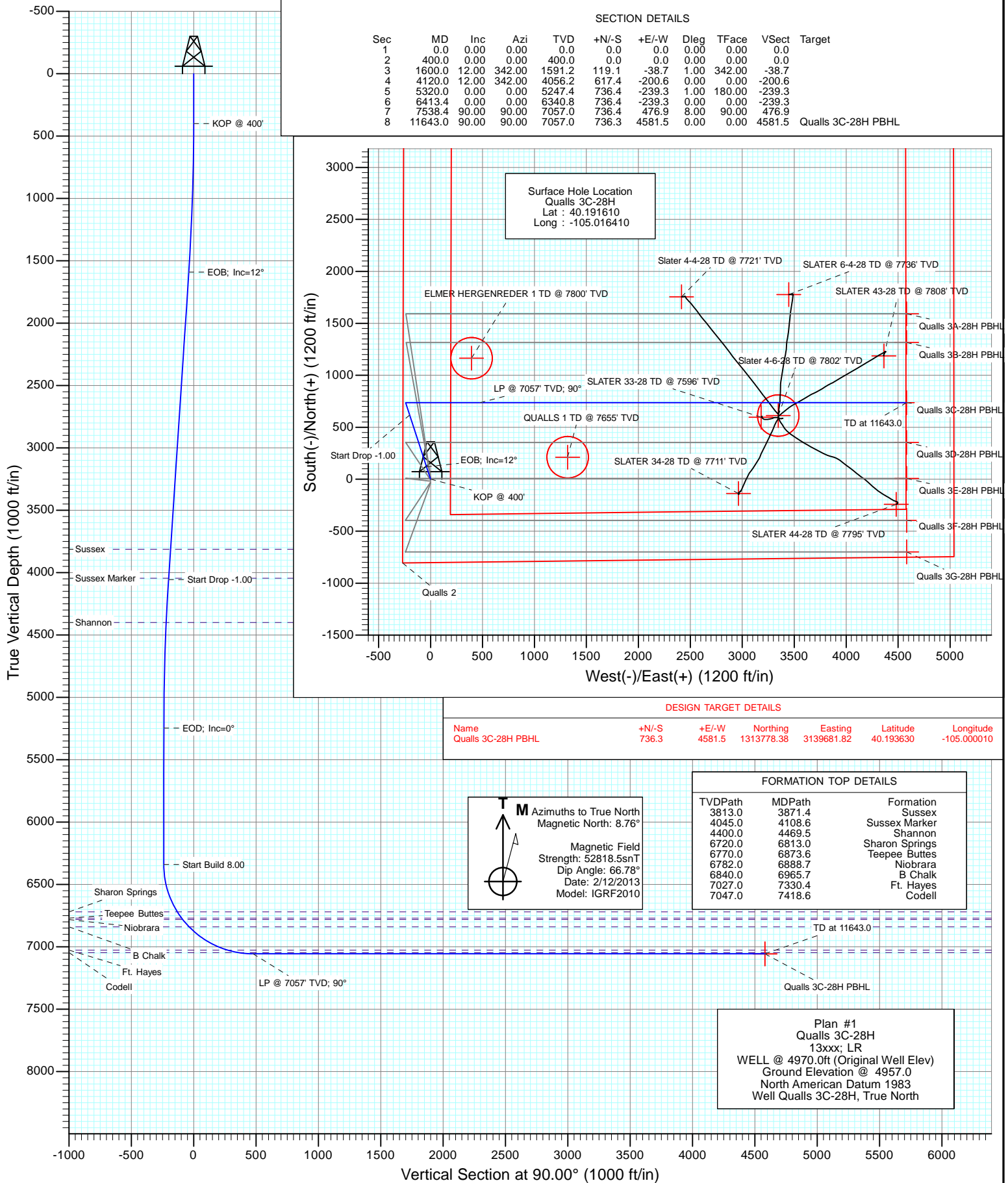




Project: DJ Wattenberg
Site: S28-T3N-R68W (Qualls)
Well: Qualls 3C-28H
Wellbore: Hz
Design: Plan #1



Planning Report

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well Qualls 3C-28H |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Project: | DJ Wattenberg | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site: | S28-T3N-R68W (Qualls) | North Reference: | True |
| Well: | Qualls 3C-28H | 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 | | S28-T3N-R68W (Qualls) | | | |
| Site Position: | | Northing: | 1,313,038.99 ft | Latitude: | 40.191670 |
| From: | Lat/Long | Easting: | 3,135,104.30 ft | Longitude: | -105.016410 |
| Position Uncertainty: | 0.0 ft | Slot Radius: | 13.200 in | Grid Convergence: | 0.31 ° |

| Well | Qualls 3C-28H | | | | | |
|----------------------|---------------|--------|---------------------|-----------------|---------------|-------------|
| Well Position | +N/-S | 0.0 ft | Northing: | 1,313,017.13 ft | Latitude: | 40.191610 |
| | +E/-W | 0.0 ft | Easting: | 3,135,104.42 ft | Longitude: | -105.016410 |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: | ft | Ground Level: | 4,957.0 ft |

| | | | | | |
|------------------|-------------------|--------------------|----------------------------|--------------------------|--------------------------------|
| Wellbore | Hz | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 2/12/2013 | 8.76 | 66.78 | 52,818 |

| | | | | |
|--------------------------|----------------------------------|-----------------------|-----------------------|--------------------------|
| Design | Plan #1 | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) |
| | 0.0 | 0.0 | 0.0 | 90.00 |

| 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 | |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,600.0 | 12.00 | 342.00 | 1,591.2 | 119.1 | -38.7 | 1.00 | 1.00 | 0.00 | 342.00 | |
| 4,120.0 | 12.00 | 342.00 | 4,056.2 | 617.4 | -200.6 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 5,320.0 | 0.00 | 0.00 | 5,247.4 | 736.4 | -239.3 | 1.00 | -1.00 | 0.00 | 180.00 | |
| 6,413.4 | 0.00 | 0.00 | 6,340.8 | 736.4 | -239.3 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 7,538.4 | 90.00 | 90.00 | 7,057.0 | 736.4 | 476.9 | 8.00 | 8.00 | 0.00 | 90.00 | |
| 11,643.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 4,581.5 | 0.00 | 0.00 | 0.00 | 0.00 | Qualls 3C-28H PBHL |

Planning Report

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well Qualls 3C-28H |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Project: | DJ Wattenberg | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site: | S28-T3N-R68W (Qualls) | North Reference: | True |
| Well: | Qualls 3C-28H | 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 | |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | KOP @ 400' |
| 500.0 | 1.00 | 342.00 | 500.0 | 0.8 | -0.3 | -0.3 | 1.00 | 1.00 | |
| 600.0 | 2.00 | 342.00 | 600.0 | 3.3 | -1.1 | -1.1 | 1.00 | 1.00 | |
| 700.0 | 3.00 | 342.00 | 699.9 | 7.5 | -2.4 | -2.4 | 1.00 | 1.00 | |
| 800.0 | 4.00 | 342.00 | 799.7 | 13.3 | -4.3 | -4.3 | 1.00 | 1.00 | |
| 900.0 | 5.00 | 342.00 | 899.4 | 20.7 | -6.7 | -6.7 | 1.00 | 1.00 | |
| 1,000.0 | 6.00 | 342.00 | 998.9 | 29.9 | -9.7 | -9.7 | 1.00 | 1.00 | |
| 1,100.0 | 7.00 | 342.00 | 1,098.3 | 40.6 | -13.2 | -13.2 | 1.00 | 1.00 | |
| 1,200.0 | 8.00 | 342.00 | 1,197.4 | 53.0 | -17.2 | -17.2 | 1.00 | 1.00 | |
| 1,300.0 | 9.00 | 342.00 | 1,296.3 | 67.1 | -21.8 | -21.8 | 1.00 | 1.00 | |
| 1,400.0 | 10.00 | 342.00 | 1,394.9 | 82.8 | -26.9 | -26.9 | 1.00 | 1.00 | |
| 1,500.0 | 11.00 | 342.00 | 1,493.3 | 100.1 | -32.5 | -32.5 | 1.00 | 1.00 | |
| 1,600.0 | 12.00 | 342.00 | 1,591.2 | 119.1 | -38.7 | -38.7 | 1.00 | 1.00 | EOB; Inc=12° |
| 1,700.0 | 12.00 | 342.00 | 1,689.1 | 138.9 | -45.1 | -45.1 | 0.00 | 0.00 | |
| 1,800.0 | 12.00 | 342.00 | 1,786.9 | 158.6 | -51.5 | -51.5 | 0.00 | 0.00 | |
| 1,900.0 | 12.00 | 342.00 | 1,884.7 | 178.4 | -58.0 | -58.0 | 0.00 | 0.00 | |
| 2,000.0 | 12.00 | 342.00 | 1,982.5 | 198.2 | -64.4 | -64.4 | 0.00 | 0.00 | |
| 2,100.0 | 12.00 | 342.00 | 2,080.3 | 217.9 | -70.8 | -70.8 | 0.00 | 0.00 | |
| 2,200.0 | 12.00 | 342.00 | 2,178.1 | 237.7 | -77.2 | -77.2 | 0.00 | 0.00 | |
| 2,300.0 | 12.00 | 342.00 | 2,275.9 | 257.5 | -83.7 | -83.7 | 0.00 | 0.00 | |
| 2,400.0 | 12.00 | 342.00 | 2,373.8 | 277.3 | -90.1 | -90.1 | 0.00 | 0.00 | |
| 2,500.0 | 12.00 | 342.00 | 2,471.6 | 297.0 | -96.5 | -96.5 | 0.00 | 0.00 | |
| 2,600.0 | 12.00 | 342.00 | 2,569.4 | 316.8 | -102.9 | -102.9 | 0.00 | 0.00 | |
| 2,700.0 | 12.00 | 342.00 | 2,667.2 | 336.6 | -109.4 | -109.4 | 0.00 | 0.00 | |
| 2,800.0 | 12.00 | 342.00 | 2,765.0 | 356.4 | -115.8 | -115.8 | 0.00 | 0.00 | |
| 2,900.0 | 12.00 | 342.00 | 2,862.8 | 376.1 | -122.2 | -122.2 | 0.00 | 0.00 | |
| 3,000.0 | 12.00 | 342.00 | 2,960.7 | 395.9 | -128.6 | -128.6 | 0.00 | 0.00 | |
| 3,100.0 | 12.00 | 342.00 | 3,058.5 | 415.7 | -135.1 | -135.1 | 0.00 | 0.00 | |
| 3,200.0 | 12.00 | 342.00 | 3,156.3 | 435.5 | -141.5 | -141.5 | 0.00 | 0.00 | |
| 3,300.0 | 12.00 | 342.00 | 3,254.1 | 455.2 | -147.9 | -147.9 | 0.00 | 0.00 | |
| 3,400.0 | 12.00 | 342.00 | 3,351.9 | 475.0 | -154.3 | -154.3 | 0.00 | 0.00 | |
| 3,500.0 | 12.00 | 342.00 | 3,449.7 | 494.8 | -160.8 | -160.8 | 0.00 | 0.00 | |
| 3,600.0 | 12.00 | 342.00 | 3,547.5 | 514.5 | -167.2 | -167.2 | 0.00 | 0.00 | |
| 3,700.0 | 12.00 | 342.00 | 3,645.4 | 534.3 | -173.6 | -173.6 | 0.00 | 0.00 | |
| 3,800.0 | 12.00 | 342.00 | 3,743.2 | 554.1 | -180.0 | -180.0 | 0.00 | 0.00 | |
| 3,871.4 | 12.00 | 342.00 | 3,813.0 | 568.2 | -184.6 | -184.6 | 0.00 | 0.00 | Sussex |
| 3,900.0 | 12.00 | 342.00 | 3,841.0 | 573.9 | -186.5 | -186.5 | 0.00 | 0.00 | |
| 4,000.0 | 12.00 | 342.00 | 3,938.8 | 593.6 | -192.9 | -192.9 | 0.00 | 0.00 | |
| 4,100.0 | 12.00 | 342.00 | 4,036.6 | 613.4 | -199.3 | -199.3 | 0.00 | 0.00 | |
| 4,108.6 | 12.00 | 342.00 | 4,045.0 | 615.1 | -199.9 | -199.9 | 0.00 | 0.00 | Sussex Marker |
| 4,120.0 | 12.00 | 342.00 | 4,056.2 | 617.4 | -200.6 | -200.6 | 0.00 | 0.00 | Start Drop -1.00 |
| 4,200.0 | 11.20 | 342.00 | 4,134.5 | 632.7 | -205.6 | -205.6 | 1.00 | -1.00 | |
| 4,300.0 | 10.20 | 342.00 | 4,232.8 | 650.3 | -211.3 | -211.3 | 1.00 | -1.00 | |
| 4,400.0 | 9.20 | 342.00 | 4,331.4 | 666.4 | -216.5 | -216.5 | 1.00 | -1.00 | |
| 4,469.5 | 8.51 | 342.00 | 4,400.0 | 676.5 | -219.8 | -219.8 | 1.00 | -1.00 | Shannon |
| 4,500.0 | 8.20 | 342.00 | 4,430.2 | 680.7 | -221.2 | -221.2 | 1.00 | -1.00 | |
| 4,600.0 | 7.20 | 342.00 | 4,529.3 | 693.5 | -225.3 | -225.3 | 1.00 | -1.00 | |
| 4,700.0 | 6.20 | 342.00 | 4,628.6 | 704.6 | -228.9 | -228.9 | 1.00 | -1.00 | |

Planning Report

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well Qualls 3C-28H |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Project: | DJ Wattenberg | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site: | S28-T3N-R68W (Qualls) | North Reference: | True |
| Well: | Qualls 3C-28H | 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 | 5.20 | 342.00 | 4,728.1 | 714.0 | -232.0 | -232.0 | 1.00 | -1.00 | |
| 4,900.0 | 4.20 | 342.00 | 4,827.8 | 721.8 | -234.5 | -234.5 | 1.00 | -1.00 | |
| 5,000.0 | 3.20 | 342.00 | 4,927.6 | 728.0 | -236.5 | -236.5 | 1.00 | -1.00 | |
| 5,100.0 | 2.20 | 342.00 | 5,027.5 | 732.4 | -238.0 | -238.0 | 1.00 | -1.00 | |
| 5,200.0 | 1.20 | 342.00 | 5,127.4 | 735.3 | -238.9 | -238.9 | 1.00 | -1.00 | |
| 5,300.0 | 0.20 | 342.00 | 5,227.4 | 736.4 | -239.3 | -239.3 | 1.00 | -1.00 | |
| 5,320.0 | 0.00 | 0.00 | 5,247.4 | 736.4 | -239.3 | -239.3 | 1.00 | -1.00 | EOD; Inc=0° |
| 5,400.0 | 0.00 | 0.00 | 5,327.4 | 736.4 | -239.3 | -239.3 | 0.00 | 0.00 | |
| 5,500.0 | 0.00 | 0.00 | 5,427.4 | 736.4 | -239.3 | -239.3 | 0.00 | 0.00 | |
| 5,600.0 | 0.00 | 0.00 | 5,527.4 | 736.4 | -239.3 | -239.3 | 0.00 | 0.00 | |
| 5,700.0 | 0.00 | 0.00 | 5,627.4 | 736.4 | -239.3 | -239.3 | 0.00 | 0.00 | |
| 5,800.0 | 0.00 | 0.00 | 5,727.4 | 736.4 | -239.3 | -239.3 | 0.00 | 0.00 | |
| 5,900.0 | 0.00 | 0.00 | 5,827.4 | 736.4 | -239.3 | -239.3 | 0.00 | 0.00 | |
| 6,000.0 | 0.00 | 0.00 | 5,927.4 | 736.4 | -239.3 | -239.3 | 0.00 | 0.00 | |
| 6,100.0 | 0.00 | 0.00 | 6,027.4 | 736.4 | -239.3 | -239.3 | 0.00 | 0.00 | |
| 6,200.0 | 0.00 | 0.00 | 6,127.4 | 736.4 | -239.3 | -239.3 | 0.00 | 0.00 | |
| 6,300.0 | 0.00 | 0.00 | 6,227.4 | 736.4 | -239.3 | -239.3 | 0.00 | 0.00 | |
| 6,400.0 | 0.00 | 0.00 | 6,327.4 | 736.4 | -239.3 | -239.3 | 0.00 | 0.00 | |
| 6,413.4 | 0.00 | 0.00 | 6,340.8 | 736.4 | -239.3 | -239.3 | 0.00 | 0.00 | Start Build 8.00 |
| 6,500.0 | 6.93 | 90.00 | 6,427.2 | 736.4 | -234.1 | -234.1 | 8.00 | 8.00 | |
| 6,600.0 | 14.93 | 90.00 | 6,525.3 | 736.4 | -215.1 | -215.1 | 8.00 | 8.00 | |
| 6,700.0 | 22.93 | 90.00 | 6,619.8 | 736.4 | -182.7 | -182.7 | 8.00 | 8.00 | |
| 6,800.0 | 30.93 | 90.00 | 6,708.9 | 736.4 | -137.4 | -137.4 | 8.00 | 8.00 | |
| 6,813.0 | 31.97 | 90.00 | 6,720.0 | 736.4 | -130.7 | -130.7 | 8.00 | 8.00 | Sharon Springs |
| 6,873.6 | 36.82 | 90.00 | 6,770.0 | 736.4 | -96.4 | -96.4 | 8.00 | 8.00 | Teepee Buttes |
| 6,888.7 | 38.03 | 90.00 | 6,782.0 | 736.4 | -87.3 | -87.3 | 8.00 | 8.00 | Niobrara |
| 6,900.0 | 38.93 | 90.00 | 6,790.8 | 736.4 | -80.2 | -80.2 | 8.00 | 8.00 | |
| 6,965.7 | 44.19 | 90.00 | 6,840.0 | 736.4 | -36.6 | -36.6 | 8.00 | 8.00 | B Chalk |
| 7,000.0 | 46.93 | 90.00 | 6,864.0 | 736.4 | -12.2 | -12.2 | 8.00 | 8.00 | |
| 7,100.0 | 54.93 | 90.00 | 6,927.0 | 736.4 | 65.4 | 65.4 | 8.00 | 8.00 | |
| 7,200.0 | 62.93 | 90.00 | 6,978.5 | 736.4 | 151.0 | 151.0 | 8.00 | 8.00 | |
| 7,300.0 | 70.93 | 90.00 | 7,017.7 | 736.4 | 242.9 | 242.9 | 8.00 | 8.00 | |
| 7,330.4 | 73.36 | 90.00 | 7,027.0 | 736.4 | 271.8 | 271.8 | 8.00 | 8.00 | Ft. Hayes |
| 7,400.0 | 78.93 | 90.00 | 7,043.7 | 736.4 | 339.4 | 339.4 | 8.00 | 8.00 | |
| 7,418.6 | 80.41 | 90.00 | 7,047.0 | 736.4 | 357.6 | 357.6 | 8.00 | 8.00 | Codell |
| 7,500.0 | 86.93 | 90.00 | 7,056.0 | 736.4 | 438.6 | 438.6 | 8.00 | 8.00 | |
| 7,538.4 | 90.00 | 90.00 | 7,057.0 | 736.4 | 476.9 | 476.9 | 8.00 | 8.00 | LP @ 7057' TVD; 90° |
| 7,600.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 538.5 | 538.5 | 0.00 | 0.00 | |
| 7,700.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 638.5 | 638.5 | 0.00 | 0.00 | |
| 7,800.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 738.5 | 738.5 | 0.00 | 0.00 | |
| 7,900.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 838.5 | 838.5 | 0.00 | 0.00 | |
| 8,000.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 938.5 | 938.5 | 0.00 | 0.00 | |
| 8,100.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 1,038.5 | 1,038.5 | 0.00 | 0.00 | |
| 8,200.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 1,138.5 | 1,138.5 | 0.00 | 0.00 | |
| 8,300.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 1,238.5 | 1,238.5 | 0.00 | 0.00 | |
| 8,400.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 1,338.5 | 1,338.5 | 0.00 | 0.00 | |
| 8,500.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 1,438.5 | 1,438.5 | 0.00 | 0.00 | |
| 8,600.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 1,538.5 | 1,538.5 | 0.00 | 0.00 | |
| 8,700.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 1,638.5 | 1,638.5 | 0.00 | 0.00 | |
| 8,800.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 1,738.5 | 1,738.5 | 0.00 | 0.00 | |
| 8,900.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 1,838.5 | 1,838.5 | 0.00 | 0.00 | |
| 9,000.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 1,938.5 | 1,938.5 | 0.00 | 0.00 | |

Planning Report

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well Qualls 3C-28H |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Project: | DJ Wattenberg | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site: | S28-T3N-R68W (Qualls) | North Reference: | True |
| Well: | Qualls 3C-28H | 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 |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|------------------------------------|
| 9,100.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 2,038.5 | 2,038.5 | 0.00 | 0.00 | |
| 9,200.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 2,138.5 | 2,138.5 | 0.00 | 0.00 | |
| 9,300.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 2,238.5 | 2,238.5 | 0.00 | 0.00 | |
| 9,400.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 2,338.5 | 2,338.5 | 0.00 | 0.00 | |
| 9,500.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 2,438.5 | 2,438.5 | 0.00 | 0.00 | |
| 9,600.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 2,538.5 | 2,538.5 | 0.00 | 0.00 | |
| 9,700.0 | 90.00 | 90.00 | 7,057.0 | 736.4 | 2,638.5 | 2,638.5 | 0.00 | 0.00 | |
| 9,800.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 2,738.5 | 2,738.5 | 0.00 | 0.00 | |
| 9,900.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 2,838.5 | 2,838.5 | 0.00 | 0.00 | |
| 10,000.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 2,938.5 | 2,938.5 | 0.00 | 0.00 | |
| 10,100.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 3,038.5 | 3,038.5 | 0.00 | 0.00 | |
| 10,200.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 3,138.5 | 3,138.5 | 0.00 | 0.00 | |
| 10,300.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 3,238.5 | 3,238.5 | 0.00 | 0.00 | |
| 10,400.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 3,338.5 | 3,338.5 | 0.00 | 0.00 | |
| 10,500.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 3,438.5 | 3,438.5 | 0.00 | 0.00 | |
| 10,600.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 3,538.5 | 3,538.5 | 0.00 | 0.00 | |
| 10,700.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 3,638.5 | 3,638.5 | 0.00 | 0.00 | |
| 10,800.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 3,738.5 | 3,738.5 | 0.00 | 0.00 | |
| 10,900.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 3,838.5 | 3,838.5 | 0.00 | 0.00 | |
| 11,000.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 3,938.5 | 3,938.5 | 0.00 | 0.00 | |
| 11,100.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 4,038.5 | 4,038.5 | 0.00 | 0.00 | |
| 11,200.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 4,138.5 | 4,138.5 | 0.00 | 0.00 | |
| 11,300.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 4,238.5 | 4,238.5 | 0.00 | 0.00 | |
| 11,400.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 4,338.5 | 4,338.5 | 0.00 | 0.00 | |
| 11,500.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 4,438.5 | 4,438.5 | 0.00 | 0.00 | |
| 11,600.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 4,538.5 | 4,538.5 | 0.00 | 0.00 | |
| 11,643.0 | 90.00 | 90.00 | 7,057.0 | 736.3 | 4,581.5 | 4,581.5 | 0.00 | 0.00 | TD at 11643.0 - Qualls 3C-28H PBHL |

Targets

Target Name

| - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
|--|---------------|--------------|----------|------------|------------|---------------|--------------|-----------|-------------|
| Qualls 3C-28H PBHL - plan hits target center - Point | 0.00 | 0.00 | 7,057.0 | 736.3 | 4,581.5 | 1,313,778.38 | 3,139,681.82 | 40.193630 | -105.000010 |

Planning Report

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well Qualls 3C-28H |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Project: | DJ Wattenberg | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site: | S28-T3N-R68W (Qualls) | North Reference: | True |
| Well: | Qualls 3C-28H | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Hz | | |
| Design: | Plan #1 | | |

| Formations | | | | | | |
|---------------------|---------------------|----------------|-----------|---------|-------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| 3,871.4 | 3,813.0 | Sussex | | | | |
| 4,108.6 | 4,045.0 | Sussex Marker | | | | |
| 4,469.5 | 4,400.0 | Shannon | | | | |
| 6,813.0 | 6,720.0 | Sharon Springs | | | | |
| 6,873.6 | 6,770.0 | Teepee Buttes | | | | |
| 6,888.7 | 6,782.0 | Niobrara | | | | |
| 6,965.7 | 6,840.0 | B Chalk | | | | |
| 7,330.4 | 7,027.0 | Ft. Hayes | | | | |
| 7,418.6 | 7,047.0 | Codell | | | | |

| Plan Annotations | | | | | |
|---------------------|---------------------|-------------------|------------|---------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | | |
| | | +N/-S (ft) | +E/-W (ft) | Comment | |
| 400.0 | 400.0 | 0.0 | 0.0 | KOP @ 400' | |
| 1,600.0 | 1,591.2 | 119.1 | -38.7 | EOB; Inc=12° | |
| 4,120.0 | 4,056.2 | 617.4 | -200.6 | Start Drop -1.00 | |
| 5,320.0 | 5,247.4 | 736.4 | -239.3 | EOD; Inc=0° | |
| 6,413.4 | 6,340.8 | 736.4 | -239.3 | Start Build 8.00 | |
| 7,538.4 | 7,057.0 | 736.4 | 476.9 | LP @ 7057' TVD; 90° | |
| 11,643.0 | 7,057.0 | 736.3 | 4,581.5 | TD at 11643.0 | |

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S28-T3N-R68W (Qualls)

Qualls 3C-28H

Hz

Plan #1

Anticollision Report

12 February, 2013

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Qualls 3C-28H |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Reference Site: | S28-T3N-R68W (Qualls) | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Qualls 3C-28H | 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 | 2/12/2013 | | |
|---------------------|------------|-------------------|-----------|-------------|--|
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description | |
| 0.0 | 11,643.0 | Plan #1 (Hz) | MWD | Geolink MWD | |

| 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 | | | | | | |
| S28-T3N-R68W (Qualls) | | | | | | |
| ANDERSON FAMILY TRUST 1 (EXISTING) - EXISTING | | | | | | Out of range |
| ELMER HERGENREDER 1 (EXISTING) - EXISTING - N | 7,455.7 | 7,031.2 | 427.8 | 398.3 | 14.517 | CC, ES |
| ELMER HERGENREDER 1 (EXISTING) - EXISTING - N | 7,600.0 | 7,036.0 | 451.4 | 419.3 | 14.049 | SF |
| QUALLS 1 (EXISTING) - EXISTING - NO SURVEYS | | | | | | Out of range |
| Qualls 3A-28H - Hz - Plan #1 | 200.0 | 200.0 | 21.9 | 21.2 | 33.491 | CC, ES |
| Qualls 3A-28H - Hz - Plan #1 | 400.0 | 397.6 | 30.4 | 29.1 | 22.482 | SF |
| Qualls 3B-28H - Hz - Plan #1 | 300.0 | 300.0 | 10.9 | 9.9 | 10.909 | CC, ES |
| Qualls 3B-28H - Hz - Plan #1 | 400.0 | 399.6 | 12.6 | 11.3 | 9.360 | SF |
| Qualls 3D-28H - Hz - Plan #1 | 400.0 | 400.0 | 7.3 | 5.9 | 5.393 | CC, ES |
| Qualls 3D-28H - Hz - Plan #1 | 11,643.8 | 11,379.8 | 442.8 | 241.1 | 2.196 | SF |
| Qualls 3E-28H - Hz - Plan #1 | 400.0 | 400.0 | 18.2 | 16.9 | 13.483 | CC, ES |
| Qualls 3E-28H - Hz - Plan #1 | 600.0 | 600.0 | 21.3 | 19.2 | 10.370 | SF |
| Qualls 3F-28H - Hz - Plan #1 | 300.0 | 300.0 | 29.1 | 28.1 | 29.090 | CC, ES |
| Qualls 3F-28H - Hz - Plan #1 | 600.0 | 598.3 | 39.1 | 37.1 | 19.082 | SF |
| Qualls 3G-28H - Hz - Plan #1 | 200.0 | 200.0 | 36.4 | 35.8 | 55.807 | CC, ES |
| Qualls 3G-28H - Hz - Plan #1 | 600.0 | 596.8 | 52.9 | 50.8 | 25.849 | SF |
| SLATER 33-28 (EXISTING) - EXISTING - GYRO | 10,251.3 | 7,053.9 | 131.7 | 43.1 | 1.487 | Level 3, CC, ES, SF |
| SLATER 34-28 (EXISTING) - EXISTING - SURVEYS | | | | | | Out of range |
| SLATER 43-28 (EXISTING) - EXISTING - SURVEYS | 11,426.9 | 7,236.3 | 470.3 | 337.2 | 3.534 | CC, ES |
| SLATER 43-28 (EXISTING) - EXISTING - SURVEYS | 11,500.0 | 7,234.6 | 475.9 | 341.0 | 3.528 | SF |
| SLATER 44-28 (EXISTING) - EXISTING - SURVEYS | | | | | | Out of range |
| SLATER 4-4-28 (EXISTING) - Existing - SURVEYS | | | | | | Out of range |
| SLATER 4-6-28 (EXISTING) - Existing - NO SURVEYS | 10,407.4 | 7,049.0 | 123.7 | 25.4 | 1.259 | Level 3, CC, ES, SF |
| SLATER 6-4-28 (EXISTING) - EXISTING - SURVEYS | | | | | | Out of range |
| WATERFRONT 11-27 (EXISTING) - EXISTING - NO SU | | | | | | Out of range |
| WATERFRONT 12-27 (EXISTING) - EXISTING - NO SU | | | | | | Out of range |
| WATERFRONT 13-27 (EXISTING) - EXISTING - NO SU | | | | | | Out of range |
| WATERFRONT 14-27 (EXISTING) - EXISTING - NO SU | | | | | | Out of range |
| WATERFRONT 33-27 (EXISTING) - EXISTING - NO SU | | | | | | Out of range |

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Qualls 3C-28H |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Reference Site: | S28-T3N-R68W (Qualls) | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Qualls 3C-28H | 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 S28-T3N-R68W (Qualls) - ELMER HERGENREDER 1 (EXISTING) - EXISTING - NO SURVEYS | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|------------------------|------------------------|------------------------|-------------------|----------------|--------------------------|---|---------------|-------------------------|--------------------------|---------------------------|---------------------------|---------|
| Survey Program: 0-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 | |
| 7,200.0 | 6,978.5 | 6,957.5 | 6,957.5 | 18.3 | 12.1 | -75.48 | 1,164.2 | 394.4 | 492.2 | 467.0 | 25.22 | 19.521 | |
| 7,300.0 | 7,017.7 | 6,996.7 | 6,996.7 | 18.9 | 12.2 | -83.40 | 1,164.2 | 394.4 | 453.9 | 427.1 | 26.79 | 16.941 | |
| 7,400.0 | 7,043.7 | 7,022.7 | 7,022.7 | 19.8 | 12.3 | -88.58 | 1,164.2 | 394.4 | 431.3 | 402.9 | 28.48 | 15.145 | |
| 7,455.7 | 7,052.2 | 7,031.2 | 7,031.2 | 20.4 | 12.3 | -90.00 | 1,164.2 | 394.4 | 427.8 | 398.3 | 29.47 | 14.517 CC, ES | |
| 7,500.0 | 7,056.0 | 7,035.0 | 7,035.0 | 21.0 | 12.3 | -90.32 | 1,164.2 | 394.4 | 430.1 | 399.8 | 30.24 | 14.224 | |
| 7,600.0 | 7,057.0 | 7,036.0 | 7,036.0 | 22.5 | 12.3 | -90.00 | 1,164.2 | 394.4 | 451.4 | 419.3 | 32.13 | 14.049 SF | |
| 7,700.0 | 7,057.0 | 7,036.0 | 7,036.0 | 24.2 | 12.3 | -90.00 | 1,164.2 | 394.4 | 492.6 | 458.4 | 34.14 | 14.428 | |

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Qualls 3C-28H |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Reference Site: | S28-T3N-R68W (Qualls) | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Qualls 3C-28H | 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 S28-T3N-R68W (Qualls) - Qualls 3A-28H - Hz - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------------|---------------------------|---------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|-------|------------------------------|----------------------|---------|
| Survey Program: 0-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) | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 21.9 | 0.0 | 21.9 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.2 | 0.2 | 0.00 | 21.9 | 0.0 | 21.9 | 21.6 | 0.30 | 71.986 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 0.00 | 21.9 | 0.0 | 21.9 | 21.2 | 0.65 | 33.491 CC, ES | | |
| 300.0 | 300.0 | 299.0 | 299.0 | 0.5 | 0.5 | -0.76 | 24.0 | -0.3 | 24.0 | 23.0 | 1.00 | 23.971 | | |
| 400.0 | 400.0 | 397.6 | 397.4 | 0.7 | 0.7 | -2.41 | 30.3 | -1.3 | 30.4 | 29.1 | 1.35 | 22.482 SF | | |
| 500.0 | 500.0 | 495.7 | 494.8 | 0.9 | 1.0 | 14.27 | 40.7 | -2.8 | 40.3 | 38.6 | 1.69 | 23.784 | | |
| 600.0 | 600.0 | 592.9 | 591.0 | 1.0 | 1.3 | 13.57 | 55.1 | -5.0 | 52.7 | 50.6 | 2.04 | 25.841 | | |
| 700.0 | 699.9 | 689.3 | 685.6 | 1.2 | 1.6 | 13.22 | 73.3 | -7.8 | 67.6 | 65.2 | 2.38 | 28.361 | | |
| 800.0 | 799.7 | 784.6 | 778.3 | 1.4 | 2.0 | 13.07 | 95.2 | -11.1 | 84.9 | 82.2 | 2.73 | 31.150 | | |
| 900.0 | 899.4 | 879.9 | 870.0 | 1.6 | 2.5 | 13.02 | 120.7 | -14.9 | 104.5 | 101.4 | 3.07 | 34.035 | | |
| 1,000.0 | 998.9 | 978.1 | 964.2 | 1.8 | 3.0 | 13.13 | 148.0 | -19.1 | 123.5 | 120.1 | 3.42 | 36.095 | | |
| 1,100.0 | 1,098.3 | 1,076.6 | 1,058.7 | 2.1 | 3.5 | 13.37 | 175.4 | -23.2 | 140.9 | 137.1 | 3.78 | 37.298 | | |
| 1,200.0 | 1,197.4 | 1,175.3 | 1,153.5 | 2.3 | 4.0 | 13.70 | 202.9 | -27.4 | 156.5 | 152.4 | 4.14 | 37.855 | | |
| 1,300.0 | 1,296.3 | 1,274.3 | 1,248.5 | 2.6 | 4.5 | 14.11 | 230.5 | -31.6 | 170.5 | 166.0 | 4.50 | 37.909 | | |
| 1,400.0 | 1,394.9 | 1,373.5 | 1,343.7 | 2.9 | 5.0 | 14.60 | 258.1 | -35.7 | 182.9 | 178.0 | 4.87 | 37.564 | | |
| 1,500.0 | 1,493.3 | 1,472.9 | 1,439.1 | 3.3 | 5.5 | 15.15 | 285.8 | -39.9 | 193.5 | 188.3 | 5.25 | 36.891 | | |
| 1,600.0 | 1,591.2 | 1,572.5 | 1,534.6 | 3.6 | 6.0 | 15.79 | 313.5 | -44.1 | 202.6 | 196.9 | 5.63 | 35.948 | | |
| 1,700.0 | 1,689.1 | 1,672.1 | 1,630.2 | 4.0 | 6.6 | 16.46 | 341.2 | -48.3 | 210.8 | 204.7 | 6.04 | 34.915 | | |
| 1,800.0 | 1,786.9 | 1,771.8 | 1,725.8 | 4.4 | 7.1 | 17.08 | 369.0 | -52.5 | 219.0 | 212.6 | 6.45 | 33.977 | | |
| 1,900.0 | 1,884.7 | 1,871.4 | 1,821.4 | 4.8 | 7.6 | 17.65 | 396.7 | -56.7 | 227.3 | 220.4 | 6.86 | 33.123 | | |
| 2,000.0 | 1,982.5 | 1,971.0 | 1,917.0 | 5.2 | 8.1 | 18.18 | 424.4 | -60.9 | 235.6 | 228.3 | 7.28 | 32.341 | | |
| 2,100.0 | 2,080.3 | 2,070.7 | 2,012.6 | 5.5 | 8.6 | 18.68 | 452.1 | -65.1 | 243.9 | 236.1 | 7.71 | 31.623 | | |
| 2,200.0 | 2,178.1 | 2,170.3 | 2,108.2 | 5.9 | 9.1 | 19.14 | 479.9 | -69.3 | 252.2 | 244.0 | 8.14 | 30.961 | | |
| 2,300.0 | 2,275.9 | 2,269.9 | 2,203.8 | 6.3 | 9.7 | 19.58 | 507.6 | -73.5 | 260.5 | 251.9 | 8.58 | 30.350 | | |
| 2,400.0 | 2,373.8 | 2,369.6 | 2,299.4 | 6.7 | 10.2 | 19.99 | 535.3 | -77.7 | 268.9 | 259.8 | 9.03 | 29.784 | | |
| 2,500.0 | 2,471.6 | 2,469.2 | 2,395.1 | 7.1 | 10.7 | 20.37 | 563.1 | -81.9 | 277.2 | 267.7 | 9.47 | 29.258 | | |
| 2,600.0 | 2,569.4 | 2,568.8 | 2,490.7 | 7.5 | 11.2 | 20.73 | 590.8 | -86.0 | 285.6 | 275.7 | 9.93 | 28.769 | | |
| 2,700.0 | 2,667.2 | 2,668.5 | 2,586.3 | 7.9 | 11.7 | 21.07 | 618.5 | -90.2 | 294.0 | 283.6 | 10.38 | 28.313 | | |
| 2,800.0 | 2,765.0 | 2,768.1 | 2,681.9 | 8.3 | 12.3 | 21.39 | 646.3 | -94.4 | 302.4 | 291.5 | 10.84 | 27.887 | | |
| 2,900.0 | 2,862.8 | 2,867.7 | 2,777.5 | 8.7 | 12.8 | 21.70 | 674.0 | -98.6 | 310.8 | 299.5 | 11.30 | 27.489 | | |
| 3,000.0 | 2,960.7 | 2,967.4 | 2,873.1 | 9.1 | 13.3 | 21.98 | 701.7 | -102.8 | 319.2 | 307.4 | 11.77 | 27.115 | | |
| 3,100.0 | 3,058.5 | 3,067.0 | 2,968.7 | 9.5 | 13.8 | 22.26 | 729.5 | -107.0 | 327.6 | 315.3 | 12.24 | 26.764 | | |
| 3,200.0 | 3,156.3 | 3,166.6 | 3,064.3 | 9.9 | 14.3 | 22.52 | 757.2 | -111.2 | 336.0 | 323.3 | 12.71 | 26.434 | | |
| 3,300.0 | 3,254.1 | 3,266.3 | 3,159.9 | 10.3 | 14.8 | 22.76 | 784.9 | -115.4 | 344.4 | 331.3 | 13.19 | 26.123 | | |
| 3,400.0 | 3,351.9 | 3,365.9 | 3,255.5 | 10.7 | 15.4 | 23.00 | 812.7 | -119.6 | 352.9 | 339.2 | 13.66 | 25.830 | | |
| 3,500.0 | 3,449.7 | 3,465.5 | 3,351.1 | 11.1 | 15.9 | 23.22 | 840.4 | -123.8 | 361.3 | 347.2 | 14.14 | 25.553 | | |
| 3,600.0 | 3,547.5 | 3,565.2 | 3,446.7 | 11.5 | 16.4 | 23.44 | 868.1 | -128.0 | 369.8 | 355.1 | 14.62 | 25.291 | | |
| 3,700.0 | 3,645.4 | 3,664.8 | 3,542.3 | 11.9 | 16.9 | 23.64 | 895.9 | -132.2 | 378.2 | 363.1 | 15.10 | 25.043 | | |
| 3,800.0 | 3,743.2 | 3,764.4 | 3,637.9 | 12.3 | 17.4 | 23.84 | 923.6 | -136.4 | 386.7 | 371.1 | 15.59 | 24.807 | | |
| 3,900.0 | 3,841.0 | 3,864.1 | 3,733.5 | 12.7 | 18.0 | 24.02 | 951.3 | -140.6 | 395.1 | 379.1 | 16.07 | 24.583 | | |
| 4,000.0 | 3,938.8 | 3,963.7 | 3,829.1 | 13.1 | 18.5 | 24.20 | 979.1 | -144.8 | 403.6 | 387.0 | 16.56 | 24.371 | | |
| 4,100.0 | 4,036.6 | 4,063.3 | 3,924.7 | 13.5 | 19.0 | 24.37 | 1,006.8 | -149.0 | 412.1 | 395.0 | 17.05 | 24.168 | | |
| 4,200.0 | 4,134.5 | 4,162.9 | 4,020.3 | 13.9 | 19.5 | 24.54 | 1,034.5 | -153.1 | 421.0 | 403.5 | 17.53 | 24.018 | | |
| 4,300.0 | 4,232.8 | 4,262.4 | 4,115.7 | 14.2 | 20.0 | 24.61 | 1,062.2 | -157.3 | 431.6 | 413.6 | 17.98 | 24.006 | | |
| 4,400.0 | 4,331.4 | 4,361.6 | 4,211.0 | 14.6 | 20.6 | 24.60 | 1,089.8 | -161.5 | 443.7 | 425.3 | 18.39 | 24.125 | | |
| 4,500.0 | 4,430.2 | 4,460.7 | 4,306.0 | 14.9 | 21.1 | 24.51 | 1,117.4 | -165.7 | 457.4 | 438.6 | 18.77 | 24.367 | | |
| 4,600.0 | 4,529.3 | 4,559.5 | 4,400.8 | 15.1 | 21.6 | 24.34 | 1,144.9 | -169.8 | 472.6 | 453.5 | 19.12 | 24.724 | | |
| 4,700.0 | 4,628.6 | 4,658.0 | 4,495.4 | 15.4 | 22.1 | 24.11 | 1,172.3 | -174.0 | 489.4 | 470.0 | 19.43 | 25.189 | | |

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 Qualls 3C-28H |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Reference Site: | S28-T3N-R68W (Qualls) | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Qualls 3C-28H | 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 S28-T3N-R68W (Qualls) - Qualls 3B-28H - Hz - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------------|---------------------------|---------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|----------------------|--------------------|--------|
| Survey Program: O-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) | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 10.9 | 0.0 | 10.9 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.2 | 0.2 | 0.00 | 10.9 | 0.0 | 10.9 | 10.6 | 0.30 | 35.986 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 0.00 | 10.9 | 0.0 | 10.9 | 10.3 | 0.65 | 16.742 | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | 0.00 | 10.9 | 0.0 | 10.9 | 9.9 | 1.00 | 10.909 CC, ES | | |
| 400.0 | 400.0 | 399.6 | 399.6 | 0.7 | 0.7 | -1.39 | 12.6 | -0.3 | 12.6 | 11.3 | 1.35 | 9.360 SF | | |
| 500.0 | 500.0 | 499.0 | 498.8 | 0.9 | 0.9 | 14.75 | 17.7 | -1.2 | 17.0 | 15.3 | 1.70 | 9.988 | | |
| 600.0 | 600.0 | 598.1 | 597.6 | 1.0 | 1.1 | 13.79 | 26.2 | -2.7 | 23.0 | 21.0 | 2.05 | 11.261 | | |
| 700.0 | 699.9 | 696.9 | 695.6 | 1.2 | 1.3 | 13.35 | 37.9 | -4.9 | 30.9 | 28.5 | 2.39 | 12.890 | | |
| 800.0 | 799.7 | 795.2 | 792.8 | 1.4 | 1.6 | 13.19 | 53.0 | -7.6 | 40.4 | 37.7 | 2.74 | 14.733 | | |
| 900.0 | 899.4 | 893.0 | 888.8 | 1.6 | 2.0 | 13.17 | 71.1 | -10.8 | 51.6 | 48.6 | 3.09 | 16.707 | | |
| 1,000.0 | 998.9 | 990.2 | 983.6 | 1.8 | 2.4 | 13.20 | 92.4 | -14.7 | 64.6 | 61.1 | 3.44 | 18.765 | | |
| 1,100.0 | 1,098.3 | 1,088.0 | 1,078.2 | 2.1 | 2.8 | 13.30 | 116.5 | -19.0 | 78.7 | 74.9 | 3.79 | 20.759 | | |
| 1,200.0 | 1,197.4 | 1,187.2 | 1,174.1 | 2.3 | 3.3 | 13.59 | 141.5 | -23.5 | 91.7 | 87.5 | 4.15 | 22.083 | | |
| 1,300.0 | 1,296.3 | 1,286.6 | 1,270.2 | 2.6 | 3.7 | 14.03 | 166.5 | -28.0 | 102.9 | 98.4 | 4.51 | 22.799 | | |
| 1,400.0 | 1,394.9 | 1,386.1 | 1,366.4 | 2.9 | 4.2 | 14.61 | 191.5 | -32.5 | 112.5 | 107.6 | 4.89 | 23.032 | | |
| 1,500.0 | 1,493.3 | 1,485.8 | 1,462.8 | 3.3 | 4.6 | 15.32 | 216.5 | -37.0 | 120.4 | 115.2 | 5.27 | 22.873 | | |
| 1,600.0 | 1,591.2 | 1,585.5 | 1,559.2 | 3.6 | 5.1 | 16.15 | 241.6 | -41.5 | 126.7 | 121.0 | 5.66 | 22.392 | | |
| 1,700.0 | 1,689.1 | 1,685.4 | 1,655.8 | 4.0 | 5.6 | 17.03 | 266.7 | -46.0 | 132.1 | 126.1 | 6.07 | 21.778 | | |
| 1,800.0 | 1,786.9 | 1,785.2 | 1,752.3 | 4.4 | 6.1 | 17.85 | 291.8 | -50.5 | 137.6 | 131.1 | 6.49 | 21.216 | | |
| 1,900.0 | 1,884.7 | 1,885.0 | 1,848.8 | 4.8 | 6.5 | 18.60 | 316.9 | -55.1 | 143.1 | 136.2 | 6.91 | 20.700 | | |
| 2,000.0 | 1,982.5 | 1,984.9 | 1,945.3 | 5.2 | 7.0 | 19.29 | 342.0 | -59.6 | 148.7 | 141.3 | 7.35 | 20.224 | | |
| 2,100.0 | 2,080.3 | 2,084.7 | 2,041.8 | 5.5 | 7.5 | 19.93 | 367.1 | -64.1 | 154.2 | 146.4 | 7.79 | 19.785 | | |
| 2,200.0 | 2,178.1 | 2,184.5 | 2,138.4 | 5.9 | 7.9 | 20.53 | 392.2 | -68.6 | 159.8 | 151.5 | 8.24 | 19.378 | | |
| 2,300.0 | 2,275.9 | 2,284.4 | 2,234.9 | 6.3 | 8.4 | 21.09 | 417.3 | -73.1 | 165.4 | 156.6 | 8.70 | 19.001 | | |
| 2,400.0 | 2,373.8 | 2,384.2 | 2,331.4 | 6.7 | 8.9 | 21.62 | 442.4 | -77.6 | 170.9 | 161.8 | 9.17 | 18.651 | | |
| 2,500.0 | 2,471.6 | 2,484.0 | 2,427.9 | 7.1 | 9.4 | 22.11 | 467.5 | -82.2 | 176.6 | 166.9 | 9.64 | 18.324 | | |
| 2,600.0 | 2,569.4 | 2,583.9 | 2,524.4 | 7.5 | 9.8 | 22.57 | 492.6 | -86.7 | 182.2 | 172.1 | 10.11 | 18.020 | | |
| 2,700.0 | 2,667.2 | 2,683.7 | 2,621.0 | 7.9 | 10.3 | 23.00 | 517.7 | -91.2 | 187.8 | 177.2 | 10.59 | 17.736 | | |
| 2,800.0 | 2,765.0 | 2,783.5 | 2,717.5 | 8.3 | 10.8 | 23.40 | 542.8 | -95.7 | 193.5 | 182.4 | 11.07 | 17.471 | | |
| 2,900.0 | 2,862.8 | 2,883.4 | 2,814.0 | 8.7 | 11.3 | 23.79 | 567.9 | -100.2 | 199.1 | 187.6 | 11.56 | 17.222 | | |
| 3,000.0 | 2,960.7 | 2,983.2 | 2,910.5 | 9.1 | 11.8 | 24.15 | 593.0 | -104.7 | 204.8 | 192.7 | 12.05 | 16.989 | | |
| 3,100.0 | 3,058.5 | 3,083.0 | 3,007.0 | 9.5 | 12.2 | 24.49 | 618.1 | -109.2 | 210.4 | 197.9 | 12.55 | 16.769 | | |
| 3,200.0 | 3,156.3 | 3,182.9 | 3,103.6 | 9.9 | 12.7 | 24.82 | 643.2 | -113.8 | 216.1 | 203.1 | 13.05 | 16.563 | | |
| 3,300.0 | 3,254.1 | 3,282.7 | 3,200.1 | 10.3 | 13.2 | 25.13 | 668.3 | -118.3 | 221.8 | 208.3 | 13.55 | 16.369 | | |
| 3,400.0 | 3,351.9 | 3,382.5 | 3,296.6 | 10.7 | 13.7 | 25.42 | 693.4 | -122.8 | 227.5 | 213.4 | 14.06 | 16.186 | | |
| 3,500.0 | 3,449.7 | 3,482.3 | 3,393.1 | 11.1 | 14.1 | 25.70 | 718.5 | -127.3 | 233.2 | 218.6 | 14.56 | 16.013 | | |
| 3,600.0 | 3,547.5 | 3,582.2 | 3,489.6 | 11.5 | 14.6 | 25.96 | 743.6 | -131.8 | 238.9 | 223.8 | 15.07 | 15.849 | | |
| 3,700.0 | 3,645.4 | 3,682.0 | 3,586.2 | 11.9 | 15.1 | 26.22 | 768.7 | -136.3 | 244.6 | 229.0 | 15.58 | 15.694 | | |
| 3,800.0 | 3,743.2 | 3,781.8 | 3,682.7 | 12.3 | 15.6 | 26.46 | 793.8 | -140.9 | 250.3 | 234.2 | 16.10 | 15.547 | | |
| 3,900.0 | 3,841.0 | 3,881.7 | 3,779.2 | 12.7 | 16.0 | 26.69 | 818.9 | -145.4 | 256.0 | 239.4 | 16.62 | 15.408 | | |
| 4,000.0 | 3,938.8 | 3,981.5 | 3,875.7 | 13.1 | 16.5 | 26.91 | 844.0 | -149.9 | 261.7 | 244.6 | 17.13 | 15.276 | | |
| 4,100.0 | 4,036.6 | 4,081.3 | 3,972.2 | 13.5 | 17.0 | 27.12 | 869.1 | -154.4 | 267.5 | 249.8 | 17.65 | 15.150 | | |
| 4,200.0 | 4,134.5 | 4,181.1 | 4,068.7 | 13.9 | 17.5 | 27.29 | 894.2 | -158.9 | 273.7 | 255.5 | 18.16 | 15.070 | | |
| 4,300.0 | 4,232.8 | 4,280.8 | 4,165.1 | 14.2 | 18.0 | 27.31 | 919.2 | -163.4 | 281.4 | 262.8 | 18.61 | 15.118 | | |
| 4,400.0 | 4,331.4 | 4,380.4 | 4,261.4 | 14.6 | 18.4 | 27.17 | 944.3 | -167.9 | 290.7 | 271.7 | 19.02 | 15.286 | | |
| 4,500.0 | 4,430.2 | 4,479.8 | 4,357.5 | 14.9 | 18.9 | 26.91 | 969.3 | -172.4 | 301.5 | 282.2 | 19.37 | 15.568 | | |
| 4,600.0 | 4,529.3 | 4,579.0 | 4,453.4 | 15.1 | 19.4 | 26.52 | 994.2 | -176.9 | 313.9 | 294.2 | 19.67 | 15.956 | | |
| 4,700.0 | 4,628.6 | 4,678.0 | 4,549.1 | 15.4 | 19.9 | 26.05 | 1,019.1 | -181.4 | 327.9 | 307.9 | 19.94 | 16.445 | | |
| 4,800.0 | 4,728.1 | 4,776.7 | 4,644.5 | 15.6 | 20.3 | 25.49 | 1,043.9 | -185.9 | 343.4 | 323.3 | 20.16 | 17.031 | | |
| 4,900.0 | 4,827.8 | 4,875.1 | 4,739.7 | 15.8 | 20.8 | 24.88 | 1,068.7 | -190.3 | 360.6 | 340.2 | 20.36 | 17.710 | | |
| 5,000.0 | 4,927.6 | 4,973.2 | 4,834.5 | 16.0 | 21.3 | 24.22 | 1,093.3 | -194.8 | 379.3 | 358.8 | 20.53 | 18.476 | | |
| 5,100.0 | 5,027.5 | 5,071.0 | 4,929.1 | 16.2 | 21.7 | 23.54 | 1,117.9 | -199.2 | 399.7 | 379.0 | 20.68 | 19.326 | | |

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 Qualls 3C-28H |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Reference Site: | S28-T3N-R68W (Qualls) | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Qualls 3C-28H | 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 | | | | | | | | | | | | | S28-T3N-R68W (Qualls) - Qualls 3B-28H - Hz - Plan #1 | | Offset Site Error: | | 0.0 ft |
|-----------------|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------------|--------|-----------------|------------------|------------------------|-------------------|--|--|--------------------|--|--------|
| Survey Program: | | | | | | | | | | | | | 0-MWD | | Offset Well Error: | | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | | | | |
| Measured Depth | Vertical Depth | Measured Depth | Vertical Depth | Reference | Offset | Highside Toolface | Offset Wellbore Centre +N/-S | +E/-W | Between Centres | Between Ellipses | Total Uncertainty Axis | Separation Factor | Warning | | | | |
| (ft) | (ft) | (ft) | (ft) | (ft) | (ft) | (°) | (ft) | (ft) | (ft) | (ft) | | | | | | | |
| 5,200.0 | 5,127.4 | 5,168.4 | 5,023.2 | 16.3 | 22.2 | 22.84 | 1,142.4 | -203.6 | 421.7 | 400.9 | 20.82 | 20.256 | | | | | |
| 5,300.0 | 5,227.4 | 5,265.4 | 5,117.0 | 16.4 | 22.7 | 22.14 | 1,166.8 | -208.0 | 445.4 | 424.4 | 20.95 | 21.263 | | | | | |
| 5,400.0 | 5,327.4 | 5,362.1 | 5,210.5 | 16.5 | 23.1 | 3.39 | 1,191.1 | -212.3 | 470.2 | 431.9 | 38.31 | 12.272 | | | | | |
| 5,500.0 | 5,427.4 | 5,458.7 | 5,303.9 | 16.6 | 23.6 | 2.70 | 1,215.4 | -216.7 | 495.1 | 456.1 | 38.97 | 12.704 | | | | | |

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Qualls 3C-28H |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Reference Site: | S28-T3N-R68W (Qualls) | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Qualls 3C-28H | 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 S28-T3N-R68W (Qualls) - Qualls 3D-28H - Hz - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------------|---------------------------|---------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|----------------------|--------------------|--------|
| Survey Program: 0-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) | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 180.00 | -7.3 | 0.0 | 7.3 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.2 | 0.2 | 180.00 | -7.3 | 0.0 | 7.3 | 7.0 | 0.30 | 23.991 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 180.00 | -7.3 | 0.0 | 7.3 | 6.6 | 0.65 | 11.161 | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | 180.00 | -7.3 | 0.0 | 7.3 | 6.3 | 1.00 | 7.272 | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | 180.00 | -7.3 | 0.0 | 7.3 | 5.9 | 1.35 | 5.393 CC, ES | | |
| 500.0 | 500.0 | 500.0 | 500.0 | 0.9 | 0.8 | -163.90 | -7.3 | 0.0 | 8.1 | 6.4 | 1.70 | 4.777 | | |
| 600.0 | 600.0 | 600.1 | 600.1 | 1.0 | 1.0 | -165.45 | -6.6 | -0.5 | 9.9 | 7.8 | 2.05 | 4.829 | | |
| 700.0 | 699.9 | 700.3 | 700.2 | 1.2 | 1.2 | -164.40 | -4.4 | -1.9 | 11.9 | 9.5 | 2.40 | 4.940 | | |
| 800.0 | 799.7 | 800.4 | 800.3 | 1.4 | 1.4 | -161.88 | -0.7 | -4.3 | 14.0 | 11.3 | 2.75 | 5.089 | | |
| 900.0 | 899.4 | 900.6 | 900.3 | 1.6 | 1.6 | -158.56 | 4.4 | -7.7 | 16.4 | 13.3 | 3.11 | 5.269 | | |
| 1,000.0 | 998.9 | 1,000.8 | 1,000.2 | 1.8 | 1.8 | -154.89 | 11.0 | -12.1 | 19.1 | 15.6 | 3.49 | 5.473 | | |
| 1,100.0 | 1,098.3 | 1,101.0 | 1,099.9 | 2.1 | 2.0 | -151.13 | 19.0 | -17.4 | 22.1 | 18.2 | 3.88 | 5.690 | | |
| 1,200.0 | 1,197.4 | 1,201.2 | 1,199.5 | 2.3 | 2.2 | -147.45 | 28.5 | -23.7 | 25.5 | 21.2 | 4.31 | 5.910 | | |
| 1,300.0 | 1,296.3 | 1,301.5 | 1,298.9 | 2.6 | 2.5 | -143.96 | 39.4 | -30.9 | 29.3 | 24.5 | 4.78 | 6.121 | | |
| 1,400.0 | 1,394.9 | 1,401.7 | 1,398.0 | 2.9 | 2.8 | -140.71 | 51.8 | -39.1 | 33.5 | 28.2 | 5.30 | 6.317 | | |
| 1,500.0 | 1,493.3 | 1,501.9 | 1,496.8 | 3.3 | 3.1 | -137.73 | 65.6 | -48.2 | 38.1 | 32.2 | 5.87 | 6.492 | | |
| 1,600.0 | 1,591.2 | 1,601.7 | 1,595.1 | 3.6 | 3.4 | -136.04 | 80.0 | -57.8 | 43.6 | 37.2 | 6.46 | 6.758 | | |
| 1,700.0 | 1,689.1 | 1,701.6 | 1,693.4 | 4.0 | 3.7 | -135.48 | 94.5 | -67.4 | 49.8 | 42.8 | 7.04 | 7.073 | | |
| 1,800.0 | 1,786.9 | 1,801.4 | 1,791.7 | 4.4 | 4.1 | -135.04 | 108.9 | -76.9 | 56.0 | 48.4 | 7.64 | 7.331 | | |
| 1,900.0 | 1,884.7 | 1,901.2 | 1,890.0 | 4.8 | 4.4 | -134.69 | 123.4 | -86.5 | 62.2 | 53.9 | 8.24 | 7.544 | | |
| 2,000.0 | 1,982.5 | 2,001.0 | 1,988.3 | 5.2 | 4.7 | -134.40 | 137.8 | -96.1 | 68.4 | 59.5 | 8.85 | 7.724 | | |
| 2,100.0 | 2,080.3 | 2,100.8 | 2,086.6 | 5.5 | 5.1 | -134.16 | 152.3 | -105.6 | 74.6 | 65.1 | 9.47 | 7.876 | | |
| 2,200.0 | 2,178.1 | 2,200.6 | 2,184.9 | 5.9 | 5.4 | -133.96 | 166.7 | -115.2 | 80.8 | 70.7 | 10.09 | 8.007 | | |
| 2,300.0 | 2,275.9 | 2,300.4 | 2,283.2 | 6.3 | 5.7 | -133.78 | 181.2 | -124.8 | 87.0 | 76.2 | 10.71 | 8.120 | | |
| 2,400.0 | 2,373.8 | 2,400.2 | 2,381.5 | 6.7 | 6.1 | -133.63 | 195.7 | -134.3 | 93.1 | 81.8 | 11.33 | 8.219 | | |
| 2,500.0 | 2,471.6 | 2,500.0 | 2,479.8 | 7.1 | 6.4 | -133.50 | 210.1 | -143.9 | 99.3 | 87.4 | 11.96 | 8.306 | | |
| 2,600.0 | 2,569.4 | 2,599.8 | 2,578.0 | 7.5 | 6.8 | -133.38 | 224.6 | -153.5 | 105.5 | 92.9 | 12.59 | 8.383 | | |
| 2,700.0 | 2,667.2 | 2,699.6 | 2,676.3 | 7.9 | 7.1 | -133.28 | 239.0 | -163.0 | 111.7 | 98.5 | 13.22 | 8.452 | | |
| 2,800.0 | 2,765.0 | 2,799.4 | 2,774.6 | 8.3 | 7.4 | -133.19 | 253.5 | -172.6 | 117.9 | 104.1 | 13.85 | 8.513 | | |
| 2,900.0 | 2,862.8 | 2,899.2 | 2,872.9 | 8.7 | 7.8 | -133.10 | 267.9 | -182.2 | 124.1 | 109.6 | 14.48 | 8.569 | | |
| 3,000.0 | 2,960.7 | 2,999.0 | 2,971.1 | 9.1 | 8.1 | -133.03 | 282.3 | -191.7 | 130.3 | 115.2 | 15.12 | 8.620 | | |
| 3,100.0 | 3,058.5 | 3,097.7 | 3,068.5 | 9.5 | 8.4 | -133.34 | 295.8 | -200.6 | 137.0 | 121.3 | 15.69 | 8.731 | | |
| 3,200.0 | 3,156.3 | 3,196.2 | 3,166.0 | 9.9 | 8.7 | -134.21 | 307.9 | -208.6 | 144.5 | 128.3 | 16.17 | 8.933 | | |
| 3,300.0 | 3,254.1 | 3,294.5 | 3,263.4 | 10.3 | 9.0 | -135.54 | 318.5 | -215.6 | 152.9 | 136.3 | 16.57 | 9.224 | | |
| 3,400.0 | 3,351.9 | 3,392.6 | 3,360.9 | 10.7 | 9.3 | -137.24 | 327.7 | -221.7 | 162.2 | 145.3 | 16.89 | 9.605 | | |
| 3,500.0 | 3,449.7 | 3,490.3 | 3,458.2 | 11.1 | 9.5 | -139.22 | 335.5 | -226.9 | 172.7 | 155.5 | 17.13 | 10.080 | | |
| 3,600.0 | 3,547.5 | 3,587.6 | 3,555.2 | 11.5 | 9.7 | -141.39 | 341.9 | -231.1 | 184.3 | 167.0 | 17.30 | 10.650 | | |
| 3,700.0 | 3,645.4 | 3,684.5 | 3,651.9 | 11.9 | 9.9 | -143.67 | 346.9 | -234.4 | 197.2 | 179.8 | 17.42 | 11.320 | | |
| 3,800.0 | 3,743.2 | 3,781.0 | 3,748.2 | 12.3 | 10.0 | -146.00 | 350.5 | -236.8 | 211.5 | 194.0 | 17.49 | 12.091 | | |
| 3,900.0 | 3,841.0 | 3,876.8 | 3,844.1 | 12.7 | 10.1 | -148.34 | 352.7 | -238.3 | 227.2 | 209.6 | 17.53 | 12.962 | | |
| 4,000.0 | 3,938.8 | 3,972.1 | 3,939.3 | 13.1 | 10.3 | -150.63 | 353.6 | -238.9 | 244.4 | 226.8 | 17.54 | 13.931 | | |
| 4,100.0 | 4,036.6 | 4,069.4 | 4,036.6 | 13.5 | 10.4 | -152.83 | 353.6 | -238.9 | 262.8 | 245.2 | 17.57 | 14.959 | | |
| 4,200.0 | 4,134.5 | 4,167.3 | 4,134.5 | 13.9 | 10.5 | -154.77 | 353.6 | -238.9 | 281.0 | 263.4 | 17.63 | 15.939 | | |
| 4,300.0 | 4,232.8 | 4,265.6 | 4,232.8 | 14.2 | 10.6 | -156.35 | 353.6 | -238.9 | 298.0 | 280.2 | 17.74 | 16.792 | | |
| 4,400.0 | 4,331.4 | 4,364.1 | 4,331.4 | 14.6 | 10.7 | -157.65 | 353.6 | -238.9 | 313.5 | 295.6 | 17.90 | 17.517 | | |
| 4,500.0 | 4,430.2 | 4,463.0 | 4,430.2 | 14.9 | 10.9 | -158.70 | 353.6 | -238.9 | 327.6 | 309.5 | 18.08 | 18.116 | | |
| 4,600.0 | 4,529.3 | 4,562.1 | 4,529.3 | 15.1 | 11.0 | -159.57 | 353.6 | -238.9 | 340.1 | 321.8 | 18.29 | 18.593 | | |
| 4,700.0 | 4,628.6 | 4,661.4 | 4,628.6 | 15.4 | 11.1 | -160.27 | 353.6 | -238.9 | 351.1 | 332.6 | 18.52 | 18.955 | | |
| 4,800.0 | 4,728.1 | 4,760.9 | 4,728.1 | 15.6 | 11.2 | -160.83 | 353.6 | -238.9 | 360.4 | 341.7 | 18.77 | 19.206 | | |
| 4,900.0 | 4,827.8 | 4,860.6 | 4,827.8 | 15.8 | 11.4 | -161.27 | 353.6 | -238.9 | 368.2 | 349.2 | 19.03 | 19.352 | | |
| 5,000.0 | 4,927.6 | 4,960.4 | 4,927.6 | 16.0 | 11.5 | -161.61 | 353.6 | -238.9 | 374.3 | 355.0 | 19.30 | 19.399 | | |
| 5,100.0 | 5,027.5 | 5,060.3 | 5,027.5 | 16.2 | 11.6 | -161.85 | 353.6 | -238.9 | 378.8 | 359.2 | 19.57 | 19.351 | | |

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 Qualls 3C-28H |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Reference Site: | S28-T3N-R68W (Qualls) | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Qualls 3C-28H | 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 S28-T3N-R68W (Qualls) - Qualls 3D-28H - Hz - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------|-------------------|--------------------|--------|
| Survey Program: O-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | Total | | 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) | Uncertainty Axis | Separation Factor | | |
| 5,200.0 | 5,127.4 | 5,160.2 | 5,127.4 | 16.3 | 11.8 | -162.00 | 353.6 | -238.9 | 381.6 | 361.8 | 19.86 | 19.214 | | |
| 5,300.0 | 5,227.4 | 5,260.2 | 5,227.4 | 16.4 | 11.9 | -162.06 | 353.6 | -238.9 | 382.8 | 362.6 | 20.15 | 18.993 | | |
| 5,400.0 | 5,327.4 | 5,360.2 | 5,327.4 | 16.5 | 12.0 | 179.94 | 353.6 | -238.9 | 382.8 | 355.6 | 27.22 | 14.064 | | |
| 5,500.0 | 5,427.4 | 5,460.2 | 5,427.4 | 16.6 | 12.2 | 179.94 | 353.6 | -238.9 | 382.8 | 355.3 | 27.47 | 13.936 | | |
| 5,600.0 | 5,527.4 | 5,560.2 | 5,527.4 | 16.7 | 12.3 | 179.94 | 353.6 | -238.9 | 382.8 | 355.1 | 27.72 | 13.811 | | |
| 5,700.0 | 5,627.4 | 5,660.2 | 5,627.4 | 16.8 | 12.4 | 179.94 | 353.6 | -238.9 | 382.8 | 354.8 | 27.97 | 13.686 | | |
| 5,800.0 | 5,727.4 | 5,760.2 | 5,727.4 | 16.9 | 12.6 | 179.94 | 353.6 | -238.9 | 382.8 | 354.6 | 28.23 | 13.563 | | |
| 5,900.0 | 5,827.4 | 5,860.2 | 5,827.4 | 17.0 | 12.7 | 179.94 | 353.6 | -238.9 | 382.8 | 354.3 | 28.48 | 13.441 | | |
| 6,000.0 | 5,927.4 | 5,960.2 | 5,927.4 | 17.1 | 12.9 | 179.94 | 353.6 | -238.9 | 382.8 | 354.1 | 28.74 | 13.320 | | |
| 6,100.0 | 6,027.4 | 6,060.2 | 6,027.4 | 17.2 | 13.0 | 179.94 | 353.6 | -238.9 | 382.8 | 353.8 | 29.00 | 13.200 | | |
| 6,163.4 | 6,090.8 | 6,123.6 | 6,090.8 | 17.3 | 13.1 | 179.94 | 353.6 | -238.9 | 382.8 | 353.6 | 29.17 | 13.125 | | |
| 6,200.0 | 6,127.4 | 6,160.2 | 6,127.4 | 17.3 | 13.1 | 179.93 | 353.6 | -238.8 | 382.8 | 353.5 | 29.26 | 13.082 | | |
| 6,215.5 | 6,142.9 | 6,175.7 | 6,142.9 | 17.3 | 13.2 | 179.88 | 353.6 | -238.5 | 382.8 | 353.5 | 29.31 | 13.062 | | |
| 6,300.0 | 6,227.4 | 6,259.3 | 6,226.1 | 17.4 | 13.2 | 178.71 | 353.6 | -230.7 | 382.9 | 353.3 | 29.63 | 12.922 | | |
| 6,400.0 | 6,327.4 | 6,354.4 | 6,318.9 | 17.5 | 13.2 | 175.64 | 353.6 | -210.1 | 384.0 | 353.9 | 30.12 | 12.751 | | |
| 6,500.0 | 6,427.2 | 6,444.4 | 6,403.5 | 17.6 | 13.2 | 81.52 | 353.6 | -179.5 | 387.4 | 364.6 | 22.85 | 16.951 | | |
| 6,600.0 | 6,525.3 | 6,531.6 | 6,481.1 | 17.6 | 13.2 | 77.62 | 353.6 | -139.9 | 392.6 | 369.8 | 22.82 | 17.209 | | |
| 6,700.0 | 6,619.8 | 6,616.3 | 6,551.4 | 17.6 | 13.2 | 74.03 | 353.6 | -92.7 | 399.1 | 376.2 | 22.99 | 17.365 | | |
| 6,800.0 | 6,708.9 | 6,700.0 | 6,614.9 | 17.6 | 13.3 | 70.79 | 353.6 | -38.3 | 406.5 | 383.1 | 23.36 | 17.397 | | |
| 6,900.0 | 6,790.8 | 6,780.1 | 6,669.3 | 17.6 | 13.4 | 68.00 | 353.6 | 20.4 | 414.0 | 390.1 | 23.94 | 17.296 | | |
| 7,000.0 | 6,864.0 | 6,859.8 | 6,716.7 | 17.7 | 13.7 | 65.60 | 353.7 | 84.5 | 421.4 | 396.7 | 24.70 | 17.061 | | |
| 7,100.0 | 6,927.0 | 6,938.4 | 6,756.1 | 17.9 | 14.2 | 63.62 | 353.7 | 152.4 | 428.1 | 402.5 | 25.65 | 16.695 | | |
| 7,200.0 | 6,978.5 | 7,016.1 | 6,787.5 | 18.3 | 15.0 | 62.05 | 353.7 | 223.4 | 433.9 | 407.1 | 26.80 | 16.192 | | |
| 7,300.0 | 7,017.7 | 7,093.1 | 6,810.9 | 18.9 | 15.9 | 60.90 | 353.7 | 296.8 | 438.4 | 410.2 | 28.18 | 15.555 | | |
| 7,400.0 | 7,043.7 | 7,169.7 | 6,826.2 | 19.8 | 17.1 | 60.15 | 353.7 | 371.8 | 441.4 | 411.6 | 29.84 | 14.792 | | |
| 7,500.0 | 7,056.0 | 7,250.0 | 6,833.5 | 21.0 | 18.5 | 59.80 | 353.7 | 451.7 | 442.9 | 411.1 | 31.83 | 13.913 | | |
| 7,520.6 | 7,057.0 | 7,261.8 | 6,833.9 | 21.3 | 18.7 | 59.77 | 353.7 | 463.5 | 443.1 | 410.8 | 32.30 | 13.716 | | |
| 7,600.0 | 7,057.0 | 7,336.8 | 6,834.0 | 22.5 | 20.1 | 59.77 | 353.7 | 538.5 | 443.0 | 408.3 | 34.65 | 12.784 | | |
| 7,700.0 | 7,057.0 | 7,436.8 | 6,834.0 | 24.2 | 22.1 | 59.77 | 353.7 | 638.5 | 443.0 | 404.8 | 38.14 | 11.615 | | |
| 7,800.0 | 7,057.0 | 7,536.8 | 6,834.0 | 26.0 | 24.1 | 59.77 | 353.7 | 738.5 | 443.0 | 401.2 | 41.77 | 10.605 | | |
| 7,900.0 | 7,057.0 | 7,636.8 | 6,834.0 | 28.0 | 26.3 | 59.77 | 353.7 | 838.5 | 443.0 | 397.4 | 45.52 | 9.732 | | |
| 8,000.0 | 7,057.0 | 7,736.8 | 6,834.0 | 30.0 | 28.5 | 59.77 | 353.7 | 938.5 | 443.0 | 393.6 | 49.35 | 8.975 | | |
| 8,100.0 | 7,057.0 | 7,836.8 | 6,834.0 | 32.1 | 30.7 | 59.77 | 353.7 | 1,038.5 | 443.0 | 389.7 | 53.25 | 8.318 | | |
| 8,200.0 | 7,057.0 | 7,936.8 | 6,834.0 | 34.3 | 33.0 | 59.77 | 353.7 | 1,138.5 | 442.9 | 385.7 | 57.21 | 7.742 | | |
| 8,300.0 | 7,057.0 | 8,036.8 | 6,834.0 | 36.5 | 35.3 | 59.77 | 353.7 | 1,238.5 | 442.9 | 381.7 | 61.21 | 7.236 | | |
| 8,400.0 | 7,057.0 | 8,136.8 | 6,834.0 | 38.7 | 37.6 | 59.77 | 353.7 | 1,338.5 | 442.9 | 377.7 | 65.25 | 6.789 | | |
| 8,500.0 | 7,057.0 | 8,236.8 | 6,834.0 | 41.0 | 39.9 | 59.77 | 353.7 | 1,438.5 | 442.9 | 373.6 | 69.31 | 6.390 | | |
| 8,600.0 | 7,057.0 | 8,336.8 | 6,834.0 | 43.3 | 42.3 | 59.77 | 353.7 | 1,538.5 | 442.9 | 369.5 | 73.40 | 6.034 | | |
| 8,700.0 | 7,057.0 | 8,436.8 | 6,834.0 | 45.6 | 44.6 | 59.77 | 353.7 | 1,638.5 | 442.9 | 365.4 | 77.51 | 5.714 | | |
| 8,800.0 | 7,057.0 | 8,536.8 | 6,834.0 | 48.0 | 47.0 | 59.77 | 353.7 | 1,738.5 | 442.9 | 361.3 | 81.64 | 5.425 | | |
| 8,900.0 | 7,057.0 | 8,636.8 | 6,834.0 | 50.3 | 49.4 | 59.77 | 353.7 | 1,838.5 | 442.9 | 357.1 | 85.78 | 5.163 | | |
| 9,000.0 | 7,057.0 | 8,736.8 | 6,834.0 | 52.7 | 51.8 | 59.77 | 353.7 | 1,938.5 | 442.9 | 353.0 | 89.94 | 4.925 | | |
| 9,100.0 | 7,057.0 | 8,836.8 | 6,834.0 | 55.0 | 54.2 | 59.77 | 353.7 | 2,038.5 | 442.9 | 348.8 | 94.10 | 4.707 | | |
| 9,200.0 | 7,057.0 | 8,936.8 | 6,834.0 | 57.4 | 56.6 | 59.77 | 353.7 | 2,138.5 | 442.9 | 344.6 | 98.28 | 4.507 | | |
| 9,300.0 | 7,057.0 | 9,036.8 | 6,834.0 | 59.8 | 59.0 | 59.77 | 353.7 | 2,238.5 | 442.9 | 340.4 | 102.46 | 4.322 | | |
| 9,400.0 | 7,057.0 | 9,136.8 | 6,834.0 | 62.2 | 61.4 | 59.77 | 353.7 | 2,338.5 | 442.9 | 336.2 | 106.66 | 4.152 | | |
| 9,500.0 | 7,057.0 | 9,236.8 | 6,834.0 | 64.6 | 63.9 | 59.77 | 353.7 | 2,438.5 | 442.9 | 332.0 | 110.85 | 3.995 | | |
| 9,600.0 | 7,057.0 | 9,336.8 | 6,834.0 | 67.0 | 66.3 | 59.77 | 353.7 | 2,538.5 | 442.9 | 327.8 | 115.06 | 3.849 | | |
| 9,700.0 | 7,057.0 | 9,436.8 | 6,834.0 | 69.4 | 68.7 | 59.77 | 353.7 | 2,638.5 | 442.9 | 323.6 | 119.27 | 3.713 | | |
| 9,800.0 | 7,057.0 | 9,536.8 | 6,834.0 | 71.8 | 71.2 | 59.77 | 353.7 | 2,738.5 | 442.9 | 319.4 | 123.48 | 3.586 | | |
| 9,900.0 | 7,057.0 | 9,636.8 | 6,834.0 | 74.2 | 73.6 | 59.76 | 353.7 | 2,838.5 | 442.9 | 315.2 | 127.70 | 3.468 | | |
| 10,000.0 | 7,057.0 | 9,736.8 | 6,834.0 | 76.7 | 76.0 | 59.76 | 353.7 | 2,938.5 | 442.8 | 310.9 | 131.93 | 3.357 | | |

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 Qualls 3C-28H |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Reference Site: | S28-T3N-R68W (Qualls) | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Qualls 3C-28H | 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 | | | | | | | | | | | | S28-T3N-R68W (Qualls) - Qualls 3D-28H - Hz - Plan #1 | | Offset Site Error: | | 0.0 ft | |
|---------------------|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|------------------------|------------|----------------------|-----------------------|------------------------|--|--|--------------------|--|--------|--|
| Survey Program: | | | | | | | | | | | | 0-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 | | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | | | | | |
| | | | | | | | +N/-S (ft) | +E/-W (ft) | | | | | | | | | |
| 10,100.0 | 7,057.0 | 9,836.8 | 6,834.0 | 79.1 | 78.5 | 59.76 | 353.7 | 3,038.5 | 442.8 | 306.7 | 136.15 | 3.253 | | | | | |
| 10,200.0 | 7,057.0 | 9,936.8 | 6,834.0 | 81.5 | 80.9 | 59.76 | 353.7 | 3,138.5 | 442.8 | 302.5 | 140.38 | 3.155 | | | | | |
| 10,300.0 | 7,057.0 | 10,036.8 | 6,834.0 | 83.9 | 83.4 | 59.76 | 353.7 | 3,238.5 | 442.8 | 298.2 | 144.61 | 3.062 | | | | | |
| 10,400.0 | 7,057.0 | 10,136.8 | 6,834.0 | 86.4 | 85.8 | 59.76 | 353.7 | 3,338.5 | 442.8 | 294.0 | 148.85 | 2.975 | | | | | |
| 10,500.0 | 7,057.0 | 10,236.8 | 6,834.0 | 88.8 | 88.3 | 59.76 | 353.8 | 3,438.5 | 442.8 | 289.7 | 153.09 | 2.893 | | | | | |
| 10,600.0 | 7,057.0 | 10,336.8 | 6,834.0 | 91.2 | 90.7 | 59.76 | 353.8 | 3,538.5 | 442.8 | 285.5 | 157.33 | 2.815 | | | | | |
| 10,700.0 | 7,057.0 | 10,436.8 | 6,834.0 | 93.7 | 93.2 | 59.76 | 353.8 | 3,638.5 | 442.8 | 281.2 | 161.57 | 2.741 | | | | | |
| 10,800.0 | 7,057.0 | 10,536.8 | 6,834.0 | 96.1 | 95.6 | 59.76 | 353.8 | 3,738.5 | 442.8 | 277.0 | 165.81 | 2.670 | | | | | |
| 10,900.0 | 7,057.0 | 10,636.8 | 6,834.0 | 98.6 | 98.1 | 59.76 | 353.8 | 3,838.5 | 442.8 | 272.7 | 170.06 | 2.604 | | | | | |
| 11,000.0 | 7,057.0 | 10,736.8 | 6,834.0 | 101.0 | 100.5 | 59.76 | 353.8 | 3,938.5 | 442.8 | 268.5 | 174.31 | 2.540 | | | | | |
| 11,100.0 | 7,057.0 | 10,836.8 | 6,834.0 | 103.5 | 103.0 | 59.76 | 353.8 | 4,038.5 | 442.8 | 264.2 | 178.55 | 2.480 | | | | | |
| 11,200.0 | 7,057.0 | 10,936.8 | 6,834.0 | 105.9 | 105.4 | 59.76 | 353.8 | 4,138.5 | 442.8 | 260.0 | 182.80 | 2.422 | | | | | |
| 11,300.0 | 7,057.0 | 11,036.8 | 6,834.0 | 108.4 | 107.9 | 59.76 | 353.8 | 4,238.5 | 442.8 | 255.7 | 187.06 | 2.367 | | | | | |
| 11,400.0 | 7,057.0 | 11,136.8 | 6,834.0 | 110.8 | 110.3 | 59.76 | 353.8 | 4,338.5 | 442.8 | 251.5 | 191.31 | 2.314 | | | | | |
| 11,500.0 | 7,057.0 | 11,236.8 | 6,834.0 | 113.3 | 112.8 | 59.76 | 353.8 | 4,438.5 | 442.8 | 247.2 | 195.56 | 2.264 | | | | | |
| 11,600.0 | 7,057.0 | 11,336.8 | 6,834.0 | 115.7 | 115.3 | 59.76 | 353.8 | 4,538.5 | 442.8 | 242.9 | 199.82 | 2.216 | | | | | |
| 11,634.6 | 7,057.0 | 11,371.4 | 6,834.0 | 116.6 | 116.1 | 59.76 | 353.8 | 4,573.2 | 442.8 | 241.5 | 201.29 | 2.200 | | | | | |
| 11,643.8 | 7,057.0 | 11,379.8 | 6,834.0 | 116.8 | 116.3 | 59.76 | 353.8 | 4,581.6 | 442.8 | 241.1 | 201.66 | 2.196 SF | | | | | |

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Qualls 3C-28H |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Reference Site: | S28-T3N-R68W (Qualls) | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Qualls 3C-28H | 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 S28-T3N-R68W (Qualls) - Qualls 3E-28H - Hz - Plan #1 | | | | | | | | | | | | | Offset Site Error: 0.0 ft | |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|------------------------|------------|----------------------|-----------------------|------------------------|-------------------|---------------------------|--|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: 0.0 ft | |
| Reference | | Offset | | Semi Major Axis | | Highside Toolface (°) | Offset Wellbore Centre | | Distance | | Total Uncertainty Axis | Separation Factor | Warning | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | | +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 180.00 | -18.2 | 0.0 | 18.2 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.2 | 0.2 | 180.00 | -18.2 | 0.0 | 18.2 | 17.9 | 0.30 | 59.977 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 180.00 | -18.2 | 0.0 | 18.2 | 17.6 | 0.65 | 27.904 | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | 180.00 | -18.2 | 0.0 | 18.2 | 17.2 | 1.00 | 18.181 | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | 180.00 | -18.2 | 0.0 | 18.2 | 16.9 | 1.35 | 13.483 CC, ES | | |
| 500.0 | 500.0 | 500.0 | 500.0 | 0.9 | 0.9 | -160.19 | -18.1 | -0.9 | 19.0 | 17.3 | 1.70 | 11.150 | | |
| 600.0 | 600.0 | 600.0 | 600.0 | 1.0 | 1.0 | -155.54 | -17.8 | -3.5 | 21.3 | 19.2 | 2.05 | 10.370 SF | | |
| 700.0 | 699.9 | 699.9 | 699.7 | 1.2 | 1.2 | -149.75 | -17.4 | -7.8 | 25.4 | 23.0 | 2.41 | 10.527 | | |
| 800.0 | 799.7 | 799.6 | 799.2 | 1.4 | 1.4 | -144.27 | -16.7 | -13.8 | 31.5 | 28.7 | 2.79 | 11.289 | | |
| 900.0 | 899.4 | 899.1 | 898.4 | 1.6 | 1.6 | -139.73 | -15.9 | -21.6 | 39.5 | 36.3 | 3.18 | 12.429 | | |
| 1,000.0 | 998.9 | 998.3 | 997.2 | 1.8 | 1.8 | -136.19 | -14.8 | -31.0 | 49.6 | 46.0 | 3.59 | 13.788 | | |
| 1,100.0 | 1,098.3 | 1,097.2 | 1,095.5 | 2.1 | 2.1 | -133.50 | -13.6 | -42.1 | 61.5 | 57.5 | 4.04 | 15.252 | | |
| 1,200.0 | 1,197.4 | 1,195.7 | 1,193.2 | 2.3 | 2.3 | -131.44 | -12.3 | -54.8 | 75.5 | 71.0 | 4.51 | 16.746 | | |
| 1,300.0 | 1,296.3 | 1,294.5 | 1,291.0 | 2.6 | 2.6 | -130.29 | -10.8 | -68.5 | 91.0 | 86.0 | 5.00 | 18.195 | | |
| 1,400.0 | 1,394.9 | 1,393.1 | 1,388.6 | 2.9 | 2.9 | -130.15 | -9.3 | -82.1 | 107.6 | 102.1 | 5.51 | 19.525 | | |
| 1,500.0 | 1,493.3 | 1,491.5 | 1,486.1 | 3.3 | 3.2 | -130.63 | -7.8 | -95.8 | 125.3 | 119.3 | 6.04 | 20.757 | | |
| 1,600.0 | 1,591.2 | 1,589.7 | 1,583.3 | 3.6 | 3.4 | -131.47 | -6.3 | -109.3 | 144.2 | 137.6 | 6.58 | 21.919 | | |
| 1,700.0 | 1,689.1 | 1,687.7 | 1,680.4 | 4.0 | 3.7 | -132.47 | -4.9 | -122.9 | 163.6 | 156.5 | 7.13 | 22.963 | | |
| 1,800.0 | 1,786.9 | 1,785.8 | 1,777.5 | 4.4 | 4.0 | -133.25 | -3.4 | -136.5 | 183.2 | 175.5 | 7.68 | 23.850 | | |
| 1,900.0 | 1,884.7 | 1,883.8 | 1,874.6 | 4.8 | 4.3 | -133.88 | -1.9 | -150.0 | 202.7 | 194.5 | 8.24 | 24.611 | | |
| 2,000.0 | 1,982.5 | 1,981.9 | 1,971.7 | 5.2 | 4.6 | -134.40 | -0.4 | -163.6 | 222.3 | 213.5 | 8.80 | 25.271 | | |
| 2,100.0 | 2,080.3 | 2,079.9 | 2,068.8 | 5.5 | 4.9 | -134.84 | 1.0 | -177.2 | 241.9 | 232.5 | 9.36 | 25.848 | | |
| 2,200.0 | 2,178.1 | 2,178.7 | 2,166.6 | 5.9 | 5.1 | -135.25 | 2.5 | -190.6 | 261.4 | 251.5 | 9.91 | 26.364 | | |
| 2,300.0 | 2,275.9 | 2,278.4 | 2,265.6 | 6.3 | 5.4 | -135.91 | 3.8 | -202.7 | 280.4 | 270.0 | 10.45 | 26.845 | | |
| 2,400.0 | 2,373.8 | 2,378.2 | 2,364.8 | 6.7 | 5.6 | -136.80 | 4.9 | -213.1 | 299.0 | 288.0 | 10.95 | 27.304 | | |
| 2,500.0 | 2,471.6 | 2,478.0 | 2,464.2 | 7.1 | 5.9 | -137.90 | 5.9 | -221.8 | 317.1 | 305.6 | 11.42 | 27.759 | | |
| 2,600.0 | 2,569.4 | 2,577.8 | 2,563.8 | 7.5 | 6.1 | -139.16 | 6.6 | -228.8 | 334.8 | 322.9 | 11.86 | 28.225 | | |
| 2,700.0 | 2,667.2 | 2,677.5 | 2,663.3 | 7.9 | 6.3 | -140.57 | 7.2 | -234.0 | 352.2 | 339.9 | 12.27 | 28.715 | | |
| 2,800.0 | 2,765.0 | 2,777.0 | 2,762.8 | 8.3 | 6.4 | -142.10 | 7.6 | -237.5 | 369.4 | 356.8 | 12.63 | 29.241 | | |
| 2,900.0 | 2,862.8 | 2,876.4 | 2,862.1 | 8.7 | 6.6 | -143.75 | 7.8 | -239.3 | 386.5 | 373.5 | 12.96 | 29.815 | | |
| 3,000.0 | 2,960.7 | 2,974.9 | 2,960.7 | 9.1 | 6.7 | -145.46 | 7.8 | -239.5 | 403.6 | 390.4 | 13.27 | 30.422 | | |
| 3,100.0 | 3,058.5 | 3,072.7 | 3,058.5 | 9.5 | 6.8 | -147.06 | 7.8 | -239.5 | 421.0 | 407.5 | 13.56 | 31.041 | | |
| 3,200.0 | 3,156.3 | 3,170.5 | 3,156.3 | 9.9 | 7.0 | -148.53 | 7.8 | -239.5 | 438.7 | 424.9 | 13.86 | 31.663 | | |
| 3,300.0 | 3,254.1 | 3,268.3 | 3,254.1 | 10.3 | 7.1 | -149.88 | 7.8 | -239.5 | 456.7 | 442.6 | 14.15 | 32.282 | | |
| 3,400.0 | 3,351.9 | 3,366.2 | 3,351.9 | 10.7 | 7.2 | -151.13 | 7.8 | -239.5 | 474.9 | 460.5 | 14.44 | 32.895 | | |
| 3,500.0 | 3,449.7 | 3,464.0 | 3,449.7 | 11.1 | 7.4 | -152.29 | 7.8 | -239.5 | 493.3 | 478.6 | 14.73 | 33.499 | | |

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Qualls 3C-28H |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Reference Site: | S28-T3N-R68W (Qualls) | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Qualls 3C-28H | 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 S28-T3N-R68W (Qualls) - Qualls 3F-28H - Hz - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------|------------|-----------------|------------------|------------------------|-------------------|--------------------|---------|
| Survey Program: 0-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 Axis | Separation Factor | | |
| (ft) | (ft) | (ft) | (ft) | (ft) | (ft) | (°) | +N/-S (ft) | +E/-W (ft) | (ft) | (ft) | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 180.00 | -29.1 | 0.0 | 29.1 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.2 | 0.2 | 180.00 | -29.1 | 0.0 | 29.1 | 28.8 | 0.30 | 95.963 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 180.00 | -29.1 | 0.0 | 29.1 | 28.5 | 0.65 | 44.646 | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | 180.00 | -29.1 | 0.0 | 29.1 | 28.1 | 1.00 | 29.090 CC, ES | | |
| 400.0 | 400.0 | 399.6 | 399.6 | 0.7 | 0.7 | -179.08 | -29.9 | -0.5 | 29.9 | 28.5 | 1.35 | 22.124 | | |
| 500.0 | 500.0 | 499.1 | 499.0 | 0.9 | 0.9 | -159.13 | -32.0 | -1.9 | 32.9 | 31.2 | 1.70 | 19.366 | | |
| 600.0 | 600.0 | 598.3 | 598.2 | 1.0 | 1.0 | -157.24 | -35.6 | -4.3 | 39.1 | 37.1 | 2.05 | 19.082 SF | | |
| 700.0 | 699.9 | 697.2 | 696.9 | 1.2 | 1.2 | -155.76 | -40.6 | -7.6 | 48.5 | 46.1 | 2.40 | 20.178 | | |
| 800.0 | 799.7 | 795.6 | 795.0 | 1.4 | 1.4 | -154.71 | -47.0 | -11.8 | 60.9 | 58.2 | 2.76 | 22.109 | | |
| 900.0 | 899.4 | 893.3 | 892.2 | 1.6 | 1.7 | -154.01 | -54.7 | -16.9 | 76.5 | 73.4 | 3.11 | 24.567 | | |
| 1,000.0 | 998.9 | 990.2 | 988.6 | 1.8 | 1.9 | -153.55 | -63.8 | -22.9 | 95.1 | 91.6 | 3.48 | 27.365 | | |
| 1,100.0 | 1,098.3 | 1,086.3 | 1,083.8 | 2.1 | 2.2 | -153.23 | -74.1 | -29.7 | 116.8 | 112.9 | 3.84 | 30.382 | | |
| 1,200.0 | 1,197.4 | 1,181.2 | 1,177.8 | 2.3 | 2.4 | -153.01 | -85.5 | -37.3 | 141.4 | 137.2 | 4.22 | 33.537 | | |
| 1,300.0 | 1,296.3 | 1,275.1 | 1,270.4 | 2.6 | 2.7 | -152.85 | -98.2 | -45.7 | 169.0 | 164.4 | 4.60 | 36.769 | | |
| 1,400.0 | 1,394.9 | 1,369.7 | 1,363.6 | 2.9 | 3.0 | -152.78 | -111.8 | -54.7 | 199.1 | 194.1 | 4.98 | 39.948 | | |
| 1,500.0 | 1,493.3 | 1,464.6 | 1,457.0 | 3.3 | 3.3 | -152.88 | -125.6 | -63.8 | 230.7 | 225.3 | 5.38 | 42.898 | | |
| 1,600.0 | 1,591.2 | 1,558.9 | 1,549.9 | 3.6 | 3.7 | -153.10 | -139.2 | -72.9 | 263.8 | 258.0 | 5.78 | 45.659 | | |
| 1,700.0 | 1,689.1 | 1,653.0 | 1,642.6 | 4.0 | 4.0 | -153.47 | -152.8 | -81.9 | 297.7 | 291.5 | 6.19 | 48.078 | | |
| 1,800.0 | 1,786.9 | 1,747.1 | 1,735.2 | 4.4 | 4.3 | -153.77 | -166.5 | -90.9 | 331.5 | 324.9 | 6.61 | 50.177 | | |
| 1,900.0 | 1,884.7 | 1,841.2 | 1,827.9 | 4.8 | 4.6 | -154.01 | -180.1 | -99.9 | 365.4 | 358.4 | 7.02 | 52.013 | | |
| 2,000.0 | 1,982.5 | 1,935.3 | 1,920.5 | 5.2 | 4.9 | -154.21 | -193.7 | -108.9 | 399.2 | 391.8 | 7.44 | 53.631 | | |
| 2,100.0 | 2,080.3 | 2,029.4 | 2,013.2 | 5.5 | 5.2 | -154.37 | -207.3 | -117.9 | 433.1 | 425.3 | 7.87 | 55.067 | | |
| 2,200.0 | 2,178.1 | 2,123.4 | 2,105.9 | 5.9 | 5.6 | -154.52 | -221.0 | -127.0 | 467.0 | 458.7 | 8.29 | 56.350 | | |

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Qualls 3C-28H |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Reference Site: | S28-T3N-R68W (Qualls) | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Qualls 3C-28H | 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 S28-T3N-R68W (Qualls) - Qualls 3G-28H - Hz - Plan #1 | | | | | | | | | | | | Offset Site Error: 0.0 ft | | |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|---------------------------|--------|---------|
| Survey Program: 0-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 | -180.00 | -36.4 | 0.0 | 36.4 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.2 | 0.2 | -180.00 | -36.4 | 0.0 | 36.4 | 36.1 | 0.30 | 119.953 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -180.00 | -36.4 | 0.0 | 36.4 | 35.8 | 0.65 | 55.807 | CC, ES | |
| 300.0 | 300.0 | 299.4 | 299.4 | 0.5 | 0.5 | -179.55 | -37.2 | -0.3 | 37.2 | 36.2 | 1.00 | 37.216 | | |
| 400.0 | 400.0 | 398.7 | 398.7 | 0.7 | 0.7 | -178.30 | -39.7 | -1.2 | 39.7 | 38.4 | 1.35 | 29.440 | | |
| 500.0 | 500.0 | 497.9 | 497.8 | 0.9 | 0.9 | -158.92 | -43.7 | -2.6 | 44.7 | 43.0 | 1.70 | 26.301 | | |
| 600.0 | 600.0 | 596.8 | 596.4 | 1.0 | 1.1 | -158.01 | -49.3 | -4.7 | 52.9 | 50.8 | 2.05 | 25.849 | SF | |
| 700.0 | 699.9 | 695.1 | 694.5 | 1.2 | 1.3 | -157.51 | -56.5 | -7.3 | 64.4 | 62.0 | 2.39 | 26.888 | | |
| 800.0 | 799.7 | 792.9 | 791.8 | 1.4 | 1.5 | -157.30 | -65.2 | -10.5 | 79.1 | 76.4 | 2.74 | 28.834 | | |
| 900.0 | 899.4 | 889.8 | 888.1 | 1.6 | 1.7 | -157.27 | -75.4 | -14.2 | 97.1 | 94.0 | 3.09 | 31.366 | | |
| 1,000.0 | 998.9 | 985.8 | 983.3 | 1.8 | 2.0 | -157.32 | -87.0 | -18.4 | 118.2 | 114.7 | 3.45 | 34.290 | | |
| 1,100.0 | 1,098.3 | 1,080.7 | 1,077.3 | 2.1 | 2.3 | -157.42 | -99.9 | -23.1 | 142.4 | 138.6 | 3.80 | 37.481 | | |
| 1,200.0 | 1,197.4 | 1,174.5 | 1,169.8 | 2.3 | 2.6 | -157.52 | -114.1 | -28.3 | 169.8 | 165.6 | 4.16 | 40.856 | | |
| 1,300.0 | 1,296.3 | 1,269.1 | 1,263.0 | 2.6 | 2.9 | -157.66 | -129.5 | -33.9 | 199.8 | 195.2 | 4.52 | 44.241 | | |
| 1,400.0 | 1,394.9 | 1,364.0 | 1,356.4 | 2.9 | 3.2 | -157.89 | -145.0 | -39.5 | 231.3 | 226.5 | 4.88 | 47.418 | | |
| 1,500.0 | 1,493.3 | 1,458.3 | 1,449.3 | 3.3 | 3.5 | -158.18 | -160.4 | -45.1 | 264.5 | 259.2 | 5.24 | 50.427 | | |
| 1,600.0 | 1,591.2 | 1,552.1 | 1,541.7 | 3.6 | 3.8 | -158.51 | -175.7 | -50.7 | 299.1 | 293.5 | 5.61 | 53.299 | | |
| 1,700.0 | 1,689.1 | 1,645.6 | 1,633.7 | 4.0 | 4.2 | -158.93 | -190.9 | -56.2 | 334.6 | 328.6 | 5.99 | 55.827 | | |
| 1,800.0 | 1,786.9 | 1,739.1 | 1,725.8 | 4.4 | 4.5 | -159.27 | -206.2 | -61.8 | 370.0 | 363.7 | 6.37 | 58.044 | | |
| 1,900.0 | 1,884.7 | 1,832.6 | 1,817.9 | 4.8 | 4.8 | -159.55 | -221.4 | -67.3 | 405.5 | 398.7 | 6.76 | 60.004 | | |
| 2,000.0 | 1,982.5 | 1,926.0 | 1,909.9 | 5.2 | 5.1 | -159.78 | -236.7 | -72.9 | 441.0 | 433.8 | 7.14 | 61.747 | | |
| 2,100.0 | 2,080.3 | 2,019.5 | 2,002.0 | 5.5 | 5.4 | -159.98 | -252.0 | -78.4 | 476.4 | 468.9 | 7.53 | 63.307 | | |

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Qualls 3C-28H |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Reference Site: | S28-T3N-R68W (Qualls) | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Qualls 3C-28H | 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 | | | | | | | | | | S28-T3N-R68W (Qualls) - SLATER 33-28 (EXISTING) - EXISTING - GYRO | | | | | Offset Site Error: | | 0.0 ft |
|--------------------------|------------|------------|------------|-----------------|--------|--------------|-----------------|------------|--------------|---|------------------|------------|---------------------|--|--------------------|--|--------|
| Survey Program: 100-Gyro | | | | | | | | | | | | | | | Offset Well Error: | | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | | | | |
| Measured Depth | Vertical | Measured | Vertical | Reference | Offset | Highside | Offset Wellbore | Centre | Between | Between | Total | Separation | Warning | | | | |
| Depth (ft) | Depth (ft) | Depth (ft) | Depth (ft) | (ft) | (ft) | Toolface (°) | +N/-S (ft) | +E/-W (ft) | Centres (ft) | Ellipses (ft) | Uncertainty Axis | Factor | | | | | |
| 9,800.0 | 7,057.0 | 7,049.8 | 7,045.7 | 71.8 | 6.4 | 89.44 | 604.6 | 3,189.8 | 470.1 | 392.6 | 77.56 | 6.062 | | | | | |
| 9,900.0 | 7,057.0 | 7,050.7 | 7,046.6 | 74.2 | 6.4 | 89.84 | 604.6 | 3,189.8 | 375.2 | 295.2 | 80.00 | 4.690 | | | | | |
| 10,000.0 | 7,057.0 | 7,051.6 | 7,047.5 | 76.7 | 6.4 | 90.24 | 604.6 | 3,189.8 | 283.7 | 201.3 | 82.44 | 3.442 | | | | | |
| 10,100.0 | 7,057.0 | 7,052.5 | 7,048.5 | 79.1 | 6.4 | 90.64 | 604.6 | 3,189.8 | 200.6 | 115.7 | 84.89 | 2.363 | | | | | |
| 10,200.0 | 7,057.0 | 7,053.5 | 7,049.4 | 81.5 | 6.4 | 91.04 | 604.6 | 3,189.9 | 141.4 | 54.0 | 87.32 | 1.619 | | | | | |
| 10,251.3 | 7,057.0 | 7,053.9 | 7,049.9 | 82.8 | 6.4 | 91.25 | 604.7 | 3,189.9 | 131.7 | 43.1 | 88.58 | 1.487 | Level 3, CC, ES, SF | | | | |
| 10,300.0 | 7,057.0 | 7,054.4 | 7,050.3 | 83.9 | 6.4 | 91.45 | 604.7 | 3,189.9 | 140.4 | 50.6 | 89.76 | 1.564 | | | | | |
| 10,400.0 | 7,057.0 | 7,055.3 | 7,051.3 | 86.4 | 6.4 | 91.86 | 604.7 | 3,189.9 | 198.6 | 106.4 | 92.19 | 2.154 | | | | | |
| 10,500.0 | 7,057.0 | 7,056.3 | 7,052.2 | 88.8 | 6.4 | 92.27 | 604.7 | 3,189.9 | 281.4 | 186.8 | 94.62 | 2.974 | | | | | |
| 10,600.0 | 7,057.0 | 7,057.2 | 7,053.2 | 91.2 | 6.4 | 92.69 | 604.7 | 3,189.9 | 372.7 | 275.7 | 97.05 | 3.840 | | | | | |
| 10,700.0 | 7,057.0 | 7,058.2 | 7,054.1 | 93.7 | 6.4 | 93.10 | 604.7 | 3,189.9 | 467.6 | 368.1 | 99.46 | 4.701 | | | | | |

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Qualls 3C-28H |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Reference Site: | S28-T3N-R68W (Qualls) | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Qualls 3C-28H | 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 | | | | | | | | | | | S28-T3N-R68W (Qualls) - SLATER 43-28 (EXISTING) - EXISTING - SURVEYS | | | Offset Site Error: | | 0.0 ft |
|-----------------|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------|-----------------|------------------|-------------------|--|--------------|---------|--------------------|--|--------|
| Survey Program: | | | | | | | | | | | 176-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 Factor | | | | | |
| (ft) | (ft) | (ft) | (ft) | (ft) | (ft) | (°) | +N/-S (ft) | +E/-W (ft) | (ft) | (ft) | Axis | | | | | |
| 11,300.0 | 7,057.0 | 7,239.2 | 7,083.1 | 108.4 | 24.6 | -92.57 | 1,206.1 | 4,365.4 | 487.1 | 357.1 | 129.92 | 3.749 | | | | |
| 11,400.0 | 7,057.0 | 7,236.9 | 7,080.8 | 110.8 | 24.6 | -92.29 | 1,206.2 | 4,365.4 | 471.0 | 338.6 | 132.41 | 3.557 | | | | |
| 11,426.9 | 7,057.0 | 7,236.3 | 7,080.2 | 111.5 | 24.6 | -92.21 | 1,206.2 | 4,365.5 | 470.3 | 337.2 | 133.08 | 3.534 CC, ES | | | | |
| 11,500.0 | 7,057.0 | 7,234.6 | 7,078.5 | 113.3 | 24.6 | -92.01 | 1,206.3 | 4,365.5 | 475.9 | 341.0 | 134.89 | 3.528 SF | | | | |

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Qualls 3C-28H |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Reference Site: | S28-T3N-R68W (Qualls) | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Qualls 3C-28H | 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 | | | | | | | | | | | | | S28-T3N-R68W (Qualls) - SLATER 4-6-28 (EXISTING) - Existing - NO SURVEYS | | Offset Site Error: | | 0.0 ft | |
|-----------------|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------|------------|-----------------|------------------|------------------------|-------------------|--|---------|--------------------|--|--------|--|
| Survey Program: | | | | | | | | | | | | | 7802-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 Axis | Separation Factor | | | | | | |
| (ft) | (ft) | (ft) | (ft) | (ft) | (ft) | (°) | +N/-S (ft) | +E/-W (ft) | (ft) | (ft) | | | | | | | | |
| 10,000.0 | 7,057.0 | 7,049.0 | 7,049.0 | 76.7 | 12.3 | 90.00 | 612.6 | 3,345.9 | 425.7 | 337.4 | 88.35 | 4.819 | | | | | | |
| 10,100.0 | 7,057.0 | 7,049.0 | 7,049.0 | 79.1 | 12.3 | 90.00 | 612.6 | 3,345.9 | 331.3 | 240.5 | 90.80 | 3.649 | | | | | | |
| 10,200.0 | 7,057.0 | 7,049.0 | 7,049.0 | 81.5 | 12.3 | 90.00 | 612.6 | 3,345.9 | 241.5 | 148.2 | 93.24 | 2.590 | | | | | | |
| 10,300.0 | 7,057.0 | 7,049.0 | 7,049.0 | 83.9 | 12.3 | 90.00 | 612.6 | 3,345.9 | 163.8 | 68.1 | 95.69 | 1.712 | | | | | | |
| 10,400.0 | 7,057.0 | 7,049.0 | 7,049.0 | 86.4 | 12.3 | 90.00 | 612.6 | 3,345.9 | 124.0 | 25.8 | 98.14 | 1.263 | Level 3 | | | | | |
| 10,407.4 | 7,057.0 | 7,049.0 | 7,049.0 | 86.6 | 12.3 | 90.00 | 612.6 | 3,345.9 | 123.7 | 25.4 | 98.32 | 1.259 | Level 3, CC, ES, SF | | | | | |
| 10,500.0 | 7,057.0 | 7,049.0 | 7,049.0 | 88.8 | 12.3 | 90.00 | 612.6 | 3,345.9 | 154.6 | 54.0 | 100.59 | 1.537 | | | | | | |
| 10,600.0 | 7,057.0 | 7,049.0 | 7,049.0 | 91.2 | 12.3 | 90.00 | 612.6 | 3,345.9 | 229.0 | 125.9 | 103.04 | 2.222 | | | | | | |
| 10,700.0 | 7,057.0 | 7,049.0 | 7,049.0 | 93.7 | 12.3 | 90.00 | 612.6 | 3,345.9 | 317.7 | 212.2 | 105.49 | 3.012 | | | | | | |
| 10,800.0 | 7,057.0 | 7,049.0 | 7,049.0 | 96.1 | 12.3 | 90.00 | 612.6 | 3,345.9 | 411.7 | 303.7 | 107.95 | 3.814 | | | | | | |

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well Qualls 3C-28H |
| Project: | DJ Wattenberg | TVD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Reference Site: | S28-T3N-R68W (Qualls) | MD Reference: | WELL @ 4970.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Qualls 3C-28H | 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 @ 4970.0ft (Original Well Elev)

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Qualls 3C-28H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.31°

