 83.48 | 6,635.1 | 101.0 | 883.3 | 101.0 | 0.00 | 0.00 | |
| 6,800.0 | 8.56 | 83.48 | 6,733.9 | 102.6 | 898.1 | 102.6 | 0.00 | 0.00 | |
| 6,852.6 | 8.56 | 83.48 | 6,785.9 | 103.5 | 905.9 | 103.5 | 0.00 | 0.00 | Start build/turn @ 6852' MD |
| 6,900.0 | 10.19 | 55.75 | 6,832.7 | 106.3 | 912.8 | 106.3 | 10.00 | 3.43 | |
| 7,000.0 | 17.73 | 27.23 | 6,929.8 | 124.9 | 927.2 | 124.9 | 10.00 | 7.54 | |
| 7,100.0 | 26.90 | 16.47 | 7,022.3 | 160.2 | 940.6 | 160.2 | 10.00 | 9.17 | |
| 7,200.0 | 36.48 | 10.98 | 7,107.3 | 211.2 | 952.7 | 211.2 | 10.00 | 9.58 | |
| 7,289.6 | 45.21 | 7.85 | 7,175.0 | 268.9 | 962.1 | 268.9 | 10.00 | 9.74 | Sharon Springs |
| 7,300.0 | 46.22 | 7.55 | 7,182.3 | 276.3 | 963.1 | 276.3 | 10.00 | 9.78 | |
| 7,400.0 | 56.04 | 5.09 | 7,245.0 | 353.6 | 971.6 | 353.6 | 10.00 | 9.82 | |
| 7,443.7 | 60.35 | 4.19 | 7,268.0 | 390.7 | 974.6 | 390.7 | 10.00 | 9.85 | Niobrara |
| 7,500.0 | 65.90 | 3.14 | 7,293.4 | 440.7 | 977.8 | 440.7 | 10.00 | 9.86 | |
| 7,600.0 | 75.77 | 1.48 | 7,326.2 | 535.0 | 981.5 | 535.0 | 10.00 | 9.88 | |
| 7,636.1 | 79.34 | 0.92 | 7,334.0 | 570.2 | 982.2 | 570.2 | 10.00 | 9.88 | B Chalk |
| 7,700.0 | 85.66 | 359.95 | 7,342.3 | 633.5 | 982.7 | 633.5 | 10.00 | 9.89 | |
| 7,743.9 | 90.00 | 359.30 | 7,344.0 | 677.4 | 982.4 | 677.4 | 10.00 | 9.89 | LP @ 7344' TVD; 90° |
| 7,800.0 | 90.00 | 359.30 | 7,344.0 | 733.5 | 981.8 | 733.5 | 0.00 | 0.00 | |
| 7,900.0 | 90.00 | 359.30 | 7,344.0 | 833.5 | 980.5 | 833.5 | 0.00 | 0.00 | |
| 8,000.0 | 90.00 | 359.30 | 7,344.0 | 933.5 | 979.3 | 933.5 | 0.00 | 0.00 | |
| 8,100.0 | 90.00 | 359.30 | 7,344.0 | 1,033.5 | 978.1 | 1,033.5 | 0.00 | 0.00 | |
| 8,200.0 | 90.00 | 359.30 | 7,344.0 | 1,133.5 | 976.9 | 1,133.5 | 0.00 | 0.00 | |
| 8,300.0 | 90.00 | 359.30 | 7,344.0 | 1,233.5 | 975.6 | 1,233.5 | 0.00 | 0.00 | |
| 8,400.0 | 90.00 | 359.30 | 7,344.0 | 1,333.4 | 974.4 | 1,333.4 | 0.00 | 0.00 | |
| 8,500.0 | 90.00 | 359.30 | 7,344.0 | 1,433.4 | 973.2 | 1,433.4 | 0.00 | 0.00 | |
| 8,600.0 | 90.00 | 359.30 | 7,344.0 | 1,533.4 | 972.0 | 1,533.4 | 0.00 | 0.00 | |
| 8,700.0 | 90.00 | 359.30 | 7,344.0 | 1,633.4 | 970.8 | 1,633.4 | 0.00 | 0.00 | |
| 8,800.0 | 90.00 | 359.30 | 7,344.0 | 1,733.4 | 969.5 | 1,733.4 | 0.00 | 0.00 | |
| 8,900.0 | 90.00 | 359.30 | 7,344.0 | 1,833.4 | 968.3 | 1,833.4 | 0.00 | 0.00 | |
| 9,000.0 | 90.00 | 359.30 | 7,344.0 | 1,933.4 | 967.1 | 1,933.4 | 0.00 | 0.00 | |
| 9,100.0 | 90.00 | 359.30 | 7,344.0 | 2,033.4 | 965.9 | 2,033.4 | 0.00 | 0.00 | |
| 9,200.0 | 90.00 | 359.30 | 7,344.0 | 2,133.4 | 964.6 | 2,133.4 | 0.00 | 0.00 | |

Planning Report

| | | | |
|------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Project: | DJ Wattenberg | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site: | S21-T2N-R68W (Edith Ann-Duckworth) | North Reference: | True |
| Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Hz | | |
| Design: | Plan #1 | | |

Planned Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Comments / Formations |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|-----------------------|
| 9,300.0 | 90.00 | 359.30 | 7,344.0 | 2,233.4 | 963.4 | 2,233.4 | 0.00 | 0.00 | |
| 9,400.0 | 90.00 | 359.30 | 7,344.0 | 2,333.4 | 962.2 | 2,333.4 | 0.00 | 0.00 | |
| 9,500.0 | 90.00 | 359.30 | 7,344.0 | 2,433.4 | 961.0 | 2,433.4 | 0.00 | 0.00 | |
| 9,600.0 | 90.00 | 359.30 | 7,344.0 | 2,533.4 | 959.8 | 2,533.4 | 0.00 | 0.00 | |
| 9,700.0 | 90.00 | 359.30 | 7,344.0 | 2,633.3 | 958.5 | 2,633.3 | 0.00 | 0.00 | |
| 9,800.0 | 90.00 | 359.30 | 7,344.0 | 2,733.3 | 957.3 | 2,733.3 | 0.00 | 0.00 | |
| 9,900.0 | 90.00 | 359.30 | 7,344.0 | 2,833.3 | 956.1 | 2,833.3 | 0.00 | 0.00 | |
| 10,000.0 | 90.00 | 359.30 | 7,344.0 | 2,933.3 | 954.9 | 2,933.3 | 0.00 | 0.00 | |
| 10,100.0 | 90.00 | 359.30 | 7,344.0 | 3,033.3 | 953.7 | 3,033.3 | 0.00 | 0.00 | |
| 10,200.0 | 90.00 | 359.30 | 7,344.0 | 3,133.3 | 952.4 | 3,133.3 | 0.00 | 0.00 | |
| 10,300.0 | 90.00 | 359.30 | 7,344.0 | 3,233.3 | 951.2 | 3,233.3 | 0.00 | 0.00 | |
| 10,400.0 | 90.00 | 359.30 | 7,344.0 | 3,333.3 | 950.0 | 3,333.3 | 0.00 | 0.00 | |
| 10,500.0 | 90.00 | 359.30 | 7,344.0 | 3,433.3 | 948.8 | 3,433.3 | 0.00 | 0.00 | |
| 10,600.0 | 90.00 | 359.30 | 7,344.0 | 3,533.3 | 947.5 | 3,533.3 | 0.00 | 0.00 | |
| 10,700.0 | 90.00 | 359.30 | 7,344.0 | 3,633.3 | 946.3 | 3,633.3 | 0.00 | 0.00 | |
| 10,800.0 | 90.00 | 359.30 | 7,344.0 | 3,733.3 | 945.1 | 3,733.3 | 0.00 | 0.00 | |
| 10,900.0 | 90.00 | 359.30 | 7,344.0 | 3,833.3 | 943.9 | 3,833.3 | 0.00 | 0.00 | |
| 11,000.0 | 90.00 | 359.30 | 7,344.0 | 3,933.2 | 942.7 | 3,933.2 | 0.00 | 0.00 | |
| 11,100.0 | 90.00 | 359.30 | 7,344.0 | 4,033.2 | 941.4 | 4,033.2 | 0.00 | 0.00 | |
| 11,200.0 | 90.00 | 359.30 | 7,344.0 | 4,133.2 | 940.2 | 4,133.2 | 0.00 | 0.00 | |
| 11,300.0 | 90.00 | 359.30 | 7,344.0 | 4,233.2 | 939.0 | 4,233.2 | 0.00 | 0.00 | |
| 11,400.0 | 90.00 | 359.30 | 7,344.0 | 4,333.2 | 937.8 | 4,333.2 | 0.00 | 0.00 | |
| 11,500.0 | 90.00 | 359.30 | 7,344.0 | 4,433.2 | 936.5 | 4,433.2 | 0.00 | 0.00 | |
| 11,600.0 | 90.00 | 359.30 | 7,344.0 | 4,533.2 | 935.3 | 4,533.2 | 0.00 | 0.00 | |
| 11,700.0 | 90.00 | 359.30 | 7,344.0 | 4,633.2 | 934.1 | 4,633.2 | 0.00 | 0.00 | |
| 11,800.0 | 90.00 | 359.30 | 7,344.0 | 4,733.2 | 932.9 | 4,733.2 | 0.00 | 0.00 | |
| 11,900.0 | 90.00 | 359.30 | 7,344.0 | 4,833.2 | 931.7 | 4,833.2 | 0.00 | 0.00 | |
| 12,000.0 | 90.00 | 359.30 | 7,344.0 | 4,933.2 | 930.4 | 4,933.2 | 0.00 | 0.00 | |
| 12,100.0 | 90.00 | 359.30 | 7,344.0 | 5,033.2 | 929.2 | 5,033.2 | 0.00 | 0.00 | |
| 12,200.0 | 90.00 | 359.30 | 7,344.0 | 5,133.2 | 928.0 | 5,133.2 | 0.00 | 0.00 | |
| 12,300.0 | 90.00 | 359.30 | 7,344.0 | 5,233.2 | 926.8 | 5,233.2 | 0.00 | 0.00 | |
| 12,400.0 | 90.00 | 359.30 | 7,344.0 | 5,333.1 | 925.6 | 5,333.1 | 0.00 | 0.00 | |
| 12,500.0 | 90.00 | 359.30 | 7,344.0 | 5,433.1 | 924.3 | 5,433.1 | 0.00 | 0.00 | |
| 12,600.0 | 90.00 | 359.30 | 7,344.0 | 5,533.1 | 923.1 | 5,533.1 | 0.00 | 0.00 | |
| 12,700.0 | 90.00 | 359.30 | 7,344.0 | 5,633.1 | 921.9 | 5,633.1 | 0.00 | 0.00 | |
| 12,800.0 | 90.00 | 359.30 | 7,344.0 | 5,733.1 | 920.7 | 5,733.1 | 0.00 | 0.00 | |
| 12,900.0 | 90.00 | 359.30 | 7,344.0 | 5,833.1 | 919.4 | 5,833.1 | 0.00 | 0.00 | |
| 13,000.0 | 90.00 | 359.30 | 7,344.0 | 5,933.1 | 918.2 | 5,933.1 | 0.00 | 0.00 | |
| 13,100.0 | 90.00 | 359.30 | 7,344.0 | 6,033.1 | 917.0 | 6,033.1 | 0.00 | 0.00 | |
| 13,200.0 | 90.00 | 359.30 | 7,344.0 | 6,133.1 | 915.8 | 6,133.1 | 0.00 | 0.00 | |
| 13,300.0 | 90.00 | 359.30 | 7,344.0 | 6,233.1 | 914.6 | 6,233.1 | 0.00 | 0.00 | |
| 13,400.0 | 90.00 | 359.30 | 7,344.0 | 6,333.1 | 913.3 | 6,333.1 | 0.00 | 0.00 | |
| 13,500.0 | 90.00 | 359.30 | 7,344.0 | 6,433.1 | 912.1 | 6,433.1 | 0.00 | 0.00 | |
| 13,600.0 | 90.00 | 359.30 | 7,344.0 | 6,533.1 | 910.9 | 6,533.1 | 0.00 | 0.00 | |
| 13,700.0 | 90.00 | 359.30 | 7,344.0 | 6,633.0 | 909.7 | 6,633.0 | 0.00 | 0.00 | |
| 13,800.0 | 90.00 | 359.30 | 7,344.0 | 6,733.0 | 908.4 | 6,733.0 | 0.00 | 0.00 | |
| 13,900.0 | 90.00 | 359.30 | 7,344.0 | 6,833.0 | 907.2 | 6,833.0 | 0.00 | 0.00 | |
| 14,000.0 | 90.00 | 359.30 | 7,344.0 | 6,933.0 | 906.0 | 6,933.0 | 0.00 | 0.00 | |
| 14,100.0 | 90.00 | 359.30 | 7,344.0 | 7,033.0 | 904.8 | 7,033.0 | 0.00 | 0.00 | |
| 14,200.0 | 90.00 | 359.30 | 7,344.0 | 7,133.0 | 903.6 | 7,133.0 | 0.00 | 0.00 | |
| 14,300.0 | 90.00 | 359.30 | 7,344.0 | 7,233.0 | 902.3 | 7,233.0 | 0.00 | 0.00 | |
| 14,400.0 | 90.00 | 359.30 | 7,344.0 | 7,333.0 | 901.1 | 7,333.0 | 0.00 | 0.00 | |

Planning Report

| | | | |
|------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Project: | DJ Wattenberg | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site: | S21-T2N-R68W (Edith Ann-Duckworth) | North Reference: | True |
| Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Hz | | |
| Design: | Plan #1 | | |

Planned Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Comments / Formations |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|-----------------------|
| 14,500.0 | 90.00 | 359.30 | 7,344.0 | 7,433.0 | 899.9 | 7,433.0 | 0.00 | 0.00 | |
| 14,600.0 | 90.00 | 359.30 | 7,344.0 | 7,533.0 | 898.7 | 7,533.0 | 0.00 | 0.00 | |
| 14,700.0 | 90.00 | 359.30 | 7,344.0 | 7,633.0 | 897.5 | 7,633.0 | 0.00 | 0.00 | |
| 14,800.0 | 90.00 | 359.30 | 7,344.0 | 7,733.0 | 896.2 | 7,733.0 | 0.00 | 0.00 | |
| 14,900.0 | 90.00 | 359.30 | 7,344.0 | 7,833.0 | 895.0 | 7,833.0 | 0.00 | 0.00 | |
| 15,000.0 | 90.00 | 359.30 | 7,344.0 | 7,933.0 | 893.8 | 7,933.0 | 0.00 | 0.00 | |
| 15,100.0 | 90.00 | 359.30 | 7,344.0 | 8,032.9 | 892.6 | 8,032.9 | 0.00 | 0.00 | |
| 15,200.0 | 90.00 | 359.30 | 7,344.0 | 8,132.9 | 891.3 | 8,132.9 | 0.00 | 0.00 | |
| 15,300.0 | 90.00 | 359.30 | 7,344.0 | 8,232.9 | 890.1 | 8,232.9 | 0.00 | 0.00 | |
| 15,400.0 | 90.00 | 359.30 | 7,344.0 | 8,332.9 | 888.9 | 8,332.9 | 0.00 | 0.00 | |
| 15,500.0 | 90.00 | 359.30 | 7,344.0 | 8,432.9 | 887.7 | 8,432.9 | 0.00 | 0.00 | |
| 15,600.0 | 90.00 | 359.30 | 7,344.0 | 8,532.9 | 886.5 | 8,532.9 | 0.00 | 0.00 | |
| 15,700.0 | 90.00 | 359.30 | 7,344.0 | 8,632.9 | 885.2 | 8,632.9 | 0.00 | 0.00 | |
| 15,800.0 | 90.00 | 359.30 | 7,344.0 | 8,732.9 | 884.0 | 8,732.9 | 0.00 | 0.00 | |
| 15,900.0 | 90.00 | 359.30 | 7,344.0 | 8,832.9 | 882.8 | 8,832.9 | 0.00 | 0.00 | |
| 16,000.0 | 90.00 | 359.30 | 7,344.0 | 8,932.9 | 881.6 | 8,932.9 | 0.00 | 0.00 | |
| 16,100.0 | 90.00 | 359.30 | 7,344.0 | 9,032.9 | 880.3 | 9,032.9 | 0.00 | 0.00 | |
| 16,200.0 | 90.00 | 359.30 | 7,344.0 | 9,132.9 | 879.1 | 9,132.9 | 0.00 | 0.00 | |
| 16,300.0 | 90.00 | 359.30 | 7,344.0 | 9,232.9 | 877.9 | 9,232.9 | 0.00 | 0.00 | |
| 16,400.0 | 90.00 | 359.30 | 7,344.0 | 9,332.8 | 876.7 | 9,332.8 | 0.00 | 0.00 | |
| 16,500.0 | 90.00 | 359.30 | 7,344.0 | 9,432.8 | 875.5 | 9,432.8 | 0.00 | 0.00 | |
| 16,600.0 | 90.00 | 359.30 | 7,344.0 | 9,532.8 | 874.2 | 9,532.8 | 0.00 | 0.00 | |
| 16,700.0 | 90.00 | 359.30 | 7,344.0 | 9,632.8 | 873.0 | 9,632.8 | 0.00 | 0.00 | |
| 16,800.0 | 90.00 | 359.30 | 7,344.0 | 9,732.8 | 871.8 | 9,732.8 | 0.00 | 0.00 | |
| 16,900.0 | 90.00 | 359.30 | 7,344.0 | 9,832.8 | 870.6 | 9,832.8 | 0.00 | 0.00 | |
| 16,993.9 | 90.00 | 359.30 | 7,344.0 | 9,926.7 | 869.4 | 9,926.7 | 0.00 | 0.00 | TD at 16993.9 |

Targets

| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
|---------------------------|---------------|--------------|----------|------------|------------|---------------|--------------|-----------|-------------|
| - hit/miss target | | | | | | | | | |
| - Shape | | | | | | | | | |
| Edith Ann-Duckworth 4G | 0.00 | 0.00 | 7,344.0 | 9,926.7 | 869.4 | 1,296,012.10 | 3,139,689.74 | 40.144860 | -105.000340 |
| - plan hits target center | | | | | | | | | |
| - Point | | | | | | | | | |

Formations

| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|---------------------|---------------------|-----------------------------|-----------|---------|-------------------|
| 252.0 | 252.0 | Fox Hills - BASE | | | |
| 4,363.9 | 4,325.0 | Sussex | | | |
| 4,623.8 | 4,582.0 | Sussex Marker | | | |
| 4,912.0 | 4,867.0 | Shannon | | | |
| 6,260.0 | 6,200.0 | Teepee Buttes (*if present) | | | |
| 7,289.6 | 7,175.0 | Sharon Springs | | | |
| 7,443.7 | 7,268.0 | Niobrara | | | |
| 7,636.1 | 7,334.0 | B Chalk | | | |

Planning Report

| | | | |
|------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Project: | DJ Wattenberg | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site: | S21-T2N-R68W (Edith Ann-Duckworth) | North Reference: | True |
| Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Hz | | |
| Design: | Plan #1 | | |

Plan Annotations

| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment |
|---------------------------|---------------------------|-------------------|---------------|-----------------------------|
| | | +N/-S (ft) | +E/-W (ft) | |
| 300.0 | 300.0 | 0.0 | 0.0 | KOP @ 300' |
| 1,156.0 | 1,152.9 | 7.2 | 63.4 | EOB; Inc=8.56° |
| 6,852.6 | 6,785.9 | 103.5 | 905.9 | Start build/turn @ 6852' MD |
| 7,743.9 | 7,344.0 | 677.4 | 982.4 | LP @ 7344' TVD; 90° |
| 16,993.9 | 7,344.0 | 9,926.7 | 869.4 | TD at 16993.9 |

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S21-T2N-R68W (Edith Ann-Duckworth)

Edith Ann-Duckworth 4G-21H-O268

Hz

Plan #1

Anticollision Report

26 June, 2013

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| | | | |
|-------------------------------------|---|-----------------------|---------------------|
| Reference | Plan #1 | | |
| Filter type: | NO GLOBAL FILTER: Using user defined selection & filtering criteria | | |
| Interpolation Method: | MD Interval 100.0ft | Error Model: | Systematic Ellipse |
| Depth Range: | Unlimited | Scan Method: | Closest Approach 3D |
| Results Limited by: | Maximum center-center distance of 500.0ft | Error Surface: | Elliptical Conic |
| Warning Levels Evaluated at: | 2.00 Sigma | | |

| | | | | | |
|----------------------------|----------------|--------------------------|------------------|--------------------|--|
| Survey Tool Program | | Date | 6/26/2013 | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description | |
| 0.0 | 16,993.9 | Plan #1 (Hz) | Geolink MWD | Geolink MWD | |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

Summary

| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Between Ellipses (ft) | Separation Factor | Warning |
|---|--|-------------------------------------|--|-----------------------------|----------------------|---------------------|
| Offset Well - Wellbore - Design | | | | | | |
| S21-T2N-R68W (Edith Ann-Duckworth) | | | | | | |
| BLISS 41-21 (EXISTING) - KPK WELL - SURVEYS | | | | | | Out of range |
| COLCLASURE 42-21 (EXISTING) - KPK WELL - NO SU | | | | | | Out of range |
| DUCKWORTH 31-16 (EXISTING) - ENCANA WELL - SU | | | | | | Out of range |
| DUCKWORTH 32-16 (EXISTING) - ENCANA WELL - SU | | | | | | Out of range |
| DUCKWORTH 33-16 (EXISTING) - ENCANA WELL - SU | | | | | | Out of range |
| DUCKWORTH 41-16 (EXISTING) - ENCANA WELL - SUR | 16,950.8 | 7,422.2 | 87.3 | -111.8 | 0.438 | Level 1, CC, ES, SF |
| DUCKWORTH 43-16 (EXISTING) - ENCANA WELL - NO | 13,929.4 | 7,267.0 | 247.0 | 111.9 | 1.828 | CC, ES, SF |
| DUCKWORTH 44-16 (EXISTING) - ENCANA WELL - SU | 12,670.1 | 7,363.9 | 131.3 | 17.4 | 1.153 | Level 2, CC, ES, SF |
| DUCKWORTH 6-0-16 (EXISTING) - ENCANA WELL - S | | | | | | Out of range |
| DUCKWORTH B UNIT 1 (EXISTING) - ENCANA WELL - | | | | | | Out of range |
| DUCKWORTH B UNIT 2 (EXISTING) - ENCANA WELL - | | | | | | Out of range |
| EDITH ANN 1 (EXISTING) - ENCANA WELL - NO SURV | | | | | | Out of range |
| EDITH ANN 1 (EXISTING) - ENCANA WELL - NO SURV | | | | | | Out of range |
| EDITH ANN 33-21 (EXISTING) - ENCANA WELL - NO S | | | | | | Out of range |
| EDITH ANN 34-21 (EXISTING) - ENCANA WELL - NO S | | | | | | Out of range |
| EDITH ANN 4-21 (EXISTING) - ENCANA WELL - SURVE | 2,423.8 | 2,397.8 | 484.8 | 471.4 | 36.105 | CC, ES |
| EDITH ANN 4-21 (EXISTING) - ENCANA WELL - SURVE | 2,700.0 | 2,646.4 | 496.6 | 481.5 | 32.846 | SF |
| EDITH ANN 43-21 (EXISTING) - ENCANA WELL - NO S | 8,878.7 | 7,291.0 | 251.6 | 203.4 | 5.227 | CC, ES |
| EDITH ANN 43-21 (EXISTING) - ENCANA WELL - NO S | 8,900.0 | 7,291.0 | 252.5 | 204.0 | 5.208 | SF |
| EDITH ANN 44-21 (EXISTING) - ENCANA WELL - NO S | 5,679.0 | 5,603.4 | 200.7 | 174.5 | 7.661 | CC |
| EDITH ANN 44-21 (EXISTING) - ENCANA WELL - NO S | 5,700.0 | 5,624.2 | 200.7 | 174.4 | 7.632 | ES |
| EDITH ANN 44-21 (EXISTING) - ENCANA WELL - NO S | 5,900.0 | 5,822.0 | 203.4 | 176.3 | 7.496 | SF |
| EDITH ANN 6-8-21 (EXISTING) - ENCANA WELL - SUR | 2,995.0 | 3,018.3 | 4.2 | -13.2 | 0.242 | Level 1, CC, ES, SF |
| EDITH ANN 8-8-21 (EXISTING) - ENCANA WELL - SUR | 6,956.3 | 6,936.8 | 402.9 | 374.2 | 14.006 | CC, ES |
| EDITH ANN 8-8-21 (EXISTING) - ENCANA WELL - SUR | 7,000.0 | 6,978.8 | 404.1 | 375.1 | 13.917 | SF |
| Edith Ann-Duckworth 4A-21H-O268 - Hz - Plan #1 | 200.0 | 198.0 | 61.5 | 60.9 | 101.301 | CC, ES |
| Edith Ann-Duckworth 4A-21H-O268 - Hz - Plan #1 | 700.0 | 690.0 | 96.7 | 94.4 | 41.418 | SF |
| Edith Ann-Duckworth 4B-21H-O268 - Hz - Plan #1 | 300.0 | 299.0 | 50.3 | 49.4 | 52.538 | CC, ES |
| Edith Ann-Duckworth 4B-21H-O268 - Hz - Plan #1 | 600.0 | 595.6 | 65.9 | 63.9 | 32.965 | SF |
| Edith Ann-Duckworth 4C-21H-O268 - Hz - Plan #1 | 300.0 | 299.0 | 42.0 | 41.0 | 43.781 | CC, ES |
| Edith Ann-Duckworth 4C-21H-O268 - Hz - Plan #1 | 600.0 | 597.1 | 53.2 | 51.2 | 26.581 | SF |
| Edith Ann-Duckworth 4D-21H-O268 - Hz - Plan #1 | 300.0 | 299.0 | 30.8 | 29.8 | 32.106 | CC, ES |
| Edith Ann-Duckworth 4D-21H-O268 - Hz - Plan #1 | 600.0 | 598.2 | 39.4 | 37.4 | 19.685 | SF |
| Edith Ann-Duckworth 4E-21H-O268 - Hz - Plan #1 | 300.0 | 299.0 | 22.4 | 21.4 | 23.350 | CC, ES |
| Edith Ann-Duckworth 4E-21H-O268 - Hz - Plan #1 | 600.0 | 598.9 | 30.2 | 28.2 | 15.065 | SF |
| Edith Ann-Duckworth 4F-21H-O268 - Hz - Plan #1 | 300.0 | 300.0 | 11.2 | 10.2 | 11.654 | CC, ES |
| Edith Ann-Duckworth 4F-21H-O268 - Hz - Plan #1 | 16,993.9 | 17,213.3 | 414.0 | 115.1 | 1.385 | Level 3, SF |
| Edith Ann-Duckworth 4H-21H-O268 - Hz - Plan #1 | 200.0 | 200.0 | 8.4 | 7.8 | 13.735 | CC, ES |
| Edith Ann-Duckworth 4H-21H-O268 - Hz - Plan #1 | 16,993.9 | 17,350.7 | 414.0 | 115.4 | 1.386 | Level 3, SF |
| JILLSON A 1 (EXISTING) - FOUNDATION WELL - NO S | | | | | | Out of range |
| JILLSON A 2 (EXISTING) - FOUNDATION WELL - NO S | | | | | | Out of range |
| JILLSON A 3 (EXISTING) - FOUNDATION WELL - NO S | 5,080.3 | 5,006.4 | 309.0 | 285.8 | 13.304 | CC, ES |
| JILLSON A 3 (EXISTING) - FOUNDATION WELL - NO S | 5,100.0 | 5,009.0 | 309.2 | 285.9 | 13.273 | SF |
| JILLSON A 4 (EXISTING) - FOUNDATION WELL - NO S | | | | | | Out of range |
| KENNEDY 1 (EXISTING) - MACEY & MERSHON WELL | | | | | | Out of range |
| KENNEDY 31-21 (EXISTING) - ENCANA WELL - NO SU | | | | | | Out of range |
| KENNEDY 32-21 (EXISTING) - ENCANA WELL - NO SU | | | | | | Out of range |
| KENNEDY 41-21 (EXISTING) - ENCANA WELL - NO SU | 11,279.1 | 7,279.0 | 99.5 | 10.5 | 1.118 | Level 2, CC, ES, SF |
| KENNEDY 4-2-21 (EXISTING) - ENCANA WELL - SURV | | | | | | Out of range |
| KENNEDY 6-0-21 (EXISTING) - ENCANA WELL - SURV | | | | | | Out of range |
| KENNEDY 6-4-21 (EXISTING) - ENCANA WELL - SURV | | | | | | Out of range |
| KENNEDY 8-0-21 (EXISTING) - ENCANA WELL - SURV | 12,066.7 | 7,722.4 | 319.2 | 212.4 | 2.990 | CC, ES |
| KENNEDY 8-0-21 (EXISTING) - ENCANA WELL - SURV | 12,100.0 | 7,724.0 | 320.9 | 213.6 | 2.990 | SF |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Summary | | | | | | |
|---|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|--------------|
| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
| Offset Well - Wellbore - Design | | | | | | |
| S21-T2N-R68W (Edith Ann-Duckworth) | | | | | | |
| KENNEDY 8-4-21 (EXISTING) - ENCANA WELL - SURV | 9,369.8 | 7,500.1 | 221.2 | 153.3 | 3.256 | CC, ES, SF |
| KENNEDY GAS UNIT 1 (EXISTING) - ENCANA WELL - | | | | | | Out of range |
| NORTH RINN 33-9 (EXISTING) - ENCANA WELL - PLA | | | | | | Out of range |
| NORTH RINN 34-9 (EXISTING) - ENCANA WELL - PLA | | | | | | Out of range |
| NORTH RINN 43-9 (EXISTING) - ENCANA WELL - PLA | | | | | | Out of range |
| NORTH RINN 44-9 (EXISTING) - ENCANA WELL - PLA | | | | | | Out of range |
| NORTH RINN 4-4-9 (EXISTING) - ENCANA WELL - PLA | | | | | | Out of range |
| NORTH RINN 4-6-9 (EXISTING) - ENCANA WELL - PLA | | | | | | Out of range |
| NORTH RINN 4-8-9 (EXISTING) - ENCANA WELL - PLA | | | | | | Out of range |
| NORTH RINN 6-6-9 (EXISTING) - ENCANA WELL - PLA | | | | | | Out of range |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - DUCKWORTH 41-16 (EXISING) - ENCANA WELL - SURVEY | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|--------------------|---------------------|
| Survey Program: | | 88-MWD | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | Warning | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | | Separation Factor |
| 16,500.0 | 7,344.0 | 7,416.8 | 7,272.0 | 168.3 | 25.2 | -86.04 | 9,882.5 | 782.8 | 459.2 | 268.5 | 190.68 | 2.408 | |
| 16,600.0 | 7,344.0 | 7,418.0 | 7,273.2 | 170.0 | 25.2 | -86.86 | 9,882.5 | 782.7 | 361.5 | 168.9 | 192.60 | 1.877 | |
| 16,700.0 | 7,344.0 | 7,419.2 | 7,274.4 | 171.8 | 25.2 | -87.66 | 9,882.5 | 782.7 | 265.6 | 71.1 | 194.48 | 1.365 | Level 3 |
| 16,800.0 | 7,344.0 | 7,420.4 | 7,275.6 | 173.5 | 25.2 | -88.45 | 9,882.5 | 782.7 | 174.2 | -22.1 | 196.32 | 0.888 | Level 1 |
| 16,900.0 | 7,344.0 | 7,421.6 | 7,276.8 | 175.2 | 25.2 | -89.22 | 9,882.6 | 782.7 | 101.0 | -97.2 | 198.13 | 0.510 | Level 1 |
| 16,950.8 | 7,344.0 | 7,422.2 | 7,277.4 | 176.1 | 25.2 | -89.60 | 9,882.6 | 782.7 | 87.3 | -111.8 | 199.04 | 0.438 | Level 1, CC, ES, SF |
| 16,993.9 | 7,344.0 | 7,422.7 | 7,277.9 | 176.9 | 25.2 | -89.93 | 9,882.6 | 782.7 | 97.3 | -102.5 | 199.80 | 0.487 | Level 1 |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - DUCKWORTH 43-16 (EXISTING) - ENCANA WELL - NO SUR | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|
| Survey Program: 8020-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | Warning | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | | |
| 13,500.0 | 7,344.0 | 7,267.0 | 7,267.0 | 116.3 | 12.7 | -90.00 | 6,859.5 | 659.8 | 495.4 | 367.8 | 127.64 | 3.881 | | |
| 13,600.0 | 7,344.0 | 7,267.0 | 7,267.0 | 118.0 | 12.7 | -90.00 | 6,859.5 | 659.8 | 411.8 | 282.4 | 129.38 | 3.183 | | |
| 13,700.0 | 7,344.0 | 7,267.0 | 7,267.0 | 119.7 | 12.7 | -90.00 | 6,859.5 | 659.8 | 337.2 | 206.0 | 131.13 | 2.571 | | |
| 13,800.0 | 7,344.0 | 7,267.0 | 7,267.0 | 121.4 | 12.7 | -90.00 | 6,859.5 | 659.8 | 278.9 | 146.0 | 132.87 | 2.099 | | |
| 13,900.0 | 7,344.0 | 7,267.0 | 7,267.0 | 123.2 | 12.7 | -90.00 | 6,859.5 | 659.8 | 248.8 | 114.2 | 134.62 | 1.848 | | |
| 13,929.4 | 7,344.0 | 7,267.0 | 7,267.0 | 123.7 | 12.7 | -90.00 | 6,859.5 | 659.8 | 247.0 | 111.9 | 135.13 | 1.828 CC, ES, SF | | |
| 14,000.0 | 7,344.0 | 7,267.0 | 7,267.0 | 124.9 | 12.7 | -90.00 | 6,859.5 | 659.8 | 256.9 | 120.6 | 136.36 | 1.884 | | |
| 14,100.0 | 7,344.0 | 7,267.0 | 7,267.0 | 126.6 | 12.7 | -90.00 | 6,859.5 | 659.8 | 300.2 | 162.1 | 138.11 | 2.174 | | |
| 14,200.0 | 7,344.0 | 7,267.0 | 7,267.0 | 128.4 | 12.7 | -90.00 | 6,859.5 | 659.8 | 366.4 | 226.5 | 139.86 | 2.620 | | |
| 14,300.0 | 7,344.0 | 7,267.0 | 7,267.0 | 130.1 | 12.7 | -90.00 | 6,859.5 | 659.8 | 445.4 | 303.8 | 141.60 | 3.145 | | |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - DUCKWORTH 44-16 (EXISTING) - ENCANA WELL - SURVE | | | | | | | | | | | | | Offset Site Error: 0.0 ft |
|---|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|---------------------------|---------------------------|
| Survey Program: 61-MWD | | | | | | | | | | | | | Offset Well Error: 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | |
| 12,200.0 | 7,344.0 | 7,360.7 | 7,287.0 | 93.9 | 21.3 | -89.11 | 5,601.6 | 791.0 | 488.1 | 382.5 | 105.61 | 4.621 | |
| 12,300.0 | 7,344.0 | 7,361.3 | 7,287.7 | 95.7 | 21.3 | -89.41 | 5,601.6 | 791.0 | 392.7 | 285.3 | 107.36 | 3.658 | |
| 12,400.0 | 7,344.0 | 7,362.0 | 7,288.3 | 97.4 | 21.3 | -89.71 | 5,601.6 | 791.0 | 300.3 | 191.2 | 109.12 | 2.752 | |
| 12,500.0 | 7,344.0 | 7,362.7 | 7,289.0 | 99.1 | 21.3 | -90.01 | 5,601.6 | 791.0 | 214.9 | 104.0 | 110.86 | 1.938 | |
| 12,600.0 | 7,344.0 | 7,363.4 | 7,289.7 | 100.8 | 21.3 | -90.31 | 5,601.6 | 791.0 | 148.8 | 36.2 | 112.61 | 1.321 Level 3 | |
| 12,670.1 | 7,344.0 | 7,363.9 | 7,290.2 | 102.0 | 21.3 | -90.52 | 5,601.6 | 791.0 | 131.3 | 17.4 | 113.83 | 1.153 Level 2, CC, ES, SF | |
| 12,700.0 | 7,344.0 | 7,364.1 | 7,290.4 | 102.5 | 21.3 | -90.61 | 5,601.6 | 791.0 | 134.6 | 20.3 | 114.36 | 1.177 Level 2 | |
| 12,800.0 | 7,344.0 | 7,364.8 | 7,291.1 | 104.2 | 21.3 | -90.91 | 5,601.6 | 791.0 | 184.7 | 68.6 | 116.10 | 1.591 | |
| 12,900.0 | 7,344.0 | 7,365.5 | 7,291.8 | 105.9 | 21.3 | -91.22 | 5,601.6 | 791.0 | 264.7 | 146.9 | 117.84 | 2.247 | |
| 13,000.0 | 7,344.0 | 7,366.2 | 7,292.5 | 107.7 | 21.3 | -91.52 | 5,601.6 | 791.0 | 355.0 | 235.5 | 119.57 | 2.969 | |
| 13,100.0 | 7,344.0 | 7,366.9 | 7,293.2 | 109.4 | 21.3 | -91.83 | 5,601.6 | 791.0 | 449.5 | 328.2 | 121.30 | 3.705 | |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - EDITH ANN 4-21 (EXISTING) - ENCANA WELL - SURVEYS | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|--------------------|---------|
| Survey Program: 140-Geolink MWD | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | |
| 2,100.0 | 2,086.3 | 2,083.8 | 2,054.1 | 5.2 | 6.6 | -46.19 | 417.2 | 503.2 | 495.9 | 484.8 | 11.12 | 44.592 | |
| 2,200.0 | 2,185.2 | 2,182.9 | 2,150.7 | 5.5 | 7.1 | -49.91 | 433.7 | 488.7 | 491.2 | 479.3 | 11.87 | 41.381 | |
| 2,300.0 | 2,284.1 | 2,285.5 | 2,250.8 | 5.8 | 7.5 | -53.83 | 449.7 | 472.9 | 487.2 | 474.6 | 12.61 | 38.626 | |
| 2,400.0 | 2,383.0 | 2,377.3 | 2,340.6 | 6.1 | 7.9 | -57.32 | 463.3 | 458.9 | 484.9 | 471.7 | 13.28 | 36.520 | |
| 2,423.8 | 2,406.5 | 2,397.8 | 2,360.5 | 6.2 | 7.9 | -58.10 | 466.4 | 455.9 | 484.8 | 471.4 | 13.43 | 36.105 CC, ES | |
| 2,500.0 | 2,481.8 | 2,464.2 | 2,425.4 | 6.4 | 8.2 | -60.63 | 477.1 | 446.2 | 485.9 | 472.0 | 13.90 | 34.950 | |
| 2,600.0 | 2,580.7 | 2,557.4 | 2,516.1 | 6.8 | 8.6 | -64.23 | 492.8 | 432.1 | 489.8 | 475.3 | 14.54 | 33.700 | |
| 2,700.0 | 2,679.6 | 2,646.4 | 2,602.6 | 7.1 | 9.0 | -67.69 | 508.6 | 418.2 | 496.6 | 481.5 | 15.12 | 32.846 SF | |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - EDITH ANN 43-21 (EXISTING) - ENCANA WELL - NO SURVE | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|------------------------|------------------------|------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|----------------------|--------------------|---------|
| Survey Program: 8150-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | | |
| 8,500.0 | 7,344.0 | 7,291.0 | 7,291.0 | 34.1 | 12.7 | -90.00 | 1,809.1 | 717.0 | 454.7 | 412.7 | 41.98 | 10.831 | | |
| 8,600.0 | 7,344.0 | 7,291.0 | 7,291.0 | 35.5 | 12.7 | -90.00 | 1,809.1 | 717.0 | 375.5 | 331.9 | 43.58 | 8.615 | | |
| 8,700.0 | 7,344.0 | 7,291.0 | 7,291.0 | 36.9 | 12.7 | -90.00 | 1,809.1 | 717.0 | 308.6 | 263.4 | 45.20 | 6.827 | | |
| 8,800.0 | 7,344.0 | 7,291.0 | 7,291.0 | 38.3 | 12.7 | -90.00 | 1,809.1 | 717.0 | 263.6 | 216.8 | 46.84 | 5.628 | | |
| 8,878.7 | 7,344.0 | 7,291.0 | 7,291.0 | 39.5 | 12.7 | -90.00 | 1,809.1 | 717.0 | 251.6 | 203.4 | 48.13 | 5.227 CC, ES | | |
| 8,900.0 | 7,344.0 | 7,291.0 | 7,291.0 | 39.8 | 12.7 | -90.00 | 1,809.1 | 717.0 | 252.5 | 204.0 | 48.48 | 5.208 SF | | |
| 9,000.0 | 7,344.0 | 7,291.0 | 7,291.0 | 41.3 | 12.7 | -90.00 | 1,809.1 | 717.0 | 279.3 | 229.1 | 50.13 | 5.570 | | |
| 9,100.0 | 7,344.0 | 7,291.0 | 7,291.0 | 42.8 | 12.7 | -90.00 | 1,809.1 | 717.0 | 335.0 | 283.2 | 51.80 | 6.468 | | |
| 9,200.0 | 7,344.0 | 7,291.0 | 7,291.0 | 44.3 | 12.7 | -90.00 | 1,809.1 | 717.0 | 408.0 | 354.6 | 53.47 | 7.632 | | |
| 9,300.0 | 7,344.0 | 7,291.0 | 7,291.0 | 45.9 | 12.7 | -90.00 | 1,809.1 | 717.0 | 490.7 | 435.5 | 55.14 | 8.898 | | |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - EDITH ANN 44-21 (EXISTING) - ENCANA WELL - NO SURVE | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|
| Survey Program: 8129-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | Warning | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | | |
| 2,700.0 | 2,679.6 | 2,657.6 | 2,657.6 | 7.1 | 4.6 | -24.60 | 283.1 | 709.5 | 486.7 | 477.0 | 9.78 | 49.782 | | |
| 2,800.0 | 2,778.5 | 2,756.5 | 2,756.5 | 7.4 | 4.8 | -25.34 | 283.1 | 709.5 | 473.2 | 463.0 | 10.18 | 46.472 | | |
| 2,900.0 | 2,877.4 | 2,855.4 | 2,855.4 | 7.7 | 5.0 | -26.14 | 283.1 | 709.5 | 459.8 | 449.2 | 10.59 | 43.400 | | |
| 3,000.0 | 2,976.3 | 2,954.3 | 2,954.3 | 8.0 | 5.2 | -26.98 | 283.1 | 709.5 | 446.4 | 435.4 | 11.01 | 40.542 | | |
| 3,100.0 | 3,075.2 | 3,053.2 | 3,053.2 | 8.3 | 5.3 | -27.87 | 283.1 | 709.5 | 433.2 | 421.8 | 11.44 | 37.880 | | |
| 3,200.0 | 3,174.0 | 3,152.0 | 3,152.0 | 8.6 | 5.5 | -28.81 | 283.1 | 709.5 | 420.1 | 408.2 | 11.87 | 35.394 | | |
| 3,300.0 | 3,272.9 | 3,250.9 | 3,250.9 | 8.9 | 5.7 | -29.82 | 283.1 | 709.5 | 407.0 | 394.7 | 12.31 | 33.071 | | |
| 3,400.0 | 3,371.8 | 3,349.8 | 3,349.8 | 9.3 | 5.8 | -30.89 | 283.1 | 709.5 | 394.2 | 381.4 | 12.76 | 30.896 | | |
| 3,500.0 | 3,470.7 | 3,448.7 | 3,448.7 | 9.6 | 6.0 | -32.04 | 283.1 | 709.5 | 381.4 | 368.2 | 13.22 | 28.857 | | |
| 3,600.0 | 3,569.6 | 3,547.6 | 3,547.6 | 9.9 | 6.2 | -33.26 | 283.1 | 709.5 | 368.8 | 355.2 | 13.69 | 26.946 | | |
| 3,700.0 | 3,668.5 | 3,646.5 | 3,646.5 | 10.2 | 6.4 | -34.57 | 283.1 | 709.5 | 356.5 | 342.3 | 14.17 | 25.152 | | |
| 3,800.0 | 3,767.4 | 3,745.4 | 3,745.4 | 10.5 | 6.5 | -35.97 | 283.1 | 709.5 | 344.3 | 329.6 | 14.67 | 23.469 | | |
| 3,900.0 | 3,866.2 | 3,844.2 | 3,844.2 | 10.8 | 6.7 | -37.47 | 283.1 | 709.5 | 332.3 | 317.1 | 15.18 | 21.890 | | |
| 4,000.0 | 3,965.1 | 3,943.1 | 3,943.1 | 11.1 | 6.9 | -39.08 | 283.1 | 709.5 | 320.5 | 304.8 | 15.71 | 20.408 | | |
| 4,100.0 | 4,064.0 | 4,042.0 | 4,042.0 | 11.5 | 7.1 | -40.81 | 283.1 | 709.5 | 309.1 | 292.8 | 16.25 | 19.020 | | |
| 4,200.0 | 4,162.9 | 4,140.9 | 4,140.9 | 11.8 | 7.2 | -42.68 | 283.1 | 709.5 | 297.9 | 281.1 | 16.81 | 17.720 | | |
| 4,300.0 | 4,261.8 | 4,239.8 | 4,239.8 | 12.1 | 7.4 | -44.68 | 283.1 | 709.5 | 287.1 | 269.7 | 17.39 | 16.506 | | |
| 4,400.0 | 4,360.7 | 4,338.7 | 4,338.7 | 12.4 | 7.6 | -46.83 | 283.1 | 709.5 | 276.6 | 258.6 | 17.99 | 15.375 | | |
| 4,500.0 | 4,459.6 | 4,437.6 | 4,437.6 | 12.7 | 7.7 | -49.15 | 283.1 | 709.5 | 266.6 | 248.0 | 18.61 | 14.324 | | |
| 4,600.0 | 4,558.5 | 4,536.5 | 4,536.5 | 13.0 | 7.9 | -51.65 | 283.1 | 709.5 | 257.1 | 237.8 | 19.25 | 13.353 | | |
| 4,700.0 | 4,657.3 | 4,635.3 | 4,635.3 | 13.3 | 8.1 | -54.32 | 283.1 | 709.5 | 248.0 | 228.1 | 19.91 | 12.459 | | |
| 4,800.0 | 4,756.2 | 4,734.2 | 4,734.2 | 13.7 | 8.3 | -57.19 | 283.1 | 709.5 | 239.6 | 219.0 | 20.58 | 11.642 | | |
| 4,900.0 | 4,855.1 | 4,833.1 | 4,833.1 | 14.0 | 8.4 | -60.26 | 283.1 | 709.5 | 231.8 | 210.5 | 21.26 | 10.900 | | |
| 5,000.0 | 4,954.0 | 4,932.0 | 4,932.0 | 14.3 | 8.6 | -63.53 | 283.1 | 709.5 | 224.7 | 202.8 | 21.96 | 10.235 | | |
| 5,100.0 | 5,052.9 | 5,030.9 | 5,030.9 | 14.6 | 8.8 | -66.99 | 283.1 | 709.5 | 218.4 | 195.8 | 22.65 | 9.645 | | |
| 5,200.0 | 5,151.8 | 5,129.8 | 5,129.8 | 14.9 | 9.0 | -70.65 | 283.1 | 709.5 | 213.0 | 189.7 | 23.33 | 9.129 | | |
| 5,300.0 | 5,250.7 | 5,228.7 | 5,228.7 | 15.2 | 9.1 | -74.47 | 283.1 | 709.5 | 208.5 | 184.5 | 24.00 | 8.687 | | |
| 5,400.0 | 5,349.5 | 5,327.5 | 5,327.5 | 15.5 | 9.3 | -78.44 | 283.1 | 709.5 | 205.0 | 180.3 | 24.64 | 8.319 | | |
| 5,500.0 | 5,448.4 | 5,426.4 | 5,426.4 | 15.9 | 9.5 | -82.52 | 283.1 | 709.5 | 202.5 | 177.2 | 25.24 | 8.022 | | |
| 5,600.0 | 5,547.3 | 5,525.3 | 5,525.3 | 16.2 | 9.6 | -86.69 | 283.1 | 709.5 | 201.1 | 175.3 | 25.80 | 7.794 | | |
| 5,679.0 | 5,625.4 | 5,603.4 | 5,603.4 | 16.4 | 9.8 | -90.00 | 283.1 | 709.5 | 200.7 | 174.5 | 26.20 | 7.661 CC | | |
| 5,700.0 | 5,646.2 | 5,624.2 | 5,624.2 | 16.5 | 9.8 | -90.88 | 283.1 | 709.5 | 200.7 | 174.4 | 26.30 | 7.632 ES | | |
| 5,800.0 | 5,745.1 | 5,723.1 | 5,723.1 | 16.8 | 10.0 | -95.07 | 283.1 | 709.5 | 201.5 | 174.8 | 26.75 | 7.534 | | |
| 5,900.0 | 5,844.0 | 5,822.0 | 5,822.0 | 17.1 | 10.2 | -99.21 | 283.1 | 709.5 | 203.4 | 176.3 | 27.13 | 7.496 SF | | |
| 6,000.0 | 5,942.9 | 5,920.9 | 5,920.9 | 17.4 | 10.3 | -103.25 | 283.1 | 709.5 | 206.3 | 178.9 | 27.46 | 7.512 | | |
| 6,100.0 | 6,041.7 | 6,019.7 | 6,019.7 | 17.7 | 10.5 | -107.16 | 283.1 | 709.5 | 210.3 | 182.5 | 27.74 | 7.579 | | |
| 6,200.0 | 6,140.6 | 6,118.6 | 6,118.6 | 18.1 | 10.7 | -110.91 | 283.1 | 709.5 | 215.2 | 187.2 | 27.97 | 7.692 | | |
| 6,300.0 | 6,239.5 | 6,217.5 | 6,217.5 | 18.4 | 10.9 | -114.49 | 283.1 | 709.5 | 221.0 | 192.8 | 28.17 | 7.845 | | |
| 6,400.0 | 6,338.4 | 6,316.4 | 6,316.4 | 18.7 | 11.0 | -117.87 | 283.1 | 709.5 | 227.6 | 199.3 | 28.33 | 8.034 | | |
| 6,500.0 | 6,437.3 | 6,415.3 | 6,415.3 | 19.0 | 11.2 | -121.05 | 283.1 | 709.5 | 235.0 | 206.5 | 28.47 | 8.253 | | |
| 6,600.0 | 6,536.2 | 6,514.2 | 6,514.2 | 19.3 | 11.4 | -124.04 | 283.1 | 709.5 | 243.1 | 214.5 | 28.60 | 8.499 | | |
| 6,700.0 | 6,635.1 | 6,613.1 | 6,613.1 | 19.6 | 11.5 | -126.83 | 283.1 | 709.5 | 251.8 | 223.0 | 28.72 | 8.767 | | |
| 6,800.0 | 6,733.9 | 6,711.9 | 6,711.9 | 19.9 | 11.7 | -129.42 | 283.1 | 709.5 | 261.0 | 232.2 | 28.83 | 9.054 | | |
| 6,900.0 | 6,832.7 | 6,810.7 | 6,810.7 | 20.3 | 11.9 | -104.52 | 283.1 | 709.5 | 269.5 | 240.5 | 28.97 | 9.300 | | |
| 7,000.0 | 6,929.8 | 6,907.8 | 6,907.8 | 20.6 | 12.1 | -81.62 | 283.1 | 709.5 | 269.1 | 240.4 | 28.67 | 9.386 | | |
| 7,100.0 | 7,022.3 | 7,000.3 | 7,000.3 | 21.0 | 12.2 | -79.68 | 283.1 | 709.5 | 261.7 | 233.8 | 27.93 | 9.369 | | |
| 7,200.0 | 7,107.3 | 7,085.3 | 7,085.3 | 21.4 | 12.4 | -85.58 | 283.1 | 709.5 | 253.6 | 226.4 | 27.19 | 9.327 | | |
| 7,252.3 | 7,147.9 | 7,125.9 | 7,125.9 | 21.7 | 12.4 | -90.00 | 283.1 | 709.5 | 252.0 | 225.0 | 26.94 | 9.353 | | |
| 7,300.0 | 7,182.3 | 7,160.3 | 7,160.3 | 21.9 | 12.5 | -94.17 | 283.1 | 709.5 | 253.7 | 226.9 | 26.77 | 9.477 | | |
| 7,400.0 | 7,245.0 | 7,223.0 | 7,223.0 | 22.5 | 12.6 | -101.58 | 283.1 | 709.5 | 271.4 | 244.6 | 26.74 | 10.149 | | |
| 7,500.0 | 7,293.4 | 7,271.4 | 7,271.4 | 23.2 | 12.7 | -105.17 | 283.1 | 709.5 | 311.1 | 283.9 | 27.22 | 11.431 | | |
| 7,600.0 | 7,326.2 | 7,304.2 | 7,304.2 | 23.9 | 12.7 | -103.48 | 283.1 | 709.5 | 370.7 | 342.2 | 28.51 | 13.003 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| | | | | | | | | | | | | | | | | | | |
|----------------------------------|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------|------------|-----------------|------------------|-------------------|------------|--|---------|--------------------|--|--------|--|
| Offset Design | | | | | | | | | | | | | S21-T2N-R68W (Edith Ann-Duckworth) - EDITH ANN 44-21 (EXISTING) - ENCANA WELL - NO SURVE | | Offset Site Error: | | 0.0 ft | |
| Survey Program: 8129-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | | 0.0 ft | | | |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | Warning | | | | |
| Measured Depth | Vertical Depth | Measured Depth | Vertical Depth | Reference | Offset | Highside Toolface | Offset Wellbore Centre | | Between Centres | Between Ellipses | Total Uncertainty | Separation | | | | | | |
| Depth (ft) | Depth (ft) | Depth (ft) | Depth (ft) | (ft) | (ft) | (°) | +N/-S (ft) | +E/-W (ft) | (ft) | (ft) | Axis | Factor | | | | | | |
| 7,700.0 | 7,342.3 | 7,320.3 | 7,320.3 | 24.8 | 12.8 | -95.54 | 283.1 | 709.5 | 444.3 | 414.0 | 30.30 | 14.665 | | | | | | |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - EDITH ANN 6-8-21 (EXISTING) - ENCANA WELL - SURVEYS | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|---------------------|---------|
| Survey Program: 80-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | | |
| 1,900.0 | 1,888.5 | 2,000.6 | 1,990.0 | 4.6 | 4.4 | -12.90 | 165.8 | 601.9 | 465.6 | 458.9 | 6.79 | 68.621 | | |
| 2,000.0 | 1,987.4 | 2,104.7 | 2,090.9 | 4.9 | 4.8 | -12.76 | 153.3 | 579.1 | 427.2 | 420.1 | 7.15 | 59.748 | | |
| 2,100.0 | 2,086.3 | 2,200.9 | 2,183.5 | 5.2 | 5.3 | -12.59 | 141.0 | 556.2 | 386.8 | 379.3 | 7.50 | 51.561 | | |
| 2,200.0 | 2,185.2 | 2,291.5 | 2,270.7 | 5.5 | 5.7 | -12.42 | 129.5 | 534.2 | 346.0 | 338.2 | 7.84 | 44.124 | | |
| 2,300.0 | 2,284.1 | 2,382.9 | 2,358.6 | 5.8 | 6.1 | -12.29 | 118.3 | 511.9 | 305.3 | 297.1 | 8.18 | 37.299 | | |
| 2,400.0 | 2,383.0 | 2,473.9 | 2,446.2 | 6.1 | 6.6 | -12.37 | 108.2 | 489.7 | 264.9 | 256.4 | 8.52 | 31.082 | | |
| 2,500.0 | 2,481.8 | 2,572.1 | 2,540.4 | 6.4 | 7.1 | -12.87 | 98.1 | 463.9 | 223.0 | 214.2 | 8.87 | 25.135 | | |
| 2,600.0 | 2,580.7 | 2,666.5 | 2,630.1 | 6.8 | 7.6 | -13.59 | 87.5 | 436.4 | 178.4 | 169.1 | 9.22 | 19.342 | | |
| 2,700.0 | 2,679.6 | 2,755.6 | 2,714.5 | 7.1 | 8.1 | -14.34 | 76.3 | 409.8 | 132.7 | 123.1 | 9.56 | 13.875 | | |
| 2,800.0 | 2,778.5 | 2,844.3 | 2,798.5 | 7.4 | 8.6 | -15.78 | 65.3 | 383.8 | 87.5 | 77.6 | 9.92 | 8.822 | | |
| 2,900.0 | 2,877.4 | 2,933.4 | 2,883.0 | 7.7 | 9.1 | -19.33 | 53.6 | 358.0 | 42.6 | 32.2 | 10.36 | 4.108 | | |
| 2,995.0 | 2,971.4 | 3,018.3 | 2,963.7 | 8.0 | 9.6 | -100.84 | 42.4 | 334.1 | 4.2 | -13.2 | 17.43 | 0.242 | Level 1, CC, ES, SF | |
| 3,000.0 | 2,976.3 | 3,022.8 | 2,968.0 | 8.0 | 9.6 | -125.93 | 41.8 | 332.9 | 4.7 | -11.7 | 16.45 | 0.286 | Level 1 | |
| 3,100.0 | 3,075.2 | 3,112.5 | 3,053.4 | 8.3 | 10.1 | 175.17 | 31.6 | 307.6 | 46.3 | 35.3 | 11.04 | 4.196 | | |
| 3,200.0 | 3,174.0 | 3,202.3 | 3,138.8 | 8.6 | 10.6 | 172.17 | 21.1 | 281.9 | 90.5 | 79.2 | 11.28 | 8.025 | | |
| 3,300.0 | 3,272.9 | 3,293.1 | 3,225.4 | 8.9 | 11.1 | 171.27 | 10.8 | 256.5 | 134.2 | 122.6 | 11.60 | 11.572 | | |
| 3,400.0 | 3,371.8 | 3,382.4 | 3,310.7 | 9.3 | 11.6 | 170.82 | 0.9 | 231.8 | 177.6 | 165.6 | 11.92 | 14.891 | | |
| 3,500.0 | 3,470.7 | 3,472.5 | 3,396.5 | 9.6 | 12.1 | 170.85 | -8.3 | 206.1 | 221.5 | 209.2 | 12.25 | 18.077 | | |
| 3,600.0 | 3,569.6 | 3,559.8 | 3,479.7 | 9.9 | 12.6 | 171.30 | -15.5 | 180.8 | 265.4 | 252.8 | 12.58 | 21.089 | | |
| 3,700.0 | 3,668.5 | 3,648.0 | 3,563.5 | 10.2 | 13.1 | 171.52 | -23.5 | 154.3 | 310.4 | 297.5 | 12.91 | 24.036 | | |
| 3,800.0 | 3,767.4 | 3,736.7 | 3,647.7 | 10.5 | 13.7 | 171.62 | -31.9 | 127.8 | 355.3 | 342.1 | 13.24 | 26.831 | | |
| 3,900.0 | 3,866.2 | 3,825.4 | 3,731.8 | 10.8 | 14.2 | 171.50 | -41.6 | 101.3 | 400.6 | 387.0 | 13.58 | 29.507 | | |
| 4,000.0 | 3,965.1 | 3,910.9 | 3,812.8 | 11.1 | 14.7 | 171.28 | -51.8 | 75.8 | 446.1 | 432.2 | 13.90 | 32.100 | | |
| 4,100.0 | 4,064.0 | 3,998.3 | 3,895.4 | 11.5 | 15.2 | 171.16 | -61.9 | 48.9 | 492.3 | 478.1 | 14.23 | 34.607 | | |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - EDITH ANN 8-8-21 (EXISTING) - ENCANA WELL - SURVEYS | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|
| Survey Program: 78-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | Warning | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | | |
| 6,200.0 | 6,140.6 | 6,188.9 | 6,130.4 | 18.1 | 15.3 | 34.16 | -132.0 | 1,243.7 | 488.9 | 464.4 | 24.45 | 19.999 | | |
| 6,300.0 | 6,239.5 | 6,288.3 | 6,229.7 | 18.4 | 15.4 | 35.08 | -131.2 | 1,243.8 | 476.4 | 451.4 | 24.94 | 19.103 | | |
| 6,400.0 | 6,338.4 | 6,387.2 | 6,328.6 | 18.7 | 15.5 | 36.05 | -130.5 | 1,243.9 | 463.9 | 438.5 | 25.44 | 18.235 | | |
| 6,500.0 | 6,437.3 | 6,485.9 | 6,427.4 | 19.0 | 15.7 | 37.08 | -129.8 | 1,243.9 | 451.7 | 425.7 | 25.96 | 17.398 | | |
| 6,600.0 | 6,536.2 | 6,585.5 | 6,526.9 | 19.3 | 15.8 | 38.17 | -129.2 | 1,244.0 | 439.5 | 413.0 | 26.50 | 16.584 | | |
| 6,700.0 | 6,635.1 | 6,684.8 | 6,626.2 | 19.6 | 15.9 | 39.34 | -128.5 | 1,243.8 | 427.3 | 400.3 | 27.06 | 15.793 | | |
| 6,800.0 | 6,733.9 | 6,783.4 | 6,724.8 | 19.9 | 16.0 | 40.58 | -127.9 | 1,243.6 | 415.4 | 387.7 | 27.63 | 15.030 | | |
| 6,900.0 | 6,832.7 | 6,882.0 | 6,823.4 | 20.3 | 16.1 | 69.86 | -127.5 | 1,243.3 | 404.8 | 376.5 | 28.32 | 14.293 | | |
| 6,956.3 | 6,887.8 | 6,936.8 | 6,878.2 | 20.5 | 16.2 | 90.92 | -127.3 | 1,243.2 | 402.9 | 374.2 | 28.77 | 14.006 CC, ES | | |
| 7,000.0 | 6,929.8 | 6,978.8 | 6,920.2 | 20.6 | 16.3 | 100.89 | -127.2 | 1,243.1 | 404.1 | 375.1 | 29.04 | 13.917 SF | | |
| 7,100.0 | 7,022.3 | 7,071.1 | 7,012.5 | 21.0 | 16.4 | 114.59 | -127.1 | 1,242.7 | 416.9 | 387.5 | 29.43 | 14.165 | | |
| 7,200.0 | 7,107.3 | 7,155.9 | 7,097.3 | 21.4 | 16.5 | 122.62 | -127.1 | 1,242.4 | 445.4 | 416.1 | 29.29 | 15.206 | | |
| 7,300.0 | 7,182.3 | 7,231.0 | 7,172.5 | 21.9 | 16.6 | 127.45 | -127.2 | 1,242.0 | 490.5 | 461.9 | 28.61 | 17.144 | | |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4A-21H-O268 - Hz - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|------------------------|-------------------|---------|----------------------|-----------------------|--------|
| Survey Program: 0-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | Highside Toolface (°) | Distance | | Total Uncertainty Axis | Separation Factor | Warning | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | | | | Between Centres (ft) | Between Ellipses (ft) | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -89.95 | 0.1 | -61.5 | 61.6 | | | | | |
| 100.0 | 100.0 | 98.0 | 98.0 | 0.1 | 0.1 | -89.95 | 0.1 | -61.5 | 61.5 | 61.3 | 0.26 | 237.392 | | |
| 200.0 | 200.0 | 198.0 | 198.0 | 0.3 | 0.3 | -89.95 | 0.1 | -61.5 | 61.5 | 60.9 | 0.61 | 101.301 CC, ES | | |
| 300.0 | 300.0 | 296.9 | 296.9 | 0.5 | 0.5 | -89.95 | 0.1 | -62.3 | 62.4 | 61.4 | 0.96 | 65.259 | | |
| 400.0 | 400.0 | 395.8 | 395.7 | 0.7 | 0.7 | -173.51 | 0.1 | -64.9 | 65.8 | 64.5 | 1.30 | 50.540 | | |
| 500.0 | 500.0 | 494.4 | 494.2 | 0.8 | 0.8 | -173.73 | 0.1 | -69.1 | 72.7 | 71.0 | 1.65 | 44.099 | | |
| 600.0 | 599.9 | 592.5 | 592.2 | 1.0 | 1.0 | -174.01 | 0.1 | -75.0 | 83.0 | 81.0 | 1.99 | 41.648 | | |
| 700.0 | 699.7 | 690.0 | 689.4 | 1.2 | 1.2 | -174.32 | 0.1 | -82.5 | 96.7 | 94.4 | 2.33 | 41.418 SF | | |
| 800.0 | 799.4 | 786.8 | 785.7 | 1.4 | 1.5 | -174.61 | 0.1 | -91.5 | 113.8 | 111.2 | 2.67 | 42.553 | | |
| 900.0 | 898.9 | 882.6 | 880.9 | 1.7 | 1.7 | -174.86 | 0.1 | -102.1 | 134.3 | 131.3 | 3.01 | 44.588 | | |
| 1,000.0 | 998.3 | 977.3 | 974.9 | 1.9 | 2.0 | -175.07 | 0.2 | -114.2 | 158.1 | 154.8 | 3.35 | 47.250 | | |
| 1,100.0 | 1,097.4 | 1,070.7 | 1,067.4 | 2.2 | 2.2 | -175.25 | 0.2 | -127.6 | 185.2 | 181.5 | 3.68 | 50.369 | | |
| 1,200.0 | 1,196.3 | 1,162.9 | 1,158.3 | 2.5 | 2.5 | -175.41 | 0.2 | -142.2 | 215.3 | 211.3 | 4.01 | 53.750 | | |
| 1,300.0 | 1,295.2 | 1,254.0 | 1,248.0 | 2.8 | 2.8 | -175.53 | 0.3 | -158.2 | 247.2 | 242.9 | 4.34 | 57.007 | | |
| 1,400.0 | 1,394.1 | 1,344.1 | 1,336.5 | 3.1 | 3.2 | -175.61 | 0.3 | -175.4 | 280.7 | 276.0 | 4.67 | 60.148 | | |
| 1,500.0 | 1,493.0 | 1,437.5 | 1,428.0 | 3.4 | 3.5 | -175.66 | 0.3 | -194.1 | 315.0 | 310.0 | 5.00 | 62.990 | | |
| 1,600.0 | 1,591.9 | 1,531.4 | 1,520.0 | 3.7 | 3.9 | -175.71 | 0.4 | -212.9 | 349.3 | 344.0 | 5.34 | 65.468 | | |
| 1,700.0 | 1,690.8 | 1,625.3 | 1,612.0 | 4.0 | 4.2 | -175.75 | 0.4 | -231.7 | 383.6 | 377.9 | 5.67 | 67.654 | | |
| 1,800.0 | 1,789.6 | 1,719.2 | 1,704.1 | 4.3 | 4.6 | -175.78 | 0.5 | -250.5 | 417.9 | 411.9 | 6.01 | 69.596 | | |
| 1,900.0 | 1,888.5 | 1,813.2 | 1,796.1 | 4.6 | 5.0 | -175.80 | 0.5 | -269.3 | 452.3 | 445.9 | 6.34 | 71.333 | | |
| 2,000.0 | 1,987.4 | 1,907.1 | 1,888.1 | 4.9 | 5.3 | -175.83 | 0.6 | -288.1 | 486.6 | 479.9 | 6.68 | 72.896 | | |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4B-21H-O268 - Hz - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------------|---------------------------|---------------------------|-------------------|----------------|-----------------------------|---|---------------|------------------------------|----------------------|---------|---------------|--------------------|--------|
| Survey Program: 0-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | Highside Toolface (°) | Distance | | Total Uncertainty Axis | Separation Factor | Warning | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -89.95 | 0.0 | -50.3 | 50.4 | | | | | |
| 100.0 | 100.0 | 99.0 | 99.0 | 0.1 | 0.1 | -89.95 | 0.0 | -50.3 | 50.3 | 50.1 | 0.26 | 193.254 | | |
| 200.0 | 200.0 | 199.0 | 199.0 | 0.3 | 0.3 | -89.95 | 0.0 | -50.3 | 50.3 | 49.7 | 0.61 | 82.645 | | |
| 300.0 | 300.0 | 299.0 | 299.0 | 0.5 | 0.5 | -89.95 | 0.0 | -50.3 | 50.3 | 49.4 | 0.96 | 52.538 CC, ES | | |
| 400.0 | 400.0 | 398.1 | 398.1 | 0.7 | 0.7 | -173.54 | 0.0 | -51.2 | 52.1 | 50.7 | 1.31 | 39.872 | | |
| 500.0 | 500.0 | 497.0 | 497.0 | 0.8 | 0.8 | -173.82 | 0.0 | -53.7 | 57.2 | 55.6 | 1.65 | 34.637 | | |
| 600.0 | 599.9 | 595.6 | 595.5 | 1.0 | 1.0 | -174.18 | 0.1 | -58.0 | 65.9 | 63.9 | 2.00 | 32.965 SF | | |
| 700.0 | 699.7 | 693.6 | 693.3 | 1.2 | 1.2 | -174.56 | 0.1 | -63.9 | 77.9 | 75.6 | 2.34 | 33.277 | | |
| 800.0 | 799.4 | 791.0 | 790.4 | 1.4 | 1.4 | -174.90 | 0.1 | -71.4 | 93.4 | 90.7 | 2.68 | 34.808 | | |
| 900.0 | 898.9 | 887.4 | 886.4 | 1.7 | 1.6 | -175.18 | 0.1 | -80.4 | 112.3 | 109.2 | 3.02 | 37.144 | | |
| 1,000.0 | 998.3 | 982.9 | 981.3 | 1.9 | 1.9 | -175.41 | 0.1 | -91.0 | 134.5 | 131.1 | 3.36 | 40.042 | | |
| 1,100.0 | 1,097.4 | 1,077.7 | 1,075.3 | 2.2 | 2.1 | -175.59 | 0.1 | -103.0 | 159.9 | 156.2 | 3.69 | 43.328 | | |
| 1,200.0 | 1,196.3 | 1,173.8 | 1,170.6 | 2.5 | 2.4 | -175.76 | 0.2 | -115.7 | 187.4 | 183.4 | 4.03 | 46.531 | | |
| 1,300.0 | 1,295.2 | 1,269.9 | 1,265.9 | 2.8 | 2.6 | -175.90 | 0.2 | -128.4 | 215.2 | 210.8 | 4.37 | 49.263 | | |
| 1,400.0 | 1,394.1 | 1,366.0 | 1,361.1 | 3.1 | 2.9 | -176.01 | 0.2 | -141.0 | 242.9 | 238.2 | 4.71 | 51.601 | | |
| 1,500.0 | 1,493.0 | 1,462.1 | 1,456.3 | 3.4 | 3.2 | -176.10 | 0.2 | -153.7 | 270.7 | 265.6 | 5.05 | 53.625 | | |
| 1,600.0 | 1,591.9 | 1,558.1 | 1,551.5 | 3.7 | 3.4 | -176.17 | 0.3 | -166.4 | 298.4 | 293.0 | 5.39 | 55.393 | | |
| 1,700.0 | 1,690.8 | 1,654.2 | 1,646.8 | 4.0 | 3.7 | -176.23 | 0.3 | -179.1 | 326.2 | 320.5 | 5.73 | 56.952 | | |
| 1,800.0 | 1,789.6 | 1,750.3 | 1,742.0 | 4.3 | 4.0 | -176.28 | 0.3 | -191.8 | 353.9 | 347.9 | 6.07 | 58.337 | | |
| 1,900.0 | 1,888.5 | 1,846.3 | 1,837.2 | 4.6 | 4.2 | -176.32 | 0.3 | -204.4 | 381.7 | 375.3 | 6.41 | 59.574 | | |
| 2,000.0 | 1,987.4 | 1,942.4 | 1,932.5 | 4.9 | 4.5 | -176.36 | 0.4 | -217.1 | 409.5 | 402.7 | 6.75 | 60.687 | | |
| 2,100.0 | 2,086.3 | 2,038.5 | 2,027.7 | 5.2 | 4.8 | -176.39 | 0.4 | -229.8 | 437.2 | 430.1 | 7.09 | 61.694 | | |
| 2,200.0 | 2,185.2 | 2,134.5 | 2,122.9 | 5.5 | 5.1 | -176.42 | 0.4 | -242.5 | 465.0 | 457.6 | 7.43 | 62.608 | | |
| 2,300.0 | 2,284.1 | 2,230.6 | 2,218.2 | 5.8 | 5.3 | -176.44 | 0.4 | -255.1 | 492.7 | 485.0 | 7.77 | 63.443 | | |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4C-21H-O268 - Hz - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------------|---------------------------|---------------------------|-------------------|----------------|-----------------------------|---|---------------|------------------------------|----------------------|---------|---------------|--------------------|--------|
| Survey Program: 0-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | Highside Toolface (°) | Distance | | Total Uncertainty Axis | Separation Factor | Warning | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -89.95 | 0.0 | -42.0 | 42.0 | | | | | |
| 100.0 | 100.0 | 99.0 | 99.0 | 0.1 | 0.1 | -89.95 | 0.0 | -42.0 | 42.0 | 41.7 | 0.26 | 161.045 | | |
| 200.0 | 200.0 | 199.0 | 199.0 | 0.3 | 0.3 | -89.95 | 0.0 | -42.0 | 42.0 | 41.3 | 0.61 | 68.871 | | |
| 300.0 | 300.0 | 299.0 | 299.0 | 0.5 | 0.5 | -89.95 | 0.0 | -42.0 | 42.0 | 41.0 | 0.96 | 43.781 CC, ES | | |
| 400.0 | 400.0 | 399.0 | 399.0 | 0.7 | 0.7 | -173.57 | 0.0 | -42.0 | 42.8 | 41.5 | 1.31 | 32.757 | | |
| 500.0 | 500.0 | 498.2 | 498.2 | 0.8 | 0.8 | -173.91 | 0.0 | -42.8 | 46.3 | 44.6 | 1.65 | 27.967 | | |
| 600.0 | 599.9 | 597.1 | 597.0 | 1.0 | 1.0 | -174.36 | 0.1 | -45.3 | 53.2 | 51.2 | 2.00 | 26.581 SF | | |
| 700.0 | 699.7 | 695.9 | 695.7 | 1.2 | 1.2 | -174.79 | 0.1 | -49.5 | 63.5 | 61.1 | 2.35 | 27.052 | | |
| 800.0 | 799.4 | 795.1 | 794.8 | 1.4 | 1.4 | -175.21 | 0.1 | -54.1 | 75.9 | 73.2 | 2.69 | 28.200 | | |
| 900.0 | 898.9 | 894.1 | 893.7 | 1.7 | 1.6 | -175.59 | 0.2 | -58.7 | 90.0 | 87.0 | 3.04 | 29.670 | | |
| 1,000.0 | 998.3 | 992.8 | 992.4 | 1.9 | 1.7 | -175.94 | 0.2 | -63.3 | 105.9 | 102.6 | 3.38 | 31.365 | | |
| 1,100.0 | 1,097.4 | 1,091.2 | 1,090.7 | 2.2 | 1.9 | -176.24 | 0.3 | -67.9 | 123.5 | 119.8 | 3.72 | 33.225 | | |
| 1,200.0 | 1,196.3 | 1,189.4 | 1,188.7 | 2.5 | 2.1 | -176.51 | 0.3 | -72.4 | 142.7 | 138.6 | 4.06 | 35.146 | | |
| 1,300.0 | 1,295.2 | 1,287.5 | 1,286.7 | 2.8 | 2.3 | -176.73 | 0.3 | -77.0 | 162.1 | 157.7 | 4.40 | 36.804 | | |
| 1,400.0 | 1,394.1 | 1,385.6 | 1,384.7 | 3.1 | 2.5 | -176.90 | 0.4 | -81.5 | 181.5 | 176.8 | 4.75 | 38.223 | | |
| 1,500.0 | 1,493.0 | 1,483.7 | 1,482.7 | 3.4 | 2.7 | -177.04 | 0.4 | -86.1 | 201.0 | 195.9 | 5.09 | 39.450 | | |
| 1,600.0 | 1,591.9 | 1,581.8 | 1,580.7 | 3.7 | 2.9 | -177.15 | 0.4 | -90.6 | 220.4 | 214.9 | 5.44 | 40.522 | | |
| 1,700.0 | 1,690.8 | 1,679.9 | 1,678.7 | 4.0 | 3.0 | -177.25 | 0.5 | -95.2 | 239.8 | 234.0 | 5.78 | 41.467 | | |
| 1,800.0 | 1,789.6 | 1,777.9 | 1,776.7 | 4.3 | 3.2 | -177.33 | 0.5 | -99.7 | 259.2 | 253.1 | 6.13 | 42.306 | | |
| 1,900.0 | 1,888.5 | 1,876.0 | 1,874.6 | 4.6 | 3.4 | -177.40 | 0.6 | -104.3 | 278.7 | 272.2 | 6.47 | 43.055 | | |
| 2,000.0 | 1,987.4 | 1,974.1 | 1,972.6 | 4.9 | 3.6 | -177.46 | 0.6 | -108.8 | 298.1 | 291.3 | 6.82 | 43.729 | | |
| 2,100.0 | 2,086.3 | 2,072.2 | 2,070.6 | 5.2 | 3.8 | -177.51 | 0.6 | -113.4 | 317.5 | 310.4 | 7.16 | 44.338 | | |
| 2,200.0 | 2,185.2 | 2,170.3 | 2,168.6 | 5.5 | 4.0 | -177.56 | 0.7 | -117.9 | 337.0 | 329.4 | 7.51 | 44.892 | | |
| 2,300.0 | 2,284.1 | 2,268.4 | 2,266.6 | 5.8 | 4.2 | -177.60 | 0.7 | -122.5 | 356.4 | 348.5 | 7.85 | 45.397 | | |
| 2,400.0 | 2,383.0 | 2,366.5 | 2,364.6 | 6.1 | 4.4 | -177.64 | 0.8 | -127.0 | 375.8 | 367.6 | 8.19 | 45.859 | | |
| 2,500.0 | 2,481.8 | 2,464.6 | 2,462.6 | 6.4 | 4.5 | -177.67 | 0.8 | -131.6 | 395.2 | 386.7 | 8.54 | 46.284 | | |
| 2,600.0 | 2,580.7 | 2,562.7 | 2,560.6 | 6.8 | 4.7 | -177.71 | 0.8 | -136.1 | 414.7 | 405.8 | 8.88 | 46.677 | | |
| 2,700.0 | 2,679.6 | 2,660.8 | 2,658.5 | 7.1 | 4.9 | -177.73 | 0.9 | -140.7 | 434.1 | 424.9 | 9.23 | 47.040 | | |
| 2,800.0 | 2,778.5 | 2,758.9 | 2,756.5 | 7.4 | 5.1 | -177.76 | 0.9 | -145.2 | 453.5 | 444.0 | 9.57 | 47.377 | | |
| 2,900.0 | 2,877.4 | 2,857.0 | 2,854.5 | 7.7 | 5.3 | -177.78 | 1.0 | -149.8 | 473.0 | 463.0 | 9.92 | 47.690 | | |
| 3,000.0 | 2,976.3 | 2,955.1 | 2,952.5 | 8.0 | 5.5 | -177.80 | 1.0 | -154.3 | 492.4 | 482.1 | 10.26 | 47.983 | | |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4D-21H-O268 - Hz - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------------|---------------------------|---------------------------|-------------------|----------------|-----------------------------|---|---------------|------------------------------|----------------------|---------|---------------|--------------------|--------|
| Survey Program: 0-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | Highside Toolface (°) | Distance | | Total Uncertainty Axis | Separation Factor | Warning | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -89.95 | 0.0 | -30.8 | 30.8 | | | | | |
| 100.0 | 100.0 | 99.0 | 99.0 | 0.1 | 0.1 | -89.95 | 0.0 | -30.8 | 30.8 | 30.5 | 0.26 | 118.099 | | |
| 200.0 | 200.0 | 199.0 | 199.0 | 0.3 | 0.3 | -89.95 | 0.0 | -30.8 | 30.8 | 30.2 | 0.61 | 50.505 | | |
| 300.0 | 300.0 | 299.0 | 299.0 | 0.5 | 0.5 | -89.95 | 0.0 | -30.8 | 30.8 | 29.8 | 0.96 | 32.106 CC, ES | | |
| 400.0 | 400.0 | 399.0 | 399.0 | 0.7 | 0.7 | -173.61 | 0.0 | -30.8 | 31.6 | 30.3 | 1.31 | 24.199 | | |
| 500.0 | 500.0 | 499.0 | 499.0 | 0.8 | 0.8 | -174.10 | 0.0 | -30.8 | 34.2 | 32.6 | 1.66 | 20.676 | | |
| 600.0 | 599.9 | 598.2 | 598.2 | 1.0 | 1.0 | -174.72 | 0.0 | -31.6 | 39.4 | 37.4 | 2.00 | 19.685 SF | | |
| 700.0 | 699.7 | 697.5 | 697.4 | 1.2 | 1.2 | -175.32 | 0.0 | -34.0 | 47.9 | 45.5 | 2.35 | 20.376 | | |
| 800.0 | 799.4 | 796.9 | 796.9 | 1.4 | 1.4 | -175.85 | 0.0 | -36.5 | 58.3 | 55.6 | 2.69 | 21.620 | | |
| 900.0 | 898.9 | 896.2 | 896.1 | 1.7 | 1.5 | -176.31 | 0.0 | -39.1 | 70.4 | 67.4 | 3.04 | 23.160 | | |
| 1,000.0 | 998.3 | 995.2 | 995.1 | 1.9 | 1.7 | -176.71 | 0.1 | -41.7 | 84.3 | 80.9 | 3.38 | 24.909 | | |
| 1,100.0 | 1,097.4 | 1,094.0 | 1,093.8 | 2.2 | 1.9 | -177.04 | 0.1 | -44.2 | 99.8 | 96.1 | 3.72 | 26.810 | | |
| 1,200.0 | 1,196.3 | 1,192.5 | 1,192.3 | 2.5 | 2.1 | -177.32 | 0.1 | -46.8 | 117.0 | 112.9 | 4.07 | 28.767 | | |
| 1,300.0 | 1,295.2 | 1,291.0 | 1,290.7 | 2.8 | 2.2 | -177.54 | 0.1 | -49.3 | 134.4 | 130.0 | 4.41 | 30.461 | | |
| 1,400.0 | 1,394.1 | 1,389.4 | 1,389.2 | 3.1 | 2.4 | -177.71 | 0.1 | -51.9 | 151.8 | 147.1 | 4.76 | 31.910 | | |
| 1,500.0 | 1,493.0 | 1,487.9 | 1,487.6 | 3.4 | 2.6 | -177.84 | 0.1 | -54.4 | 169.3 | 164.1 | 5.10 | 33.163 | | |
| 1,600.0 | 1,591.9 | 1,586.4 | 1,586.1 | 3.7 | 2.8 | -177.95 | 0.1 | -57.0 | 186.7 | 181.2 | 5.45 | 34.258 | | |
| 1,700.0 | 1,690.8 | 1,684.9 | 1,684.5 | 4.0 | 2.9 | -178.04 | 0.1 | -59.5 | 204.1 | 198.3 | 5.79 | 35.222 | | |
| 1,800.0 | 1,789.6 | 1,783.3 | 1,782.9 | 4.3 | 3.1 | -178.12 | 0.1 | -62.1 | 221.5 | 215.4 | 6.14 | 36.078 | | |
| 1,900.0 | 1,888.5 | 1,881.8 | 1,881.4 | 4.6 | 3.3 | -178.18 | 0.1 | -64.6 | 238.9 | 232.5 | 6.49 | 36.843 | | |
| 2,000.0 | 1,987.4 | 1,980.3 | 1,979.8 | 4.9 | 3.5 | -178.24 | 0.1 | -67.2 | 256.4 | 249.5 | 6.83 | 37.531 | | |
| 2,100.0 | 2,086.3 | 2,078.7 | 2,078.2 | 5.2 | 3.7 | -178.29 | 0.1 | -69.7 | 273.8 | 266.6 | 7.18 | 38.153 | | |
| 2,200.0 | 2,185.2 | 2,177.2 | 2,176.7 | 5.5 | 3.8 | -178.33 | 0.1 | -72.2 | 291.2 | 283.7 | 7.52 | 38.717 | | |
| 2,300.0 | 2,284.1 | 2,275.7 | 2,275.1 | 5.8 | 4.0 | -178.37 | 0.2 | -74.8 | 308.6 | 300.8 | 7.87 | 39.233 | | |
| 2,400.0 | 2,383.0 | 2,374.2 | 2,373.6 | 6.1 | 4.2 | -178.40 | 0.2 | -77.3 | 326.1 | 317.8 | 8.21 | 39.704 | | |
| 2,500.0 | 2,481.8 | 2,472.6 | 2,472.0 | 6.4 | 4.4 | -178.44 | 0.2 | -79.9 | 343.5 | 334.9 | 8.56 | 40.138 | | |
| 2,600.0 | 2,580.7 | 2,571.1 | 2,570.4 | 6.8 | 4.5 | -178.46 | 0.2 | -82.4 | 360.9 | 352.0 | 8.90 | 40.539 | | |
| 2,700.0 | 2,679.6 | 2,669.6 | 2,668.9 | 7.1 | 4.7 | -178.49 | 0.2 | -85.0 | 378.3 | 369.1 | 9.25 | 40.909 | | |
| 2,800.0 | 2,778.5 | 2,768.0 | 2,767.3 | 7.4 | 4.9 | -178.51 | 0.2 | -87.5 | 395.7 | 386.2 | 9.59 | 41.253 | | |
| 2,900.0 | 2,877.4 | 2,866.5 | 2,865.7 | 7.7 | 5.1 | -178.53 | 0.2 | -90.1 | 413.2 | 403.2 | 9.94 | 41.572 | | |
| 3,000.0 | 2,976.3 | 2,965.0 | 2,964.2 | 8.0 | 5.2 | -178.55 | 0.2 | -92.6 | 430.6 | 420.3 | 10.28 | 41.871 | | |
| 3,100.0 | 3,075.2 | 3,063.4 | 3,062.6 | 8.3 | 5.4 | -178.57 | 0.2 | -95.2 | 448.0 | 437.4 | 10.63 | 42.150 | | |
| 3,200.0 | 3,174.0 | 3,161.9 | 3,161.1 | 8.6 | 5.6 | -178.59 | 0.2 | -97.7 | 465.4 | 454.5 | 10.97 | 42.411 | | |
| 3,300.0 | 3,272.9 | 3,260.4 | 3,259.5 | 8.9 | 5.8 | -178.60 | 0.2 | -100.3 | 482.9 | 471.5 | 11.32 | 42.657 | | |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4E-21H-O268 - Hz - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------------|---------------------------|---------------------------|-------------------|----------------|-----------------------------|---|---------------|------------------------------|----------------------|---------|---------------|--------------------|--------|
| Survey Program: 0-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | Highside Toolface (°) | Distance | | Total Uncertainty Axis | Separation Factor | Warning | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -89.96 | 0.0 | -22.4 | 22.4 | | | | | |
| 100.0 | 100.0 | 99.0 | 99.0 | 0.1 | 0.1 | -89.96 | 0.0 | -22.4 | 22.4 | 22.1 | 0.26 | 85.891 | | |
| 200.0 | 200.0 | 199.0 | 199.0 | 0.3 | 0.3 | -89.96 | 0.0 | -22.4 | 22.4 | 21.8 | 0.61 | 36.731 | | |
| 300.0 | 300.0 | 299.0 | 299.0 | 0.5 | 0.5 | -89.96 | 0.0 | -22.4 | 22.4 | 21.4 | 0.96 | 23.350 CC, ES | | |
| 400.0 | 400.0 | 399.0 | 399.0 | 0.7 | 0.7 | -173.68 | 0.0 | -22.4 | 23.2 | 21.9 | 1.31 | 17.780 | | |
| 500.0 | 500.0 | 499.0 | 499.0 | 0.8 | 0.8 | -174.32 | 0.0 | -22.4 | 25.8 | 24.2 | 1.66 | 15.609 | | |
| 600.0 | 599.9 | 598.9 | 598.9 | 1.0 | 1.0 | -175.13 | 0.0 | -22.4 | 30.2 | 28.2 | 2.00 | 15.065 SF | | |
| 700.0 | 699.7 | 698.7 | 698.7 | 1.2 | 1.2 | -175.95 | 0.0 | -22.4 | 36.3 | 33.9 | 2.35 | 15.428 | | |
| 800.0 | 799.4 | 798.4 | 798.4 | 1.4 | 1.3 | -176.66 | 0.0 | -22.4 | 44.1 | 41.4 | 2.70 | 16.349 | | |
| 900.0 | 898.9 | 897.9 | 897.9 | 1.7 | 1.5 | -177.25 | 0.0 | -22.4 | 53.7 | 50.6 | 3.04 | 17.638 | | |
| 1,000.0 | 998.3 | 997.3 | 997.3 | 1.9 | 1.7 | -177.73 | 0.0 | -22.4 | 65.0 | 61.6 | 3.39 | 19.185 | | |
| 1,100.0 | 1,097.4 | 1,096.4 | 1,096.4 | 2.2 | 1.9 | -178.10 | 0.0 | -22.4 | 78.0 | 74.3 | 3.73 | 20.919 | | |
| 1,200.0 | 1,196.3 | 1,195.3 | 1,195.3 | 2.5 | 2.0 | -178.40 | 0.0 | -22.4 | 92.6 | 88.6 | 4.07 | 22.740 | | |
| 1,300.0 | 1,295.2 | 1,294.2 | 1,294.2 | 2.8 | 2.2 | -178.62 | 0.0 | -22.4 | 107.5 | 103.1 | 4.42 | 24.323 | | |
| 1,400.0 | 1,394.1 | 1,393.1 | 1,393.1 | 3.1 | 2.4 | -178.79 | 0.0 | -22.4 | 122.4 | 117.6 | 4.77 | 25.676 | | |
| 1,500.0 | 1,493.0 | 1,492.0 | 1,492.0 | 3.4 | 2.6 | -178.92 | 0.0 | -22.4 | 137.3 | 132.2 | 5.11 | 26.847 | | |
| 1,600.0 | 1,591.9 | 1,590.9 | 1,590.9 | 3.7 | 2.7 | -179.03 | 0.0 | -22.4 | 152.2 | 146.7 | 5.46 | 27.869 | | |
| 1,700.0 | 1,690.8 | 1,689.8 | 1,689.8 | 4.0 | 2.9 | -179.11 | 0.0 | -22.4 | 167.0 | 161.2 | 5.81 | 28.769 | | |
| 1,800.0 | 1,789.6 | 1,788.6 | 1,788.6 | 4.3 | 3.1 | -179.19 | 0.0 | -22.4 | 181.9 | 175.8 | 6.15 | 29.568 | | |
| 1,900.0 | 1,888.5 | 1,887.5 | 1,887.5 | 4.6 | 3.3 | -179.25 | 0.0 | -22.4 | 196.8 | 190.3 | 6.50 | 30.282 | | |
| 2,000.0 | 1,987.4 | 1,986.4 | 1,986.4 | 4.9 | 3.4 | -179.30 | 0.0 | -22.4 | 211.7 | 204.9 | 6.85 | 30.924 | | |
| 2,100.0 | 2,086.3 | 2,085.3 | 2,085.3 | 5.2 | 3.6 | -179.35 | 0.0 | -22.4 | 226.6 | 219.4 | 7.19 | 31.504 | | |
| 2,200.0 | 2,185.2 | 2,184.2 | 2,184.2 | 5.5 | 3.8 | -179.39 | 0.0 | -22.4 | 241.5 | 233.9 | 7.54 | 32.030 | | |
| 2,300.0 | 2,284.1 | 2,283.1 | 2,283.1 | 5.8 | 3.9 | -179.42 | 0.0 | -22.4 | 256.3 | 248.5 | 7.89 | 32.511 | | |
| 2,400.0 | 2,383.0 | 2,382.0 | 2,382.0 | 6.1 | 4.1 | -179.45 | 0.0 | -22.4 | 271.2 | 263.0 | 8.23 | 32.951 | | |
| 2,500.0 | 2,481.8 | 2,480.8 | 2,480.8 | 6.4 | 4.3 | -179.48 | 0.0 | -22.4 | 286.1 | 277.5 | 8.58 | 33.356 | | |
| 2,600.0 | 2,580.7 | 2,579.7 | 2,579.7 | 6.8 | 4.5 | -179.51 | 0.0 | -22.4 | 301.0 | 292.1 | 8.92 | 33.729 | | |
| 2,700.0 | 2,679.6 | 2,678.6 | 2,678.6 | 7.1 | 4.6 | -179.53 | 0.0 | -22.4 | 315.9 | 306.6 | 9.27 | 34.074 | | |
| 2,800.0 | 2,778.5 | 2,777.5 | 2,777.5 | 7.4 | 4.8 | -179.55 | 0.0 | -22.4 | 330.8 | 321.2 | 9.62 | 34.395 | | |
| 2,900.0 | 2,877.4 | 2,876.4 | 2,876.4 | 7.7 | 5.0 | -179.57 | 0.0 | -22.4 | 345.7 | 335.7 | 9.96 | 34.693 | | |
| 3,000.0 | 2,976.3 | 2,975.3 | 2,975.3 | 8.0 | 5.1 | -179.59 | 0.0 | -22.4 | 360.5 | 350.2 | 10.31 | 34.971 | | |
| 3,100.0 | 3,075.2 | 3,074.2 | 3,074.2 | 8.3 | 5.3 | -179.61 | 0.0 | -22.4 | 375.4 | 364.8 | 10.66 | 35.231 | | |
| 3,200.0 | 3,174.0 | 3,173.0 | 3,173.0 | 8.6 | 5.5 | -179.62 | 0.0 | -22.4 | 390.3 | 379.3 | 11.00 | 35.475 | | |
| 3,300.0 | 3,272.9 | 3,271.9 | 3,271.9 | 8.9 | 5.7 | -179.63 | 0.0 | -22.4 | 405.2 | 393.8 | 11.35 | 35.704 | | |
| 3,400.0 | 3,371.8 | 3,370.8 | 3,370.8 | 9.3 | 5.8 | -179.65 | 0.0 | -22.4 | 420.1 | 408.4 | 11.70 | 35.919 | | |
| 3,500.0 | 3,470.7 | 3,469.7 | 3,469.7 | 9.6 | 6.0 | -179.66 | 0.0 | -22.4 | 435.0 | 422.9 | 12.04 | 36.122 | | |
| 3,600.0 | 3,569.6 | 3,568.6 | 3,568.6 | 9.9 | 6.2 | -179.67 | 0.0 | -22.4 | 449.9 | 437.5 | 12.39 | 36.314 | | |
| 3,700.0 | 3,668.5 | 3,667.5 | 3,667.5 | 10.2 | 6.4 | -179.68 | 0.0 | -22.4 | 464.7 | 452.0 | 12.73 | 36.495 | | |
| 3,800.0 | 3,767.4 | 3,766.4 | 3,766.4 | 10.5 | 6.5 | -179.69 | 0.0 | -22.4 | 479.6 | 466.5 | 13.08 | 36.667 | | |
| 3,900.0 | 3,866.2 | 3,865.2 | 3,865.2 | 10.8 | 6.7 | -179.70 | 0.0 | -22.4 | 494.5 | 481.1 | 13.43 | 36.829 | | |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4F-21H-O268 - Hz - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|------------------------|------------------------|------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|----------------------|--------------------|---------|
| Survey Program: O-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -89.96 | 0.0 | -11.2 | 11.2 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -89.96 | 0.0 | -11.2 | 11.2 | 10.9 | 0.26 | 42.731 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -89.96 | 0.0 | -11.2 | 11.2 | 10.6 | 0.61 | 18.313 | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -89.96 | 0.0 | -11.2 | 11.2 | 10.2 | 0.96 | 11.654 CC, ES | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | -173.91 | 0.0 | -11.2 | 12.1 | 10.7 | 1.31 | 9.210 | | |
| 500.0 | 500.0 | 500.2 | 500.2 | 0.8 | 0.8 | -174.72 | 0.1 | -10.3 | 13.8 | 12.1 | 1.66 | 8.317 | | |
| 600.0 | 599.9 | 600.4 | 600.4 | 1.0 | 1.0 | -175.42 | 0.4 | -7.7 | 15.5 | 13.5 | 2.01 | 7.733 | | |
| 700.0 | 699.7 | 700.7 | 700.6 | 1.2 | 1.2 | -176.05 | 0.8 | -3.3 | 17.2 | 14.9 | 2.36 | 7.322 | | |
| 800.0 | 799.4 | 801.0 | 800.7 | 1.4 | 1.4 | -176.62 | 1.4 | 2.8 | 19.0 | 16.3 | 2.70 | 7.016 | | |
| 900.0 | 898.9 | 901.1 | 900.5 | 1.7 | 1.6 | -177.18 | 2.2 | 10.3 | 21.0 | 18.0 | 3.05 | 6.889 | | |
| 1,000.0 | 998.3 | 1,001.1 | 1,000.2 | 1.9 | 1.8 | -177.81 | 3.0 | 17.9 | 24.7 | 21.3 | 3.40 | 7.265 | | |
| 1,100.0 | 1,097.4 | 1,100.9 | 1,099.7 | 2.2 | 2.0 | -178.37 | 3.8 | 25.5 | 30.1 | 26.3 | 3.74 | 8.039 | | |
| 1,200.0 | 1,196.3 | 1,200.7 | 1,199.2 | 2.5 | 2.2 | -178.81 | 4.6 | 33.1 | 37.1 | 33.0 | 4.09 | 9.066 | | |
| 1,300.0 | 1,295.2 | 1,300.4 | 1,298.6 | 2.8 | 2.4 | -179.12 | 5.3 | 40.7 | 44.3 | 39.9 | 4.44 | 9.988 | | |
| 1,400.0 | 1,394.1 | 1,400.1 | 1,398.1 | 3.1 | 2.6 | -179.34 | 6.1 | 48.3 | 51.6 | 46.8 | 4.79 | 10.776 | | |
| 1,500.0 | 1,493.0 | 1,499.9 | 1,497.5 | 3.4 | 2.9 | -179.50 | 6.9 | 55.9 | 58.9 | 53.7 | 5.14 | 11.457 | | |
| 1,600.0 | 1,591.9 | 1,599.6 | 1,596.9 | 3.7 | 3.1 | -179.64 | 7.7 | 63.5 | 66.1 | 60.6 | 5.49 | 12.052 | | |
| 1,700.0 | 1,690.8 | 1,699.3 | 1,696.4 | 4.0 | 3.3 | -179.74 | 8.5 | 71.1 | 73.4 | 67.5 | 5.84 | 12.575 | | |
| 1,800.0 | 1,789.6 | 1,799.1 | 1,795.8 | 4.3 | 3.5 | -179.83 | 9.2 | 78.7 | 80.6 | 74.5 | 6.18 | 13.040 | | |
| 1,900.0 | 1,888.5 | 1,898.8 | 1,895.3 | 4.6 | 3.7 | -179.90 | 10.0 | 86.3 | 87.9 | 81.4 | 6.53 | 13.454 | | |
| 2,000.0 | 1,987.4 | 1,998.6 | 1,994.7 | 4.9 | 3.9 | -179.96 | 10.8 | 93.9 | 95.2 | 88.3 | 6.88 | 13.827 | | |
| 2,100.0 | 2,086.3 | 2,098.3 | 2,094.2 | 5.2 | 4.2 | 179.99 | 11.6 | 101.5 | 102.4 | 95.2 | 7.23 | 14.164 | | |
| 2,200.0 | 2,185.2 | 2,198.0 | 2,193.6 | 5.5 | 4.4 | 179.95 | 12.4 | 109.2 | 109.7 | 102.1 | 7.58 | 14.470 | | |
| 2,300.0 | 2,284.1 | 2,297.8 | 2,293.0 | 5.8 | 4.6 | 179.91 | 13.2 | 116.8 | 117.0 | 109.0 | 7.93 | 14.749 | | |
| 2,400.0 | 2,383.0 | 2,397.5 | 2,392.5 | 6.1 | 4.8 | 179.87 | 13.9 | 124.4 | 124.2 | 115.9 | 8.28 | 15.004 | | |
| 2,500.0 | 2,481.8 | 2,497.2 | 2,491.9 | 6.4 | 5.0 | 179.84 | 14.7 | 132.0 | 131.5 | 122.9 | 8.63 | 15.239 | | |
| 2,600.0 | 2,580.7 | 2,597.0 | 2,591.4 | 6.8 | 5.2 | 179.81 | 15.5 | 139.6 | 138.7 | 129.8 | 8.98 | 15.456 | | |
| 2,700.0 | 2,679.6 | 2,696.7 | 2,690.8 | 7.1 | 5.5 | 179.79 | 16.3 | 147.2 | 146.0 | 136.7 | 9.33 | 15.656 | | |
| 2,800.0 | 2,778.5 | 2,796.4 | 2,790.3 | 7.4 | 5.7 | 179.76 | 17.1 | 154.8 | 153.3 | 143.6 | 9.68 | 15.842 | | |
| 2,900.0 | 2,877.4 | 2,896.2 | 2,889.7 | 7.7 | 5.9 | 179.74 | 17.8 | 162.4 | 160.5 | 150.5 | 10.02 | 16.015 | | |
| 3,000.0 | 2,976.3 | 2,995.9 | 2,989.1 | 8.0 | 6.1 | 179.72 | 18.6 | 170.0 | 167.8 | 157.4 | 10.37 | 16.176 | | |
| 3,100.0 | 3,075.2 | 3,095.6 | 3,088.6 | 8.3 | 6.3 | 179.71 | 19.4 | 177.6 | 175.1 | 164.3 | 10.72 | 16.327 | | |
| 3,200.0 | 3,174.0 | 3,195.4 | 3,188.0 | 8.6 | 6.6 | 179.69 | 20.2 | 185.2 | 182.3 | 171.3 | 11.07 | 16.468 | | |
| 3,300.0 | 3,272.9 | 3,295.1 | 3,287.5 | 8.9 | 6.8 | 179.68 | 21.0 | 192.8 | 189.6 | 178.2 | 11.42 | 16.601 | | |
| 3,400.0 | 3,371.8 | 3,394.9 | 3,386.9 | 9.3 | 7.0 | 179.66 | 21.7 | 200.4 | 196.9 | 185.1 | 11.77 | 16.726 | | |
| 3,500.0 | 3,470.7 | 3,494.6 | 3,486.3 | 9.6 | 7.2 | 179.65 | 22.5 | 208.0 | 204.1 | 192.0 | 12.12 | 16.844 | | |
| 3,600.0 | 3,569.6 | 3,594.3 | 3,585.8 | 9.9 | 7.4 | 179.64 | 23.3 | 215.6 | 211.4 | 198.9 | 12.47 | 16.955 | | |
| 3,700.0 | 3,668.5 | 3,694.1 | 3,685.2 | 10.2 | 7.7 | 179.63 | 24.1 | 223.2 | 218.6 | 205.8 | 12.82 | 17.060 | | |
| 3,800.0 | 3,767.4 | 3,793.8 | 3,784.7 | 10.5 | 7.9 | 179.62 | 24.9 | 230.8 | 225.9 | 212.7 | 13.17 | 17.159 | | |
| 3,900.0 | 3,866.2 | 3,893.5 | 3,884.1 | 10.8 | 8.1 | 179.61 | 25.6 | 238.4 | 233.2 | 219.7 | 13.51 | 17.253 | | |
| 4,000.0 | 3,965.1 | 3,993.3 | 3,983.6 | 11.1 | 8.3 | 179.60 | 26.4 | 246.0 | 240.4 | 226.6 | 13.86 | 17.343 | | |
| 4,100.0 | 4,064.0 | 4,093.0 | 4,083.0 | 11.5 | 8.5 | 179.59 | 27.2 | 253.6 | 247.7 | 233.5 | 14.21 | 17.428 | | |
| 4,200.0 | 4,162.9 | 4,192.7 | 4,182.4 | 11.8 | 8.7 | 179.58 | 28.0 | 261.2 | 255.0 | 240.4 | 14.56 | 17.509 | | |
| 4,300.0 | 4,261.8 | 4,292.5 | 4,281.9 | 12.1 | 9.0 | 179.57 | 28.8 | 268.8 | 262.2 | 247.3 | 14.91 | 17.587 | | |
| 4,400.0 | 4,360.7 | 4,392.2 | 4,381.3 | 12.4 | 9.2 | 179.57 | 29.6 | 276.4 | 269.5 | 254.2 | 15.26 | 17.660 | | |
| 4,500.0 | 4,459.6 | 4,491.9 | 4,480.8 | 12.7 | 9.4 | 179.56 | 30.3 | 284.1 | 276.7 | 261.1 | 15.61 | 17.731 | | |
| 4,600.0 | 4,558.5 | 4,591.7 | 4,580.2 | 13.0 | 9.6 | 179.55 | 31.1 | 291.7 | 284.0 | 268.1 | 15.96 | 17.798 | | |
| 4,700.0 | 4,657.3 | 4,691.4 | 4,679.7 | 13.3 | 9.8 | 179.55 | 31.9 | 299.3 | 291.3 | 275.0 | 16.31 | 17.863 | | |
| 4,800.0 | 4,756.2 | 4,791.2 | 4,779.1 | 13.7 | 10.1 | 179.54 | 32.7 | 306.9 | 298.5 | 281.9 | 16.66 | 17.925 | | |
| 4,900.0 | 4,855.1 | 4,890.9 | 4,878.5 | 14.0 | 10.3 | 179.54 | 33.5 | 314.5 | 305.8 | 288.8 | 17.00 | 17.984 | | |
| 5,000.0 | 4,954.0 | 4,990.6 | 4,978.0 | 14.3 | 10.5 | 179.53 | 34.2 | 322.1 | 313.1 | 295.7 | 17.35 | 18.041 | | |
| 5,100.0 | 5,052.9 | 5,090.4 | 5,077.4 | 14.6 | 10.7 | 179.53 | 35.0 | 329.7 | 320.3 | 302.6 | 17.70 | 18.095 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4F-21H-O268 - Hz - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------------|---------------------------|---------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|------------------------------|----------------------|---------|-----------------------------|--------|
| Survey Program: 0-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | Total Uncertainty Axis | Separation Factor | Warning | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | | | | Between Ellipses (ft) | |
| 5,200.0 | 5,151.8 | 5,190.1 | 5,176.9 | 14.9 | 10.9 | 179.52 | 35.8 | 337.3 | 327.6 | 309.5 | 18.05 | 18.148 | | |
| 5,300.0 | 5,250.7 | 5,289.8 | 5,276.3 | 15.2 | 11.2 | 179.52 | 36.6 | 344.9 | 334.9 | 316.5 | 18.40 | 18.198 | | |
| 5,400.0 | 5,349.5 | 5,389.6 | 5,375.8 | 15.5 | 11.4 | 179.51 | 37.4 | 352.5 | 342.1 | 323.4 | 18.75 | 18.247 | | |
| 5,500.0 | 5,448.4 | 5,489.3 | 5,475.2 | 15.9 | 11.6 | 179.51 | 38.1 | 360.1 | 349.4 | 330.3 | 19.10 | 18.294 | | |
| 5,600.0 | 5,547.3 | 5,589.0 | 5,574.6 | 16.2 | 11.8 | 179.50 | 38.9 | 367.7 | 356.6 | 337.2 | 19.45 | 18.339 | | |
| 5,700.0 | 5,646.2 | 5,688.8 | 5,674.1 | 16.5 | 12.0 | 179.50 | 39.7 | 375.3 | 363.9 | 344.1 | 19.80 | 18.383 | | |
| 5,800.0 | 5,745.1 | 5,788.5 | 5,773.5 | 16.8 | 12.3 | 179.50 | 40.5 | 382.9 | 371.2 | 351.0 | 20.14 | 18.425 | | |
| 5,900.0 | 5,844.0 | 5,888.3 | 5,873.0 | 17.1 | 12.5 | 179.49 | 41.3 | 390.5 | 378.4 | 357.9 | 20.49 | 18.466 | | |
| 6,000.0 | 5,942.9 | 5,988.0 | 5,972.4 | 17.4 | 12.7 | 179.49 | 42.1 | 398.1 | 385.7 | 364.9 | 20.84 | 18.505 | | |
| 6,100.0 | 6,041.7 | 6,087.7 | 6,071.9 | 17.7 | 12.9 | 179.49 | 42.8 | 405.7 | 393.0 | 371.8 | 21.19 | 18.543 | | |
| 6,200.0 | 6,140.6 | 6,187.5 | 6,171.3 | 18.1 | 13.1 | 179.48 | 43.6 | 413.3 | 400.2 | 378.7 | 21.54 | 18.580 | | |
| 6,300.0 | 6,239.5 | 6,287.2 | 6,270.7 | 18.4 | 13.4 | 179.48 | 44.4 | 420.9 | 407.5 | 385.6 | 21.89 | 18.615 | | |
| 6,400.0 | 6,338.4 | 6,386.9 | 6,370.2 | 18.7 | 13.6 | 179.48 | 45.2 | 428.5 | 414.7 | 392.5 | 22.24 | 18.650 | | |
| 6,500.0 | 6,437.3 | 6,486.7 | 6,469.6 | 19.0 | 13.8 | 179.47 | 46.0 | 436.1 | 422.0 | 399.4 | 22.59 | 18.683 | | |
| 6,600.0 | 6,536.2 | 6,586.4 | 6,569.1 | 19.3 | 14.0 | 179.47 | 46.7 | 443.7 | 429.3 | 406.3 | 22.94 | 18.716 | | |
| 6,700.0 | 6,635.1 | 6,686.1 | 6,668.5 | 19.6 | 14.2 | 179.47 | 47.5 | 451.3 | 436.5 | 413.3 | 23.29 | 18.747 | | |
| 6,800.0 | 6,733.9 | 6,785.9 | 6,768.0 | 19.9 | 14.4 | 179.47 | 48.3 | 458.9 | 443.8 | 420.2 | 23.63 | 18.778 | | |
| 6,900.0 | 6,832.7 | 6,885.5 | 6,867.3 | 20.3 | 14.7 | -153.04 | 49.1 | 466.5 | 451.3 | 427.3 | 23.97 | 18.823 | | |
| 7,000.0 | 6,929.8 | 6,983.6 | 6,965.1 | 20.6 | 14.9 | -126.40 | 49.8 | 474.0 | 460.7 | 436.4 | 24.30 | 18.959 | | |
| 7,100.0 | 7,022.3 | 7,090.7 | 7,071.6 | 21.0 | 15.1 | -119.08 | 55.3 | 482.2 | 472.8 | 448.2 | 24.60 | 19.221 | | |
| 7,200.0 | 7,107.3 | 7,211.7 | 7,188.6 | 21.4 | 15.4 | -117.09 | 84.1 | 491.1 | 485.6 | 460.7 | 24.87 | 19.529 | | |
| 7,300.0 | 7,182.3 | 7,342.1 | 7,304.8 | 21.9 | 15.9 | -116.78 | 141.9 | 500.0 | 497.6 | 472.4 | 25.19 | 19.756 | | |
| 9,000.0 | 7,344.0 | 9,223.6 | 7,566.0 | 41.3 | 38.9 | -116.41 | 1,933.4 | 520.0 | 499.2 | 430.9 | 68.34 | 7.304 | | |
| 9,100.0 | 7,344.0 | 9,323.6 | 7,566.0 | 42.8 | 40.5 | -116.47 | 2,033.4 | 520.0 | 498.1 | 426.8 | 71.27 | 6.989 | | |
| 9,200.0 | 7,344.0 | 9,423.6 | 7,566.0 | 44.3 | 42.1 | -116.53 | 2,133.4 | 520.0 | 497.0 | 422.8 | 74.21 | 6.697 | | |
| 9,300.0 | 7,344.0 | 9,523.6 | 7,566.0 | 45.9 | 43.8 | -116.60 | 2,233.4 | 520.0 | 495.9 | 418.8 | 77.16 | 6.427 | | |
| 9,400.0 | 7,344.0 | 9,623.6 | 7,566.0 | 47.4 | 45.4 | -116.66 | 2,333.4 | 520.0 | 494.8 | 414.7 | 80.12 | 6.176 | | |
| 9,500.0 | 7,344.0 | 9,723.6 | 7,566.0 | 49.0 | 47.0 | -116.72 | 2,433.4 | 520.0 | 493.7 | 410.6 | 83.08 | 5.943 | | |
| 9,600.0 | 7,344.0 | 9,823.6 | 7,566.0 | 50.6 | 48.7 | -116.79 | 2,533.4 | 520.0 | 492.6 | 406.6 | 86.05 | 5.725 | | |
| 9,700.0 | 7,344.0 | 9,923.6 | 7,566.0 | 52.2 | 50.4 | -116.85 | 2,633.3 | 520.0 | 491.5 | 402.5 | 89.03 | 5.521 | | |
| 9,800.0 | 7,344.0 | 10,023.6 | 7,566.0 | 53.8 | 52.0 | -116.91 | 2,733.3 | 520.0 | 490.5 | 398.5 | 92.01 | 5.331 | | |
| 9,900.0 | 7,344.0 | 10,123.6 | 7,566.0 | 55.4 | 53.7 | -116.98 | 2,833.3 | 520.0 | 489.4 | 394.4 | 94.99 | 5.152 | | |
| 10,000.0 | 7,344.0 | 10,223.6 | 7,566.0 | 57.0 | 55.4 | -117.04 | 2,933.3 | 520.0 | 488.3 | 390.3 | 97.97 | 4.984 | | |
| 10,100.0 | 7,344.0 | 10,323.6 | 7,566.0 | 58.7 | 57.1 | -117.11 | 3,033.3 | 520.0 | 487.2 | 386.2 | 100.96 | 4.826 | | |
| 10,200.0 | 7,344.0 | 10,423.6 | 7,566.0 | 60.3 | 58.8 | -117.18 | 3,133.3 | 520.0 | 486.1 | 382.2 | 103.95 | 4.676 | | |
| 10,300.0 | 7,344.0 | 10,523.5 | 7,566.0 | 61.9 | 60.5 | -117.24 | 3,233.3 | 520.0 | 485.0 | 378.1 | 106.94 | 4.536 | | |
| 10,400.0 | 7,344.0 | 10,623.5 | 7,566.0 | 63.6 | 62.2 | -117.31 | 3,333.3 | 520.0 | 483.9 | 374.0 | 109.93 | 4.402 | | |
| 10,500.0 | 7,344.0 | 10,723.5 | 7,566.0 | 65.3 | 63.9 | -117.37 | 3,433.3 | 520.0 | 482.8 | 369.9 | 112.92 | 4.276 | | |
| 10,600.0 | 7,344.0 | 10,823.5 | 7,566.0 | 66.9 | 65.6 | -117.44 | 3,533.3 | 520.0 | 481.8 | 365.9 | 115.91 | 4.156 | | |
| 10,700.0 | 7,344.0 | 10,923.5 | 7,566.0 | 68.6 | 67.3 | -117.51 | 3,633.3 | 520.0 | 480.7 | 361.8 | 118.90 | 4.043 | | |
| 10,800.0 | 7,344.0 | 11,023.5 | 7,566.0 | 70.2 | 69.0 | -117.58 | 3,733.3 | 520.0 | 479.6 | 357.7 | 121.88 | 3.935 | | |
| 10,900.0 | 7,344.0 | 11,123.5 | 7,566.0 | 71.9 | 70.7 | -117.64 | 3,833.3 | 520.0 | 478.5 | 353.6 | 124.87 | 3.832 | | |
| 11,000.0 | 7,344.0 | 11,223.5 | 7,566.0 | 73.6 | 72.4 | -117.71 | 3,933.2 | 520.0 | 477.4 | 349.6 | 127.85 | 3.734 | | |
| 11,100.0 | 7,344.0 | 11,323.5 | 7,566.0 | 75.3 | 74.1 | -117.78 | 4,033.2 | 520.0 | 476.4 | 345.5 | 130.84 | 3.641 | | |
| 11,200.0 | 7,344.0 | 11,423.5 | 7,566.0 | 77.0 | 75.8 | -117.85 | 4,133.2 | 520.0 | 475.3 | 341.5 | 133.82 | 3.552 | | |
| 11,300.0 | 7,344.0 | 11,523.5 | 7,566.0 | 78.7 | 77.5 | -117.92 | 4,233.2 | 520.0 | 474.2 | 337.4 | 136.80 | 3.466 | | |
| 11,400.0 | 7,344.0 | 11,623.5 | 7,566.0 | 80.3 | 79.3 | -117.99 | 4,333.2 | 520.0 | 473.1 | 333.3 | 139.77 | 3.385 | | |
| 11,500.0 | 7,344.0 | 11,723.5 | 7,566.0 | 82.0 | 81.0 | -118.06 | 4,433.2 | 520.0 | 472.0 | 329.3 | 142.75 | 3.307 | | |
| 11,600.0 | 7,344.0 | 11,823.4 | 7,566.0 | 83.7 | 82.7 | -118.13 | 4,533.2 | 520.0 | 471.0 | 325.2 | 145.72 | 3.232 | | |
| 11,700.0 | 7,344.0 | 11,923.4 | 7,566.0 | 85.4 | 84.4 | -118.20 | 4,633.2 | 520.0 | 469.9 | 321.2 | 148.69 | 3.160 | | |
| 11,800.0 | 7,344.0 | 12,023.4 | 7,566.0 | 87.1 | 86.1 | -118.27 | 4,733.2 | 520.0 | 468.8 | 317.1 | 151.65 | 3.091 | | |
| 11,900.0 | 7,344.0 | 12,123.4 | 7,566.0 | 88.8 | 87.9 | -118.34 | 4,833.2 | 520.0 | 467.7 | 313.1 | 154.61 | 3.025 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4F-21H-O268 - Hz - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|---------|
| Survey Program: 0-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | | |
| 12,000.0 | 7,344.0 | 12,223.4 | 7,566.0 | 90.5 | 89.6 | -118.41 | 4,933.2 | 520.0 | 466.7 | 309.1 | 157.57 | 2.961 | | |
| 12,100.0 | 7,344.0 | 12,323.4 | 7,566.0 | 92.2 | 91.3 | -118.48 | 5,033.2 | 520.0 | 465.6 | 305.0 | 160.53 | 2.900 | | |
| 12,200.0 | 7,344.0 | 12,423.4 | 7,566.0 | 93.9 | 93.0 | -118.55 | 5,133.2 | 520.0 | 464.5 | 301.0 | 163.48 | 2.841 | | |
| 12,300.0 | 7,344.0 | 12,523.4 | 7,566.0 | 95.7 | 94.8 | -118.62 | 5,233.2 | 520.0 | 463.4 | 297.0 | 166.43 | 2.785 | | |
| 12,400.0 | 7,344.0 | 12,623.4 | 7,566.0 | 97.4 | 96.5 | -118.70 | 5,333.1 | 520.0 | 462.4 | 293.0 | 169.37 | 2.730 | | |
| 12,500.0 | 7,344.0 | 12,723.4 | 7,566.0 | 99.1 | 98.2 | -118.77 | 5,433.1 | 520.0 | 461.3 | 289.0 | 172.31 | 2.677 | | |
| 12,600.0 | 7,344.0 | 12,823.4 | 7,566.0 | 100.8 | 100.0 | -118.84 | 5,533.1 | 520.0 | 460.2 | 285.0 | 175.25 | 2.626 | | |
| 12,700.0 | 7,344.0 | 12,923.4 | 7,566.0 | 102.5 | 101.7 | -118.92 | 5,633.1 | 520.0 | 459.1 | 281.0 | 178.18 | 2.577 | | |
| 12,800.0 | 7,344.0 | 13,023.4 | 7,566.0 | 104.2 | 103.4 | -118.99 | 5,733.1 | 520.0 | 458.1 | 277.0 | 181.11 | 2.529 | | |
| 12,900.0 | 7,344.0 | 13,123.4 | 7,566.0 | 105.9 | 105.2 | -119.06 | 5,833.1 | 520.0 | 457.0 | 273.0 | 184.03 | 2.483 | | |
| 13,000.0 | 7,344.0 | 13,223.3 | 7,566.0 | 107.7 | 106.9 | -119.14 | 5,933.1 | 520.0 | 455.9 | 269.0 | 186.95 | 2.439 | | |
| 13,100.0 | 7,344.0 | 13,323.3 | 7,566.0 | 109.4 | 108.6 | -119.21 | 6,033.1 | 520.0 | 454.9 | 265.0 | 189.87 | 2.396 | | |
| 13,200.0 | 7,344.0 | 13,423.3 | 7,566.0 | 111.1 | 110.4 | -119.29 | 6,133.1 | 520.0 | 453.8 | 261.0 | 192.78 | 2.354 | | |
| 13,300.0 | 7,344.0 | 13,523.3 | 7,566.0 | 112.8 | 112.1 | -119.37 | 6,233.1 | 520.0 | 452.7 | 257.1 | 195.68 | 2.314 | | |
| 13,400.0 | 7,344.0 | 13,623.3 | 7,566.0 | 114.5 | 113.8 | -119.44 | 6,333.1 | 520.0 | 451.7 | 253.1 | 198.58 | 2.274 | | |
| 13,500.0 | 7,344.0 | 13,723.3 | 7,566.0 | 116.3 | 115.6 | -119.52 | 6,433.1 | 520.0 | 450.6 | 249.1 | 201.48 | 2.237 | | |
| 13,600.0 | 7,344.0 | 13,823.3 | 7,566.0 | 118.0 | 117.3 | -119.59 | 6,533.1 | 520.0 | 449.6 | 245.2 | 204.37 | 2.200 | | |
| 13,700.0 | 7,344.0 | 13,923.3 | 7,566.0 | 119.7 | 119.1 | -119.67 | 6,633.0 | 520.0 | 448.5 | 241.2 | 207.26 | 2.164 | | |
| 13,800.0 | 7,344.0 | 14,023.3 | 7,566.0 | 121.4 | 120.8 | -119.75 | 6,733.0 | 520.0 | 447.4 | 237.3 | 210.14 | 2.129 | | |
| 13,900.0 | 7,344.0 | 14,123.3 | 7,566.0 | 123.2 | 122.5 | -119.83 | 6,833.0 | 520.0 | 446.4 | 233.4 | 213.01 | 2.095 | | |
| 14,000.0 | 7,344.0 | 14,223.3 | 7,566.0 | 124.9 | 124.3 | -119.90 | 6,933.0 | 520.0 | 445.3 | 229.4 | 215.88 | 2.063 | | |
| 14,100.0 | 7,344.0 | 14,323.3 | 7,566.0 | 126.6 | 126.0 | -119.98 | 7,033.0 | 520.0 | 444.3 | 225.5 | 218.75 | 2.031 | | |
| 14,200.0 | 7,344.0 | 14,423.3 | 7,566.0 | 128.4 | 127.8 | -120.06 | 7,133.0 | 520.0 | 443.2 | 221.6 | 221.61 | 2.000 | | |
| 14,300.0 | 7,344.0 | 14,523.2 | 7,566.0 | 130.1 | 129.5 | -120.14 | 7,233.0 | 520.0 | 442.1 | 217.7 | 224.46 | 1.970 | | |
| 14,400.0 | 7,344.0 | 14,623.2 | 7,566.0 | 131.8 | 131.2 | -120.22 | 7,333.0 | 520.0 | 441.1 | 213.8 | 227.31 | 1.940 | | |
| 14,500.0 | 7,344.0 | 14,723.2 | 7,566.0 | 133.6 | 133.0 | -120.30 | 7,433.0 | 520.0 | 440.0 | 209.9 | 230.15 | 1.912 | | |
| 14,600.0 | 7,344.0 | 14,823.2 | 7,566.0 | 135.3 | 134.7 | -120.38 | 7,533.0 | 520.0 | 439.0 | 206.0 | 232.99 | 1.884 | | |
| 14,700.0 | 7,344.0 | 14,923.2 | 7,566.0 | 137.0 | 136.5 | -120.46 | 7,633.0 | 520.0 | 437.9 | 202.1 | 235.82 | 1.857 | | |
| 14,800.0 | 7,344.0 | 15,023.2 | 7,566.0 | 138.8 | 138.2 | -120.54 | 7,733.0 | 520.0 | 436.9 | 198.2 | 238.65 | 1.831 | | |
| 14,900.0 | 7,344.0 | 15,123.2 | 7,566.0 | 140.5 | 140.0 | -120.63 | 7,833.0 | 520.0 | 435.8 | 194.3 | 241.47 | 1.805 | | |
| 15,000.0 | 7,344.0 | 15,223.2 | 7,566.0 | 142.2 | 141.7 | -120.71 | 7,933.0 | 520.0 | 434.8 | 190.5 | 244.28 | 1.780 | | |
| 15,100.0 | 7,344.0 | 15,323.2 | 7,566.0 | 144.0 | 143.4 | -120.79 | 8,032.9 | 520.0 | 433.7 | 186.6 | 247.09 | 1.755 | | |
| 15,200.0 | 7,344.0 | 15,423.2 | 7,566.0 | 145.7 | 145.2 | -120.87 | 8,132.9 | 520.0 | 432.7 | 182.8 | 249.89 | 1.731 | | |
| 15,300.0 | 7,344.0 | 15,523.2 | 7,566.0 | 147.4 | 146.9 | -120.96 | 8,232.9 | 520.0 | 431.6 | 178.9 | 252.68 | 1.708 | | |
| 15,400.0 | 7,344.0 | 15,623.2 | 7,566.0 | 149.2 | 148.7 | -121.04 | 8,332.9 | 520.0 | 430.6 | 175.1 | 255.47 | 1.685 | | |
| 15,500.0 | 7,344.0 | 15,723.2 | 7,566.0 | 150.9 | 150.4 | -121.12 | 8,432.9 | 520.0 | 429.5 | 171.3 | 258.25 | 1.663 | | |
| 15,600.0 | 7,344.0 | 15,823.2 | 7,566.0 | 152.6 | 152.2 | -121.21 | 8,532.9 | 520.0 | 428.5 | 167.4 | 261.03 | 1.642 | | |
| 15,700.0 | 7,344.0 | 15,923.1 | 7,566.0 | 154.4 | 153.9 | -121.29 | 8,632.9 | 520.0 | 427.4 | 163.6 | 263.79 | 1.620 | | |
| 15,800.0 | 7,344.0 | 16,023.1 | 7,566.0 | 156.1 | 155.7 | -121.38 | 8,732.9 | 520.0 | 426.4 | 159.8 | 266.56 | 1.600 | | |
| 15,900.0 | 7,344.0 | 16,123.1 | 7,566.0 | 157.8 | 157.4 | -121.46 | 8,832.9 | 520.0 | 425.3 | 156.0 | 269.31 | 1.579 | | |
| 16,000.0 | 7,344.0 | 16,223.1 | 7,566.0 | 159.6 | 159.1 | -121.55 | 8,932.9 | 520.0 | 424.3 | 152.2 | 272.06 | 1.560 | | |
| 16,100.0 | 7,344.0 | 16,323.1 | 7,566.0 | 161.3 | 160.9 | -121.64 | 9,032.9 | 520.0 | 423.3 | 148.5 | 274.80 | 1.540 | | |
| 16,200.0 | 7,344.0 | 16,423.1 | 7,566.0 | 163.1 | 162.6 | -121.72 | 9,132.9 | 520.0 | 422.2 | 144.7 | 277.53 | 1.521 | | |
| 16,300.0 | 7,344.0 | 16,523.1 | 7,566.0 | 164.8 | 164.4 | -121.81 | 9,232.9 | 520.0 | 421.2 | 140.9 | 280.26 | 1.503 | | |
| 16,400.0 | 7,344.0 | 16,623.1 | 7,566.0 | 166.5 | 166.1 | -121.90 | 9,332.8 | 520.0 | 420.1 | 137.2 | 282.98 | 1.485 Level 3 | | |
| 16,500.0 | 7,344.0 | 16,723.1 | 7,566.0 | 168.3 | 167.9 | -121.99 | 9,432.8 | 520.0 | 419.1 | 133.4 | 285.69 | 1.467 Level 3 | | |
| 16,600.0 | 7,344.0 | 16,823.1 | 7,566.0 | 170.0 | 169.6 | -122.08 | 9,532.8 | 520.0 | 418.1 | 129.7 | 288.40 | 1.450 Level 3 | | |
| 16,700.0 | 7,344.0 | 16,923.1 | 7,566.0 | 171.8 | 171.4 | -122.16 | 9,632.8 | 520.0 | 417.0 | 125.9 | 291.09 | 1.433 Level 3 | | |
| 16,800.0 | 7,344.0 | 17,023.1 | 7,566.0 | 173.5 | 173.1 | -122.25 | 9,732.8 | 520.0 | 416.0 | 122.2 | 293.78 | 1.416 Level 3 | | |
| 16,900.0 | 7,344.0 | 17,123.1 | 7,566.0 | 175.2 | 174.9 | -122.34 | 9,832.8 | 520.0 | 415.0 | 118.5 | 296.47 | 1.400 Level 3 | | |
| 16,993.9 | 7,344.0 | 17,213.3 | 7,566.0 | 176.9 | 176.4 | -122.43 | 9,923.1 | 520.0 | 414.0 | 115.1 | 298.93 | 1.385 Level 3, SF | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4H-21H-O268 - Hz - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|
| Survey Program: O-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 90.06 | 0.0 | 8.4 | 8.4 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | 90.06 | 0.0 | 8.4 | 8.4 | 8.1 | 0.26 | 32.048 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 90.06 | 0.0 | 8.4 | 8.4 | 7.8 | 0.61 | 13.735 CC, ES | | |
| 300.0 | 300.0 | 299.8 | 299.8 | 0.5 | 0.5 | 90.05 | 0.0 | 9.3 | 9.3 | 8.3 | 0.96 | 9.641 | | |
| 400.0 | 400.0 | 399.7 | 399.6 | 0.7 | 0.7 | 7.09 | 0.0 | 11.9 | 11.0 | 9.7 | 1.31 | 8.414 | | |
| 500.0 | 500.0 | 499.4 | 499.3 | 0.8 | 0.8 | 8.35 | 0.0 | 16.2 | 12.8 | 11.1 | 1.66 | 7.706 | | |
| 600.0 | 599.9 | 599.2 | 598.9 | 1.0 | 1.0 | 10.08 | 0.0 | 22.3 | 14.6 | 12.5 | 2.01 | 7.255 | | |
| 700.0 | 699.7 | 698.9 | 698.3 | 1.2 | 1.3 | 12.12 | 0.0 | 30.1 | 16.4 | 14.0 | 2.36 | 6.950 | | |
| 800.0 | 799.4 | 798.6 | 797.5 | 1.4 | 1.5 | 14.37 | 0.0 | 39.6 | 18.2 | 15.5 | 2.71 | 6.734 | | |
| 900.0 | 898.9 | 898.2 | 896.5 | 1.7 | 1.7 | 16.74 | 0.0 | 50.9 | 20.2 | 17.1 | 3.07 | 6.576 | | |
| 1,000.0 | 998.3 | 997.8 | 995.3 | 1.9 | 2.0 | 19.19 | 0.0 | 63.8 | 22.2 | 18.7 | 3.44 | 6.454 | | |
| 1,100.0 | 1,097.4 | 1,097.4 | 1,093.8 | 2.2 | 2.3 | 21.68 | 0.0 | 78.5 | 24.3 | 20.4 | 3.82 | 6.353 | | |
| 1,200.0 | 1,196.3 | 1,197.0 | 1,191.9 | 2.5 | 2.6 | 24.02 | -0.1 | 94.9 | 26.6 | 22.4 | 4.23 | 6.299 | | |
| 1,300.0 | 1,295.2 | 1,296.9 | 1,290.4 | 2.8 | 3.0 | 25.63 | -0.1 | 112.3 | 29.6 | 25.0 | 4.64 | 6.381 | | |
| 1,400.0 | 1,394.1 | 1,396.8 | 1,388.8 | 3.1 | 3.3 | 26.94 | -0.1 | 129.6 | 32.7 | 27.6 | 5.07 | 6.442 | | |
| 1,500.0 | 1,493.0 | 1,496.8 | 1,487.2 | 3.4 | 3.7 | 28.03 | -0.1 | 147.0 | 35.7 | 30.2 | 5.50 | 6.486 | | |
| 1,600.0 | 1,591.9 | 1,596.8 | 1,585.7 | 3.7 | 4.0 | 28.95 | -0.1 | 164.3 | 38.8 | 32.8 | 5.95 | 6.519 | | |
| 1,700.0 | 1,690.8 | 1,696.7 | 1,684.1 | 4.0 | 4.3 | 29.73 | -0.1 | 181.7 | 41.8 | 35.4 | 6.39 | 6.542 | | |
| 1,800.0 | 1,789.6 | 1,796.7 | 1,782.5 | 4.3 | 4.7 | 30.40 | -0.1 | 199.0 | 44.9 | 38.0 | 6.84 | 6.560 | | |
| 1,900.0 | 1,888.5 | 1,896.6 | 1,881.0 | 4.6 | 5.0 | 30.99 | -0.1 | 216.4 | 48.0 | 40.7 | 7.30 | 6.572 | | |
| 2,000.0 | 1,987.4 | 1,996.6 | 1,979.4 | 4.9 | 5.4 | 31.51 | -0.1 | 233.8 | 51.0 | 43.3 | 7.76 | 6.581 | | |
| 2,100.0 | 2,086.3 | 2,096.5 | 2,077.8 | 5.2 | 5.7 | 31.97 | -0.1 | 251.1 | 54.1 | 45.9 | 8.22 | 6.587 | | |
| 2,200.0 | 2,185.2 | 2,196.5 | 2,176.3 | 5.5 | 6.1 | 32.38 | -0.1 | 268.5 | 57.2 | 48.5 | 8.68 | 6.591 | | |
| 2,300.0 | 2,284.1 | 2,296.4 | 2,274.7 | 5.8 | 6.4 | 32.75 | -0.2 | 285.8 | 60.3 | 51.2 | 9.15 | 6.594 | | |
| 2,400.0 | 2,383.0 | 2,396.4 | 2,373.1 | 6.1 | 6.8 | 33.08 | -0.2 | 303.2 | 63.4 | 53.8 | 9.61 | 6.595 | | |
| 2,500.0 | 2,481.8 | 2,496.3 | 2,471.6 | 6.4 | 7.1 | 33.38 | -0.2 | 320.5 | 66.5 | 56.4 | 10.08 | 6.595 | | |
| 2,600.0 | 2,580.7 | 2,596.3 | 2,570.0 | 6.8 | 7.5 | 33.65 | -0.2 | 337.9 | 69.6 | 59.0 | 10.55 | 6.595 | | |
| 2,700.0 | 2,679.6 | 2,696.2 | 2,668.4 | 7.1 | 7.8 | 33.91 | -0.2 | 355.3 | 72.7 | 61.7 | 11.02 | 6.594 | | |
| 2,800.0 | 2,778.5 | 2,796.2 | 2,766.8 | 7.4 | 8.2 | 34.14 | -0.2 | 372.6 | 75.8 | 64.3 | 11.50 | 6.593 | | |
| 2,900.0 | 2,877.4 | 2,896.1 | 2,865.3 | 7.7 | 8.5 | 34.35 | -0.2 | 390.0 | 78.9 | 66.9 | 11.97 | 6.591 | | |
| 3,000.0 | 2,976.3 | 2,996.1 | 2,963.7 | 8.0 | 8.9 | 34.54 | -0.2 | 407.3 | 82.0 | 69.5 | 12.44 | 6.589 | | |
| 3,100.0 | 3,075.2 | 3,096.0 | 3,062.1 | 8.3 | 9.2 | 34.73 | -0.2 | 424.7 | 85.1 | 72.2 | 12.92 | 6.587 | | |
| 3,200.0 | 3,174.0 | 3,196.0 | 3,160.6 | 8.6 | 9.6 | 34.90 | -0.2 | 442.0 | 88.2 | 74.8 | 13.39 | 6.585 | | |
| 3,300.0 | 3,272.9 | 3,295.9 | 3,259.0 | 8.9 | 9.9 | 35.05 | -0.2 | 459.4 | 91.3 | 77.4 | 13.87 | 6.583 | | |
| 3,400.0 | 3,371.8 | 3,395.9 | 3,357.4 | 9.3 | 10.3 | 35.20 | -0.3 | 476.8 | 94.4 | 80.1 | 14.34 | 6.581 | | |
| 3,500.0 | 3,470.7 | 3,495.8 | 3,455.9 | 9.6 | 10.6 | 35.34 | -0.3 | 494.1 | 97.5 | 82.7 | 14.82 | 6.579 | | |
| 3,600.0 | 3,569.6 | 3,595.8 | 3,554.3 | 9.9 | 11.0 | 35.47 | -0.3 | 511.5 | 100.6 | 85.3 | 15.30 | 6.576 | | |
| 3,700.0 | 3,668.5 | 3,695.7 | 3,652.7 | 10.2 | 11.3 | 35.59 | -0.3 | 528.8 | 103.7 | 87.9 | 15.78 | 6.574 | | |
| 3,800.0 | 3,767.4 | 3,795.7 | 3,751.2 | 10.5 | 11.7 | 35.70 | -0.3 | 546.2 | 106.8 | 90.6 | 16.25 | 6.572 | | |
| 3,900.0 | 3,866.2 | 3,895.6 | 3,849.6 | 10.8 | 12.0 | 35.81 | -0.3 | 563.5 | 109.9 | 93.2 | 16.73 | 6.570 | | |
| 4,000.0 | 3,965.1 | 3,995.6 | 3,948.0 | 11.1 | 12.4 | 35.91 | -0.3 | 580.9 | 113.0 | 95.8 | 17.21 | 6.567 | | |
| 4,100.0 | 4,064.0 | 4,095.5 | 4,046.5 | 11.5 | 12.8 | 36.01 | -0.3 | 598.3 | 116.1 | 98.4 | 17.69 | 6.565 | | |
| 4,200.0 | 4,162.9 | 4,195.5 | 4,144.9 | 11.8 | 13.1 | 36.10 | -0.3 | 615.6 | 119.2 | 101.1 | 18.17 | 6.563 | | |
| 4,300.0 | 4,261.8 | 4,295.4 | 4,243.3 | 12.1 | 13.5 | 36.19 | -0.3 | 633.0 | 122.4 | 103.7 | 18.65 | 6.561 | | |
| 4,400.0 | 4,360.7 | 4,395.4 | 4,341.8 | 12.4 | 13.8 | 36.27 | -0.3 | 650.3 | 125.5 | 106.3 | 19.13 | 6.559 | | |
| 4,500.0 | 4,459.6 | 4,495.3 | 4,440.2 | 12.7 | 14.2 | 36.35 | -0.4 | 667.7 | 128.6 | 109.0 | 19.61 | 6.557 | | |
| 4,600.0 | 4,558.5 | 4,595.3 | 4,538.6 | 13.0 | 14.5 | 36.42 | -0.4 | 685.1 | 131.7 | 111.6 | 20.09 | 6.555 | | |
| 4,700.0 | 4,657.3 | 4,695.2 | 4,637.1 | 13.3 | 14.9 | 36.50 | -0.4 | 702.4 | 134.8 | 114.2 | 20.57 | 6.553 | | |
| 4,800.0 | 4,756.2 | 4,795.2 | 4,735.5 | 13.7 | 15.2 | 36.56 | -0.4 | 719.8 | 137.9 | 116.8 | 21.05 | 6.551 | | |
| 4,900.0 | 4,855.1 | 4,895.2 | 4,833.9 | 14.0 | 15.6 | 36.63 | -0.4 | 737.1 | 141.0 | 119.5 | 21.53 | 6.549 | | |
| 5,000.0 | 4,954.0 | 4,995.1 | 4,932.4 | 14.3 | 15.9 | 36.69 | -0.4 | 754.5 | 144.1 | 122.1 | 22.01 | 6.547 | | |
| 5,100.0 | 5,052.9 | 5,095.1 | 5,030.8 | 14.6 | 16.3 | 36.75 | -0.4 | 771.8 | 147.2 | 124.7 | 22.49 | 6.546 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4H-21H-O268 - Hz - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------------|---------------------------|---------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|----------------------|--------------------|--------|
| Survey Program: 0-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | Total Uncertainty Axis | Separation Factor | Warning | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | | | | |
| 5,200.0 | 5,151.8 | 5,195.0 | 5,129.2 | 14.9 | 16.6 | 36.81 | -0.4 | 789.2 | 150.3 | 127.4 | 22.97 | 6.544 | | |
| 5,300.0 | 5,250.7 | 5,295.0 | 5,227.7 | 15.2 | 17.0 | 36.86 | -0.4 | 806.6 | 153.4 | 130.0 | 23.45 | 6.542 | | |
| 5,400.0 | 5,349.5 | 5,394.9 | 5,326.1 | 15.5 | 17.3 | 36.92 | -0.4 | 823.9 | 156.5 | 132.6 | 23.93 | 6.541 | | |
| 5,500.0 | 5,448.4 | 5,494.9 | 5,424.5 | 15.9 | 17.7 | 36.97 | -0.4 | 841.3 | 159.7 | 135.2 | 24.42 | 6.539 | | |
| 5,600.0 | 5,547.3 | 5,594.8 | 5,523.0 | 16.2 | 18.0 | 37.02 | -0.5 | 858.6 | 162.8 | 137.9 | 24.90 | 6.537 | | |
| 5,700.0 | 5,646.2 | 5,694.8 | 5,621.4 | 16.5 | 18.4 | 37.06 | -0.5 | 876.0 | 165.9 | 140.5 | 25.38 | 6.536 | | |
| 5,800.0 | 5,745.1 | 5,794.7 | 5,719.8 | 16.8 | 18.7 | 37.11 | -0.5 | 893.3 | 169.0 | 143.1 | 25.86 | 6.534 | | |
| 5,900.0 | 5,844.0 | 5,894.7 | 5,818.3 | 17.1 | 19.1 | 37.15 | -0.5 | 910.7 | 172.1 | 145.8 | 26.34 | 6.533 | | |
| 6,000.0 | 5,942.9 | 5,994.6 | 5,916.7 | 17.4 | 19.5 | 37.19 | -0.5 | 928.1 | 175.2 | 148.4 | 26.82 | 6.532 | | |
| 6,100.0 | 6,041.7 | 6,094.6 | 6,015.1 | 17.7 | 19.8 | 37.24 | -0.5 | 945.4 | 178.3 | 151.0 | 27.31 | 6.530 | | |
| 6,200.0 | 6,140.6 | 6,194.5 | 6,113.6 | 18.1 | 20.2 | 37.27 | -0.5 | 962.8 | 181.4 | 153.6 | 27.79 | 6.529 | | |
| 6,300.0 | 6,239.5 | 6,294.5 | 6,212.0 | 18.4 | 20.5 | 37.31 | -0.5 | 980.1 | 184.5 | 156.3 | 28.27 | 6.528 | | |
| 6,400.0 | 6,338.4 | 6,394.4 | 6,310.4 | 18.7 | 20.9 | 37.35 | -0.5 | 997.5 | 187.6 | 158.9 | 28.75 | 6.526 | | |
| 6,500.0 | 6,437.3 | 6,494.4 | 6,408.9 | 19.0 | 21.2 | 37.38 | -0.5 | 1,014.8 | 190.8 | 161.5 | 29.23 | 6.525 | | |
| 6,600.0 | 6,536.2 | 6,594.3 | 6,507.3 | 19.3 | 21.6 | 37.42 | -0.5 | 1,032.2 | 193.9 | 164.2 | 29.72 | 6.524 | | |
| 6,700.0 | 6,635.1 | 6,694.3 | 6,605.7 | 19.6 | 21.9 | 37.45 | -0.6 | 1,049.6 | 197.0 | 166.8 | 30.20 | 6.523 | | |
| 6,800.0 | 6,733.9 | 6,794.2 | 6,704.2 | 19.9 | 22.3 | 37.48 | -0.6 | 1,066.9 | 200.1 | 169.4 | 30.68 | 6.522 | | |
| 6,900.0 | 6,832.7 | 6,894.1 | 6,802.5 | 20.3 | 22.6 | 65.15 | -0.6 | 1,084.3 | 204.2 | 173.0 | 31.22 | 6.542 | | |
| 7,000.0 | 6,929.8 | 6,992.2 | 6,899.1 | 20.6 | 23.0 | 95.65 | -0.6 | 1,101.3 | 216.8 | 184.5 | 32.26 | 6.721 | | |
| 7,100.0 | 7,022.3 | 7,085.6 | 6,991.1 | 21.0 | 23.3 | 110.07 | -0.6 | 1,117.5 | 241.1 | 207.8 | 33.24 | 7.252 | | |
| 7,200.0 | 7,107.3 | 7,213.7 | 7,116.5 | 21.4 | 23.8 | 121.26 | 11.4 | 1,139.6 | 273.8 | 239.7 | 34.05 | 8.040 | | |
| 7,300.0 | 7,182.3 | 7,366.1 | 7,257.6 | 21.9 | 24.3 | 128.82 | 61.7 | 1,164.5 | 303.8 | 270.1 | 33.69 | 9.016 | | |
| 7,400.0 | 7,245.0 | 7,539.9 | 7,396.2 | 22.5 | 25.0 | 133.42 | 162.7 | 1,188.9 | 326.5 | 294.0 | 32.49 | 10.050 | | |
| 7,500.0 | 7,293.4 | 7,730.2 | 7,506.2 | 23.2 | 25.9 | 135.36 | 315.6 | 1,208.3 | 337.8 | 306.7 | 31.01 | 10.891 | | |
| 7,600.0 | 7,326.2 | 7,924.3 | 7,561.5 | 23.9 | 27.1 | 134.72 | 500.5 | 1,218.1 | 335.5 | 305.6 | 29.90 | 11.220 | | |
| 7,700.0 | 7,342.3 | 8,057.6 | 7,566.0 | 24.8 | 28.1 | 133.36 | 633.5 | 1,218.9 | 325.3 | 296.6 | 28.68 | 11.340 | | |
| 7,748.8 | 7,345.1 | 8,106.3 | 7,566.0 | 25.2 | 28.5 | 133.05 | 682.2 | 1,218.9 | 323.5 | 294.5 | 28.96 | 11.169 | | |
| 7,800.0 | 7,344.0 | 8,157.5 | 7,566.0 | 25.7 | 28.9 | 133.11 | 733.5 | 1,218.9 | 324.8 | 295.7 | 29.14 | 11.148 | | |
| 7,900.0 | 7,344.0 | 8,257.5 | 7,566.0 | 26.7 | 29.9 | 132.97 | 833.5 | 1,218.9 | 325.7 | 294.5 | 31.23 | 10.431 | | |
| 8,000.0 | 7,344.0 | 8,357.5 | 7,566.0 | 27.8 | 30.8 | 132.82 | 933.5 | 1,218.9 | 326.6 | 293.2 | 33.40 | 9.780 | | |
| 8,100.0 | 7,344.0 | 8,457.5 | 7,566.0 | 29.0 | 31.9 | 132.68 | 1,033.5 | 1,218.9 | 327.5 | 291.9 | 35.64 | 9.190 | | |
| 8,200.0 | 7,344.0 | 8,557.5 | 7,566.0 | 30.2 | 33.0 | 132.53 | 1,133.5 | 1,218.9 | 328.4 | 290.5 | 37.94 | 8.655 | | |
| 8,300.0 | 7,344.0 | 8,657.5 | 7,566.0 | 31.4 | 34.2 | 132.39 | 1,233.5 | 1,218.9 | 329.3 | 289.0 | 40.30 | 8.172 | | |
| 8,400.0 | 7,344.0 | 8,757.5 | 7,566.0 | 32.7 | 35.4 | 132.25 | 1,333.4 | 1,218.9 | 330.2 | 287.5 | 42.70 | 7.733 | | |
| 8,500.0 | 7,344.0 | 8,857.5 | 7,566.0 | 34.1 | 36.7 | 132.10 | 1,433.4 | 1,218.9 | 331.1 | 286.0 | 45.15 | 7.334 | | |
| 8,600.0 | 7,344.0 | 8,957.5 | 7,566.0 | 35.5 | 38.0 | 131.96 | 1,533.4 | 1,218.9 | 332.0 | 284.4 | 47.63 | 6.972 | | |
| 8,700.0 | 7,344.0 | 9,057.5 | 7,566.0 | 36.9 | 39.3 | 131.82 | 1,633.4 | 1,218.9 | 332.9 | 282.8 | 50.14 | 6.640 | | |
| 8,800.0 | 7,344.0 | 9,157.5 | 7,566.0 | 38.3 | 40.7 | 131.68 | 1,733.4 | 1,218.9 | 333.9 | 281.2 | 52.68 | 6.337 | | |
| 8,900.0 | 7,344.0 | 9,257.4 | 7,566.0 | 39.8 | 42.1 | 131.54 | 1,833.4 | 1,218.9 | 334.8 | 279.5 | 55.25 | 6.059 | | |
| 9,000.0 | 7,344.0 | 9,357.4 | 7,566.0 | 41.3 | 43.5 | 131.40 | 1,933.4 | 1,218.9 | 335.7 | 277.8 | 57.84 | 5.804 | | |
| 9,100.0 | 7,344.0 | 9,457.4 | 7,566.0 | 42.8 | 44.9 | 131.27 | 2,033.4 | 1,218.9 | 336.6 | 276.1 | 60.45 | 5.568 | | |
| 9,200.0 | 7,344.0 | 9,557.4 | 7,566.0 | 44.3 | 46.4 | 131.13 | 2,133.4 | 1,218.9 | 337.5 | 274.4 | 63.09 | 5.350 | | |
| 9,300.0 | 7,344.0 | 9,657.4 | 7,566.0 | 45.9 | 47.9 | 130.99 | 2,233.4 | 1,218.9 | 338.4 | 272.7 | 65.74 | 5.148 | | |
| 9,400.0 | 7,344.0 | 9,757.4 | 7,566.0 | 47.4 | 49.4 | 130.86 | 2,333.4 | 1,218.9 | 339.4 | 270.9 | 68.42 | 4.960 | | |
| 9,500.0 | 7,344.0 | 9,857.4 | 7,566.0 | 49.0 | 50.9 | 130.72 | 2,433.4 | 1,218.9 | 340.3 | 269.2 | 71.11 | 4.785 | | |
| 9,600.0 | 7,344.0 | 9,957.4 | 7,566.0 | 50.6 | 52.4 | 130.59 | 2,533.4 | 1,218.9 | 341.2 | 267.4 | 73.82 | 4.622 | | |
| 9,700.0 | 7,344.0 | 10,057.4 | 7,566.0 | 52.2 | 54.0 | 130.46 | 2,633.3 | 1,218.9 | 342.1 | 265.6 | 76.54 | 4.470 | | |
| 9,800.0 | 7,344.0 | 10,157.4 | 7,566.0 | 53.8 | 55.5 | 130.32 | 2,733.3 | 1,218.9 | 343.1 | 263.8 | 79.28 | 4.327 | | |
| 9,900.0 | 7,344.0 | 10,257.4 | 7,566.0 | 55.4 | 57.1 | 130.19 | 2,833.3 | 1,218.9 | 344.0 | 262.0 | 82.03 | 4.194 | | |
| 10,000.0 | 7,344.0 | 10,357.4 | 7,566.0 | 57.0 | 58.7 | 130.06 | 2,933.3 | 1,218.9 | 344.9 | 260.1 | 84.80 | 4.068 | | |
| 10,100.0 | 7,344.0 | 10,457.4 | 7,566.0 | 58.7 | 60.3 | 129.93 | 3,033.3 | 1,218.9 | 345.9 | 258.3 | 87.58 | 3.949 | | |
| 10,200.0 | 7,344.0 | 10,557.3 | 7,566.0 | 60.3 | 61.9 | 129.80 | 3,133.3 | 1,218.9 | 346.8 | 256.4 | 90.37 | 3.838 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4H-21H-O268 - Hz - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------------|---------------------------|---------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|----------------------|--------------------|--------|
| Survey Program: 0-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | Total Uncertainty Axis | Separation Factor | Warning | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | | | | |
| 10,300.0 | 7,344.0 | 10,657.3 | 7,566.0 | 61.9 | 63.5 | 129.67 | 3,233.3 | 1,218.9 | 347.8 | 254.6 | 93.17 | 3.732 | | |
| 10,400.0 | 7,344.0 | 10,757.3 | 7,566.0 | 63.6 | 65.1 | 129.55 | 3,333.3 | 1,218.9 | 348.7 | 252.7 | 95.99 | 3.633 | | |
| 10,500.0 | 7,344.0 | 10,857.3 | 7,566.0 | 65.3 | 66.7 | 129.42 | 3,433.3 | 1,218.9 | 349.6 | 250.8 | 98.81 | 3.538 | | |
| 10,600.0 | 7,344.0 | 10,957.3 | 7,566.0 | 66.9 | 68.4 | 129.29 | 3,533.3 | 1,218.9 | 350.6 | 248.9 | 101.65 | 3.449 | | |
| 10,700.0 | 7,344.0 | 11,057.3 | 7,566.0 | 68.6 | 70.0 | 129.17 | 3,633.3 | 1,218.9 | 351.5 | 247.0 | 104.50 | 3.364 | | |
| 10,800.0 | 7,344.0 | 11,157.3 | 7,566.0 | 70.2 | 71.6 | 129.04 | 3,733.3 | 1,218.9 | 352.5 | 245.1 | 107.36 | 3.283 | | |
| 10,900.0 | 7,344.0 | 11,257.3 | 7,566.0 | 71.9 | 73.3 | 128.91 | 3,833.3 | 1,218.9 | 353.4 | 243.2 | 110.23 | 3.206 | | |
| 11,000.0 | 7,344.0 | 11,357.3 | 7,566.0 | 73.6 | 74.9 | 128.79 | 3,933.2 | 1,218.9 | 354.4 | 241.3 | 113.11 | 3.133 | | |
| 11,100.0 | 7,344.0 | 11,457.3 | 7,566.0 | 75.3 | 76.6 | 128.67 | 4,033.2 | 1,218.9 | 355.3 | 239.3 | 116.00 | 3.063 | | |
| 11,200.0 | 7,344.0 | 11,557.3 | 7,566.0 | 77.0 | 78.3 | 128.54 | 4,133.2 | 1,218.9 | 356.3 | 237.4 | 118.90 | 2.996 | | |
| 11,300.0 | 7,344.0 | 11,657.3 | 7,566.0 | 78.7 | 79.9 | 128.42 | 4,233.2 | 1,218.9 | 357.2 | 235.4 | 121.81 | 2.933 | | |
| 11,400.0 | 7,344.0 | 11,757.3 | 7,566.0 | 80.3 | 81.6 | 128.30 | 4,333.2 | 1,218.9 | 358.2 | 233.5 | 124.73 | 2.872 | | |
| 11,500.0 | 7,344.0 | 11,857.2 | 7,566.0 | 82.0 | 83.3 | 128.18 | 4,433.2 | 1,218.9 | 359.2 | 231.5 | 127.66 | 2.813 | | |
| 11,600.0 | 7,344.0 | 11,957.2 | 7,566.0 | 83.7 | 84.9 | 128.06 | 4,533.2 | 1,218.9 | 360.1 | 229.5 | 130.59 | 2.758 | | |
| 11,700.0 | 7,344.0 | 12,057.2 | 7,566.0 | 85.4 | 86.6 | 127.94 | 4,633.2 | 1,218.9 | 361.1 | 227.5 | 133.54 | 2.704 | | |
| 11,800.0 | 7,344.0 | 12,157.2 | 7,566.0 | 87.1 | 88.3 | 127.82 | 4,733.2 | 1,218.9 | 362.0 | 225.6 | 136.49 | 2.653 | | |
| 11,900.0 | 7,344.0 | 12,257.2 | 7,566.0 | 88.8 | 90.0 | 127.70 | 4,833.2 | 1,218.9 | 363.0 | 223.6 | 139.45 | 2.603 | | |
| 12,000.0 | 7,344.0 | 12,357.2 | 7,566.0 | 90.5 | 91.7 | 127.59 | 4,933.2 | 1,218.9 | 364.0 | 221.6 | 142.42 | 2.556 | | |
| 12,100.0 | 7,344.0 | 12,457.2 | 7,566.0 | 92.2 | 93.4 | 127.47 | 5,033.2 | 1,218.9 | 364.9 | 219.6 | 145.40 | 2.510 | | |
| 12,200.0 | 7,344.0 | 12,557.2 | 7,566.0 | 93.9 | 95.1 | 127.35 | 5,133.2 | 1,218.9 | 365.9 | 217.5 | 148.38 | 2.466 | | |
| 12,300.0 | 7,344.0 | 12,657.2 | 7,566.0 | 95.7 | 96.7 | 127.24 | 5,233.2 | 1,218.9 | 366.9 | 215.5 | 151.37 | 2.424 | | |
| 12,400.0 | 7,344.0 | 12,757.2 | 7,566.0 | 97.4 | 98.4 | 127.12 | 5,333.1 | 1,218.9 | 367.9 | 213.5 | 154.37 | 2.383 | | |
| 12,500.0 | 7,344.0 | 12,857.2 | 7,566.0 | 99.1 | 100.1 | 127.01 | 5,433.1 | 1,218.9 | 368.8 | 211.5 | 157.38 | 2.344 | | |
| 12,600.0 | 7,344.0 | 12,957.2 | 7,566.0 | 100.8 | 101.8 | 126.89 | 5,533.1 | 1,218.9 | 369.8 | 209.4 | 160.40 | 2.306 | | |
| 12,700.0 | 7,344.0 | 13,057.2 | 7,566.0 | 102.5 | 103.5 | 126.78 | 5,633.1 | 1,218.9 | 370.8 | 207.4 | 163.42 | 2.269 | | |
| 12,800.0 | 7,344.0 | 13,157.2 | 7,566.0 | 104.2 | 105.2 | 126.67 | 5,733.1 | 1,218.9 | 371.8 | 205.3 | 166.45 | 2.234 | | |
| 12,900.0 | 7,344.0 | 13,257.1 | 7,566.0 | 105.9 | 106.9 | 126.56 | 5,833.1 | 1,218.9 | 372.8 | 203.3 | 169.48 | 2.199 | | |
| 13,000.0 | 7,344.0 | 13,357.1 | 7,566.0 | 107.7 | 108.7 | 126.44 | 5,933.1 | 1,218.9 | 373.7 | 201.2 | 172.53 | 2.166 | | |
| 13,100.0 | 7,344.0 | 13,457.1 | 7,566.0 | 109.4 | 110.4 | 126.33 | 6,033.1 | 1,218.9 | 374.7 | 199.1 | 175.57 | 2.134 | | |
| 13,200.0 | 7,344.0 | 13,557.1 | 7,566.0 | 111.1 | 112.1 | 126.22 | 6,133.1 | 1,218.9 | 375.7 | 197.1 | 178.63 | 2.103 | | |
| 13,300.0 | 7,344.0 | 13,657.1 | 7,566.0 | 112.8 | 113.8 | 126.11 | 6,233.1 | 1,218.9 | 376.7 | 195.0 | 181.69 | 2.073 | | |
| 13,400.0 | 7,344.0 | 13,757.1 | 7,566.0 | 114.5 | 115.5 | 126.00 | 6,333.1 | 1,218.9 | 377.7 | 192.9 | 184.76 | 2.044 | | |
| 13,500.0 | 7,344.0 | 13,857.1 | 7,566.0 | 116.3 | 117.2 | 125.89 | 6,433.1 | 1,218.9 | 378.7 | 190.8 | 187.84 | 2.016 | | |
| 13,600.0 | 7,344.0 | 13,957.1 | 7,566.0 | 118.0 | 118.9 | 125.79 | 6,533.1 | 1,218.9 | 379.7 | 188.7 | 190.92 | 1.989 | | |
| 13,700.0 | 7,344.0 | 14,057.1 | 7,566.0 | 119.7 | 120.6 | 125.68 | 6,633.0 | 1,218.9 | 380.6 | 186.6 | 194.01 | 1.962 | | |
| 13,800.0 | 7,344.0 | 14,157.1 | 7,566.0 | 121.4 | 122.4 | 125.57 | 6,733.0 | 1,218.9 | 381.6 | 184.5 | 197.10 | 1.936 | | |
| 13,900.0 | 7,344.0 | 14,257.1 | 7,566.0 | 123.2 | 124.1 | 125.47 | 6,833.0 | 1,218.9 | 382.6 | 182.4 | 200.20 | 1.911 | | |
| 14,000.0 | 7,344.0 | 14,357.1 | 7,566.0 | 124.9 | 125.8 | 125.36 | 6,933.0 | 1,218.9 | 383.6 | 180.3 | 203.31 | 1.887 | | |
| 14,100.0 | 7,344.0 | 14,457.1 | 7,566.0 | 126.6 | 127.5 | 125.25 | 7,033.0 | 1,218.9 | 384.6 | 178.2 | 206.42 | 1.863 | | |
| 14,200.0 | 7,344.0 | 14,557.0 | 7,566.0 | 128.4 | 129.2 | 125.15 | 7,133.0 | 1,218.9 | 385.6 | 176.1 | 209.54 | 1.840 | | |
| 14,300.0 | 7,344.0 | 14,657.0 | 7,566.0 | 130.1 | 131.0 | 125.05 | 7,233.0 | 1,218.9 | 386.6 | 174.0 | 212.66 | 1.818 | | |
| 14,400.0 | 7,344.0 | 14,757.0 | 7,566.0 | 131.8 | 132.7 | 124.94 | 7,333.0 | 1,218.9 | 387.6 | 171.8 | 215.79 | 1.796 | | |
| 14,500.0 | 7,344.0 | 14,857.0 | 7,566.0 | 133.6 | 134.4 | 124.84 | 7,433.0 | 1,218.9 | 388.6 | 169.7 | 218.92 | 1.775 | | |
| 14,600.0 | 7,344.0 | 14,957.0 | 7,566.0 | 135.3 | 136.1 | 124.74 | 7,533.0 | 1,218.9 | 389.6 | 167.6 | 222.06 | 1.755 | | |
| 14,700.0 | 7,344.0 | 15,057.0 | 7,566.0 | 137.0 | 137.8 | 124.63 | 7,633.0 | 1,218.9 | 390.6 | 165.4 | 225.20 | 1.735 | | |
| 14,800.0 | 7,344.0 | 15,157.0 | 7,566.0 | 138.8 | 139.6 | 124.53 | 7,733.0 | 1,218.9 | 391.6 | 163.3 | 228.35 | 1.715 | | |
| 14,900.0 | 7,344.0 | 15,257.0 | 7,566.0 | 140.5 | 141.3 | 124.43 | 7,833.0 | 1,218.9 | 392.7 | 161.1 | 231.51 | 1.696 | | |
| 15,000.0 | 7,344.0 | 15,357.0 | 7,566.0 | 142.2 | 143.0 | 124.33 | 7,933.0 | 1,218.9 | 393.7 | 159.0 | 234.67 | 1.678 | | |
| 15,100.0 | 7,344.0 | 15,457.0 | 7,566.0 | 144.0 | 144.8 | 124.23 | 8,032.9 | 1,218.9 | 394.7 | 156.8 | 237.83 | 1.659 | | |
| 15,200.0 | 7,344.0 | 15,557.0 | 7,566.0 | 145.7 | 146.5 | 124.13 | 8,132.9 | 1,218.9 | 395.7 | 154.7 | 241.00 | 1.642 | | |
| 15,300.0 | 7,344.0 | 15,657.0 | 7,566.0 | 147.4 | 148.2 | 124.03 | 8,232.9 | 1,218.9 | 396.7 | 152.5 | 244.18 | 1.625 | | |
| 15,400.0 | 7,344.0 | 15,757.0 | 7,566.0 | 149.2 | 149.9 | 123.93 | 8,332.9 | 1,218.9 | 397.7 | 150.3 | 247.36 | 1.608 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4H-21H-O268 - Hz - Plan #1 | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|------------------------|------------------------|------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|---------------------------|-------------|
| Survey Program: 0-Geolink MWD | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
| 15,500.0 | 7,344.0 | 15,857.0 | 7,566.0 | 150.9 | 151.7 | 123.84 | 8,432.9 | 1,218.9 | 398.7 | 148.2 | 250.54 | 1.591 | |
| 15,600.0 | 7,344.0 | 15,956.9 | 7,566.0 | 152.6 | 153.4 | 123.74 | 8,532.9 | 1,218.9 | 399.7 | 146.0 | 253.73 | 1.575 | |
| 15,700.0 | 7,344.0 | 16,056.9 | 7,566.0 | 154.4 | 155.1 | 123.64 | 8,632.9 | 1,218.9 | 400.8 | 143.8 | 256.93 | 1.560 | |
| 15,800.0 | 7,344.0 | 16,156.9 | 7,566.0 | 156.1 | 156.9 | 123.54 | 8,732.9 | 1,218.9 | 401.8 | 141.6 | 260.12 | 1.545 | |
| 15,900.0 | 7,344.0 | 16,256.9 | 7,566.0 | 157.8 | 158.6 | 123.45 | 8,832.9 | 1,218.9 | 402.8 | 139.5 | 263.33 | 1.530 | |
| 16,000.0 | 7,344.0 | 16,356.9 | 7,566.0 | 159.6 | 160.3 | 123.35 | 8,932.9 | 1,218.9 | 403.8 | 137.3 | 266.53 | 1.515 | |
| 16,100.0 | 7,344.0 | 16,456.9 | 7,566.0 | 161.3 | 162.1 | 123.26 | 9,032.9 | 1,218.9 | 404.8 | 135.1 | 269.75 | 1.501 | |
| 16,200.0 | 7,344.0 | 16,556.9 | 7,566.0 | 163.1 | 163.8 | 123.16 | 9,132.9 | 1,218.9 | 405.8 | 132.9 | 272.96 | 1.487 | Level 3 |
| 16,300.0 | 7,344.0 | 16,656.9 | 7,566.0 | 164.8 | 165.5 | 123.07 | 9,232.9 | 1,218.9 | 406.9 | 130.7 | 276.18 | 1.473 | Level 3 |
| 16,400.0 | 7,344.0 | 16,756.9 | 7,566.0 | 166.5 | 167.3 | 122.98 | 9,332.8 | 1,218.9 | 407.9 | 128.5 | 279.41 | 1.460 | Level 3 |
| 16,500.0 | 7,344.0 | 16,856.9 | 7,566.0 | 168.3 | 169.0 | 122.88 | 9,432.8 | 1,218.9 | 408.9 | 126.3 | 282.63 | 1.447 | Level 3 |
| 16,600.0 | 7,344.0 | 16,956.9 | 7,566.0 | 170.0 | 170.7 | 122.79 | 9,532.8 | 1,218.9 | 409.9 | 124.1 | 285.87 | 1.434 | Level 3 |
| 16,700.0 | 7,344.0 | 17,056.9 | 7,566.0 | 171.8 | 172.5 | 122.70 | 9,632.8 | 1,218.9 | 411.0 | 121.9 | 289.10 | 1.422 | Level 3 |
| 16,800.0 | 7,344.0 | 17,156.9 | 7,566.0 | 173.5 | 174.2 | 122.61 | 9,732.8 | 1,218.9 | 412.0 | 119.7 | 292.34 | 1.409 | Level 3 |
| 16,900.0 | 7,344.0 | 17,256.8 | 7,566.0 | 175.2 | 175.9 | 122.51 | 9,832.8 | 1,218.9 | 413.0 | 117.4 | 295.59 | 1.397 | Level 3 |
| 16,993.9 | 7,344.0 | 17,350.7 | 7,566.0 | 176.9 | 177.6 | 122.43 | 9,926.7 | 1,218.9 | 414.0 | 115.4 | 298.64 | 1.386 | Level 3, SF |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - JILLSON A 3 (EXISTING) - FOUNDATION WELL - NO SURVE | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|---------|
| Survey Program: 5009-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | | |
| 2,700.0 | 2,679.6 | 2,652.6 | 2,652.6 | 7.1 | 4.6 | -38.84 | 382.6 | 640.4 | 493.5 | 483.1 | 10.34 | 47.715 | | |
| 2,800.0 | 2,778.5 | 2,751.5 | 2,751.5 | 7.4 | 4.8 | -39.94 | 382.6 | 640.4 | 481.9 | 471.1 | 10.80 | 44.616 | | |
| 2,900.0 | 2,877.4 | 2,850.4 | 2,850.4 | 7.7 | 5.0 | -41.10 | 382.6 | 640.4 | 470.6 | 459.3 | 11.27 | 41.757 | | |
| 3,000.0 | 2,976.3 | 2,949.3 | 2,949.3 | 8.0 | 5.1 | -42.31 | 382.6 | 640.4 | 459.4 | 447.6 | 11.74 | 39.116 | | |
| 3,100.0 | 3,075.2 | 3,048.2 | 3,048.2 | 8.3 | 5.3 | -43.59 | 382.6 | 640.4 | 448.4 | 436.2 | 12.23 | 36.671 | | |
| 3,200.0 | 3,174.0 | 3,147.0 | 3,147.0 | 8.6 | 5.5 | -44.92 | 382.6 | 640.4 | 437.7 | 425.0 | 12.72 | 34.406 | | |
| 3,300.0 | 3,272.9 | 3,245.9 | 3,245.9 | 8.9 | 5.7 | -46.32 | 382.6 | 640.4 | 427.2 | 414.0 | 13.22 | 32.307 | | |
| 3,400.0 | 3,371.8 | 3,344.8 | 3,344.8 | 9.3 | 5.8 | -47.79 | 382.6 | 640.4 | 417.0 | 403.3 | 13.74 | 30.359 | | |
| 3,500.0 | 3,470.7 | 3,443.7 | 3,443.7 | 9.6 | 6.0 | -49.34 | 382.6 | 640.4 | 407.1 | 392.9 | 14.26 | 28.553 | | |
| 3,600.0 | 3,569.6 | 3,542.6 | 3,542.6 | 9.9 | 6.2 | -50.95 | 382.6 | 640.4 | 397.5 | 382.7 | 14.79 | 26.877 | | |
| 3,700.0 | 3,668.5 | 3,641.5 | 3,641.5 | 10.2 | 6.4 | -52.65 | 382.6 | 640.4 | 388.3 | 372.9 | 15.33 | 25.323 | | |
| 3,800.0 | 3,767.4 | 3,740.4 | 3,740.4 | 10.5 | 6.5 | -54.42 | 382.6 | 640.4 | 379.3 | 363.5 | 15.88 | 23.884 | | |
| 3,900.0 | 3,866.2 | 3,839.2 | 3,839.2 | 10.8 | 6.7 | -56.28 | 382.6 | 640.4 | 370.8 | 354.4 | 16.44 | 22.552 | | |
| 4,000.0 | 3,965.1 | 3,938.1 | 3,938.1 | 11.1 | 6.9 | -58.22 | 382.6 | 640.4 | 362.7 | 345.7 | 17.01 | 21.322 | | |
| 4,100.0 | 4,064.0 | 4,037.0 | 4,037.0 | 11.5 | 7.0 | -60.24 | 382.6 | 640.4 | 355.0 | 337.4 | 17.59 | 20.188 | | |
| 4,200.0 | 4,162.9 | 4,135.9 | 4,135.9 | 11.8 | 7.2 | -62.35 | 382.6 | 640.4 | 347.8 | 329.6 | 18.17 | 19.145 | | |
| 4,300.0 | 4,261.8 | 4,234.8 | 4,234.8 | 12.1 | 7.4 | -64.55 | 382.6 | 640.4 | 341.1 | 322.3 | 18.75 | 18.189 | | |
| 4,400.0 | 4,360.7 | 4,333.7 | 4,333.7 | 12.4 | 7.6 | -66.83 | 382.6 | 640.4 | 334.9 | 315.6 | 19.34 | 17.315 | | |
| 4,500.0 | 4,459.6 | 4,432.6 | 4,432.6 | 12.7 | 7.7 | -69.19 | 382.6 | 640.4 | 329.3 | 309.4 | 19.93 | 16.521 | | |
| 4,600.0 | 4,558.5 | 4,531.5 | 4,531.5 | 13.0 | 7.9 | -71.62 | 382.6 | 640.4 | 324.2 | 303.7 | 20.52 | 15.802 | | |
| 4,700.0 | 4,657.3 | 4,630.3 | 4,630.3 | 13.3 | 8.1 | -74.13 | 382.6 | 640.4 | 319.8 | 298.7 | 21.10 | 15.156 | | |
| 4,800.0 | 4,756.2 | 4,729.2 | 4,729.2 | 13.7 | 8.3 | -76.70 | 382.6 | 640.4 | 316.0 | 294.3 | 21.68 | 14.579 | | |
| 4,900.0 | 4,855.1 | 4,828.1 | 4,828.1 | 14.0 | 8.4 | -79.32 | 382.6 | 640.4 | 312.9 | 290.7 | 22.24 | 14.068 | | |
| 5,000.0 | 4,954.0 | 4,927.0 | 4,927.0 | 14.3 | 8.6 | -81.99 | 382.6 | 640.4 | 310.5 | 287.7 | 22.79 | 13.620 | | |
| 5,080.3 | 5,033.4 | 5,006.4 | 5,006.4 | 14.5 | 8.7 | -84.16 | 382.6 | 640.4 | 309.0 | 285.8 | 23.23 | 13.304 CC, ES | | |
| 5,100.0 | 5,052.9 | 5,009.0 | 5,009.0 | 14.6 | 8.7 | -84.23 | 382.6 | 640.4 | 309.2 | 285.9 | 23.29 | 13.273 SF | | |
| 5,200.0 | 5,151.8 | 5,009.0 | 5,009.0 | 14.9 | 8.7 | -84.23 | 382.6 | 640.4 | 328.7 | 305.1 | 23.61 | 13.925 | | |
| 5,300.0 | 5,250.7 | 5,009.0 | 5,009.0 | 15.2 | 8.7 | -84.23 | 382.6 | 640.4 | 374.9 | 351.0 | 23.92 | 15.673 | | |
| 5,400.0 | 5,349.5 | 5,009.0 | 5,009.0 | 15.5 | 8.7 | -84.23 | 382.6 | 640.4 | 439.3 | 415.1 | 24.23 | 18.130 | | |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - KENNEDY 41-21 (EXISTING) - ENCANA WELL - NO SURVE | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|---------------------------|--------------------|--------|
| Survey Program: 8100-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | Warning | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | | |
| 10,800.0 | 7,344.0 | 7,279.0 | 7,279.0 | 70.2 | 12.7 | -90.00 | 4,211.1 | 839.7 | 489.4 | 408.6 | 80.75 | 6.060 | | |
| 10,900.0 | 7,344.0 | 7,279.0 | 7,279.0 | 71.9 | 12.7 | -90.00 | 4,211.1 | 839.7 | 392.0 | 309.5 | 82.48 | 4.753 | | |
| 11,000.0 | 7,344.0 | 7,279.0 | 7,279.0 | 73.6 | 12.7 | -90.00 | 4,211.1 | 839.7 | 296.3 | 212.1 | 84.20 | 3.519 | | |
| 11,100.0 | 7,344.0 | 7,279.0 | 7,279.0 | 75.3 | 12.7 | -90.00 | 4,211.1 | 839.7 | 204.9 | 119.0 | 85.93 | 2.385 | | |
| 11,200.0 | 7,344.0 | 7,279.0 | 7,279.0 | 77.0 | 12.7 | -90.00 | 4,211.1 | 839.7 | 127.2 | 39.5 | 87.66 | 1.451 Level 3 | | |
| 11,279.1 | 7,344.0 | 7,279.0 | 7,279.0 | 78.3 | 12.7 | -90.00 | 4,211.1 | 839.7 | 99.5 | 10.5 | 89.03 | 1.118 Level 2, CC, ES, SF | | |
| 11,300.0 | 7,344.0 | 7,279.0 | 7,279.0 | 78.7 | 12.7 | -90.00 | 4,211.1 | 839.7 | 101.7 | 12.3 | 89.39 | 1.138 Level 2 | | |
| 11,400.0 | 7,344.0 | 7,279.0 | 7,279.0 | 80.3 | 12.7 | -90.00 | 4,211.1 | 839.7 | 156.6 | 65.5 | 91.13 | 1.718 | | |
| 11,500.0 | 7,344.0 | 7,279.0 | 7,279.0 | 82.0 | 12.7 | -90.00 | 4,211.1 | 839.7 | 242.3 | 149.4 | 92.86 | 2.609 | | |
| 11,600.0 | 7,344.0 | 7,279.0 | 7,279.0 | 83.7 | 12.7 | -90.00 | 4,211.1 | 839.7 | 336.0 | 241.4 | 94.59 | 3.552 | | |
| 11,700.0 | 7,344.0 | 7,279.0 | 7,279.0 | 85.4 | 12.7 | -90.00 | 4,211.1 | 839.7 | 432.5 | 336.2 | 96.33 | 4.490 | | |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - KENNEDY 8-0-21 (EXISTING) - ENCANA WELL - SURVEYS | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|---------|
| Survey Program: 45-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | | |
| 11,700.0 | 7,344.0 | 7,703.1 | 7,263.0 | 85.4 | 40.5 | 85.10 | 5,002.7 | 1,248.2 | 485.8 | 385.6 | 100.15 | 4.850 | | |
| 11,800.0 | 7,344.0 | 7,708.6 | 7,268.4 | 87.1 | 40.5 | 86.08 | 5,003.0 | 1,248.3 | 415.7 | 313.7 | 101.98 | 4.076 | | |
| 11,900.0 | 7,344.0 | 7,713.9 | 7,273.7 | 88.8 | 40.5 | 87.03 | 5,003.3 | 1,248.4 | 360.0 | 256.2 | 103.78 | 3.468 | | |
| 12,000.0 | 7,344.0 | 7,719.0 | 7,278.9 | 90.5 | 40.5 | 87.95 | 5,003.6 | 1,248.6 | 326.0 | 220.5 | 105.56 | 3.088 | | |
| 12,066.7 | 7,344.0 | 7,722.4 | 7,282.2 | 91.7 | 40.6 | 88.54 | 5,003.7 | 1,248.7 | 319.2 | 212.4 | 106.74 | 2.990 CC, ES | | |
| 12,100.0 | 7,344.0 | 7,724.0 | 7,283.8 | 92.2 | 40.6 | 88.84 | 5,003.8 | 1,248.7 | 320.9 | 213.6 | 107.32 | 2.990 SF | | |
| 12,200.0 | 7,344.0 | 7,728.9 | 7,288.7 | 93.9 | 40.6 | 89.71 | 5,004.0 | 1,248.8 | 345.8 | 236.8 | 109.06 | 3.171 | | |
| 12,300.0 | 7,344.0 | 7,733.5 | 7,293.3 | 95.7 | 40.6 | 90.55 | 5,004.3 | 1,248.9 | 395.2 | 284.4 | 110.77 | 3.568 | | |
| 12,400.0 | 7,344.0 | 7,738.1 | 7,297.9 | 97.4 | 40.6 | 91.36 | 5,004.5 | 1,249.0 | 461.2 | 348.7 | 112.47 | 4.101 | | |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design S21-T2N-R68W (Edith Ann-Duckworth) - KENNEDY 8-4-21 (EXISTING) - ENCANA WELL - SURVEYS | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|
| Survey Program: 72-Geolink MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | Warning | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | | |
| 9,000.0 | 7,344.0 | 7,496.4 | 7,291.7 | 41.3 | 28.1 | 89.52 | 2,305.8 | 1,183.8 | 430.9 | 369.1 | 61.78 | 6.975 | | |
| 9,100.0 | 7,344.0 | 7,497.4 | 7,292.7 | 42.8 | 28.1 | 89.78 | 2,305.8 | 1,183.8 | 348.9 | 285.4 | 63.44 | 5.499 | | |
| 9,200.0 | 7,344.0 | 7,498.4 | 7,293.8 | 44.3 | 28.1 | 90.04 | 2,305.8 | 1,183.8 | 278.8 | 213.7 | 65.11 | 4.283 | | |
| 9,300.0 | 7,344.0 | 7,499.4 | 7,294.8 | 45.9 | 28.1 | 90.30 | 2,305.8 | 1,183.8 | 232.0 | 165.2 | 66.78 | 3.473 | | |
| 9,369.8 | 7,344.0 | 7,500.1 | 7,295.4 | 47.0 | 28.1 | 90.48 | 2,305.8 | 1,183.8 | 221.2 | 153.3 | 67.95 | 3.256 | CC, ES, SF | |
| 9,400.0 | 7,344.0 | 7,500.4 | 7,295.7 | 47.4 | 28.1 | 90.56 | 2,305.8 | 1,183.8 | 223.3 | 154.8 | 68.46 | 3.261 | | |
| 9,500.0 | 7,344.0 | 7,501.4 | 7,296.7 | 49.0 | 28.1 | 90.81 | 2,305.9 | 1,183.8 | 256.7 | 186.6 | 70.14 | 3.660 | | |
| 9,600.0 | 7,344.0 | 7,502.4 | 7,297.7 | 50.6 | 28.1 | 91.07 | 2,305.9 | 1,183.7 | 319.3 | 247.5 | 71.83 | 4.445 | | |
| 9,700.0 | 7,344.0 | 7,503.4 | 7,298.7 | 52.2 | 28.1 | 91.32 | 2,305.9 | 1,183.7 | 397.5 | 324.0 | 73.51 | 5.407 | | |
| 9,800.0 | 7,344.0 | 7,504.3 | 7,299.7 | 53.8 | 28.1 | 91.57 | 2,305.9 | 1,183.7 | 483.8 | 408.5 | 75.20 | 6.433 | | |

Anticollision Report

| | | | |
|---------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Edith Ann-Duckworth 4G-21H-O268 |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Reference Site: | S21-T2N-R68W (Edith Ann-Duckworth) | MD Reference: | WELL @ 4952.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Edith Ann-Duckworth 4G-21H-O268 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Hz | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

Reference Depths are relative to WELL @ 4952.0ft (Original Well Elev)

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Edith Ann-Duckworth 4G-21H-O268

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.32°

