

# Cathedral Energy Services

## Planning Report

|                  |   |                                     |                               |
|------------------|---|-------------------------------------|-------------------------------|
| <b>Database:</b> | USA EDM 5000 Multi Users DB                   | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Company:</b>  | EnCana Oil & Gas (USA) Inc                    | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Project:</b>  | DJ Wattenberg                                 | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site:</b>     | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>North Reference:</b>             | True                          |
| <b>Well:</b>     | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | Hz  |                                     |                               |
| <b>Design:</b>   | Plan #4                                       |                                     |                               |

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

|                       |          |   |                 |                   |             |
|-----------------------|----------|---|-----------------|-------------------|-------------|
| Site                  |          | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) |                 |                   |             |
| Site Position:        |          | Northing:                                     | 1,265,219.42 ft | Latitude:         | 40.060530   |
| From:                 | Lat/Long | Easting:                                      | 3,126,139.27 ft | Longitude:        | -105.049370 |
| Position Uncertainty: | 0.0 ft   | Slot Radius:                                  | 13.200 in       | Grid Convergence: | 0.29 °      |

|                      |                          |        |                     |                 |               |             |
|----------------------|--------------------------|--------|---------------------|-----------------|---------------|-------------|
| Well                 | Woolley-Becky 2F-7H-E168 |        |                     |                 |               |             |
| Well Position        | +N/-S                    | 0.0 ft | Northing:           | 1,267,517.08 ft | Latitude:     | 40.066853   |
|                      | +E/-W                    | 0.0 ft | Easting:            | 3,125,017.86 ft | Longitude:    | -105.053335 |
| Position Uncertainty |                          | 0.0 ft | Wellhead Elevation: | ft              | Ground Level: | 4,994.0 ft  |

|                  |                   |                    |                    |                  |                       |
|------------------|-------------------|--------------------|--------------------|------------------|-----------------------|
| <b>Wellbore</b>  | Hz                |                    |                    |                  |                       |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination</b> | <b>Dip Angle</b> | <b>Field Strength</b> |
|                  |                   |                    | (°)                | (°)              | (nT)                  |
|                  | IGRF2010          | 6/28/2013          | 8.71               | 66.66            | 52,709                |

|                          |                         |              |                      |                  |
|--------------------------|-------------------------|--------------|----------------------|------------------|
| <b>Design</b>            | Plan #4                 |              |                      |                  |
| <b>Audit Notes:</b>      |                         |              |                      |                  |
| <b>Version:</b>          | <b>Phase:</b>           | PLAN         | <b>Tie On Depth:</b> | 0.0              |
| <b>Vertical Section:</b> | <b>Depth From (TVD)</b> | <b>+N/-S</b> | <b>+E/-W</b>         | <b>Direction</b> |
|                          | (ft)                    | (ft)         | (ft)                 | (°)              |
|                          | 0.0                     | 0.0          | 0.0                  | 0.00             |

| <b>Plan Sections</b> |                 |             |                     |            |            |                       |                      |                     |         |                     |
|----------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|----------------------|---------------------|---------|---------------------|
| 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    |                     |
| 1,445.9              | 11.46           | 82.30       | 1,438.3             | 15.3       | 113.2      | 1.00                  | 1.00                 | 0.00                | 82.30   |                     |
| 7,074.0              | 11.46           | 82.30       | 6,954.2             | 165.1      | 1,221.2    | 0.00                  | 0.00                 | 0.00                | 0.00    |                     |
| 7,957.7              | 90.00           | 0.50        | 7,500.0             | 736.8      | 1,335.7    | 10.00                 | 8.89                 | -9.26               | -81.96  |                     |
| 8,557.7              | 90.00           | 0.50        | 7,500.0             | 1,336.8    | 1,340.9    | 0.00                  | 0.00                 | 0.00                | 0.00    | Woolley-Becky 2F-7H |
| 9,557.7              | 90.00           | 0.50        | 7,500.0             | 2,336.8    | 1,349.7    | 0.00                  | 0.00                 | 0.00                | 0.00    |                     |
| 10,207.7             | 90.00           | 354.00      | 7,500.0             | 2,985.7    | 1,318.5    | 1.00                  | 0.00                 | -1.00               | -90.00  |                     |
| 11,807.7             | 90.00           | 354.00      | 7,500.0             | 4,576.9    | 1,151.3    | 0.00                  | 0.00                 | 0.00                | 0.00    |                     |
| 12,812.2             | 90.00           | 4.04        | 7,500.0             | 5,580.0    | 1,134.1    | 1.00                  | 0.00                 | 1.00                | 90.00   |                     |
| 14,341.7             | 90.00           | 4.04        | 7,500.0             | 7,105.6    | 1,242.0    | 0.00                  | 0.00                 | 0.00                | 0.00    | Woolley-Becky 2F-7H |

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| <b>Company:</b>  | EnCana Oil & Gas (USA) Inc                    | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Project:</b>  | DJ Wattenberg                                 | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site:</b>     | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>North Reference:</b>             | True                          |
| <b>Well:</b>     | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | Hz  |                                     |                               |
| <b>Design:</b>   | Plan #4                                       |                                     |                               |

### 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                 | KOP @ 300' MD         |
| 400.0               | 1.00            | 82.30       | 400.0               | 0.1        | 0.9        | 0.1                   | 1.00                  | 1.00                 | Fox Hills - BASE      |
| 500.0               | 2.00            | 82.30       | 500.0               | 0.5        | 3.5        | 0.5                   | 1.00                  | 1.00                 |                       |
| 600.0               | 3.00            | 82.30       | 599.9               | 1.1        | 7.8        | 1.1                   | 1.00                  | 1.00                 |                       |
| 700.0               | 4.00            | 82.30       | 699.7               | 1.9        | 13.8       | 1.9                   | 1.00                  | 1.00                 |                       |
| 800.0               | 5.00            | 82.30       | 799.4               | 2.9        | 21.6       | 2.9                   | 1.00                  | 1.00                 |                       |
| 900.0               | 6.00            | 82.30       | 898.9               | 4.2        | 31.1       | 4.2                   | 1.00                  | 1.00                 |                       |
| 1,000.0             | 7.00            | 82.30       | 998.3               | 5.7        | 42.3       | 5.7                   | 1.00                  | 1.00                 |                       |
| 1,100.0             | 8.00            | 82.30       | 1,097.4             | 7.5        | 55.3       | 7.5                   | 1.00                  | 1.00                 |                       |
| 1,200.0             | 9.00            | 82.30       | 1,196.3             | 9.4        | 69.9       | 9.4                   | 1.00                  | 1.00                 |                       |
| 1,300.0             | 10.00           | 82.30       | 1,294.9             | 11.7       | 86.3       | 11.7                  | 1.00                  | 1.00                 |                       |
| 1,400.0             | 11.00           | 82.30       | 1,393.3             | 14.1       | 104.3      | 14.1                  | 1.00                  | 1.00                 |                       |
| 1,445.9             | 11.46           | 82.30       | 1,438.3             | 15.3       | 113.2      | 15.3                  | 1.00                  | 1.00                 | EOB; 11.46° Inc       |
| 1,500.0             | 11.46           | 82.30       | 1,491.3             | 16.7       | 123.8      | 16.7                  | 0.00                  | 0.00                 |                       |
| 1,600.0             | 11.46           | 82.30       | 1,589.3             | 19.4       | 143.5      | 19.4                  | 0.00                  | 0.00                 |                       |
| 1,700.0             | 11.46           | 82.30       | 1,687.3             | 22.1       | 163.2      | 22.1                  | 0.00                  | 0.00                 |                       |
| 1,800.0             | 11.46           | 82.30       | 1,785.3             | 24.7       | 182.9      | 24.7                  | 0.00                  | 0.00                 |                       |
| 1,900.0             | 11.46           | 82.30       | 1,883.3             | 27.4       | 202.6      | 27.4                  | 0.00                  | 0.00                 |                       |
| 2,000.0             | 11.46           | 82.30       | 1,981.3             | 30.0       | 222.3      | 30.0                  | 0.00                  | 0.00                 |                       |
| 2,100.0             | 11.46           | 82.30       | 2,079.3             | 32.7       | 242.0      | 32.7                  | 0.00                  | 0.00                 |                       |
| 2,200.0             | 11.46           | 82.30       | 2,177.3             | 35.4       | 261.6      | 35.4                  | 0.00                  | 0.00                 |                       |
| 2,300.0             | 11.46           | 82.30       | 2,275.4             | 38.0       | 281.3      | 38.0                  | 0.00                  | 0.00                 |                       |
| 2,400.0             | 11.46           | 82.30       | 2,373.4             | 40.7       | 301.0      | 40.7                  | 0.00                  | 0.00                 |                       |
| 2,500.0             | 11.46           | 82.30       | 2,471.4             | 43.4       | 320.7      | 43.4                  | 0.00                  | 0.00                 |                       |
| 2,600.0             | 11.46           | 82.30       | 2,569.4             | 46.0       | 340.4      | 46.0                  | 0.00                  | 0.00                 |                       |
| 2,700.0             | 11.46           | 82.30       | 2,667.4             | 48.7       | 360.1      | 48.7                  | 0.00                  | 0.00                 |                       |
| 2,800.0             | 11.46           | 82.30       | 2,765.4             | 51.3       | 379.8      | 51.3                  | 0.00                  | 0.00                 |                       |
| 2,900.0             | 11.46           | 82.30       | 2,863.4             | 54.0       | 399.5      | 54.0                  | 0.00                  | 0.00                 |                       |
| 3,000.0             | 11.46           | 82.30       | 2,961.4             | 56.7       | 419.1      | 56.7                  | 0.00                  | 0.00                 |                       |
| 3,100.0             | 11.46           | 82.30       | 3,059.4             | 59.3       | 438.8      | 59.3                  | 0.00                  | 0.00                 |                       |
| 3,200.0             | 11.46           | 82.30       | 3,157.4             | 62.0       | 458.5      | 62.0                  | 0.00                  | 0.00                 |                       |
| 3,300.0             | 11.46           | 82.30       | 3,255.4             | 64.6       | 478.2      | 64.6                  | 0.00                  | 0.00                 |                       |
| 3,400.0             | 11.46           | 82.30       | 3,353.4             | 67.3       | 497.9      | 67.3                  | 0.00                  | 0.00                 |                       |
| 3,500.0             | 11.46           | 82.30       | 3,451.4             | 70.0       | 517.6      | 70.0                  | 0.00                  | 0.00                 |                       |
| 3,600.0             | 11.46           | 82.30       | 3,549.4             | 72.6       | 537.3      | 72.6                  | 0.00                  | 0.00                 |                       |
| 3,700.0             | 11.46           | 82.30       | 3,647.4             | 75.3       | 557.0      | 75.3                  | 0.00                  | 0.00                 |                       |
| 3,800.0             | 11.46           | 82.30       | 3,745.5             | 77.9       | 576.6      | 77.9                  | 0.00                  | 0.00                 |                       |
| 3,900.0             | 11.46           | 82.30       | 3,843.5             | 80.6       | 596.3      | 80.6                  | 0.00                  | 0.00                 |                       |
| 4,000.0             | 11.46           | 82.30       | 3,941.5             | 83.3       | 616.0      | 83.3                  | 0.00                  | 0.00                 |                       |
| 4,100.0             | 11.46           | 82.30       | 4,039.5             | 85.9       | 635.7      | 85.9                  | 0.00                  | 0.00                 |                       |
| 4,200.0             | 11.46           | 82.30       | 4,137.5             | 88.6       | 655.4      | 88.6                  | 0.00                  | 0.00                 |                       |
| 4,300.0             | 11.46           | 82.30       | 4,235.5             | 91.3       | 675.1      | 91.3                  | 0.00                  | 0.00                 |                       |
| 4,400.0             | 11.46           | 82.30       | 4,333.5             | 93.9       | 694.8      | 93.9                  | 0.00                  | 0.00                 |                       |
| 4,500.0             | 11.46           | 82.30       | 4,431.5             | 96.6       | 714.5      | 96.6                  | 0.00                  | 0.00                 |                       |
| 4,506.6             | 11.46           | 82.30       | 4,438.0             | 96.8       | 715.8      | 96.8                  | 0.00                  | 0.00                 | Sussex                |
| 4,600.0             | 11.46           | 82.30       | 4,529.5             | 99.2       | 734.1      | 99.2                  | 0.00                  | 0.00                 |                       |
| 4,700.0             | 11.46           | 82.30       | 4,627.5             | 101.9      | 753.8      | 101.9                 | 0.00                  | 0.00                 |                       |
| 4,800.0             | 11.46           | 82.30       | 4,725.5             | 104.6      | 773.5      | 104.6                 | 0.00                  | 0.00                 |                       |
| 4,900.0             | 11.46           | 82.30       | 4,823.5             | 107.2      | 793.2      | 107.2                 | 0.00                  | 0.00                 |                       |

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|------------------|---|-------------------------------------|-------------------------------|
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| <b>Company:</b>  | EnCana Oil & Gas (USA) Inc                    | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Project:</b>  | DJ Wattenberg                                 | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site:</b>     | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>North Reference:</b>             | True                          |
| <b>Well:</b>     | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | Hz  |                                     |                               |
| <b>Design:</b>   | Plan #4                                       |                                     |                               |

### 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       |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|-----------------------------|
| 5,000.0             | 11.46           | 82.30       | 4,921.5             | 109.9      | 812.9      | 109.9                 | 0.00                  | 0.00                 |                             |
| 5,085.2             | 11.46           | 82.30       | 5,005.0             | 112.2      | 829.7      | 112.2                 | 0.00                  | 0.00                 | Shannon                     |
| 5,100.0             | 11.46           | 82.30       | 5,019.5             | 112.5      | 832.6      | 112.5                 | 0.00                  | 0.00                 |                             |
| 5,200.0             | 11.46           | 82.30       | 5,117.5             | 115.2      | 852.3      | 115.2                 | 0.00                  | 0.00                 |                             |
| 5,300.0             | 11.46           | 82.30       | 5,215.6             | 117.9      | 872.0      | 117.9                 | 0.00                  | 0.00                 |                             |
| 5,400.0             | 11.46           | 82.30       | 5,313.6             | 120.5      | 891.6      | 120.5                 | 0.00                  | 0.00                 |                             |
| 5,500.0             | 11.46           | 82.30       | 5,411.6             | 123.2      | 911.3      | 123.2                 | 0.00                  | 0.00                 |                             |
| 5,600.0             | 11.46           | 82.30       | 5,509.6             | 125.9      | 931.0      | 125.9                 | 0.00                  | 0.00                 |                             |
| 5,700.0             | 11.46           | 82.30       | 5,607.6             | 128.5      | 950.7      | 128.5                 | 0.00                  | 0.00                 |                             |
| 5,800.0             | 11.46           | 82.30       | 5,705.6             | 131.2      | 970.4      | 131.2                 | 0.00                  | 0.00                 |                             |
| 5,900.0             | 11.46           | 82.30       | 5,803.6             | 133.8      | 990.1      | 133.8                 | 0.00                  | 0.00                 |                             |
| 6,000.0             | 11.46           | 82.30       | 5,901.6             | 136.5      | 1,009.8    | 136.5                 | 0.00                  | 0.00                 |                             |
| 6,100.0             | 11.46           | 82.30       | 5,999.6             | 139.2      | 1,029.5    | 139.2                 | 0.00                  | 0.00                 |                             |
| 6,200.0             | 11.46           | 82.30       | 6,097.6             | 141.8      | 1,049.1    | 141.8                 | 0.00                  | 0.00                 |                             |
| 6,300.0             | 11.46           | 82.30       | 6,195.6             | 144.5      | 1,068.8    | 144.5                 | 0.00                  | 0.00                 |                             |
| 6,400.0             | 11.46           | 82.30       | 6,293.6             | 147.1      | 1,088.5    | 147.1                 | 0.00                  | 0.00                 |                             |
| 6,500.0             | 11.46           | 82.30       | 6,391.6             | 149.8      | 1,108.2    | 149.8                 | 0.00                  | 0.00                 |                             |
| 6,600.0             | 11.46           | 82.30       | 6,489.6             | 152.5      | 1,127.9    | 152.5                 | 0.00                  | 0.00                 |                             |
| 6,639.1             | 11.46           | 82.30       | 6,528.0             | 153.5      | 1,135.6    | 153.5                 | 0.00                  | 0.00                 | Teepee Buttes (*if present) |
| 6,700.0             | 11.46           | 82.30       | 6,587.6             | 155.1      | 1,147.6    | 155.1                 | 0.00                  | 0.00                 |                             |
| 6,800.0             | 11.46           | 82.30       | 6,685.7             | 157.8      | 1,167.3    | 157.8                 | 0.00                  | 0.00                 |                             |
| 6,900.0             | 11.46           | 82.30       | 6,783.7             | 160.4      | 1,187.0    | 160.4                 | 0.00                  | 0.00                 |                             |
| 7,000.0             | 11.46           | 82.30       | 6,881.7             | 163.1      | 1,206.6    | 163.1                 | 0.00                  | 0.00                 |                             |
| 7,074.0             | 11.46           | 82.30       | 6,954.2             | 165.1      | 1,221.2    | 165.1                 | 0.00                  | 0.00                 | Start 10° Build/Turn        |
| 7,100.0             | 12.10           | 69.91       | 6,979.6             | 166.4      | 1,226.3    | 166.4                 | 10.00                 | 2.45                 |                             |
| 7,200.0             | 18.12           | 38.31       | 7,076.3             | 182.2      | 1,245.9    | 182.2                 | 10.00                 | 6.03                 |                             |
| 7,300.0             | 26.61           | 24.11       | 7,168.8             | 214.9      | 1,264.7    | 214.9                 | 10.00                 | 8.48                 |                             |
| 7,400.0             | 35.84           | 16.63       | 7,254.2             | 263.5      | 1,282.3    | 263.5                 | 10.00                 | 9.23                 |                             |
| 7,485.8             | 44.01           | 12.49       | 7,320.0             | 316.8      | 1,295.9    | 316.8                 | 10.00                 | 9.51                 | Sharon Springs              |
| 7,500.0             | 45.37           | 11.93       | 7,330.1             | 326.6      | 1,298.0    | 326.6                 | 10.00                 | 9.60                 |                             |
| 7,561.6             | 51.31           | 9.75        | 7,371.0             | 371.7      | 1,306.6    | 371.7                 | 10.00                 | 9.65                 | Niobrara                    |
| 7,600.0             | 55.03           | 8.57        | 7,394.0             | 402.1      | 1,311.5    | 402.1                 | 10.00                 | 9.69                 |                             |
| 7,700.0             | 64.77           | 5.93        | 7,444.1             | 487.8      | 1,322.3    | 487.8                 | 10.00                 | 9.74                 |                             |
| 7,800.0             | 74.54           | 3.68        | 7,478.8             | 581.1      | 1,330.1    | 581.1                 | 10.00                 | 9.78                 |                             |
| 7,834.2             | 77.89           | 2.97        | 7,487.0             | 614.3      | 1,332.0    | 614.3                 | 10.00                 | 9.79                 | B Chalk                     |
| 7,900.0             | 84.34           | 1.64        | 7,497.2             | 679.2      | 1,334.6    | 679.2                 | 10.00                 | 9.80                 |                             |
| 7,957.7             | 90.00           | 0.50        | 7,500.0             | 736.8      | 1,335.7    | 736.8                 | 10.00                 | 9.80                 | LP @ 7500' TVD; 90°         |
| 8,000.0             | 90.00           | 0.50        | 7,500.0             | 779.1      | 1,336.1    | 779.1                 | 0.00                  | 0.00                 |                             |
| 8,100.0             | 90.00           | 0.50        | 7,500.0             | 879.1      | 1,337.0    | 879.1                 | 0.00                  | 0.00                 |                             |
| 8,200.0             | 90.00           | 0.50        | 7,500.0             | 979.1      | 1,337.8    | 979.1                 | 0.00                  | 0.00                 |                             |
| 8,300.0             | 90.00           | 0.50        | 7,500.0             | 1,079.1    | 1,338.7    | 1,079.1               | 0.00                  | 0.00                 |                             |
| 8,400.0             | 90.00           | 0.50        | 7,500.0             | 1,179.1    | 1,339.6    | 1,179.1               | 0.00                  | 0.00                 |                             |
| 8,500.0             | 90.00           | 0.50        | 7,500.0             | 1,279.1    | 1,340.4    | 1,279.1               | 0.00                  | 0.00                 |                             |
| 8,557.7             | 90.00           | 0.50        | 7,500.0             | 1,336.8    | 1,340.9    | 1,336.8               | 0.00                  | 0.00                 | Hold 0.50° Azi              |
| 8,600.0             | 90.00           | 0.50        | 7,500.0             | 1,379.1    | 1,341.3    | 1,379.1               | 0.00                  | 0.00                 |                             |
| 8,700.0             | 90.00           | 0.50        | 7,500.0             | 1,479.1    | 1,342.2    | 1,479.1               | 0.00                  | 0.00                 |                             |
| 8,800.0             | 90.00           | 0.50        | 7,500.0             | 1,579.1    | 1,343.1    | 1,579.1               | 0.00                  | 0.00                 |                             |
| 8,900.0             | 90.00           | 0.50        | 7,500.0             | 1,679.1    | 1,343.9    | 1,679.1               | 0.00                  | 0.00                 |                             |
| 9,000.0             | 90.00           | 0.50        | 7,500.0             | 1,779.1    | 1,344.8    | 1,779.1               | 0.00                  | 0.00                 |                             |
| 9,100.0             | 90.00           | 0.50        | 7,500.0             | 1,879.1    | 1,345.7    | 1,879.1               | 0.00                  | 0.00                 |                             |
| 9,200.0             | 90.00           | 0.50        | 7,500.0             | 1,979.1    | 1,346.6    | 1,979.1               | 0.00                  | 0.00                 |                             |
| 9,300.0             | 90.00           | 0.50        | 7,500.0             | 2,079.1    | 1,347.4    | 2,079.1               | 0.00                  | 0.00                 |                             |

# Cathedral Energy Services

## Planning Report

|                  |   |                                     |                               |
|------------------|---|-------------------------------------|-------------------------------|
| <b>Database:</b> | USA EDM 5000 Multi Users DB                   | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Company:</b>  | EnCana Oil & Gas (USA) Inc                    | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Project:</b>  | DJ Wattenberg                                 | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site:</b>     | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>North Reference:</b>             | True                          |
| <b>Well:</b>     | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | Hz  |                                     |                               |
| <b>Design:</b>   | Plan #4                                       |                                     |                               |

| 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 |
| 9,400.0             | 90.00           | 0.50        | 7,500.0             | 2,179.0    | 1,348.3    | 2,179.0               | 0.00                  | 0.00                 |                       |
| 9,500.0             | 90.00           | 0.50        | 7,500.0             | 2,279.0    | 1,349.2    | 2,279.0               | 0.00                  | 0.00                 |                       |
| 9,557.7             | 90.00           | 0.50        | 7,500.0             | 2,336.8    | 1,349.7    | 2,336.8               | 0.00                  | 0.00                 | Start 1° Turn         |
| 9,600.0             | 90.00           | 0.08        | 7,500.0             | 2,379.0    | 1,349.9    | 2,379.0               | 1.00                  | 0.00                 |                       |
| 9,700.0             | 90.00           | 359.08      | 7,500.0             | 2,479.0    | 1,349.1    | 2,479.0               | 1.00                  | 0.00                 |                       |
| 9,800.0             | 90.00           | 358.08      | 7,500.0             | 2,579.0    | 1,346.7    | 2,579.0               | 1.00                  | 0.00                 |                       |
| 9,900.0             | 90.00           | 357.08      | 7,500.0             | 2,678.9    | 1,342.4    | 2,678.9               | 1.00                  | 0.00                 |                       |
| 10,000.0            | 90.00           | 356.08      | 7,500.0             | 2,778.7    | 1,336.5    | 2,778.7               | 1.00                  | 0.00                 |                       |
| 10,100.0            | 90.00           | 355.08      | 7,500.0             | 2,878.4    | 1,328.8    | 2,878.4               | 1.00                  | 0.00                 |                       |
| 10,200.0            | 90.00           | 354.08      | 7,500.0             | 2,978.0    | 1,319.3    | 2,978.0               | 1.00                  | 0.00                 |                       |
| 10,207.7            | 90.00           | 354.00      | 7,500.0             | 2,985.7    | 1,318.5    | 2,985.7               | 1.00                  | 0.00                 | EOT; 354° Inc         |
| 10,300.0            | 90.00           | 354.00      | 7,500.0             | 3,077.4    | 1,308.9    | 3,077.4               | 0.00                  | 0.00                 |                       |
| 10,400.0            | 90.00           | 354.00      | 7,500.0             | 3,176.9    | 1,298.4    | 3,176.9               | 0.00                  | 0.00                 |                       |
| 10,500.0            | 90.00           | 354.00      | 7,500.0             | 3,276.3    | 1,288.0    | 3,276.3               | 0.00                  | 0.00                 |                       |
| 10,600.0            | 90.00           | 354.00      | 7,500.0             | 3,375.8    | 1,277.5    | 3,375.8               | 0.00                  | 0.00                 |                       |
| 10,700.0            | 90.00           | 354.00      | 7,500.0             | 3,475.3    | 1,267.0    | 3,475.3               | 0.00                  | 0.00                 |                       |
| 10,800.0            | 90.00           | 354.00      | 7,500.0             | 3,574.7    | 1,256.6    | 3,574.7               | 0.00                  | 0.00                 |                       |
| 10,900.0            | 90.00           | 354.00      | 7,500.0             | 3,674.2    | 1,246.1    | 3,674.2               | 0.00                  | 0.00                 |                       |
| 11,000.0            | 90.00           | 354.00      | 7,500.0             | 3,773.6    | 1,235.7    | 3,773.6               | 0.00                  | 0.00                 |                       |
| 11,100.0            | 90.00           | 354.00      | 7,500.0             | 3,873.1    | 1,225.2    | 3,873.1               | 0.00                  | 0.00                 |                       |
| 11,200.0            | 90.00           | 354.00      | 7,500.0             | 3,972.5    | 1,214.8    | 3,972.5               | 0.00                  | 0.00                 |                       |
| 11,300.0            | 90.00           | 354.00      | 7,500.0             | 4,072.0    | 1,204.3    | 4,072.0               | 0.00                  | 0.00                 |                       |
| 11,400.0            | 90.00           | 354.00      | 7,500.0             | 4,171.4    | 1,193.9    | 4,171.4               | 0.00                  | 0.00                 |                       |
| 11,500.0            | 90.00           | 354.00      | 7,500.0             | 4,270.9    | 1,183.4    | 4,270.9               | 0.00                  | 0.00                 |                       |
| 11,600.0            | 90.00           | 354.00      | 7,500.0             | 4,370.3    | 1,173.0    | 4,370.3               | 0.00                  | 0.00                 |                       |
| 11,700.0            | 90.00           | 354.00      | 7,500.0             | 4,469.8    | 1,162.5    | 4,469.8               | 0.00                  | 0.00                 |                       |
| 11,800.0            | 90.00           | 354.00      | 7,500.0             | 4,569.2    | 1,152.1    | 4,569.2               | 0.00                  | 0.00                 |                       |
| 11,807.7            | 90.00           | 354.00      | 7,500.0             | 4,576.9    | 1,151.3    | 4,576.9               | 0.00                  | 0.00                 | Start 1° Turn         |
| 11,900.0            | 90.00           | 354.92      | 7,500.0             | 4,668.8    | 1,142.4    | 4,668.8               | 1.00                  | 0.00                 |                       |
| 12,000.0            | 90.00           | 355.92      | 7,500.0             | 4,768.4    | 1,134.4    | 4,768.4               | 1.00                  | 0.00                 |                       |
| 12,100.0            | 90.00           | 356.92      | 7,500.0             | 4,868.2    | 1,128.1    | 4,868.2               | 1.00                  | 0.00                 |                       |
| 12,200.0            | 90.00           | 357.92      | 7,500.0             | 4,968.1    | 1,123.6    | 4,968.1               | 1.00                  | 0.00                 |                       |
| 12,300.0            | 90.00           | 358.92      | 7,500.0             | 5,068.1    | 1,120.9    | 5,068.1               | 1.00                  | 0.00                 |                       |
| 12,400.0            | 90.00           | 359.92      | 7,500.0             | 5,168.1    | 1,119.9    | 5,168.1               | 1.00                  | 0.00                 |                       |
| 12,500.0            | 90.00           | 0.92        | 7,500.0             | 5,268.1    | 1,120.6    | 5,268.1               | 1.00                  | 0.00                 |                       |
| 12,600.0            | 90.00           | 1.92        | 7,500.0             | 5,368.0    | 1,123.1    | 5,368.0               | 1.00                  | 0.00                 |                       |
| 12,700.0            | 90.00           | 2.92        | 7,500.0             | 5,468.0    | 1,127.3    | 5,468.0               | 1.00                  | 0.00                 |                       |
| 12,800.0            | 90.00           | 3.92        | 7,500.0             | 5,567.8    | 1,133.3    | 5,567.8               | 1.00                  | 0.00                 |                       |
| 12,812.2            | 90.00           | 4.04        | 7,500.0             | 5,580.0    | 1,134.1    | 5,580.0               | 1.00                  | 0.00                 | EOT; 4.04° Azi        |
| 12,900.0            | 90.00           | 4.04        | 7,500.0             | 5,667.5    | 1,140.3    | 5,667.5               | 0.00                  | 0.00                 |                       |
| 13,000.0            | 90.00           | 4.04        | 7,500.0             | 5,767.3    | 1,147.4    | 5,767.3               | 0.00                  | 0.00                 |                       |
| 13,100.0            | 90.00           | 4.04        | 7,500.0             | 5,867.0    | 1,154.4    | 5,867.0               | 0.00                  | 0.00                 |                       |
| 13,200.0            | 90.00           | 4.04        | 7,500.0             | 5,966.8    | 1,161.5    | 5,966.8               | 0.00                  | 0.00                 |                       |
| 13,300.0            | 90.00           | 4.04        | 7,500.0             | 6,066.5    | 1,168.6    | 6,066.5               | 0.00                  | 0.00                 |                       |
| 13,400.0            | 90.00           | 4.04        | 7,500.0             | 6,166.3    | 1,175.6    | 6,166.3               | 0.00                  | 0.00                 |                       |
| 13,500.0            | 90.00           | 4.04        | 7,500.0             | 6,266.0    | 1,182.7    | 6,266.0               | 0.00                  | 0.00                 |                       |
| 13,600.0            | 90.00           | 4.04        | 7,500.0             | 6,365.8    | 1,189.7    | 6,365.8               | 0.00                  | 0.00                 |                       |
| 13,700.0            | 90.00           | 4.04        | 7,500.0             | 6,465.5    | 1,196.8    | 6,465.5               | 0.00                  | 0.00                 |                       |
| 13,800.0            | 90.00           | 4.04        | 7,500.0             | 6,565.3    | 1,203.8    | 6,565.3               | 0.00                  | 0.00                 |                       |
| 13,900.0            | 90.00           | 4.04        | 7,500.0             | 6,665.0    | 1,210.9    | 6,665.0               | 0.00                  | 0.00                 |                       |
| 14,000.0            | 90.00           | 4.04        | 7,500.0             | 6,764.8    | 1,217.9    | 6,764.8               | 0.00                  | 0.00                 |                       |
| 14,100.0            | 90.00           | 4.04        | 7,500.0             | 6,864.5    | 1,225.0    | 6,864.5               | 0.00                  | 0.00                 |                       |

# Cathedral Energy Services

## Planning Report

|                  |   |                                     |                               |
|------------------|---|-------------------------------------|-------------------------------|
| <b>Database:</b> | USA EDM 5000 Multi Users DB                   | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Company:</b>  | EnCana Oil & Gas (USA) Inc                    | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Project:</b>  | DJ Wattenberg                                 | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site:</b>     | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>North Reference:</b>             | True                          |
| <b>Well:</b>     | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Wellbore:</b> | Hz  |                                     |                               |
| <b>Design:</b>   | Plan #4                                       |                                     |                               |

| 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 |
| 14,200.0            | 90.00           | 4.04        | 7,500.0             | 6,964.3    | 1,232.0    | 6,964.3               | 0.00                  | 0.00                 |                       |
| 14,300.0            | 90.00           | 4.04        | 7,500.0             | 7,064.0    | 1,239.1    | 7,064.0               | 0.00                  | 0.00                 |                       |
| 14,341.7            | 90.00           | 4.04        | 7,500.0             | 7,105.6    | 1,242.0    | 7,105.6               | 0.00                  | 0.00                 | TD at 14341.7         |

| Targets  |               |              |          |            |            |               |              |           |             |
|--|---------------|--------------|----------|------------|------------|---------------|--------------|-----------|-------------|
| Target Name<br>- hit/miss target<br>- Shape  | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude  | Longitude   |
| Woolley-Becky 2F-7H-E<br>- plan hits target center<br>- Point  | 0.00          | 0.00         | 7,500.0  | 7,105.6    | 1,242.0    | 1,274,628.90  | 3,126,224.08 | 40.086359 | -105.048896 |
| Woolley-Becky 2F-7H-E<br>- plan hits target center<br>- Point  | 0.00          | 0.00         | 7,500.0  | 1,336.8    | 1,340.9    | 1,268,860.63  | 3,126,352.05 | 40.070523 | -105.048544 |
| Woolley-Becky 2F-7H-E<br>- plan misses target center by 35.0ft at 14341.7ft MD (7500.0 TVD, 7105.6 N, 1242.0 E)<br>- Point | 0.00          | 0.00         | 7,535.0  | 7,106.0    | 1,240.9    | 1,274,629.26  | 3,126,222.96 | 40.086360 | -105.048900 |

| Formations          |                     |                             |           |         |                   |  |
|---------------------|---------------------|-----------------------------|-----------|---------|-------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name                        | Lithology | Dip (°) | Dip Direction (°) |  |
| 400.0               | 400.0               | Fox Hills - BASE            |           |         |                   |  |
| 4,506.6             | 4,438.0             | Sussex                      |           |         |                   |  |
| 5,085.2             | 5,005.0             | Shannon                     |           |         |                   |  |
| 6,639.1             | 6,528.0             | Teepee Buttes (*if present) |           |         |                   |  |
| 7,485.8             | 7,320.0             | Sharon Springs              |           |         |                   |  |
| 7,561.6             | 7,371.0             | Niobrara                    |           |         |                   |  |
| 7,834.2             | 7,487.0             | B Chalk                     |           |         |                   |  |

| 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' MD        |
| 1,445.9             | 1,438.3             | 15.3              | 113.2      | EOB; 11.46° Inc      |
| 7,074.0             | 6,954.2             | 165.1             | 1,221.2    | Start 10° Build/Turn |
| 7,957.7             | 7,500.0             | 736.8             | 1,335.7    | LP @ 7500' TVD; 90°  |
| 8,557.7             | 7,500.0             | 1,336.8           | 1,340.9    | Hold 0.50° Azi       |
| 9,557.7             | 7,500.0             | 2,336.8           | 1,349.7    | Start 1° Turn        |
| 10,207.7            | 7,500.0             | 2,985.7           | 1,318.5    | EOT; 354° Inc        |
| 11,807.7            | 7,500.0             | 4,576.9           | 1,151.3    | Start 1° Turn        |
| 12,812.2            | 7,500.0             | 5,580.0           | 1,134.1    | EOT; 4.04° Azi       |
| 14,341.7            | 7,500.0             | 7,105.6           | 1,242.0    | TD at 14341.7        |

# **EnCana Oil & Gas (USA) Inc**

**DJ Wattenberg**

**S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)**

**Woolley-Becky 2F-7H-E168**

**Hz**

**Plan #4**

## **Anticollision Report**

**24 June, 2015**

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Reference                    | Plan #4   |                |                     |
|------------------------------|---|----------------|---------------------|
| 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 ellipse separation of 1,000.0ft                             | Error Surface: | Elliptical Conic    |
| Warning Levels Evaluated at: | 2.00 Sigma  |                |                     |

|                            |                |                          |                  |                    |  |
|----------------------------|----------------|--------------------------|------------------|--------------------|--|
| <b>Survey Tool Program</b> | <b>Date</b>    | 6/24/2015                |                  |                    |  |
| <b>From (ft)</b>           | <b>To (ft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b> |  |
| 0.0                        | 14,341.7       | Plan #4 (Hz)             | Geolink MWD      | Geolink MWD        |  |



# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | 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                  |                               |                            |                               |                                |                   |                 |
| S18-T1N-R68W (Erie Woolley)                      |                               |                            |                               |                                |                   |                 |
| Erie-Woolley 4A-18H-I168 - Hz - Plan #2          | 9,006.2                       | 15,498.1                   | 562.4                         | 386.3                          | 3.192             | CC, ES, SF      |
| Erie-Woolley 4B-18H-I168 - Hz - Plan #2          | 9,009.3                       | 15,664.3                   | 944.5                         | 773.6                          | 5.526             | CC, ES          |
| Erie-Woolley 4B-18H-I168 - Hz - Plan #2          | 9,100.0                       | 15,664.3                   | 948.8                         | 776.9                          | 5.521             | SF              |
| Erie-Woolley 4C-18H-I168 - Hz - Plan #2          |                               |                            |                               |                                |                   | Out of range    |
| Erie-Woolley 4D-18H-I168 - Hz - Plan #2          |                               |                            |                               |                                |                   | Out of range    |
| WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE    |                               |                            |                               |                                |                   | Out of range    |
| WOOLLEY 21-7 (EXISTING) - ENCANA WELL - NO SU    | 8,796.7                       | 7,549.0                    | 136.8                         | 91.6                           | 3.025             | CC, ES, SF      |
| WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE    | 7,279.1                       | 7,423.6                    | 118.4                         | 75.4                           | 2.755             | CC, ES          |
| WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE    | 7,300.0                       | 7,442.6                    | 118.9                         | 75.7                           | 2.753             | SF              |
| WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVE   | 4,413.1                       | 4,694.4                    | 252.6                         | 214.2                          | 6.574             | CC, ES, SF      |
| WOOLLEY 31-7 (EXISTING) - ENCANA WELL - PLAN O   |                               |                            |                               |                                |                   | Out of range    |
| WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVE   | 9,391.3                       | 7,628.6                    | 364.6                         | 306.2                          | 6.241             | CC              |
| WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVE   | 9,400.0                       | 7,628.8                    | 364.7                         | 305.5                          | 6.158             | ES              |
| WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVE   | 9,500.0                       | 7,631.2                    | 380.5                         | 314.0                          | 5.721             | SF              |
| WOOLLEY 4-2-7 (EXISTING) - ENCANA WELL - PLAN    | 8,142.4                       | 7,639.0                    | 525.4                         | 489.9                          | 14.771            | CC, ES          |
| WOOLLEY 4-2-7 (EXISTING) - ENCANA WELL - PLAN    | 8,400.0                       | 7,639.0                    | 585.2                         | 538.0                          | 12.405            | SF              |
| WOOLLEY 6-0-7 (EXISTING) - ENCANA WELL - PLAN    |                               |                            |                               |                                |                   | Out of range    |
| WOOLLEY A 1-7 (EXISTING) - ENCANA WELL - NO SU   |                               |                            |                               |                                |                   | Out of range    |
| S1-T1N-R69W (Bailey)                             |                               |                            |                               |                                |                   |                 |
| Bailey 8-8-1 - DD - Plan #1                      |                               |                            |                               |                                |                   | Out of range    |
| S6-T1N-R68W (Bearden)                            |                               |                            |                               |                                |                   |                 |
| Bearden #1 (Existing Well) - Existing - Existing | 10,695.5                      | 7,470.9                    | 125.3                         | 50.8                           | 1.681             | CC, ES, SF      |
| Bearden 13-6 (Existing Well) - DD - DD           |                               |                            |                               |                                |                   | Out of range    |
| Bearden 14-6(Existing Well) - DD - DD            |                               |                            |                               |                                |                   | Out of range    |
| Bearden 24-6 - DD - Plan #1                      | 10,100.0                      | 7,557.8                    | 99.7                          | 26.0                           | 1.353             | Level 3, ES, SF |
| Bearden 24-6 - DD - Plan #1                      | 10,121.7                      | 7,557.8                    | 97.3                          | 27.2                           | 1.387             | Level 3, CC     |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

### Summary

| Site Name                                       | Reference<br>Measured<br>Depth<br>(ft) | Offset<br>Measured<br>Depth<br>(ft) | Distance<br>Between<br>Centres<br>(ft) | Distance<br>Between<br>Ellipses<br>(ft) | Separation<br>Factor | Warning         |
|---|--|-------------------------------------|--|---|----------------------|-----------------|
| Offset Well - Wellbore - Design                 |  |                                     |  |   |                      |                 |
| S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)   |  |                                     |  |   |                      |                 |
| BEARDEN 0-6-6 (EXISTING) - ENCANA WELL - SURVE  |  |                                     |  |   |                      | Out of range    |
| BEARDEN 1 (EXISTING) - ENCANA WELL - SURVEYS    | 11,000.0                               | 7,469.7                             | 335.2                                  | 252.8                                   | 4.071                | ES, SF          |
| BEARDEN 1 (EXISTING) - ENCANA WELL - SURVEYS    | 11,035.3                               | 7,470.0                             | 333.3                                  | 252.9                                   | 4.145                | CC              |
| BEARDEN 13-6 (EXISTING) - ENCANA WELL - SURVE   |  |                                     |  |   |                      | Out of range    |
| BEARDEN 14-6 (EXISTING) - ENCANA WELL - SURVE   |  |                                     |  |   |                      | Out of range    |
| BEARDEN 23-6 (EXISTING) - ENCANA WELL - GYRO    | 11,575.6                               | 7,462.7                             | 106.1                                  | 16.4                                    | 1.183                | Level 2, CC     |
| BEARDEN 23-6 (EXISTING) - ENCANA WELL - GYRO    | 11,600.0                               | 7,463.9                             | 108.9                                  | 14.4                                    | 1.153                | Level 2, ES, SF |
| BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - PLAN O | 12,096.1                               | 7,610.5                             | 517.6                                  | 406.0                                   | 4.636                | CC, ES, SF      |
| BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVE  | 9,400.0                                | 7,665.7                             | 785.4                                  | 713.7                                   | 10.949               | SF              |
| BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVE  | 9,492.0                                | 7,665.8                             | 780.0                                  | 709.6                                   | 11.074               | CC, ES          |
| BECKY 2-6 (EXISTING) - NOBLE WELL - NO SURVEYS  | 13,493.9                               | 7,453.0                             | 482.2                                  | 355.6                                   | 3.809                | CC, ES, SF      |
| BECKY 4 (EXISTING) - MARTIN EXP WELL - NO SURV  | 12,707.9                               | 7,457.0                             | 1,057.3                                | 944.7                                   | 9.388                | CC, ES, SF      |
| BECKY 5-6 (EXISTING) - FOUNDATION WELL - NO SU  |  |                                     |  |   |                      | Out of range    |
| BECKY 7-6 (EXISTING) - NOBLE WELL - NO SURVEYS  | 12,827.6                               | 7,454.0                             | 258.6                                  | 143.7                                   | 2.250                | CC, ES, SF      |
| BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WELL - S  | 13,590.2                               | 7,571.5                             | 844.1                                  | 711.1                                   | 6.347                | CC              |
| BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WELL - S  | 13,600.0                               | 7,571.8                             | 844.2                                  | 710.9                                   | 6.335                | ES              |
| BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WELL - S  | 13,700.0                               | 7,573.8                             | 851.2                                  | 716.4                                   | 6.311                | SF              |
| BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WELL - S  | 10,725.9                               | 7,610.0                             | 749.6                                  | 669.6                                   | 9.376                | CC, ES          |
| BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WELL - S  | 10,900.0                               | 7,613.1                             | 769.5                                  | 682.6                                   | 8.859                | SF              |
| Morgan Hills 1A-7H-A168 - HZ - Plan #2          | 8,753.0                                | 8,123.8                             | 1,045.2                                | 998.3                                   | 22.281               | CC              |
| Morgan Hills 1A-7H-A168 - HZ - Plan #2          | 8,800.0                                | 8,089.4                             | 1,045.5                                | 997.7                                   | 21.894               | ES              |
| Morgan Hills 1A-7H-A168 - HZ - Plan #2          | 8,900.0                                | 8,017.1                             | 1,048.0                                | 998.4                                   | 21.123               | SF              |
| Morgan Hills 1B-7H-A168 - HZ - Plan #2          |  |                                     |  |   |                      | Out of range    |
| Morgan Hills 1C-7H-A168 - HZ - Plan #2          |  |                                     |  |   |                      | Out of range    |
| Morgan Hills 1D-7H-A168 - HZ - Plan #2          |  |                                     |  |   |                      | Out of range    |
| Thomas 7-12 (Existing) - Existing - NO SURVEYS  | 300.0                                  | 288.0                               | 987.6                                  | 986.6                                   | 983.932              | CC              |
| Thomas 7-12 (Existing) - Existing - NO SURVEYS  | 400.0                                  | 388.0                               | 987.8                                  | 986.5                                   | 729.858              | ES              |
| Thomas 7-12 (Existing) - Existing - NO SURVEYS  | 1,100.0                                | 1,085.4                             | 1,002.2                                | 998.1                                   | 246.562              | SF              |
| THOMAS K UNIT 1 (EXISTING) - EXISTING - NO SURV |  |                                     |  |   |                      | Out of range    |
| WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE   |  |                                     |  |   |                      | Out of range    |
| WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU   | 300.0                                  | 388.0                               | 174.1                                  | 172.9                                   | 147.736              | CC, ES          |
| WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU   | 1,600.0                                | 1,677.3                             | 280.7                                  | 274.6                                   | 46.495               | SF              |
| WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO    | 8,800.0                                | 7,558.5                             | 200.8                                  | 152.6                                   | 4.171                | ES, SF          |
| WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO    | 8,829.7                                | 7,559.4                             | 198.6                                  | 152.8                                   | 4.336                | CC              |
| WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE   | 7,279.1                                | 7,423.6                             | 118.4                                  | 75.4                                    | 2.755                | CC, ES          |
| WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE   | 7,300.0                                | 7,442.6                             | 118.9                                  | 75.7                                    | 2.754                | SF              |
| WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVE  | 4,413.1                                | 4,694.4                             | 252.6                                  | 214.2                                   | 6.574                | CC, ES, SF      |
| WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVE  | 9,391.2                                | 7,628.6                             | 364.6                                  | 306.2                                   | 6.241                | CC              |
| WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVE  | 9,400.0                                | 7,628.8                             | 364.7                                  | 305.5                                   | 6.158                | ES              |
| WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVE  | 9,500.0                                | 7,631.2                             | 380.5                                  | 314.0                                   | 5.721                | SF              |
| WOOLLEY A 1-7 (EXISTING) - ENCANA WELL - NO SU  |  |                                     |  |   |                      | Out of range    |
| WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY  | 7,900.0                                | 7,566.8                             | 664.1                                  | 628.7                                   | 18.748               | SF              |
| WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY  | 8,046.4                                | 7,557.9                             | 648.4                                  | 614.6                                   | 19.185               | CC, ES          |
| Woolley-Becky 2A-7H-E168 - Hz - Plan #3         | 200.0                                  | 200.0                               | 37.5                                   | 36.9                                    | 57.458               | CC, ES          |
| Woolley-Becky 2A-7H-E168 - Hz - Plan #3         | 500.0                                  | 497.8                               | 47.9                                   | 46.2                                    | 28.189               | SF              |
| Woolley-Becky 2B-7H-E168 - Hz - Plan #3         | 300.0                                  | 300.0                               | 30.2                                   | 29.2                                    | 30.174               | CC, ES          |
| Woolley-Becky 2B-7H-E168 - Hz - Plan #3         | 500.0                                  | 499.1                               | 36.0                                   | 34.3                                    | 21.185               | SF              |
| Woolley-Becky 2C-7H-E168 - Hz - Plan #5         | 300.0                                  | 300.0                               | 22.7                                   | 21.7                                    | 22.632               | CC, ES          |
| Woolley-Becky 2C-7H-E168 - Hz - Plan #5         | 14,341.7                               | 14,585.5                            | 1,051.7                                | 807.0                                   | 4.298                | SF              |
| Woolley-Becky 2D-7H-E168 - Hz - Plan #5         | 300.0                                  | 300.0                               | 15.1                                   | 14.1                                    | 15.090               | CC, ES          |
| Woolley-Becky 2D-7H-E168 - Hz - Plan #5         | 14,300.0                               | 14,435.0                            | 697.7                                  | 444.1                                   | 2.751                | SF              |
| Woolley-Becky 2E-7H-E168 - Hz - Plan #3         | 300.0                                  | 300.0                               | 7.6                                    | 6.6                                     | 7.552                | CC, ES          |
| Woolley-Becky 2E-7H-E168 - Hz - Plan #3         | 14,300.0                               | 14,671.7                            | 422.6                                  | 211.9                                   | 2.005                | SF              |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

### Summary

| Site Name<br>Offset Well - Wellbore - Design  | Reference                 | Offset                    | Distance                   |                             | Separation | Warning |
|---|---------------------------|---------------------------|----------------------------|-----------------------------|------------|---------|
|   | Measured<br>Depth<br>(ft) | Measured<br>Depth<br>(ft) | Between<br>Centres<br>(ft) | Between<br>Ellipses<br>(ft) |            |         |
| S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) |                           |                           |                            |                             |            |         |
| Woolley-Becky 2G-7H-E168 - Hz - Plan #3       | 203.4                     | 203.4                     | 7.3                        | 6.6                         | 10.951     | CC      |
| Woolley-Becky 2G-7H-E168 - Hz - Plan #3       | 300.0                     | 299.9                     | 7.5                        | 6.5                         | 7.479      | ES      |
| Woolley-Becky 2G-7H-E168 - Hz - Plan #3       | 14,341.7                  | 14,848.2                  | 424.4                      | 213.4                       | 2.012      | SF      |
| Woolley-Becky 2H-7H-E168 - Hz - Plan #4       | 200.0                     | 200.0                     | 14.8                       | 14.2                        | 22.725     | CC, ES  |
| Woolley-Becky 2H-7H-E168 - Hz - Plan #4       | 14,300.0                  | 14,606.2                  | 658.8                      | 402.1                       | 2.566      | SF      |
| Woolley-Sosa 2A-7H-E168 - Hz - Plan #3        | 200.0                     | 200.0                     | 90.1                       | 89.5                        | 138.068    | CC, ES  |
| Woolley-Sosa 2A-7H-E168 - Hz - Plan #3        | 900.0                     | 889.3                     | 149.4                      | 146.2                       | 47.183     | SF      |
| Woolley-Sosa 2B-7H-E168 - HZ - Plan #3        | 300.0                     | 300.0                     | 82.6                       | 81.6                        | 82.418     | CC, ES  |
| Woolley-Sosa 2B-7H-E168 - HZ - Plan #3        | 900.0                     | 892.9                     | 132.6                      | 129.5                       | 42.348     | SF      |
| Woolley-Sosa 2C-7H-E168 - HZ - Plan #3        | 300.0                     | 300.0                     | 75.0                       | 74.0                        | 74.875     | CC, ES  |
| Woolley-Sosa 2C-7H-E168 - HZ - Plan #3        | 1,200.0                   | 1,200.2                   | 128.3                      | 123.9                       | 29.165     | SF      |
| Woolley-Sosa 2D-7H-E168 - HZ - Plan #3        | 300.0                     | 300.0                     | 67.7                       | 66.7                        | 67.612     | CC, ES  |
| Woolley-Sosa 2D-7H-E168 - HZ - Plan #3        | 1,400.0                   | 1,402.9                   | 135.0                      | 129.7                       | 25.656     | SF      |
| Woolley-Sosa 2E-7H-E168 - HZ - Plan #4        | 300.0                     | 300.0                     | 60.2                       | 59.2                        | 60.069     | CC, ES  |
| Woolley-Sosa 2E-7H-E168 - HZ - Plan #4        | 7,200.0                   | 7,183.2                   | 709.7                      | 670.4                       | 18.054     | SF      |
| Woolley-Sosa 2F-7H-E168 - HZ - Plan #3        | 300.0                     | 300.0                     | 52.6                       | 51.6                        | 52.527     | CC      |
| Woolley-Sosa 2F-7H-E168 - HZ - Plan #3        | 600.0                     | 602.5                     | 53.2                       | 51.2                        | 25.879     | ES      |
| Woolley-Sosa 2F-7H-E168 - HZ - Plan #3        | 7,499.8                   | 7,538.6                   | 102.5                      | 73.7                        | 3.560      | SF      |
| Woolley-Sosa 2G-7H-E168 - HZ - Plan #3        | 109.5                     | 109.5                     | 45.1                       | 44.7                        | 133.800    | CC      |
| Woolley-Sosa 2G-7H-E168 - HZ - Plan #3        | 200.0                     | 200.0                     | 45.1                       | 44.4                        | 68.969     | ES      |
| Woolley-Sosa 2G-7H-E168 - HZ - Plan #3        | 7,800.0                   | 7,600.0                   | 206.4                      | 159.3                       | 4.387      | SF      |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S18-T1N-R68W (Erie Woolley) - Erie-Woolley 4A-18H-I168 - Hz - Plan #2 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        | Offset Site Error: | 0.0 ft  |
|---|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|--------------------|---------|
| Survey Program: 0-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 |
| 6,900.0   | 6,783.7             | 13,871.7            | 7,582.0             | 24.6            | 115.2       | 10.37                 | 154.1                             | 1,921.8    | 1,021.4              | 929.6                 | 91.80                  | 11.126             |         |
| 7,000.0   | 6,881.7             | 13,874.5            | 7,582.0             | 25.0            | 115.2       | 10.09                 | 157.0                             | 1,921.8    | 940.9                | 844.3                 | 96.61                  | 9.739              |         |
| 7,100.0   | 6,979.6             | 13,877.9            | 7,582.0             | 25.4            | 115.3       | 24.81                 | 160.4                             | 1,921.9    | 864.5                | 762.6                 | 101.93                 | 8.481              |         |
| 7,200.0   | 7,076.3             | 13,893.9            | 7,582.0             | 25.8            | 115.5       | 63.67                 | 176.4                             | 1,922.0    | 794.2                | 686.4                 | 107.82                 | 7.367              |         |
| 7,300.0   | 7,168.8             | 13,926.8            | 7,582.0             | 26.3            | 116.1       | 81.47                 | 209.3                             | 1,922.3    | 733.2                | 619.2                 | 114.02                 | 6.431              |         |
| 7,400.0   | 7,254.2             | 13,975.6            | 7,582.0             | 26.8            | 116.9       | 89.58                 | 258.0                             | 1,922.7    | 683.5                | 563.4                 | 120.07                 | 5.693              |         |
| 7,500.0   | 7,330.1             | 14,038.8            | 7,582.0             | 27.3            | 118.0       | 92.70                 | 321.2                             | 1,923.2    | 646.1                | 520.6                 | 125.51                 | 5.148              |         |
| 7,600.0   | 7,394.0             | 14,114.4            | 7,582.0             | 27.9            | 119.3       | 93.00                 | 396.8                             | 1,923.9    | 620.3                | 490.3                 | 130.07                 | 4.769              |         |
| 7,700.0   | 7,444.1             | 14,200.2            | 7,582.0             | 28.6            | 120.8       | 91.90                 | 482.6                             | 1,924.6    | 604.3                | 470.5                 | 133.79                 | 4.517              |         |
| 7,800.0   | 7,478.8             | 14,293.6            | 7,582.0             | 29.4            | 122.4       | 90.46                 | 576.0                             | 1,925.4    | 595.5                | 458.5                 | 136.98                 | 4.347              |         |
| 7,900.0   | 7,497.2             | 14,391.7            | 7,582.0             | 30.1            | 124.0       | 89.49                 | 674.1                             | 1,926.3    | 591.7                | 451.7                 | 140.01                 | 4.226              |         |
| 7,995.4   | 7,502.1             | 14,486.9            | 7,582.0             | 30.9            | 125.7       | 89.12                 | 769.4                             | 1,927.1    | 590.7                | 447.8                 | 142.94                 | 4.133              |         |
| 8,000.0   | 7,500.0             | 14,491.6            | 7,582.0             | 31.0            | 125.7       | 89.32                 | 774.0                             | 1,927.1    | 591.1                | 448.0                 | 143.09                 | 4.131              |         |
| 8,100.0   | 7,500.0             | 14,600.1            | 7,582.0             | 31.9            | 127.6       | 89.32                 | 882.5                             | 1,927.5    | 590.6                | 444.1                 | 146.47                 | 4.032              |         |
| 8,200.0   | 7,500.0             | 14,710.5            | 7,582.0             | 32.9            | 129.5       | 89.32                 | 992.9                             | 1,925.8    | 588.2                | 438.3                 | 149.89                 | 3.924              |         |
| 8,300.0   | 7,500.0             | 14,810.5            | 7,582.0             | 33.9            | 131.2       | 89.31                 | 1,092.9                           | 1,923.4    | 584.9                | 431.8                 | 153.10                 | 3.820              |         |
| 8,400.0   | 7,500.0             | 14,910.4            | 7,582.0             | 35.0            | 132.9       | 89.31                 | 1,192.8                           | 1,921.1    | 581.7                | 425.4                 | 156.35                 | 3.720              |         |
| 8,500.0   | 7,500.0             | 15,010.4            | 7,582.0             | 36.2            | 134.7       | 89.31                 | 1,292.7                           | 1,918.7    | 578.5                | 418.8                 | 159.63                 | 3.624              |         |
| 8,600.0   | 7,500.0             | 15,110.3            | 7,582.0             | 37.4            | 136.4       | 89.30                 | 1,392.6                           | 1,916.4    | 575.3                | 412.3                 | 162.94                 | 3.531              |         |
| 8,700.0   | 7,500.0             | 15,210.3            | 7,582.0             | 38.6            | 138.1       | 89.30                 | 1,492.5                           | 1,914.0    | 572.0                | 405.8                 | 166.26                 | 3.441              |         |
| 8,800.0   | 7,500.0             | 15,310.2            | 7,582.0             | 39.9            | 139.8       | 89.29                 | 1,592.5                           | 1,911.7    | 568.8                | 399.2                 | 169.61                 | 3.354              |         |
| 8,900.0   | 7,500.0             | 15,410.2            | 7,582.0             | 41.2            | 141.6       | 89.29                 | 1,692.4                           | 1,909.3    | 565.6                | 392.6                 | 172.97                 | 3.270              |         |
| 9,000.0   | 7,500.0             | 15,498.1            | 7,582.0             | 42.5            | 143.1       | 89.29                 | 1,780.3                           | 1,907.2    | 562.5                | 386.4                 | 176.12                 | 3.194              |         |
| 9,006.2   | 7,500.0             | 15,498.1            | 7,582.0             | 42.6            | 143.1       | 89.29                 | 1,780.3                           | 1,907.2    | 562.4                | 386.3                 | 176.18                 | 3.192 CC, ES, SF   |         |
| 9,100.0   | 7,500.0             | 15,498.1            | 7,582.0             | 43.9            | 143.1       | 89.29                 | 1,780.3                           | 1,907.2    | 570.2                | 395.4                 | 174.81                 | 3.262              |         |
| 9,200.0   | 7,500.0             | 15,498.1            | 7,582.0             | 45.3            | 143.1       | 89.29                 | 1,780.3                           | 1,907.2    | 594.9                | 425.9                 | 168.99                 | 3.520              |         |
| 9,300.0   | 7,500.0             | 15,498.1            | 7,582.0             | 46.7            | 143.1       | 89.29                 | 1,780.3                           | 1,907.2    | 634.6                | 474.5                 | 160.10                 | 3.964              |         |
| 9,400.0   | 7,500.0             | 15,498.1            | 7,582.0             | 48.2            | 143.1       | 89.29                 | 1,780.3                           | 1,907.2    | 686.6                | 536.9                 | 149.78                 | 4.584              |         |
| 9,500.0   | 7,500.0             | 15,498.1            | 7,582.0             | 49.6            | 143.1       | 89.29                 | 1,780.3                           | 1,907.2    | 748.5                | 609.2                 | 139.30                 | 5.373              |         |
| 9,600.0   | 7,500.0             | 15,498.1            | 7,582.0             | 51.1            | 143.1       | 89.28                 | 1,780.3                           | 1,907.2    | 818.0                | 688.6                 | 129.44                 | 6.320              |         |
| 9,700.0   | 7,500.0             | 15,498.1            | 7,582.0             | 52.6            | 143.1       | 89.27                 | 1,780.3                           | 1,907.2    | 894.3                | 773.6                 | 120.69                 | 7.410              |         |
| 9,800.0   | 7,500.0             | 15,498.1            | 7,582.0             | 54.1            | 143.1       | 89.25                 | 1,780.3                           | 1,907.2    | 975.8                | 862.6                 | 113.17                 | 8.622              |         |
| 9,900.0   | 7,500.0             | 15,498.1            | 7,582.0             | 55.6            | 143.1       | 89.23                 | 1,780.3                           | 1,907.2    | 1,061.4              | 954.5                 | 106.85                 | 9.934              |         |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S18-T1N-R68W (Erie Woolley) - Erie-Woolley 4B-18H-I168 - Hz - Plan #2 |                        |                        |                        |                   |                |                             |   |               |                            |                             |                              |                      | 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<br>(ft)  | Vertical Depth<br>(ft) | Measured Depth<br>(ft) | Vertical Depth<br>(ft) | Reference<br>(ft) | Offset<br>(ft) | Highside<br>Toolface<br>(°) | Offset Wellbore Centre<br>+N/-S<br>(ft) | +E/-W<br>(ft) | Between<br>Centres<br>(ft) | Between<br>Ellipses<br>(ft) | Total<br>Uncertainty<br>Axis | Separation<br>Factor |                    |         |
| 7,400.0   | 7,254.2                | 14,147.6               | 7,823.0                | 26.8              | 115.9          | 93.30                       | 263.7                                   | 2,260.1       | 1,089.2                    | 973.7                       | 115.46                       | 9.433                |                    |         |
| 7,500.0   | 7,330.1                | 14,210.7               | 7,823.0                | 27.3              | 117.0          | 98.92                       | 326.7                                   | 2,260.1       | 1,043.4                    | 923.4                       | 119.99                       | 8.695                |                    |         |
| 7,600.0   | 7,394.0                | 14,286.2               | 7,823.0                | 27.9              | 118.3          | 101.89                      | 402.2                                   | 2,260.0       | 1,007.6                    | 883.2                       | 124.37                       | 8.102                |                    |         |
| 7,700.0   | 7,444.1                | 14,371.9               | 7,823.0                | 28.6              | 119.8          | 103.32                      | 487.9                                   | 2,260.0       | 981.5                      | 853.0                       | 128.50                       | 7.638                |                    |         |
| 7,800.0   | 7,478.8                | 14,465.2               | 7,823.0                | 29.4              | 121.4          | 103.92                      | 581.3                                   | 2,260.0       | 964.3                      | 832.0                       | 132.32                       | 7.288                |                    |         |
| 7,900.0   | 7,497.2                | 14,563.3               | 7,823.0                | 30.1              | 123.1          | 104.14                      | 679.3                                   | 2,260.0       | 955.2                      | 819.4                       | 135.78                       | 7.035                |                    |         |
| 8,000.0   | 7,500.0                | 14,663.2               | 7,823.0                | 31.0              | 124.8          | 104.21                      | 779.2                                   | 2,260.0       | 953.1                      | 814.2                       | 138.86                       | 6.864                |                    |         |
| 8,100.0   | 7,500.0                | 14,763.2               | 7,823.0                | 31.9              | 126.5          | 104.23                      | 879.2                                   | 2,260.0       | 952.2                      | 810.3                       | 141.90                       | 6.710                |                    |         |
| 8,200.0   | 7,500.0                | 14,863.2               | 7,823.0                | 32.9              | 128.2          | 104.24                      | 979.2                                   | 2,260.0       | 951.4                      | 806.4                       | 145.00                       | 6.561                |                    |         |
| 8,300.0   | 7,500.0                | 14,963.2               | 7,823.0                | 33.9              | 130.0          | 104.25                      | 1,079.2                                 | 2,260.0       | 950.5                      | 802.4                       | 148.13                       | 6.417                |                    |         |
| 8,400.0   | 7,500.0                | 15,063.2               | 7,823.0                | 35.0              | 131.7          | 104.27                      | 1,179.2                                 | 2,259.9       | 949.7                      | 798.4                       | 151.29                       | 6.277                |                    |         |
| 8,500.0   | 7,500.0                | 15,163.2               | 7,823.0                | 36.2              | 133.4          | 104.28                      | 1,279.2                                 | 2,259.9       | 948.8                      | 794.3                       | 154.48                       | 6.142                |                    |         |
| 8,600.0   | 7,500.0                | 15,263.2               | 7,823.0                | 37.4              | 135.1          | 104.29                      | 1,379.2                                 | 2,259.9       | 947.9                      | 790.2                       | 157.69                       | 6.011                |                    |         |
| 8,700.0   | 7,500.0                | 15,363.1               | 7,823.0                | 38.6              | 136.9          | 104.31                      | 1,479.2                                 | 2,259.9       | 947.1                      | 786.2                       | 160.93                       | 5.885                |                    |         |
| 8,800.0   | 7,500.0                | 15,463.1               | 7,823.0                | 39.9              | 138.6          | 104.32                      | 1,579.2                                 | 2,259.9       | 946.2                      | 782.0                       | 164.17                       | 5.764                |                    |         |
| 8,900.0   | 7,500.0                | 15,563.1               | 7,823.0                | 41.2              | 140.3          | 104.33                      | 1,679.2                                 | 2,259.9       | 945.4                      | 777.9                       | 167.43                       | 5.646                |                    |         |
| 9,000.0   | 7,500.0                | 15,663.1               | 7,823.0                | 42.5              | 142.1          | 104.34                      | 1,779.2                                 | 2,259.9       | 944.5                      | 773.8                       | 170.70                       | 5.533                |                    |         |
| 9,009.3   | 7,500.0                | 15,664.3               | 7,823.0                | 42.7              | 142.1          | 104.35                      | 1,780.3                                 | 2,259.9       | 944.5                      | 773.6                       | 170.90                       | 5.526 CC, ES         |                    |         |
| 9,100.0   | 7,500.0                | 15,664.3               | 7,823.0                | 43.9              | 142.1          | 104.35                      | 1,780.3                                 | 2,259.9       | 948.8                      | 776.9                       | 171.86                       | 5.521 SF             |                    |         |
| 9,200.0   | 7,500.0                | 15,664.3               | 7,823.0                | 45.3              | 142.1          | 104.35                      | 1,780.3                                 | 2,259.9       | 963.5                      | 792.2                       | 171.30                       | 5.625                |                    |         |
| 9,300.0   | 7,500.0                | 15,664.3               | 7,823.0                | 46.7              | 142.1          | 104.35                      | 1,780.3                                 | 2,259.9       | 988.2                      | 819.0                       | 169.18                       | 5.841                |                    |         |
| 9,400.0   | 7,500.0                | 15,664.3               | 7,823.0                | 48.2              | 142.1          | 104.35                      | 1,780.3                                 | 2,259.9       | 1,022.1                    | 856.3                       | 165.77                       | 6.166                |                    |         |
| 9,500.0   | 7,500.0                | 15,664.3               | 7,823.0                | 49.6              | 142.1          | 104.35                      | 1,780.3                                 | 2,259.9       | 1,064.3                    | 902.9                       | 161.42                       | 6.594                |                    |         |
| 9,600.0   | 7,500.0                | 15,664.3               | 7,823.0                | 51.1              | 142.1          | 104.41                      | 1,780.3                                 | 2,259.9       | 1,114.1                    | 957.7                       | 156.46                       | 7.121                |                    |         |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S18-T1N-R68W (Erie Woolley) - WOOLLEY 21-7 (EXISTING) - ENCANA WELL - NO SURVEYS |                        |                        |                        |                   |                |                             |   |               |                            |                             |                              |                      | Offset Site Error: | 0.0 ft  |
|--|------------------------|------------------------|------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|----------------------|--------------------|---------|
| Survey Program: 8512-MWD   |                        |                        |                        |                   |                |                             |   |               |                            |                             |                              |                      | Offset Well Error: | 0.0 ft  |
| Reference  |                        | Offset                 |                        | Semi Major Axis   |                |                             | Distance                                |               |                            |                             |                              |                      |                    | Warning |
| Measured Depth<br>(ft)   | Vertical Depth<br>(ft) | Measured Depth<br>(ft) | Vertical Depth<br>(ft) | Reference<br>(ft) | Offset<br>(ft) | Highside<br>Toolface<br>(°) | Offset Wellbore Centre<br>+N/-S<br>(ft) | +E/-W<br>(ft) | Between<br>Centres<br>(ft) | Between<br>Ellipses<br>(ft) | Total<br>Uncertainty<br>Axis | Separation<br>Factor |                    |         |
| 7,800.0  | 7,478.8                | 7,527.8                | 7,527.8                | 29.4              | 13.1           | -35.52                      | 1,577.0                                 | 1,206.2       | 1,003.5                    | 962.1                       | 41.47                        | 24.198               |                    |         |
| 7,900.0  | 7,497.2                | 7,546.2                | 7,546.2                | 30.1              | 13.2           | -60.23                      | 1,577.0                                 | 1,206.2       | 906.9                      | 865.0                       | 41.97                        | 21.607               |                    |         |
| 8,000.0  | 7,500.0                | 7,549.0                | 7,549.0                | 31.0              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 808.4                      | 765.9                       | 42.46                        | 19.038               |                    |         |
| 8,100.0  | 7,500.0                | 7,549.0                | 7,549.0                | 31.9              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 710.0                      | 667.0                       | 43.04                        | 16.497               |                    |         |
| 8,200.0  | 7,500.0                | 7,549.0                | 7,549.0                | 32.9              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 612.2                      | 568.5                       | 43.76                        | 13.991               |                    |         |
| 8,300.0  | 7,500.0                | 7,549.0                | 7,549.0                | 33.9              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 515.2                      | 470.5                       | 44.68                        | 11.531               |                    |         |
| 8,400.0  | 7,500.0                | 7,549.0                | 7,549.0                | 35.0              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 419.7                      | 373.7                       | 45.92                        | 9.139                |                    |         |
| 8,500.0  | 7,500.0                | 7,549.0                | 7,549.0                | 36.2              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 326.8                      | 279.1                       | 47.62                        | 6.861                |                    |         |
| 8,600.0  | 7,500.0                | 7,549.0                | 7,549.0                | 37.4              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 239.6                      | 189.7                       | 49.90                        | 4.802                |                    |         |
| 8,700.0  | 7,500.0                | 7,549.0                | 7,549.0                | 38.6              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 167.6                      | 116.0                       | 51.56                        | 3.250                |                    |         |
| 8,796.7  | 7,500.0                | 7,549.0                | 7,549.0                | 39.8              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 136.8                      | 91.6                        | 45.23                        | 3.025 CC, ES, SF     |                    |         |
| 8,800.0  | 7,500.0                | 7,549.0                | 7,549.0                | 39.9              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 136.9                      | 92.1                        | 44.78                        | 3.056                |                    |         |
| 8,900.0  | 7,500.0                | 7,549.0                | 7,549.0                | 41.2              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 171.4                      | 140.0                       | 31.40                        | 5.460                |                    |         |
| 9,000.0  | 7,500.0                | 7,549.0                | 7,549.0                | 42.5              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 245.0                      | 216.2                       | 28.87                        | 8.487                |                    |         |
| 9,100.0  | 7,500.0                | 7,549.0                | 7,549.0                | 43.9              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 332.7                      | 302.0                       | 30.73                        | 10.827               |                    |         |
| 9,200.0  | 7,500.0                | 7,549.0                | 7,549.0                | 45.3              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 425.9                      | 393.3                       | 32.54                        | 13.088               |                    |         |
| 9,300.0  | 7,500.0                | 7,549.0                | 7,549.0                | 46.7              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 521.5                      | 487.7                       | 33.89                        | 15.389               |                    |         |
| 9,400.0  | 7,500.0                | 7,549.0                | 7,549.0                | 48.2              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 618.6                      | 583.7                       | 34.90                        | 17.724               |                    |         |
| 9,500.0  | 7,500.0                | 7,549.0                | 7,549.0                | 49.6              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 716.5                      | 680.8                       | 35.68                        | 20.080               |                    |         |
| 9,600.0  | 7,500.0                | 7,549.0                | 7,549.0                | 51.1              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 814.8                      | 778.5                       | 36.30                        | 22.445               |                    |         |
| 9,700.0  | 7,500.0                | 7,549.0                | 7,549.0                | 52.6              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 913.3                      | 876.5                       | 36.84                        | 24.792               |                    |         |
| 9,800.0  | 7,500.0                | 7,549.0                | 7,549.0                | 54.1              | 13.2           | -90.00                      | 1,577.0                                 | 1,206.2       | 1,011.8                    | 974.5                       | 37.32                        | 27.108               |                    |         |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S18-T1N-R68W (Erie Woolley) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVEYS |                     |                     |                     |                 |             |                       |                                   |            |                      |                       | Offset Site Error: 0.0 ft |                   |         |
|---|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|---------------------------|-------------------|---------|
| Survey Program: 71-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 |         |
| 3,300.0   | 3,255.4             | 3,608.0             | 3,458.9             | 10.4            | 17.6        | -30.87                | 674.9                             | 1,282.7    | 1,021.1              | 998.5                 | 22.63                     | 45.128            |         |
| 3,400.0   | 3,353.4             | 3,682.2             | 3,529.5             | 10.8            | 18.1        | -30.08                | 652.7                             | 1,287.3    | 990.6                | 967.3                 | 23.35                     | 42.431            |         |
| 3,500.0   | 3,451.4             | 3,765.4             | 3,609.1             | 11.2            | 18.5        | -29.19                | 628.9                             | 1,293.1    | 961.8                | 937.7                 | 24.05                     | 39.989            |         |
| 3,600.0   | 3,549.4             | 3,870.8             | 3,710.9             | 11.6            | 19.0        | -28.26                | 602.2                             | 1,298.0    | 933.4                | 908.7                 | 24.73                     | 37.737            |         |
| 3,700.0   | 3,647.4             | 4,005.0             | 3,840.5             | 12.0            | 19.6        | -27.13                | 567.5                             | 1,299.5    | 902.0                | 876.5                 | 25.46                     | 35.428            |         |
| 3,800.0   | 3,745.5             | 4,089.0             | 3,920.7             | 12.4            | 20.1        | -26.19                | 542.9                             | 1,300.5    | 869.1                | 842.9                 | 26.18                     | 33.201            |         |
| 3,900.0   | 3,843.5             | 4,170.1             | 3,998.0             | 12.8            | 20.6        | -25.09                | 518.6                             | 1,304.1    | 838.6                | 811.7                 | 26.92                     | 31.149            |         |
| 4,000.0   | 3,941.5             | 4,280.2             | 4,102.1             | 13.2            | 21.3        | -23.26                | 482.9                             | 1,310.0    | 808.2                | 780.4                 | 27.77                     | 29.099            |         |
| 4,100.0   | 4,039.5             | 4,384.2             | 4,199.4             | 13.6            | 21.9        | -21.25                | 446.6                             | 1,314.6    | 776.3                | 747.6                 | 28.62                     | 27.125            |         |
| 4,200.0   | 4,137.5             | 4,469.4             | 4,279.0             | 14.0            | 22.5        | -19.45                | 416.6                             | 1,318.2    | 744.9                | 715.5                 | 29.44                     | 25.306            |         |
| 4,300.0   | 4,235.5             | 4,550.3             | 4,354.9             | 14.4            | 22.9        | -17.67                | 389.0                             | 1,322.2    | 715.6                | 685.4                 | 30.20                     | 23.691            |         |
| 4,400.0   | 4,333.5             | 4,632.3             | 4,432.8             | 14.8            | 23.4        | -15.93                | 363.6                             | 1,326.6    | 688.6                | 657.7                 | 30.92                     | 22.268            |         |
| 4,500.0   | 4,431.5             | 4,723.1             | 4,519.6             | 15.2            | 23.9        | -14.04                | 337.5                             | 1,331.6    | 663.5                | 631.9                 | 31.63                     | 20.975            |         |
| 4,600.0   | 4,529.5             | 4,821.1             | 4,613.6             | 15.5            | 24.4        | -11.94                | 310.1                             | 1,336.6    | 639.1                | 606.8                 | 32.32                     | 19.771            |         |
| 4,700.0   | 4,627.5             | 4,925.7             | 4,714.3             | 15.9            | 24.9        | -9.69                 | 282.1                             | 1,340.0    | 614.2                | 581.3                 | 32.99                     | 18.618            |         |
| 4,800.0   | 4,725.5             | 5,012.0             | 4,797.7             | 16.3            | 25.3        | -7.81                 | 260.2                             | 1,342.4    | 590.2                | 556.6                 | 33.60                     | 17.563            |         |
| 4,900.0   | 4,823.5             | 5,100.2             | 4,883.6             | 16.7            | 25.7        | -5.97                 | 240.1                             | 1,345.5    | 568.1                | 534.0                 | 34.17                     | 16.629            |         |
| 5,000.0   | 4,921.5             | 5,197.1             | 4,978.6             | 17.1            | 26.0        | -4.14                 | 221.3                             | 1,348.6    | 547.2                | 512.5                 | 34.68                     | 15.779            |         |
| 5,100.0   | 5,019.5             | 5,293.6             | 5,073.7             | 17.5            | 26.3        | -2.52                 | 205.5                             | 1,351.0    | 526.7                | 491.6                 | 35.15                     | 14.985            |         |
| 5,200.0   | 5,117.5             | 5,391.7             | 5,170.8             | 17.9            | 26.6        | -0.98                 | 191.5                             | 1,353.1    | 506.6                | 471.0                 | 35.60                     | 14.233            |         |
| 5,300.0   | 5,215.6             | 5,491.2             | 5,269.6             | 18.3            | 26.8        | 0.45                  | 179.4                             | 1,354.5    | 486.4                | 450.4                 | 36.00                     | 13.510            |         |
| 5,400.0   | 5,313.6             | 5,590.9             | 5,368.8             | 18.7            | 27.0        | 1.66                  | 169.8                             | 1,355.0    | 466.0                | 429.7                 | 36.37                     | 12.814            |         |
| 5,500.0   | 5,411.6             | 5,685.9             | 5,463.6             | 19.1            | 27.2        | 2.61                  | 163.1                             | 1,355.2    | 445.7                | 409.0                 | 36.71                     | 12.143            |         |
| 5,600.0   | 5,509.6             | 5,778.2             | 5,555.8             | 19.5            | 27.3        | 3.29                  | 159.1                             | 1,356.2    | 426.5                | 389.5                 | 36.99                     | 11.530            |         |
| 5,700.0   | 5,607.6             | 5,889.1             | 5,666.7             | 19.9            | 27.4        | 3.61                  | 158.1                             | 1,356.1    | 406.5                | 369.3                 | 37.20                     | 10.927            |         |
| 5,800.0   | 5,705.6             | 5,981.4             | 5,758.9             | 20.3            | 27.4        | 3.80                  | 158.0                             | 1,355.1    | 385.7                | 348.2                 | 37.47                     | 10.293            |         |
| 5,900.0   | 5,803.6             | 6,075.5             | 5,853.0             | 20.7            | 27.5        | 4.05                  | 157.6                             | 1,355.5    | 366.2                | 328.4                 | 37.72                     | 9.707             |         |
| 6,000.0   | 5,901.6             | 6,173.8             | 5,951.3             | 21.1            | 27.6        | 4.28                  | 157.6                             | 1,356.1    | 347.0                | 309.1                 | 37.96                     | 9.143             |         |
| 6,100.0   | 5,999.6             | 6,271.4             | 6,049.0             | 21.4            | 27.6        | 4.45                  | 158.2                             | 1,356.8    | 327.9                | 289.7                 | 38.19                     | 8.584             |         |
| 6,200.0   | 6,097.6             | 6,368.3             | 6,145.8             | 21.8            | 27.7        | 4.66                  | 158.6                             | 1,357.7    | 309.1                | 270.6                 | 38.44                     | 8.040             |         |
| 6,300.0   | 6,195.6             | 6,466.9             | 6,244.5             | 22.2            | 27.7        | 4.92                  | 159.0                             | 1,358.9    | 290.5                | 251.8                 | 38.68                     | 7.510             |         |
| 6,400.0   | 6,293.6             | 6,566.3             | 6,343.8             | 22.6            | 27.8        | 5.22                  | 159.4                             | 1,359.8    | 271.5                | 232.6                 | 38.92                     | 6.977             |         |
| 6,500.0   | 6,391.6             | 6,664.5             | 6,442.0             | 23.0            | 27.9        | 5.57                  | 159.6                             | 1,360.4    | 252.4                | 213.2                 | 39.17                     | 6.443             |         |
| 6,600.0   | 6,489.6             | 6,762.5             | 6,540.0             | 23.4            | 28.0        | 6.00                  | 159.8                             | 1,361.1    | 233.3                | 193.9                 | 39.43                     | 5.917             |         |
| 6,700.0   | 6,587.6             | 6,860.4             | 6,637.9             | 23.8            | 28.0        | 6.56                  | 159.8                             | 1,361.8    | 214.3                | 174.6                 | 39.69                     | 5.398             |         |
| 6,800.0   | 6,685.7             | 6,958.4             | 6,735.9             | 24.2            | 28.1        | 7.26                  | 159.7                             | 1,362.6    | 195.4                | 155.4                 | 39.96                     | 4.888             |         |
| 6,900.0   | 6,783.7             | 7,056.4             | 6,833.9             | 24.6            | 28.2        | 8.15                  | 159.5                             | 1,363.5    | 176.6                | 136.3                 | 40.25                     | 4.387             |         |
| 7,000.0   | 6,881.7             | 7,154.2             | 6,931.7             | 25.0            | 28.3        | 9.30                  | 159.1                             | 1,364.6    | 158.0                | 117.4                 | 40.56                     | 3.895             |         |
| 7,100.0   | 6,979.6             | 7,251.9             | 7,029.4             | 25.4            | 28.4        | 23.87                 | 158.1                             | 1,365.9    | 139.8                | 98.9                  | 40.93                     | 3.417             |         |
| 7,200.0   | 7,076.3             | 7,349.3             | 7,126.7             | 25.8            | 28.5        | 64.47                 | 156.8                             | 1,367.3    | 124.1                | 82.3                  | 41.80                     | 2.968             |         |
| 7,279.1   | 7,149.9             | 7,423.6             | 7,201.0             | 26.2            | 28.5        | 88.95                 | 156.0                             | 1,367.8    | 118.4                | 75.4                  | 42.97                     | 2.755 CC, ES      |         |
| 7,300.0   | 7,168.8             | 7,442.6             | 7,220.0             | 26.3            | 28.6        | 94.90                 | 155.9                             | 1,367.9    | 118.9                | 75.7                  | 43.19                     | 2.753 SF          |         |
| 7,400.0   | 7,254.2             | 7,528.9             | 7,306.3             | 26.8            | 28.6        | 119.64                | 155.4                             | 1,367.8    | 137.8                | 95.0                  | 42.83                     | 3.218             |         |
| 7,500.0   | 7,330.1             | 7,605.3             | 7,382.7             | 27.3            | 28.7        | 136.51                | 155.1                             | 1,366.9    | 184.7                | 143.2                 | 41.57                     | 4.444             |         |
| 7,600.0   | 7,394.0             | 7,668.9             | 7,446.4             | 27.9            | 28.7        | 146.33                | 155.0                             | 1,365.7    | 253.0                | 211.8                 | 41.23                     | 6.136             |         |
| 7,700.0   | 7,444.1             | 7,718.6             | 7,496.0             | 28.6            | 28.8        | 151.11                | 154.9                             | 1,365.0    | 335.7                | 294.3                 | 41.36                     | 8.115             |         |
| 7,800.0   | 7,478.8             | 7,753.0             | 7,530.5             | 29.4            | 28.8        | 151.22                | 154.8                             | 1,364.6    | 427.7                | 386.2                 | 41.56                     | 10.292            |         |
| 7,900.0   | 7,497.2             | 7,771.1             | 7,548.5             | 30.1            | 28.8        | 138.75                | 154.8                             | 1,364.4    | 525.3                | 483.6                 | 41.71                     | 12.593            |         |
| 8,000.0   | 7,500.0             | 7,773.8             | 7,551.2             | 31.0            | 28.8        | 88.63                 | 154.8                             | 1,364.3    | 625.0                | 583.1                 | 41.82                     | 14.943            |         |
| 8,100.0   | 7,500.0             | 7,773.6             | 7,551.0             | 31.9            | 28.8        | 88.32                 | 154.8                             | 1,364.3    | 724.8                | 682.9                 | 41.93                     | 17.289            |         |
| 8,200.0   | 7,500.0             | 7,773.4             | 7,550.8             | 32.9            | 28.8        | 88.00                 | 154.8                             | 1,364.3    | 824.7                | 782.7                 | 42.02                     | 19.626            |         |
| 8,300.0   | 7,500.0             | 7,773.2             | 7,550.6             | 33.9            | 28.8        | 87.69                 | 154.8                             | 1,364.4    | 924.7                | 882.6                 | 42.12                     | 21.954            |         |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

|  |                |                |                |                 |        |                   |                              |         |                 |                  |                        |                   |                                  |
|--|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------------|---------|-----------------|------------------|------------------------|-------------------|----------------------------------|
| <b>Offset Design</b> S18-T1N-R68W (Erie Woolley) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVEYS |                |                |                |                 |        |                   |                              |         |                 |                  |                        |                   | <b>Offset Site Error:</b> 0.0 ft |
| Survey Program: 71-Geolink MWD   |                |                |                |                 |        |                   |                              |         |                 |                  |                        |                   | <b>Offset Well Error:</b> 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 +N/-S | +E/-W   | Between Centres | Between Ellipses | Total Uncertainty Axis | Separation Factor |                                  |
| (ft)   | (ft)           | (ft)           | (ft)           | (ft)            | (ft)   | (°)               | (ft)                         | (ft)    | (ft)            | (ft)             |                        |                   |                                  |
| 8,400.0  | 7,500.0        | 7,773.0        | 7,550.5        | 35.0            | 28.8   | 87.38             | 154.8                        | 1,364.4 | 1,024.6         | 982.4            | 42.21                  | 24.273            |                                  |



# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S18-T1N-R68W (Erie Woolley) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVEYS |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        | Offset Site Error: 0.0 ft |            |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|---------------------------|------------|
| Survey Program: 41-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         |            |
| 2,600.0  | 2,569.4             | 3,153.4             | 2,972.7             | 7.7             | 17.6        | -37.07                | 654.0                             | 1,026.0    | 981.4                | 964.5                 | 16.93                  | 57.972                    | CC, ES, SF |
| 2,700.0  | 2,667.4             | 3,253.0             | 3,062.1             | 8.1             | 18.4        | -36.06                | 611.0                             | 1,017.6    | 930.6                | 912.9                 | 17.71                  | 52.543                    |            |
| 2,800.0  | 2,765.4             | 3,325.8             | 3,127.1             | 8.5             | 19.0        | -35.18                | 578.9                             | 1,011.7    | 879.6                | 861.1                 | 18.51                  | 47.528                    |            |
| 2,900.0  | 2,863.4             | 3,421.5             | 3,212.8             | 8.9             | 19.8        | -33.86                | 536.6                             | 1,004.7    | 829.2                | 809.9                 | 19.35                  | 42.853                    |            |
| 3,000.0  | 2,961.4             | 3,499.3             | 3,282.2             | 9.3             | 20.4        | -32.66                | 502.1                             | 998.3      | 778.5                | 758.3                 | 20.22                  | 38.505                    |            |
| 3,100.0  | 3,059.4             | 3,578.8             | 3,353.2             | 9.7             | 21.0        | -31.22                | 466.7                             | 993.0      | 729.1                | 708.0                 | 21.15                  | 34.479                    |            |
| 3,200.0  | 3,157.4             | 3,668.2             | 3,433.1             | 10.1            | 21.8        | -29.37                | 427.0                             | 987.2      | 680.3                | 658.2                 | 22.12                  | 30.760                    |            |
| 3,300.0  | 3,255.4             | 3,755.9             | 3,511.6             | 10.4            | 22.5        | -27.41                | 388.6                             | 980.2      | 631.4                | 608.3                 | 23.10                  | 27.334                    |            |
| 3,400.0  | 3,353.4             | 3,837.8             | 3,585.4             | 10.8            | 23.1        | -25.44                | 353.8                             | 972.8      | 583.1                | 559.1                 | 24.09                  | 24.206                    |            |
| 3,500.0  | 3,451.4             | 3,919.7             | 3,659.9             | 11.2            | 23.7        | -23.37                | 320.7                             | 965.0      | 536.2                | 511.1                 | 25.11                  | 21.354                    |            |
| 3,600.0  | 3,549.4             | 4,001.1             | 3,734.1             | 11.6            | 24.3        | -20.94                | 287.9                             | 957.8      | 490.7                | 464.5                 | 26.22                  | 18.717                    |            |
| 3,700.0  | 3,647.4             | 4,086.2             | 3,811.5             | 12.0            | 24.9        | -17.82                | 253.3                             | 951.6      | 447.2                | 419.7                 | 27.44                  | 16.294                    |            |
| 3,800.0  | 3,745.5             | 4,168.9             | 3,886.5             | 12.4            | 25.6        | -14.07                | 218.8                             | 945.9      | 405.1                | 376.2                 | 28.82                  | 14.055                    |            |
| 3,900.0  | 3,843.5             | 4,249.2             | 3,959.0             | 12.8            | 26.2        | -9.54                 | 184.6                             | 942.4      | 366.9                | 336.6                 | 30.36                  | 12.085                    |            |
| 4,000.0  | 3,941.5             | 4,335.8             | 4,037.3             | 13.2            | 26.8        | -3.74                 | 147.6                             | 939.0      | 332.3                | 300.2                 | 32.03                  | 10.374                    |            |
| 4,100.0  | 4,039.5             | 4,423.0             | 4,116.3             | 13.6            | 27.5        | 3.06                  | 110.9                             | 935.8      | 302.2                | 268.4                 | 33.82                  | 8.936                     |            |
| 4,200.0  | 4,137.5             | 4,512.5             | 4,195.9             | 14.0            | 28.2        | 11.76                 | 70.3                              | 931.8      | 277.1                | 241.3                 | 35.80                  | 7.742                     |            |
| 4,300.0  | 4,235.5             | 4,598.7             | 4,271.8             | 14.4            | 29.0        | 21.58                 | 29.7                              | 926.9      | 259.7                | 222.2                 | 37.52                  | 6.921                     |            |
| 4,400.0  | 4,333.5             | 4,683.2             | 4,346.4             | 14.8            | 29.7        | 31.79                 | -9.7                              | 921.9      | 252.7                | 214.3                 | 38.39                  | 6.582                     |            |
| 4,413.1  | 4,346.4             | 4,694.4             | 4,356.4             | 14.8            | 29.8        | 33.13                 | -14.8                             | 921.3      | 252.6                | 214.2                 | 38.42                  | 6.574                     |            |
| 4,500.0  | 4,431.5             | 4,772.0             | 4,426.2             | 15.2            | 30.3        | 42.01                 | -48.4                             | 917.8      | 256.2                | 218.0                 | 38.24                  | 6.701                     |            |
| 4,600.0  | 4,529.5             | 4,867.6             | 4,513.9             | 15.5            | 31.0        | 51.76                 | -86.1                             | 914.0      | 267.0                | 229.6                 | 37.38                  | 7.143                     |            |
| 4,700.0  | 4,627.5             | 4,967.1             | 4,606.8             | 15.9            | 31.6        | 60.57                 | -121.6                            | 910.0      | 282.2                | 246.1                 | 36.10                  | 7.816                     |            |
| 4,800.0  | 4,725.5             | 5,064.6             | 4,698.9             | 16.3            | 32.2        | 68.15                 | -153.2                            | 905.0      | 299.9                | 265.3                 | 34.54                  | 8.683                     |            |
| 4,900.0  | 4,823.5             | 5,167.8             | 4,797.4             | 16.7            | 32.7        | 74.93                 | -183.8                            | 900.5      | 319.9                | 286.8                 | 33.07                  | 9.671                     |            |
| 5,000.0  | 4,921.5             | 5,273.7             | 4,899.7             | 17.1            | 33.2        | 80.74                 | -210.6                            | 896.3      | 339.3                | 307.5                 | 31.82                  | 10.663                    |            |
| 5,100.0  | 5,019.5             | 5,385.6             | 5,009.2             | 17.5            | 33.6        | 85.85                 | -233.5                            | 892.8      | 356.8                | 325.9                 | 30.84                  | 11.567                    |            |
| 5,200.0  | 5,117.5             | 5,489.3             | 5,111.4             | 17.9            | 33.9        | 89.96                 | -251.1                            | 890.1      | 372.8                | 342.8                 | 30.03                  | 12.412                    |            |
| 5,300.0  | 5,215.6             | 5,603.2             | 5,224.0             | 18.3            | 34.2        | 94.08                 | -267.2                            | 886.9      | 387.8                | 358.3                 | 29.48                  | 13.156                    |            |
| 5,400.0  | 5,313.6             | 5,709.9             | 5,330.2             | 18.7            | 34.4        | 97.65                 | -277.8                            | 883.8      | 400.0                | 370.8                 | 29.12                  | 13.733                    |            |
| 5,500.0  | 5,411.6             | 5,822.3             | 5,442.3             | 19.1            | 34.6        | 101.15                | -285.4                            | 880.8      | 410.3                | 381.2                 | 29.02                  | 14.139                    |            |
| 5,600.0  | 5,509.6             | 5,929.8             | 5,549.7             | 19.5            | 34.7        | 104.23                | -289.5                            | 879.1      | 418.8                | 389.6                 | 29.16                  | 14.358                    |            |
| 5,700.0  | 5,607.6             | 6,037.4             | 5,657.2             | 19.9            | 34.8        | 107.25                | -291.1                            | 877.2      | 426.0                | 396.5                 | 29.52                  | 14.430                    |            |
| 5,800.0  | 5,705.6             | 6,136.7             | 5,756.5             | 20.3            | 34.8        | 109.99                | -291.0                            | 875.3      | 432.7                | 402.6                 | 30.09                  | 14.381                    |            |
| 5,900.0  | 5,803.6             | 6,233.7             | 5,853.5             | 20.7            | 34.9        | 112.57                | -290.9                            | 873.6      | 440.4                | 409.6                 | 30.81                  | 14.293                    |            |
| 6,000.0  | 5,901.6             | 6,330.8             | 5,950.6             | 21.1            | 35.0        | 115.05                | -291.0                            | 871.9      | 449.2                | 417.5                 | 31.63                  | 14.199                    |            |
| 6,100.0  | 5,999.6             | 6,428.6             | 6,048.4             | 21.4            | 35.0        | 117.45                | -291.1                            | 870.3      | 458.8                | 426.3                 | 32.51                  | 14.111                    |            |
| 6,200.0  | 6,097.6             | 6,527.7             | 6,147.4             | 21.8            | 35.1        | 119.76                | -291.2                            | 868.8      | 469.1                | 435.7                 | 33.42                  | 14.038                    |            |
| 6,300.0  | 6,195.6             | 6,628.7             | 6,248.5             | 22.2            | 35.1        | 121.98                | -290.9                            | 867.7      | 479.6                | 445.3                 | 34.32                  | 13.976                    |            |
| 6,400.0  | 6,293.6             | 6,726.8             | 6,346.5             | 22.6            | 35.2        | 124.02                | -290.3                            | 867.2      | 490.3                | 455.1                 | 35.20                  | 13.927                    |            |
| 6,500.0  | 6,391.6             | 6,823.1             | 6,442.9             | 23.0            | 35.2        | 125.92                | -290.0                            | 866.6      | 501.8                | 465.7                 | 36.07                  | 13.913                    |            |
| 6,600.0  | 6,489.6             | 6,920.0             | 6,539.8             | 23.4            | 35.3        | 127.74                | -289.9                            | 865.9      | 514.1                | 477.2                 | 36.90                  | 13.933                    |            |
| 6,700.0  | 6,587.6             | 7,017.0             | 6,636.8             | 23.8            | 35.4        | 129.49                | -289.9                            | 865.1      | 527.1                | 489.4                 | 37.70                  | 13.982                    |            |
| 6,800.0  | 6,685.7             | 7,113.5             | 6,733.2             | 24.2            | 35.4        | 131.15                | -290.1                            | 864.1      | 540.8                | 502.4                 | 38.46                  | 14.060                    |            |
| 6,900.0  | 6,783.7             | 7,210.1             | 6,829.8             | 24.6            | 35.5        | 132.75                | -290.3                            | 862.9      | 555.2                | 516.0                 | 39.20                  | 14.165                    |            |
| 7,000.0  | 6,881.7             | 7,307.4             | 6,927.2             | 25.0            | 35.6        | 134.29                | -290.6                            | 861.5      | 570.1                | 530.2                 | 39.89                  | 14.292                    |            |
| 7,100.0  | 6,979.6             | 7,404.8             | 7,024.6             | 25.4            | 35.6        | 148.15                | -290.9                            | 860.0      | 586.0                | 545.4                 | 40.54                  | 14.455                    |            |
| 7,200.0  | 7,076.3             | 7,501.0             | 7,120.7             | 25.8            | 35.7        | -178.93               | -291.1                            | 858.3      | 611.8                | 570.9                 | 40.87                  | 14.968                    |            |
| 7,300.0  | 7,168.8             | 7,593.4             | 7,213.0             | 26.3            | 35.8        | -163.46               | -291.1                            | 856.5      | 650.2                | 609.3                 | 40.87                  | 15.908                    |            |
| 7,400.0  | 7,254.2             | 7,679.0             | 7,298.6             | 26.8            | 35.8        | -154.48               | -291.0                            | 854.9      | 700.2                | 659.6                 | 40.60                  | 17.246                    |            |
| 7,500.0  | 7,330.1             | 7,755.6             | 7,375.3             | 27.3            | 35.9        | -147.59               | -290.9                            | 853.4      | 760.9                | 720.8                 | 40.14                  | 18.958                    |            |
| 7,600.0  | 7,394.0             | 7,820.9             | 7,440.6             | 27.9            | 35.9        | -140.60               | -290.6                            | 852.2      | 831.2                | 791.7                 | 39.56                  | 21.011                    |            |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design   |                |                |                |                 |        |                   |                        |            |                 |                  |                        | S18-T1N-R68W (Erie Woolley) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVEYS |  | Offset Site Error: |  | 0.0 ft |  |
|-----------------|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------|------------|-----------------|------------------|------------------------|--|--|--------------------|--|--------|--|
| Survey Program: |                |                |                | 41-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 Axis | Separation Factor  |  |                    |  |        |  |
| (ft)            | (ft)           | (ft)           | (ft)           | (ft)            | (ft)   | (°)               | +N/-S (ft)             | +E/-W (ft) | (ft)            | (ft)             |                        |  |  |                    |  |        |  |
| 7,700.0         | 7,444.1        | 7,872.5        | 7,492.1        | 28.6            | 35.9   | -131.79           | -290.3                 | 851.1      | 909.7           | 870.7            | 38.95                  | 23.358   |  |                    |  |        |  |
| 7,800.0         | 7,478.8        | 7,909.3        | 7,528.9        | 29.4            | 36.0   | -119.38           | -290.1                 | 850.4      | 994.5           | 956.2            | 38.34                  | 25.936   |  |                    |  |        |  |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S18-T1N-R68W (Erie Woolley) - WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVEYS |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        | Offset Site Error: |  | 0.0 ft  |  |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|--------------------|--|---------|--|
| Survey Program: 71-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  | 7,500.0             | 7,608.2             | 7,527.1             | 36.2            | 19.3        | 86.09                 | 2,166.6                           | 1,712.5    | 962.7                | 928.6                 | 34.14                  | 28.202             |  |         |  |
| 8,600.0  | 7,500.0             | 7,610.5             | 7,529.4             | 37.4            | 19.3        | 86.44                 | 2,166.7                           | 1,712.6    | 871.0                | 838.3                 | 32.77                  | 26.582             |  |         |  |
| 8,700.0  | 7,500.0             | 7,612.8             | 7,531.6             | 38.6            | 19.3        | 86.80                 | 2,166.8                           | 1,712.6    | 781.4                | 750.1                 | 31.29                  | 24.975             |  |         |  |
| 8,800.0  | 7,500.0             | 7,615.0             | 7,533.9             | 39.9            | 19.3        | 87.16                 | 2,166.8                           | 1,712.6    | 694.5                | 664.6                 | 29.86                  | 23.257             |  |         |  |
| 8,900.0  | 7,500.0             | 7,617.3             | 7,536.2             | 41.2            | 19.3        | 87.52                 | 2,166.9                           | 1,712.6    | 611.7                | 582.7                 | 28.96                  | 21.123             |  |         |  |
| 9,000.0  | 7,500.0             | 7,619.6             | 7,538.5             | 42.5            | 19.3        | 87.88                 | 2,166.9                           | 1,712.7    | 534.7                | 505.2                 | 29.54                  | 18.103             |  |         |  |
| 9,100.0  | 7,500.0             | 7,621.9             | 7,540.8             | 43.9            | 19.3        | 88.24                 | 2,167.0                           | 1,712.7    | 466.6                | 433.7                 | 32.89                  | 14.187             |  |         |  |
| 9,200.0  | 7,500.0             | 7,624.2             | 7,543.1             | 45.3            | 19.3        | 88.60                 | 2,167.0                           | 1,712.7    | 411.7                | 372.0                 | 39.71                  | 10.368             |  |         |  |
| 9,300.0  | 7,500.0             | 7,626.5             | 7,545.4             | 46.7            | 19.3        | 88.96                 | 2,167.1                           | 1,712.8    | 375.8                | 326.5                 | 49.30                  | 7.624              |  |         |  |
| 9,391.3  | 7,500.0             | 7,628.6             | 7,547.5             | 48.1            | 19.3        | 89.29                 | 2,167.1                           | 1,712.8    | 364.6                | 306.2                 | 58.42                  | 6.241 CC           |  |         |  |
| 9,400.0  | 7,500.0             | 7,628.8             | 7,547.7             | 48.2            | 19.3        | 89.32                 | 2,167.1                           | 1,712.8    | 364.7                | 305.5                 | 59.22                  | 6.158 ES           |  |         |  |
| 9,500.0  | 7,500.0             | 7,631.2             | 7,550.0             | 49.6            | 19.3        | 89.69                 | 2,167.2                           | 1,712.8    | 380.5                | 314.0                 | 66.51                  | 5.721 SF           |  |         |  |
| 9,600.0  | 7,500.0             | 7,633.5             | 7,552.3             | 51.1            | 19.3        | 90.05                 | 2,167.2                           | 1,712.8    | 420.2                | 350.2                 | 70.06                  | 5.998              |  |         |  |
| 9,700.0  | 7,500.0             | 7,635.8             | 7,554.6             | 52.6            | 19.3        | 90.42                 | 2,167.3                           | 1,712.9    | 479.1                | 408.2                 | 70.84                  | 6.763              |  |         |  |
| 9,800.0  | 7,500.0             | 7,638.1             | 7,556.9             | 54.1            | 19.3        | 90.80                 | 2,167.3                           | 1,712.9    | 551.0                | 480.8                 | 70.24                  | 7.845              |  |         |  |
| 9,900.0  | 7,500.0             | 7,640.3             | 7,559.2             | 55.6            | 19.3        | 91.20                 | 2,167.4                           | 1,712.9    | 631.6                | 562.5                 | 69.15                  | 9.134              |  |         |  |
| 10,000.0   | 7,500.0             | 7,642.6             | 7,561.4             | 57.1            | 19.3        | 91.62                 | 2,167.4                           | 1,713.0    | 718.0                | 650.0                 | 68.00                  | 10.558             |  |         |  |
| 10,100.0   | 7,500.0             | 7,644.8             | 7,563.7             | 58.6            | 19.3        | 92.08                 | 2,167.5                           | 1,713.0    | 808.2                | 741.3                 | 66.95                  | 12.071             |  |         |  |
| 10,200.0   | 7,500.0             | 7,647.0             | 7,565.9             | 60.1            | 19.3        | 92.58                 | 2,167.6                           | 1,713.0    | 901.1                | 835.1                 | 66.05                  | 13.642             |  |         |  |
| 10,300.0   | 7,500.0             | 7,649.2             | 7,568.1             | 61.6            | 19.3        | 93.00                 | 2,167.6                           | 1,713.1    | 995.7                | 930.4                 | 65.31                  | 15.247             |  |         |  |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S18-T1N-R68W (Erie Woolley) - WOOLLEY 4-2-7 (EXISTING) - ENCANA WELL - PLAN ONLY |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        |                   | 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 |                    |        |
| 6,900.0  | 6,783.7             | 7,000.0             | 6,915.1             | 24.6            | 21.7        | -40.50                | 912.6                             | 1,886.7    | 1,030.3              | 992.9                 | 37.37                  | 27.567            |                    |        |
| 7,000.0  | 6,881.7             | 7,075.4             | 6,989.9             | 25.0            | 21.8        | -41.49                | 914.1                             | 1,878.0    | 1,008.9              | 970.6                 | 38.27                  | 26.360            |                    |        |
| 7,100.0  | 6,979.6             | 7,156.6             | 7,070.8             | 25.4            | 22.0        | -29.98                | 915.4                             | 1,870.9    | 988.9                | 949.8                 | 39.12                  | 25.282            |                    |        |
| 7,200.0  | 7,076.3             | 7,238.1             | 7,152.1             | 25.8            | 22.1        | 1.99                  | 916.3                             | 1,865.9    | 961.2                | 921.6                 | 39.59                  | 24.281            |                    |        |
| 7,300.0  | 7,168.8             | 7,317.0             | 7,231.0             | 26.3            | 22.2        | 18.25                 | 916.8                             | 1,863.3    | 922.5                | 882.9                 | 39.59                  | 23.304            |                    |        |
| 7,400.0  | 7,254.2             | 7,393.2             | 7,307.2             | 26.8            | 22.3        | 29.90                 | 916.9                             | 1,862.7    | 873.9                | 834.9                 | 39.08                  | 22.362            |                    |        |
| 7,500.0  | 7,330.1             | 7,469.1             | 7,383.1             | 27.3            | 22.4        | 41.43                 | 916.9                             | 1,862.7    | 816.9                | 778.9                 | 38.06                  | 21.462            |                    |        |
| 7,600.0  | 7,394.0             | 7,533.0             | 7,447.0             | 27.9            | 22.4        | 54.12                 | 916.9                             | 1,862.7    | 754.2                | 717.7                 | 36.48                  | 20.676            |                    |        |
| 7,700.0  | 7,444.1             | 7,583.1             | 7,497.1             | 28.6            | 22.5        | 67.36                 | 916.9                             | 1,862.7    | 690.0                | 655.7                 | 34.36                  | 20.085            |                    |        |
| 7,800.0  | 7,478.8             | 7,617.8             | 7,531.8             | 29.4            | 22.5        | 79.08                 | 916.9                             | 1,862.7    | 629.6                | 597.6                 | 32.05                  | 19.647            |                    |        |
| 7,900.0  | 7,497.2             | 7,636.2             | 7,550.2             | 30.1            | 22.6        | 87.26                 | 916.9                             | 1,862.7    | 579.1                | 548.6                 | 30.56                  | 18.953            |                    |        |
| 8,000.0  | 7,500.0             | 7,639.0             | 7,553.0             | 31.0            | 22.6        | 90.00                 | 916.9                             | 1,862.7    | 544.4                | 513.2                 | 31.14                  | 17.481            |                    |        |
| 8,100.0  | 7,500.0             | 7,639.0             | 7,553.0             | 31.9            | 22.6        | 90.00                 | 916.9                             | 1,862.7    | 527.1                | 493.2                 | 33.92                  | 15.541            |                    |        |
| 8,142.4  | 7,500.0             | 7,639.0             | 7,553.0             | 32.3            | 22.6        | 90.00                 | 916.9                             | 1,862.7    | 525.4                | 489.9                 | 35.57                  | 14.771 CC, ES     |                    |        |
| 8,200.0  | 7,500.0             | 7,639.0             | 7,553.0             | 32.9            | 22.6        | 90.00                 | 916.9                             | 1,862.7    | 528.6                | 490.5                 | 38.09                  | 13.878            |                    |        |
| 8,300.0  | 7,500.0             | 7,639.0             | 7,553.0             | 33.9            | 22.6        | 90.00                 | 916.9                             | 1,862.7    | 548.6                | 505.8                 | 42.77                  | 12.827            |                    |        |
| 8,400.0  | 7,500.0             | 7,639.0             | 7,553.0             | 35.0            | 22.6        | 90.00                 | 916.9                             | 1,862.7    | 585.2                | 538.0                 | 47.18                  | 12.405 SF         |                    |        |
| 8,500.0  | 7,500.0             | 7,639.0             | 7,553.0             | 36.2            | 22.6        | 90.00                 | 916.9                             | 1,862.7    | 635.6                | 584.8                 | 50.84                  | 12.502            |                    |        |
| 8,600.0  | 7,500.0             | 7,639.0             | 7,553.0             | 37.4            | 22.6        | 90.00                 | 916.9                             | 1,862.7    | 696.8                | 643.1                 | 53.65                  | 12.989            |                    |        |
| 8,700.0  | 7,500.0             | 7,639.0             | 7,553.0             | 38.6            | 22.6        | 90.00                 | 916.9                             | 1,862.7    | 766.2                | 710.5                 | 55.70                  | 13.755            |                    |        |
| 8,800.0  | 7,500.0             | 7,639.0             | 7,553.0             | 39.9            | 22.6        | 90.00                 | 916.9                             | 1,862.7    | 841.8                | 784.6                 | 57.18                  | 14.721            |                    |        |
| 8,900.0  | 7,500.0             | 7,639.0             | 7,553.0             | 41.2            | 22.6        | 90.00                 | 916.9                             | 1,862.7    | 922.0                | 863.8                 | 58.24                  | 15.832            |                    |        |
| 9,000.0  | 7,500.0             | 7,639.0             | 7,553.0             | 42.5            | 22.6        | 90.00                 | 916.9                             | 1,862.7    | 1,005.8              | 946.8                 | 59.00                  | 17.049            |                    |        |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S6-T1N-R68W (Bearden) - Bearden #1 (Existing Well) - Existing - Existing |                        |                        |                        |                   |                |                             |   |               |                            |                             |                              |                      | Offset Site Error: | 0.0 ft |
|--|------------------------|------------------------|------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|----------------------|--------------------|--------|
| Survey Program: 100-MWD  |                        |                        |                        |                   |                |                             |   |               |                            |                             |                              |                      | Offset Well Error: | 0.0 ft |
| Reference  |                        | Offset                 |                        | Semi Major Axis   |                |                             | Distance                                |               |                            |                             |                              | Warning              |                    |        |
| Measured Depth<br>(ft)   | Vertical Depth<br>(ft) | Measured Depth<br>(ft) | Vertical Depth<br>(ft) | Reference<br>(ft) | Offset<br>(ft) | Highside<br>Toolface<br>(°) | Offset Wellbore Centre<br>+N/-S<br>(ft) | +E/-W<br>(ft) | Between<br>Centres<br>(ft) | Between<br>Ellipses<br>(ft) | Total<br>Uncertainty<br>Axis | Separation<br>Factor |                    |        |
| 9,700.0  | 7,500.0                | 7,461.5                | 7,459.1                | 52.6              | 13.3           | -87.01                      | 3,457.6                                 | 1,142.9       | 1,000.1                    | 950.6                       | 49.52                        | 20.194               |                    |        |
| 9,800.0  | 7,500.0                | 7,462.4                | 7,460.0                | 54.1              | 13.3           | -87.03                      | 3,457.6                                 | 1,142.9       | 901.9                      | 851.4                       | 50.57                        | 17.837               |                    |        |
| 9,900.0  | 7,500.0                | 7,463.4                | 7,460.9                | 55.6              | 13.3           | -87.08                      | 3,457.6                                 | 1,142.9       | 803.9                      | 752.1                       | 51.73                        | 15.538               |                    |        |
| 10,000.0   | 7,500.0                | 7,464.3                | 7,461.8                | 57.1              | 13.3           | -87.19                      | 3,457.6                                 | 1,142.9       | 706.0                      | 652.9                       | 53.08                        | 13.299               |                    |        |
| 10,100.0   | 7,500.0                | 7,465.2                | 7,462.7                | 58.6              | 13.3           | -87.36                      | 3,457.6                                 | 1,142.9       | 608.3                      | 553.6                       | 54.69                        | 11.123               |                    |        |
| 10,200.0   | 7,500.0                | 7,466.2                | 7,463.7                | 60.1              | 13.3           | -87.59                      | 3,457.6                                 | 1,142.9       | 511.1                      | 454.4                       | 56.69                        | 9.015                |                    |        |
| 10,300.0   | 7,500.0                | 7,467.1                | 7,464.6                | 61.6              | 13.3           | -88.01                      | 3,457.6                                 | 1,142.9       | 414.9                      | 355.4                       | 59.41                        | 6.982                |                    |        |
| 10,400.0   | 7,500.0                | 7,468.1                | 7,465.6                | 63.1              | 13.3           | -88.45                      | 3,457.6                                 | 1,142.9       | 321.0                      | 257.5                       | 63.48                        | 5.056                |                    |        |
| 10,500.0   | 7,500.0                | 7,469.1                | 7,466.6                | 64.6              | 13.3           | -88.89                      | 3,457.6                                 | 1,142.9       | 232.2                      | 162.4                       | 69.81                        | 3.326                |                    |        |
| 10,600.0   | 7,500.0                | 7,470.0                | 7,467.5                | 66.2              | 13.3           | -89.33                      | 3,457.7                                 | 1,142.9       | 157.6                      | 79.3                        | 78.25                        | 2.014                |                    |        |
| 10,695.5   | 7,500.0                | 7,470.9                | 7,468.5                | 67.7              | 13.3           | -89.75                      | 3,457.7                                 | 1,142.9       | 125.3                      | 50.8                        | 74.54                        | 1.681 CC, ES, SF     |                    |        |
| 10,700.0   | 7,500.0                | 7,471.0                | 7,468.5                | 67.7              | 13.3           | -89.77                      | 3,457.7                                 | 1,142.9       | 125.4                      | 51.8                        | 73.60                        | 1.704                |                    |        |
| 10,800.0   | 7,500.0                | 7,472.0                | 7,469.5                | 69.3              | 13.3           | -90.22                      | 3,457.7                                 | 1,142.9       | 163.2                      | 116.5                       | 46.72                        | 3.493                |                    |        |
| 10,900.0   | 7,500.0                | 7,472.9                | 7,470.5                | 70.9              | 13.3           | -90.66                      | 3,457.7                                 | 1,142.9       | 239.9                      | 206.5                       | 33.30                        | 7.202                |                    |        |
| 11,000.0   | 7,500.0                | 7,473.9                | 7,471.4                | 72.5              | 13.3           | -91.11                      | 3,457.7                                 | 1,142.9       | 329.3                      | 297.4                       | 31.87                        | 10.333               |                    |        |
| 11,100.0   | 7,500.0                | 7,474.9                | 7,472.4                | 74.1              | 13.3           | -91.56                      | 3,457.7                                 | 1,142.9       | 423.5                      | 390.0                       | 33.48                        | 12.648               |                    |        |
| 11,200.0   | 7,500.0                | 7,475.9                | 7,473.4                | 75.7              | 13.3           | -92.01                      | 3,457.7                                 | 1,142.8       | 519.8                      | 484.6                       | 35.26                        | 14.744               |                    |        |
| 11,300.0   | 7,500.0                | 7,476.9                | 7,474.4                | 77.3              | 13.3           | -92.46                      | 3,457.7                                 | 1,142.8       | 617.3                      | 580.6                       | 36.74                        | 16.802               |                    |        |
| 11,400.0   | 7,500.0                | 7,477.8                | 7,475.4                | 78.9              | 13.3           | -92.91                      | 3,457.7                                 | 1,142.8       | 715.5                      | 677.6                       | 37.94                        | 18.860               |                    |        |
| 11,500.0   | 7,500.0                | 7,478.8                | 7,476.4                | 80.5              | 13.3           | -93.36                      | 3,457.7                                 | 1,142.8       | 814.2                      | 775.3                       | 38.91                        | 20.923               |                    |        |
| 11,600.0   | 7,500.0                | 7,479.8                | 7,477.4                | 82.1              | 13.3           | -93.81                      | 3,457.7                                 | 1,142.8       | 913.1                      | 873.4                       | 39.72                        | 22.991               |                    |        |
| 11,700.0   | 7,500.0                | 7,480.8                | 7,478.4                | 83.8              | 13.3           | -94.27                      | 3,457.8                                 | 1,142.8       | 1,012.3                    | 971.9                       | 40.39                        | 25.062               |                    |        |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S6-T1N-R68W (Bearden) - Bearden 24-6 - DD - 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<br>(ft)  | Vertical Depth<br>(ft) | Measured Depth<br>(ft) | Vertical Depth<br>(ft) | Reference<br>(ft) | Offset<br>(ft) | Highside<br>Toolface<br>(°) | Offset Wellbore Centre<br>+N/-S<br>(ft) | +E/-W<br>(ft) | Between<br>Centres<br>(ft) | Between<br>Ellipses<br>(ft) | Total<br>Uncertainty<br>Axis | Separation<br>Factor |                    |        |
| 9,100.0   | 7,500.0                | 7,557.8                | 7,485.0                | 43.9              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 1,018.8                    | 973.5                       | 45.35                        | 22.468               |                    |        |
| 9,200.0   | 7,500.0                | 7,557.8                | 7,485.0                | 45.3              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 919.7                      | 873.7                       | 45.93                        | 20.024               |                    |        |
| 9,300.0   | 7,500.0                | 7,557.8                | 7,485.0                | 46.7              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 820.7                      | 774.1                       | 46.63                        | 17.599               |                    |        |
| 9,400.0   | 7,500.0                | 7,557.8                | 7,485.0                | 48.2              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 722.0                      | 674.5                       | 47.51                        | 15.198               |                    |        |
| 9,500.0   | 7,500.0                | 7,557.8                | 7,485.0                | 49.6              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 623.8                      | 575.1                       | 48.63                        | 12.826               |                    |        |
| 9,600.0   | 7,500.0                | 7,557.8                | 7,485.0                | 51.1              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 526.1                      | 476.0                       | 50.13                        | 10.496               |                    |        |
| 9,700.0   | 7,500.0                | 7,557.8                | 7,485.0                | 52.6              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 429.2                      | 377.1                       | 52.11                        | 8.236                |                    |        |
| 9,800.0   | 7,500.0                | 7,557.8                | 7,485.0                | 54.1              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 333.4                      | 278.4                       | 54.97                        | 6.066                |                    |        |
| 9,900.0   | 7,500.0                | 7,557.8                | 7,485.0                | 55.6              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 240.4                      | 180.8                       | 59.56                        | 4.036                |                    |        |
| 10,000.0  | 7,500.0                | 7,557.8                | 7,485.0                | 57.1              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 155.0                      | 87.3                        | 67.68                        | 2.290                |                    |        |
| 10,100.0  | 7,500.0                | 7,557.8                | 7,485.0                | 58.6              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 99.7                       | 26.0                        | 73.67                        | 1.353                | Level 3, ES, SF    |        |
| 10,121.7  | 7,500.0                | 7,557.8                | 7,485.0                | 58.9              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 97.3                       | 27.2                        | 70.18                        | 1.387                | Level 3, CC        |        |
| 10,200.0  | 7,500.0                | 7,557.8                | 7,485.0                | 60.1              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 124.5                      | 78.8                        | 45.76                        | 2.722                |                    |        |
| 10,300.0  | 7,500.0                | 7,557.8                | 7,485.0                | 61.6              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 202.2                      | 168.4                       | 33.78                        | 5.985                |                    |        |
| 10,400.0  | 7,500.0                | 7,557.8                | 7,485.0                | 63.1              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 293.7                      | 258.4                       | 35.26                        | 8.330                |                    |        |
| 10,500.0  | 7,500.0                | 7,557.8                | 7,485.0                | 64.6              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 389.4                      | 352.0                       | 37.43                        | 10.403               |                    |        |
| 10,600.0  | 7,500.0                | 7,557.8                | 7,485.0                | 66.2              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 486.8                      | 447.8                       | 39.06                        | 12.465               |                    |        |
| 10,700.0  | 7,500.0                | 7,557.8                | 7,485.0                | 67.7              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 585.1                      | 544.9                       | 40.25                        | 14.539               |                    |        |
| 10,800.0  | 7,500.0                | 7,557.8                | 7,485.0                | 69.3              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 683.9                      | 642.8                       | 41.15                        | 16.621               |                    |        |
| 10,900.0  | 7,500.0                | 7,557.8                | 7,485.0                | 70.9              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 783.0                      | 741.2                       | 41.86                        | 18.707               |                    |        |
| 11,000.0  | 7,500.0                | 7,557.8                | 7,485.0                | 72.5              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 882.3                      | 839.9                       | 42.43                        | 20.794               |                    |        |
| 11,100.0  | 7,500.0                | 7,557.8                | 7,485.0                | 74.1              | 18.7           | -90.00                      | 2,891.3                                 | 1,229.9       | 981.8                      | 938.9                       | 42.91                        | 22.879               |                    |        |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 1 (EXISTING) - ENCANA WELL - SUR |                        |                        |                        |                   |                |                             |   |               |                            |                             |                              |                      | Offset Site Error: | 0.0 ft  |
|--|------------------------|------------------------|------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|----------------------|--------------------|---------|
| Survey Program: 100-MWD  |                        |                        |                        |                   |                |                             |   |               |                            |                             |                              |                      | Offset Well Error: | 0.0 ft  |
| Reference  |                        | Offset                 |                        | Semi Major Axis   |                |                             | Distance                                |               |                            |                             |                              |                      |                    | Warning |
| Measured Depth<br>(ft)   | Vertical Depth<br>(ft) | Measured Depth<br>(ft) | Vertical Depth<br>(ft) | Reference<br>(ft) | Offset<br>(ft) | Highside<br>Toolface<br>(°) | Offset Wellbore Centre<br>+N/-S<br>(ft) | +E/-W<br>(ft) | Between<br>Centres<br>(ft) | Between<br>Ellipses<br>(ft) | Total<br>Uncertainty<br>Axis | Separation<br>Factor |                    |         |
| 10,100.0   | 7,500.0                | 7,461.1                | 7,458.6                | 58.6              | 13.3           | -88.30                      | 3,773.8                                 | 900.6         | 992.5                      | 933.0                       | 59.47                        | 16.689               |                    |         |
| 10,200.0   | 7,500.0                | 7,462.0                | 7,459.6                | 60.1              | 13.3           | -88.38                      | 3,773.8                                 | 900.6         | 899.3                      | 837.9                       | 61.37                        | 14.652               |                    |         |
| 10,300.0   | 7,500.0                | 7,463.0                | 7,460.5                | 61.6              | 13.3           | -88.54                      | 3,773.8                                 | 900.6         | 807.3                      | 743.7                       | 63.59                        | 12.694               |                    |         |
| 10,400.0   | 7,500.0                | 7,463.9                | 7,461.5                | 63.1              | 13.3           | -88.70                      | 3,773.8                                 | 900.6         | 717.4                      | 651.1                       | 66.24                        | 10.829               |                    |         |
| 10,500.0   | 7,500.0                | 7,464.9                | 7,462.4                | 64.6              | 13.3           | -88.87                      | 3,773.8                                 | 900.5         | 630.5                      | 561.1                       | 69.41                        | 9.084                |                    |         |
| 10,600.0   | 7,500.0                | 7,465.9                | 7,463.4                | 66.2              | 13.3           | -89.03                      | 3,773.8                                 | 900.5         | 548.2                      | 475.1                       | 73.15                        | 7.494                |                    |         |
| 10,700.0   | 7,500.0                | 7,466.8                | 7,464.3                | 67.7              | 13.3           | -89.20                      | 3,773.8                                 | 900.5         | 472.7                      | 395.4                       | 77.36                        | 6.111                |                    |         |
| 10,800.0   | 7,500.0                | 7,467.8                | 7,465.3                | 69.3              | 13.3           | -89.36                      | 3,773.8                                 | 900.5         | 408.0                      | 326.5                       | 81.47                        | 5.008                |                    |         |
| 10,900.0   | 7,500.0                | 7,468.7                | 7,466.3                | 70.9              | 13.3           | -89.53                      | 3,773.8                                 | 900.5         | 359.7                      | 275.7                       | 83.97                        | 4.284                |                    |         |
| 11,000.0   | 7,500.0                | 7,469.7                | 7,467.2                | 72.5              | 13.3           | -89.70                      | 3,773.8                                 | 900.5         | 335.2                      | 252.8                       | 82.34                        | 4.071 ES, SF         |                    |         |
| 11,035.3   | 7,500.0                | 7,470.0                | 7,467.6                | 73.0              | 13.3           | -89.75                      | 3,773.8                                 | 900.5         | 333.3                      | 252.9                       | 80.41                        | 4.145 CC             |                    |         |
| 11,100.0   | 7,500.0                | 7,470.7                | 7,468.2                | 74.1              | 13.3           | -89.86                      | 3,773.8                                 | 900.5         | 339.5                      | 264.4                       | 75.16                        | 4.517                |                    |         |
| 11,200.0   | 7,500.0                | 7,471.7                | 7,469.2                | 75.7              | 13.3           | -90.03                      | 3,773.9                                 | 900.5         | 371.8                      | 307.2                       | 64.61                        | 5.755                |                    |         |
| 11,300.0   | 7,500.0                | 7,472.6                | 7,470.1                | 77.3              | 13.3           | -90.20                      | 3,773.9                                 | 900.5         | 425.6                      | 371.4                       | 54.26                        | 7.844                |                    |         |
| 11,400.0   | 7,500.0                | 7,473.6                | 7,471.1                | 78.9              | 13.3           | -90.37                      | 3,773.9                                 | 900.5         | 494.1                      | 448.0                       | 46.07                        | 10.725               |                    |         |
| 11,500.0   | 7,500.0                | 7,474.6                | 7,472.1                | 80.5              | 13.3           | -90.53                      | 3,773.9                                 | 900.5         | 571.9                      | 531.6                       | 40.31                        | 14.186               |                    |         |
| 11,600.0   | 7,500.0                | 7,475.6                | 7,473.1                | 82.1              | 13.3           | -90.70                      | 3,773.9                                 | 900.5         | 655.7                      | 619.1                       | 36.63                        | 17.904               |                    |         |
| 11,700.0   | 7,500.0                | 7,476.6                | 7,474.1                | 83.8              | 13.3           | -90.87                      | 3,773.9                                 | 900.5         | 743.6                      | 709.1                       | 34.49                        | 21.560               |                    |         |
| 11,800.0   | 7,500.0                | 7,477.6                | 7,475.1                | 85.4              | 13.3           | -91.04                      | 3,773.9                                 | 900.5         | 834.2                      | 800.8                       | 33.43                        | 24.956               |                    |         |
| 11,900.0   | 7,500.0                | 7,478.5                | 7,476.1                | 87.1              | 13.3           | -91.26                      | 3,773.9                                 | 900.5         | 927.0                      | 893.9                       | 33.06                        | 28.040               |                    |         |
| 12,000.0   | 7,500.0                | 7,479.5                | 7,477.1                | 88.7              | 13.3           | -91.52                      | 3,773.9                                 | 900.5         | 1,021.7                    | 988.6                       | 33.10                        | 30.869               |                    |         |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 23-6 (EXISTING) - ENCANA WELL - G |                |                |                |                 |        |                   |                        |            |                 |                  | Offset Site Error: 0.0 ft |                   |                 |
|---|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------|------------|-----------------|------------------|---------------------------|-------------------|-----------------|
| Survey Program: 100-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 Axis    | Separation Factor |                 |
| (ft)  | (ft)           | (ft)           | (ft)           | (ft)            | (ft)   | (°)               | +N/-S (ft)             | +E/-W (ft) | (ft)            | (ft)             |                           |                   |                 |
| 10,600.0  | 7,500.0        | 7,423.0        | 7,420.9        | 66.2            | 13.2   | 68.75             | 4,355.4                | 1,280.7    | 980.4           | 938.5            | 41.92                     | 23.390            |                 |
| 10,700.0  | 7,500.0        | 7,426.6        | 7,424.5        | 67.7            | 13.2   | 70.48             | 4,355.5                | 1,280.8    | 881.2           | 839.9            | 41.29                     | 21.340            |                 |
| 10,800.0  | 7,500.0        | 7,430.3        | 7,428.3        | 69.3            | 13.2   | 72.29             | 4,355.7                | 1,280.8    | 782.1           | 741.6            | 40.51                     | 19.308            |                 |
| 10,900.0  | 7,500.0        | 7,434.1        | 7,432.1        | 70.9            | 13.2   | 74.19             | 4,355.8                | 1,280.8    | 683.2           | 643.7            | 39.50                     | 17.297            |                 |
| 11,000.0  | 7,500.0        | 7,438.0        | 7,436.0        | 72.5            | 13.2   | 76.18             | 4,356.0                | 1,280.8    | 584.7           | 546.6            | 38.19                     | 15.311            |                 |
| 11,100.0  | 7,500.0        | 7,442.0        | 7,440.0        | 74.1            | 13.2   | 78.25             | 4,356.2                | 1,280.9    | 486.8           | 450.4            | 36.48                     | 13.346            |                 |
| 11,200.0  | 7,500.0        | 7,446.2        | 7,444.1        | 75.7            | 13.3   | 80.41             | 4,356.4                | 1,280.9    | 389.9           | 355.6            | 34.33                     | 11.359            |                 |
| 11,300.0  | 7,500.0        | 7,450.4        | 7,448.3        | 77.3            | 13.3   | 82.66             | 4,356.6                | 1,280.9    | 295.1           | 262.6            | 32.44                     | 9.095             |                 |
| 11,400.0  | 7,500.0        | 7,454.8        | 7,452.7        | 78.9            | 13.3   | 84.99             | 4,356.8                | 1,281.0    | 205.0           | 169.0            | 36.02                     | 5.691             |                 |
| 11,500.0  | 7,500.0        | 7,459.3        | 7,457.2        | 80.5            | 13.3   | 87.40             | 4,357.0                | 1,281.0    | 130.2           | 70.2             | 60.02                     | 2.170             |                 |
| 11,575.6  | 7,500.0        | 7,462.7        | 7,460.7        | 81.7            | 13.3   | 89.28             | 4,357.2                | 1,281.0    | 106.1           | 16.4             | 89.65                     | 1.183             | Level 2, CC     |
| 11,600.0  | 7,500.0        | 7,463.9        | 7,461.8        | 82.1            | 13.3   | 89.89             | 4,357.2                | 1,281.0    | 108.9           | 14.4             | 94.42                     | 1.153             | Level 2, ES, SF |
| 11,700.0  | 7,500.0        | 7,468.6        | 7,466.6        | 83.8            | 13.3   | 92.46             | 4,357.4                | 1,281.1    | 163.4           | 76.4             | 87.02                     | 1.877             |                 |
| 11,800.0  | 7,500.0        | 7,473.5        | 7,471.4        | 85.4            | 13.3   | 95.08             | 4,357.7                | 1,281.1    | 248.0           | 172.4            | 75.62                     | 3.280             |                 |
| 11,900.0  | 7,500.0        | 7,478.6        | 7,476.5        | 87.1            | 13.3   | 97.46             | 4,357.9                | 1,281.1    | 340.7           | 271.9            | 68.81                     | 4.952             |                 |
| 12,000.0  | 7,500.0        | 7,483.8        | 7,481.7        | 88.7            | 13.3   | 99.54             | 4,358.2                | 1,281.2    | 436.2           | 371.7            | 64.46                     | 6.767             |                 |
| 12,100.0  | 7,500.0        | 7,489.2        | 7,487.1        | 90.4            | 13.3   | 101.32            | 4,358.5                | 1,281.2    | 532.8           | 471.4            | 61.42                     | 8.675             |                 |
| 12,200.0  | 7,500.0        | 7,494.9        | 7,492.7        | 92.1            | 13.3   | 102.79            | 4,358.8                | 1,281.3    | 630.2           | 571.0            | 59.15                     | 10.654            |                 |
| 12,300.0  | 7,500.0        | 7,500.0        | 7,497.9        | 93.8            | 13.3   | 103.71            | 4,359.0                | 1,281.3    | 727.9           | 670.5            | 57.35                     | 12.692            |                 |
| 12,400.0  | 7,500.0        | 7,505.8        | 7,503.7        | 95.4            | 13.4   | 104.58            | 4,359.4                | 1,281.4    | 825.8           | 769.9            | 55.87                     | 14.781            |                 |
| 12,500.0  | 7,500.0        | 7,511.1        | 7,508.9        | 97.2            | 13.4   | 104.98            | 4,359.6                | 1,281.4    | 923.8           | 869.2            | 54.60                     | 16.918            |                 |
| 12,600.0  | 7,500.0        | 7,516.3        | 7,514.2        | 98.9            | 13.4   | 105.19            | 4,359.9                | 1,281.5    | 1,021.8         | 968.3            | 53.50                     | 19.100            |                 |



# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - P |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        |                   | Offset Site Error: 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|---------------------------|
| Survey Program: 775-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 |                           |
| 11,200.0   | 7,500.0             | 7,610.5             | 7,484.0             | 75.7            | 25.4        | -90.00                | 4,836.2                           | 611.5      | 1,053.6              | 978.2                 | 75.38                  | 13.976            |                           |
| 11,300.0   | 7,500.0             | 7,610.5             | 7,484.0             | 77.3            | 25.4        | -90.00                | 4,836.2                           | 611.5      | 967.2                | 888.4                 | 78.87                  | 12.264            |                           |
| 11,400.0   | 7,500.0             | 7,610.5             | 7,484.0             | 78.9            | 25.4        | -90.00                | 4,836.2                           | 611.5      | 883.8                | 800.9                 | 82.89                  | 10.662            |                           |
| 11,500.0   | 7,500.0             | 7,610.5             | 7,484.0             | 80.5            | 25.4        | -90.00                | 4,836.2                           | 611.5      | 804.2                | 716.7                 | 87.51                  | 9.190             |                           |
| 11,600.0   | 7,500.0             | 7,610.5             | 7,484.0             | 82.1            | 25.4        | -90.00                | 4,836.2                           | 611.5      | 729.6                | 636.9                 | 92.70                  | 7.870             |                           |
| 11,700.0   | 7,500.0             | 7,610.5             | 7,484.0             | 83.8            | 25.4        | -90.00                | 4,836.2                           | 611.5      | 661.8                | 563.4                 | 98.34                  | 6.729             |                           |
| 11,800.0   | 7,500.0             | 7,610.5             | 7,484.0             | 85.4            | 25.4        | -90.00                | 4,836.2                           | 611.5      | 602.9                | 498.9                 | 104.01                 | 5.796             |                           |
| 11,900.0   | 7,500.0             | 7,610.5             | 7,484.0             | 87.1            | 25.4        | -90.00                | 4,836.2                           | 611.5      | 556.7                | 447.7                 | 108.94                 | 5.110             |                           |
| 12,000.0   | 7,500.0             | 7,610.5             | 7,484.0             | 88.7            | 25.4        | -90.00                | 4,836.2                           | 611.5      | 527.3                | 415.4                 | 111.87                 | 4.713             |                           |
| 12,096.1   | 7,500.0             | 7,610.5             | 7,484.0             | 90.3            | 25.4        | -90.00                | 4,836.2                           | 611.5      | 517.6                | 406.0                 | 111.65                 | 4.636 CC, ES, SF  |                           |
| 12,100.0   | 7,500.0             | 7,610.5             | 7,484.0             | 90.4            | 25.4        | -90.00                | 4,836.2                           | 611.5      | 517.6                | 406.1                 | 111.57                 | 4.640             |                           |
| 12,200.0   | 7,500.0             | 7,610.5             | 7,484.0             | 92.1            | 25.4        | -90.00                | 4,836.2                           | 611.5      | 528.8                | 421.2                 | 107.68                 | 4.911             |                           |
| 12,300.0   | 7,500.0             | 7,610.5             | 7,484.0             | 93.8            | 25.4        | -90.00                | 4,836.2                           | 611.5      | 559.7                | 458.6                 | 101.06                 | 5.538             |                           |
| 12,400.0   | 7,500.0             | 7,610.5             | 7,484.0             | 95.4            | 25.4        | -90.00                | 4,836.2                           | 611.5      | 607.1                | 513.9                 | 93.21                  | 6.513             |                           |
| 12,500.0   | 7,500.0             | 7,610.5             | 7,484.0             | 97.2            | 25.4        | -90.00                | 4,836.2                           | 611.5      | 667.6                | 582.2                 | 85.41                  | 7.816             |                           |
| 12,600.0   | 7,500.0             | 7,610.5             | 7,484.0             | 98.9            | 25.4        | -90.00                | 4,836.2                           | 611.5      | 737.9                | 659.6                 | 78.38                  | 9.415             |                           |
| 12,700.0   | 7,500.0             | 7,610.5             | 7,484.0             | 100.6           | 25.4        | -90.00                | 4,836.2                           | 611.5      | 815.6                | 743.2                 | 72.38                  | 11.267            |                           |
| 12,800.0   | 7,500.0             | 7,610.5             | 7,484.0             | 102.3           | 25.4        | -90.00                | 4,836.2                           | 611.5      | 898.6                | 831.1                 | 67.42                  | 13.327            |                           |
| 12,900.0   | 7,500.0             | 7,610.5             | 7,484.0             | 104.0           | 25.4        | -90.00                | 4,836.2                           | 611.5      | 985.2                | 921.9                 | 63.35                  | 15.552            |                           |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design       |                     | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - S |                     |                 |             |                       |                                   |            |                      |                       |                        | Offset Site Error: |  | 0.0 ft  |  |
|---------------------|---------------------|--|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|--------------------|--|---------|--|
| Survey Program:     |                     | 76-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  |  |         |  |
| 8,800.0             | 7,500.0             | 7,665.3  | 7,472.9             | 39.9            | 27.7        | -89.18                | 2,277.9                           | 569.2      | 1,042.7              | 977.3                 | 65.41                  | 15.942             |  |         |  |
| 8,900.0             | 7,500.0             | 7,665.3  | 7,473.0             | 41.2            | 27.7        | -89.19                | 2,277.9                           | 569.2      | 979.2                | 911.8                 | 67.37                  | 14.535             |  |         |  |
| 9,000.0             | 7,500.0             | 7,665.4  | 7,473.0             | 42.5            | 27.7        | -89.20                | 2,277.9                           | 569.2      | 922.2                | 853.0                 | 69.21                  | 13.325             |  |         |  |
| 9,100.0             | 7,500.0             | 7,665.5  | 7,473.1             | 43.9            | 27.7        | -89.20                | 2,277.9                           | 569.2      | 873.0                | 802.2                 | 70.76                  | 12.337             |  |         |  |
| 9,200.0             | 7,500.0             | 7,665.6  | 7,473.2             | 45.3            | 27.7        | -89.21                | 2,277.9                           | 569.2      | 832.9                | 761.0                 | 71.84                  | 11.594             |  |         |  |
| 9,300.0             | 7,500.0             | 7,665.7  | 7,473.3             | 46.7            | 27.7        | -89.21                | 2,277.9                           | 569.2      | 803.3                | 731.1                 | 72.22                  | 11.123             |  |         |  |
| 9,400.0             | 7,500.0             | 7,665.7  | 7,473.4             | 48.2            | 27.7        | -89.22                | 2,277.9                           | 569.2      | 785.4                | 713.7                 | 71.73                  | 10.949 SF          |  |         |  |
| 9,492.0             | 7,500.0             | 7,665.8  | 7,473.4             | 49.5            | 27.7        | -89.22                | 2,277.9                           | 569.2      | 780.0                | 709.6                 | 70.43                  | 11.074 CC, ES      |  |         |  |
| 9,500.0             | 7,500.0             | 7,665.8  | 7,473.4             | 49.6            | 27.7        | -89.22                | 2,277.9                           | 569.2      | 780.0                | 709.7                 | 70.28                  | 11.099             |  |         |  |
| 9,600.0             | 7,500.0             | 7,665.9  | 7,473.5             | 51.1            | 27.7        | -89.23                | 2,277.9                           | 569.2      | 787.3                | 719.3                 | 67.92                  | 11.591             |  |         |  |
| 9,700.0             | 7,500.0             | 7,666.0  | 7,473.6             | 52.6            | 27.7        | -89.24                | 2,277.9                           | 569.2      | 805.5                | 740.7                 | 64.83                  | 12.426             |  |         |  |
| 9,800.0             | 7,500.0             | 7,666.1  | 7,473.8             | 54.1            | 27.7        | -89.26                | 2,277.9                           | 569.2      | 833.8                | 772.6                 | 61.24                  | 13.615             |  |         |  |
| 9,900.0             | 7,500.0             | 7,666.3  | 7,473.9             | 55.6            | 27.7        | -89.27                | 2,277.9                           | 569.2      | 871.1                | 813.7                 | 57.43                  | 15.168             |  |         |  |
| 10,000.0            | 7,500.0             | 7,666.5  | 7,474.1             | 57.1            | 27.7        | -89.29                | 2,277.9                           | 569.2      | 916.3                | 862.7                 | 53.62                  | 17.088             |  |         |  |
| 10,100.0            | 7,500.0             | 7,666.7  | 7,474.3             | 58.6            | 27.7        | -89.31                | 2,277.9                           | 569.2      | 968.3                | 918.4                 | 49.99                  | 19.369             |  |         |  |
| 10,200.0            | 7,500.0             | 7,666.9  | 7,474.6             | 60.1            | 27.7        | -89.34                | 2,277.9                           | 569.2      | 1,026.1              | 979.5                 | 46.66                  | 21.990             |  |         |  |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 2-6 (EXISTING) - NOBLE WELL - NO SUR |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        |                   | Offset Site Error: 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|---------------------------|
| Survey Program: 8164-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 |                           |
| 12,600.0   | 7,500.0             | 7,453.0             | 7,453.0             | 98.9            | 13.0        | -90.00                | 6,294.0                           | 701.2      | 1,017.5              | 943.5                 | 74.04                  | 13.743            |                           |
| 12,700.0   | 7,500.0             | 7,453.0             | 7,453.0             | 100.6           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 929.5                | 851.0                 | 78.43                  | 11.851            |                           |
| 12,800.0   | 7,500.0             | 7,453.0             | 7,453.0             | 102.3           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 845.0                | 761.3                 | 83.71                  | 10.095            |                           |
| 12,900.0   | 7,500.0             | 7,453.0             | 7,453.0             | 104.0           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 765.0                | 675.1                 | 89.91                  | 8.509             |                           |
| 13,000.0   | 7,500.0             | 7,453.0             | 7,453.0             | 105.8           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 690.3                | 593.3                 | 97.00                  | 7.116             |                           |
| 13,100.0   | 7,500.0             | 7,453.0             | 7,453.0             | 107.5           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 622.7                | 517.8                 | 104.86                 | 5.938             |                           |
| 13,200.0   | 7,500.0             | 7,453.0             | 7,453.0             | 109.2           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 564.7                | 451.8                 | 112.99                 | 4.998             |                           |
| 13,300.0   | 7,500.0             | 7,453.0             | 7,453.0             | 111.0           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 519.8                | 399.4                 | 120.39                 | 4.317             |                           |
| 13,400.0   | 7,500.0             | 7,453.0             | 7,453.0             | 112.7           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 491.3                | 365.9                 | 125.44                 | 3.917             |                           |
| 13,493.9   | 7,500.0             | 7,453.0             | 7,453.0             | 114.3           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 482.2                | 355.6                 | 126.59                 | 3.809 CC, ES, SF  |                           |
| 13,500.0   | 7,500.0             | 7,453.0             | 7,453.0             | 114.5           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 482.3                | 355.7                 | 126.52                 | 3.812             |                           |
| 13,600.0   | 7,500.0             | 7,453.0             | 7,453.0             | 116.2           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 493.8                | 370.7                 | 123.06                 | 4.012             |                           |
| 13,700.0   | 7,500.0             | 7,453.0             | 7,453.0             | 117.9           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 524.4                | 408.4                 | 116.03                 | 4.520             |                           |
| 13,800.0   | 7,500.0             | 7,453.0             | 7,453.0             | 119.7           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 571.2                | 463.9                 | 107.22                 | 5.327             |                           |
| 13,900.0   | 7,500.0             | 7,453.0             | 7,453.0             | 121.4           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 630.4                | 532.2                 | 98.19                  | 6.421             |                           |
| 14,000.0   | 7,500.0             | 7,453.0             | 7,453.0             | 123.1           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 699.0                | 609.2                 | 89.82                  | 7.783             |                           |
| 14,100.0   | 7,500.0             | 7,453.0             | 7,453.0             | 124.9           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 774.5                | 692.0                 | 82.47                  | 9.391             |                           |
| 14,200.0   | 7,500.0             | 7,453.0             | 7,453.0             | 126.6           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 855.0                | 778.9                 | 76.18                  | 11.224            |                           |
| 14,300.0   | 7,500.0             | 7,453.0             | 7,453.0             | 128.4           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 939.3                | 868.4                 | 70.86                  | 13.255            |                           |
| 14,341.7   | 7,500.0             | 7,453.0             | 7,453.0             | 129.1           | 13.0        | -90.00                | 6,294.0                           | 701.2      | 975.3                | 906.4                 | 68.90                  | 14.155            |                           |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design       |                     |                     |                     |                 |             |                       |                        |            |                      |                       |                        |                   | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 4 (EXISTING) - MARTIN EXP WELL - NO |         | Offset Site Error: |  | 0.0 ft |
|---------------------|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|------------------------|------------|----------------------|-----------------------|------------------------|-------------------|---|---------|--------------------|--|--------|
| Survey Program:     |                     |                     |                     |                 |             |                       |                        |            |                      |                       |                        |                   | 8200-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 |            | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor |   |         |                    |  |        |
|                     |                     |                     |                     |                 |             |                       | +N/-S (ft)             | +E/-W (ft) |                      |                       |                        |                   |   |         |                    |  |        |
| 12,500.0            | 7,500.0             | 7,457.0             | 7,457.0             | 97.2            | 13.0        | -90.00                | 5,531.2                | 71.9       | 1,081.2              | 971.1                 | 110.11                 | 9.819             |   |         |                    |  |        |
| 12,600.0            | 7,500.0             | 7,457.0             | 7,457.0             | 98.9            | 13.0        | -90.00                | 5,531.2                | 71.9       | 1,063.8              | 952.0                 | 111.74                 | 9.520             |   |         |                    |  |        |
| 12,700.0            | 7,500.0             | 7,457.0             | 7,457.0             | 100.6           | 13.0        | -90.00                | 5,531.2                | 71.9       | 1,057.3              | 944.7                 | 112.59                 | 9.391             |   |         |                    |  |        |
| 12,707.9            | 7,500.0             | 7,457.0             | 7,457.0             | 100.7           | 13.0        | -90.00                | 5,531.2                | 71.9       | 1,057.3              | 944.7                 | 112.62                 | 9.388             | CC, ES, SF  |         |                    |  |        |
| 12,800.0            | 7,500.0             | 7,457.0             | 7,457.0             | 102.3           | 13.0        | -90.00                | 5,531.2                | 71.9       | 1,062.0              | 949.4                 | 112.58                 | 9.433             |   |         |                    |  |        |
| 12,900.0            | 7,500.0             | 7,457.0             | 7,457.0             | 104.0           | 13.0        | -90.00                | 5,531.2                | 71.9       | 1,077.1              | 965.3                 | 111.76                 | 9.637             |   |         |                    |  |        |
| 13,000.0            | 7,500.0             | 7,457.0             | 7,457.0             | 105.8           | 13.0        | -90.00                | 5,531.2                | 71.9       | 1,101.1              | 990.9                 | 110.21                 | 9.991             |   |         |                    |  |        |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 7-6 (EXISTING) - NOBLE WELL - NO SUR |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        |                   | Offset Site Error: 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|---------------------------|
| Survey Program: 7756-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                   |
| 11,900.0   | 7,500.0             | 7,454.0             | 7,454.0             | 87.1            | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 942.7                | 909.8                 | 32.92                  | 28.639            |                           |
| 12,000.0   | 7,500.0             | 7,454.0             | 7,454.0             | 88.7            | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 849.5                | 815.5                 | 33.93                  | 25.034            |                           |
| 12,100.0   | 7,500.0             | 7,454.0             | 7,454.0             | 90.4            | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 757.2                | 721.2                 | 36.01                  | 21.026            |                           |
| 12,200.0   | 7,500.0             | 7,454.0             | 7,454.0             | 92.1            | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 666.3                | 626.8                 | 39.51                  | 16.864            |                           |
| 12,300.0   | 7,500.0             | 7,454.0             | 7,454.0             | 93.8            | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 577.6                | 532.8                 | 44.87                  | 12.872            |                           |
| 12,400.0   | 7,500.0             | 7,454.0             | 7,454.0             | 95.4            | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 492.3                | 439.6                 | 52.70                  | 9.341             |                           |
| 12,500.0   | 7,500.0             | 7,454.0             | 7,454.0             | 97.2            | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 412.4                | 348.6                 | 63.78                  | 6.466             |                           |
| 12,600.0   | 7,500.0             | 7,454.0             | 7,454.0             | 98.9            | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 341.8                | 263.0                 | 78.85                  | 4.335             |                           |
| 12,700.0   | 7,500.0             | 7,454.0             | 7,454.0             | 100.6           | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 287.6                | 190.5                 | 97.06                  | 2.963             |                           |
| 12,800.0   | 7,500.0             | 7,454.0             | 7,454.0             | 102.3           | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 260.1                | 147.6                 | 112.51                 | 2.312             |                           |
| 12,827.6   | 7,500.0             | 7,454.0             | 7,454.0             | 102.8           | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 258.6                | 143.7                 | 114.93                 | 2.250 CC, ES, SF  |                           |
| 12,900.0   | 7,500.0             | 7,454.0             | 7,454.0             | 104.0           | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 268.4                | 152.4                 | 116.07                 | 2.313             |                           |
| 13,000.0   | 7,500.0             | 7,454.0             | 7,454.0             | 105.8           | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 310.6                | 202.2                 | 108.32                 | 2.867             |                           |
| 13,100.0   | 7,500.0             | 7,454.0             | 7,454.0             | 107.5           | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 375.3                | 277.9                 | 97.38                  | 3.854             |                           |
| 13,200.0   | 7,500.0             | 7,454.0             | 7,454.0             | 109.2           | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 453.0                | 365.3                 | 87.71                  | 5.165             |                           |
| 13,300.0   | 7,500.0             | 7,454.0             | 7,454.0             | 111.0           | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 538.2                | 458.1                 | 80.11                  | 6.718             |                           |
| 13,400.0   | 7,500.0             | 7,454.0             | 7,454.0             | 112.7           | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 627.7                | 553.4                 | 74.29                  | 8.449             |                           |
| 13,500.0   | 7,500.0             | 7,454.0             | 7,454.0             | 114.5           | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 720.0                | 650.2                 | 69.81                  | 10.314            |                           |
| 13,600.0   | 7,500.0             | 7,454.0             | 7,454.0             | 116.2           | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 814.1                | 747.8                 | 66.31                  | 12.278            |                           |
| 13,700.0   | 7,500.0             | 7,454.0             | 7,454.0             | 117.9           | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 909.5                | 846.0                 | 63.52                  | 14.318            |                           |
| 13,800.0   | 7,500.0             | 7,454.0             | 7,454.0             | 119.7           | 13.0        | 90.00                 | 5,577.5                           | 1,393.2    | 1,005.8              | 944.5                 | 61.28                  | 16.413            |                           |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WE |                     |                     |                     |                 |             |                       |                                   |            |                      | Offset Site Error:    |                        | 0.0 ft            |         |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|---------|
| Survey Program: 40-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 |         |
| 12,900.0   | 7,500.0             | 7,556.4             | 7,460.1             | 104.0           | 19.7        | 89.66                 | 6,296.1                           | 2,031.1    | 1,090.3              | 997.6                 | 92.64                  | 11.769            |         |
| 13,000.0   | 7,500.0             | 7,560.0             | 7,463.7             | 105.8           | 19.7        | 89.91                 | 6,296.2                           | 2,031.1    | 1,029.9              | 930.7                 | 99.24                  | 10.378            |         |
| 13,100.0   | 7,500.0             | 7,560.7             | 7,464.4             | 107.5           | 19.7        | 89.96                 | 6,296.2                           | 2,031.1    | 976.1                | 870.0                 | 106.09                 | 9.201             |         |
| 13,200.0   | 7,500.0             | 7,563.0             | 7,466.7             | 109.2           | 19.7        | 90.11                 | 6,296.3                           | 2,031.1    | 929.9                | 817.0                 | 112.94                 | 8.234             |         |
| 13,300.0   | 7,500.0             | 7,565.3             | 7,468.9             | 111.0           | 19.7        | 90.27                 | 6,296.3                           | 2,031.0    | 892.6                | 773.1                 | 119.48                 | 7.471             |         |
| 13,400.0   | 7,500.0             | 7,567.5             | 7,471.1             | 112.7           | 19.7        | 90.42                 | 6,296.4                           | 2,031.0    | 865.3                | 740.0                 | 125.30                 | 6.906             |         |
| 13,500.0   | 7,500.0             | 7,569.6             | 7,473.3             | 114.5           | 19.7        | 90.56                 | 6,296.4                           | 2,031.0    | 848.9                | 718.9                 | 130.00                 | 6.530             |         |
| 13,590.2   | 7,500.0             | 7,571.5             | 7,475.2             | 116.0           | 19.7        | 90.69                 | 6,296.5                           | 2,031.0    | 844.1                | 711.1                 | 133.00                 | 6.347 CC          |         |
| 13,600.0   | 7,500.0             | 7,571.8             | 7,475.4             | 116.2           | 19.7        | 90.71                 | 6,296.5                           | 2,031.0    | 844.2                | 710.9                 | 133.25                 | 6.335 ES          |         |
| 13,700.0   | 7,500.0             | 7,573.8             | 7,477.5             | 117.9           | 19.7        | 90.85                 | 6,296.5                           | 2,030.9    | 851.2                | 716.4                 | 134.88                 | 6.311 SF          |         |
| 13,800.0   | 7,500.0             | 7,575.9             | 7,479.5             | 119.7           | 19.7        | 90.99                 | 6,296.6                           | 2,030.9    | 869.8                | 734.9                 | 134.91                 | 6.447             |         |
| 13,900.0   | 7,500.0             | 7,577.9             | 7,481.6             | 121.4           | 19.7        | 91.12                 | 6,296.6                           | 2,030.9    | 899.1                | 765.6                 | 133.56                 | 6.732             |         |
| 14,000.0   | 7,500.0             | 7,579.9             | 7,483.5             | 123.1           | 19.7        | 91.26                 | 6,296.7                           | 2,030.9    | 938.3                | 807.1                 | 131.15                 | 7.154             |         |
| 14,100.0   | 7,500.0             | 7,581.8             | 7,485.5             | 124.9           | 19.7        | 91.39                 | 6,296.7                           | 2,030.9    | 986.1                | 858.0                 | 128.03                 | 7.702             |         |
| 14,200.0   | 7,500.0             | 7,583.7             | 7,487.4             | 126.6           | 19.7        | 91.52                 | 6,296.7                           | 2,030.8    | 1,041.3              | 916.8                 | 124.51                 | 8.363             |         |
| 14,300.0   | 7,500.0             | 7,585.6             | 7,489.2             | 128.4           | 19.7        | 91.65                 | 6,296.8                           | 2,030.8    | 1,102.8              | 982.0                 | 120.82                 | 9.127             |         |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WE |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        |                   | Offset Site Error: 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|---------------------------|
| Survey Program: 771-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 |                           |
| 10,100.0   | 7,500.0             | 7,601.6             | 7,530.2             | 58.6            | 18.5        | 89.40                 | 3,579.3                           | 2,009.8    | 977.3                | 934.1                 | 43.21                  | 22.617            |                           |
| 10,200.0   | 7,500.0             | 7,603.0             | 7,531.6             | 60.1            | 18.5        | 89.51                 | 3,579.3                           | 2,009.8    | 915.6                | 867.6                 | 48.02                  | 19.067            |                           |
| 10,300.0   | 7,500.0             | 7,604.3             | 7,533.0             | 61.6            | 18.5        | 89.61                 | 3,579.3                           | 2,009.8    | 862.1                | 808.4                 | 53.68                  | 16.061            |                           |
| 10,400.0   | 7,500.0             | 7,605.7             | 7,534.4             | 63.1            | 18.5        | 89.72                 | 3,579.3                           | 2,009.8    | 817.3                | 757.4                 | 59.93                  | 13.638            |                           |
| 10,500.0   | 7,500.0             | 7,610.0             | 7,538.6             | 64.6            | 18.5        | 90.05                 | 3,579.4                           | 2,009.8    | 782.9                | 716.4                 | 66.46                  | 11.780            |                           |
| 10,600.0   | 7,500.0             | 7,610.0             | 7,538.6             | 66.2            | 18.5        | 90.05                 | 3,579.4                           | 2,009.8    | 760.1                | 687.2                 | 72.84                  | 10.435            |                           |
| 10,700.0   | 7,500.0             | 7,610.0             | 7,538.6             | 67.7            | 18.5        | 90.05                 | 3,579.4                           | 2,009.8    | 750.0                | 671.4                 | 78.61                  | 9.541             |                           |
| 10,725.9   | 7,500.0             | 7,610.0             | 7,538.6             | 68.2            | 18.5        | 90.05                 | 3,579.4                           | 2,009.8    | 749.6                | 669.6                 | 79.95                  | 9.376 CC, ES      |                           |
| 10,800.0   | 7,500.0             | 7,610.0             | 7,538.6             | 69.3            | 18.5        | 90.05                 | 3,579.4                           | 2,009.8    | 753.2                | 669.9                 | 83.36                  | 9.036             |                           |
| 10,900.0   | 7,500.0             | 7,613.1             | 7,541.7             | 70.9            | 18.5        | 90.28                 | 3,579.4                           | 2,009.8    | 769.5                | 682.6                 | 86.86                  | 8.859 SF          |                           |
| 11,000.0   | 7,500.0             | 7,614.6             | 7,543.2             | 72.5            | 18.5        | 90.40                 | 3,579.5                           | 2,009.8    | 798.1                | 709.0                 | 89.10                  | 8.957             |                           |
| 11,100.0   | 7,500.0             | 7,616.1             | 7,544.7             | 74.1            | 18.5        | 90.51                 | 3,579.5                           | 2,009.8    | 837.7                | 747.5                 | 90.22                  | 9.285             |                           |
| 11,200.0   | 7,500.0             | 7,617.6             | 7,546.2             | 75.7            | 18.5        | 90.62                 | 3,579.5                           | 2,009.8    | 886.9                | 796.4                 | 90.46                  | 9.804             |                           |
| 11,300.0   | 7,500.0             | 7,619.0             | 7,547.7             | 77.3            | 18.5        | 90.74                 | 3,579.5                           | 2,009.8    | 944.1                | 854.0                 | 90.08                  | 10.480            |                           |
| 11,400.0   | 7,500.0             | 7,620.5             | 7,549.1             | 78.9            | 18.5        | 90.85                 | 3,579.5                           | 2,009.8    | 1,008.0              | 918.7                 | 89.30                  | 11.288            |                           |
| 11,500.0   | 7,500.0             | 7,622.0             | 7,550.6             | 80.5            | 18.5        | 90.96                 | 3,579.6                           | 2,009.8    | 1,077.4              | 989.2                 | 88.29                  | 12.204            |                           |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design   |                |                |                |                 |        |                   |                        |                 |                  |                        |                   |        | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1A-7H-A168 - HZ - Plan #2 |         | 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  | 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)                   |                   |        |  |         |                    |  |        |  |
|                 |                |                |                |                 |        |                   |                        |                 |                  |                        |                   |        |  |         |                    |  |        |  |
| 8,700.0         | 7,500.0        | 8,167.6        | 7,530.0        | 38.6            | 34.0   | 90.05             | 1,479.2                | 2,387.7         | 1,045.5          | 999.4                  | 46.16             | 22.648 |  |         |                    |  |        |  |
| 8,753.0         | 7,500.0        | 8,123.8        | 7,529.5        | 39.3            | 33.9   | 90.03             | 1,523.0                | 2,387.8         | 1,045.2          | 998.3                  | 46.91             | 22.281 | CC   |         |                    |  |        |  |
| 8,800.0         | 7,500.0        | 8,089.4        | 7,527.5        | 39.9            | 33.7   | 89.92             | 1,557.4                | 2,388.3         | 1,045.5          | 997.7                  | 47.75             | 21.894 | ES   |         |                    |  |        |  |
| 8,900.0         | 7,500.0        | 8,017.1        | 7,518.1        | 41.2            | 33.5   | 89.40             | 1,629.0                | 2,390.7         | 1,048.0          | 998.4                  | 49.62             | 21.123 | SF   |         |                    |  |        |  |



# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design   |                |                |                |                 |        |                   |                        |            |                 |                  |                   | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS |    | Offset Site Error: |  | 0.0 ft |  |
|-----------------|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------|------------|-----------------|------------------|-------------------|--|----|--------------------|--|--------|--|
| Survey Program: |                |                |                |                 |        |                   |                        |            |                 |                  |                   | 7894-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   |    |                    |  |        |  |
| (ft)            | (ft)           | (ft)           | (ft)           | (ft)            | (ft)   | (°)               | +N/-S (ft)             | +E/-W (ft) | (ft)            | (ft)             | Axis              | Factor   |    |                    |  |        |  |
| 0.0             | 0.0            | 0.0            | 0.0            | 0.0             | 0.0    | -174.13           | -982.4                 | -101.0     | 987.7           |                  |                   |  |    |                    |  |        |  |
| 100.0           | 100.0          | 88.0           | 88.0           | 0.2             | 0.2    | -174.13           | -982.4                 | -101.0     | 987.6           | 987.3            | 0.31              | 3,231.447  |    |                    |  |        |  |
| 200.0           | 200.0          | 188.0          | 188.0          | 0.3             | 0.3    | -174.13           | -982.4                 | -101.0     | 987.6           | 987.0            | 0.65              | 1,508.536  |    |                    |  |        |  |
| 300.0           | 300.0          | 288.0          | 288.0          | 0.5             | 0.5    | -174.13           | -982.4                 | -101.0     | 987.6           | 986.6            | 1.00              | 983.932  | CC |                    |  |        |  |
| 400.0           | 400.0          | 388.0          | 388.0          | 0.7             | 0.7    | 103.62            | -982.4                 | -101.0     | 987.8           | 986.5            | 1.35              | 729.858  | ES |                    |  |        |  |
| 500.0           | 500.0          | 488.0          | 488.0          | 0.9             | 0.9    | 103.76            | -982.4                 | -101.0     | 988.5           | 986.7            | 1.71              | 579.250  |    |                    |  |        |  |
| 600.0           | 599.9          | 587.9          | 587.9          | 1.0             | 1.0    | 103.99            | -982.4                 | -101.0     | 989.5           | 987.4            | 2.07              | 478.955  |    |                    |  |        |  |
| 700.0           | 699.7          | 687.7          | 687.7          | 1.2             | 1.2    | 104.32            | -982.4                 | -101.0     | 991.0           | 988.6            | 2.44              | 406.933  |    |                    |  |        |  |
| 800.0           | 799.4          | 787.4          | 787.4          | 1.4             | 1.4    | 104.74            | -982.4                 | -101.0     | 993.0           | 990.2            | 2.82              | 352.439  |    |                    |  |        |  |
| 900.0           | 898.9          | 886.9          | 886.9          | 1.7             | 1.5    | 105.25            | -982.4                 | -101.0     | 995.5           | 992.2            | 3.22              | 309.629  |    |                    |  |        |  |
| 1,000.0         | 998.3          | 986.3          | 986.3          | 1.9             | 1.7    | 105.84            | -982.4                 | -101.0     | 998.5           | 994.9            | 3.63              | 275.058  |    |                    |  |        |  |
| 1,100.0         | 1,097.4        | 1,085.4        | 1,085.4        | 2.2             | 1.9    | 106.52            | -982.4                 | -101.0     | 1,002.2         | 998.1            | 4.06              | 246.562  | SF |                    |  |        |  |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 12-7 (EXISTING) - ENCANA WELL - N |                           |                           |                           |                   |                |                             |   |               |                            |                             |                              |                      | Offset Site Error: | 0.0 ft |
|---|---------------------------|---------------------------|---------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|----------------------|--------------------|--------|
| Survey Program: 8325-Geolink MWD  |                           |                           |                           |                   |                |                             |   |               |                            |                             |                              |                      | Offset Well Error: | 0.0 ft |
| Reference   |                           | Offset                    |                           | Semi Major Axis   |                |                             | Distance                                |               |                            |                             | Total<br>Uncertainty<br>Axis | Separation<br>Factor | Warning            |        |
| Measured<br>Depth<br>(ft)   | Vertical<br>Depth<br>(ft) | Measured<br>Depth<br>(ft) | Vertical<br>Depth<br>(ft) | Reference<br>(ft) | Offset<br>(ft) | Highside<br>Toolface<br>(°) | Offset Wellbore Centre<br>+N/-S<br>(ft) | +E/-W<br>(ft) | Between<br>Centres<br>(ft) | Between<br>Ellipses<br>(ft) |                              |                      |                    |        |
| 0.0   | 0.0                       | 88.0                      | 88.0                      | 0.0               | 0.2            | -40.75                      | 131.9                                   | -113.6        | 174.1                      |                             |                              |                      |                    |        |
| 100.0   | 100.0                     | 188.0                     | 188.0                     | 0.2               | 0.3            | -40.75                      | 131.9                                   | -113.6        | 174.1                      | 173.6                       | 0.48                         | 362.536              |                    |        |
| 200.0   | 200.0                     | 288.0                     | 288.0                     | 0.3               | 0.5            | -40.75                      | 131.9                                   | -113.6        | 174.1                      | 173.2                       | 0.83                         | 209.926              |                    |        |
| 300.0   | 300.0                     | 388.0                     | 388.0                     | 0.5               | 0.7            | -40.75                      | 131.9                                   | -113.6        | 174.1                      | 172.9                       | 1.18                         | 147.736 CC, ES       |                    |        |
| 400.0   | 400.0                     | 488.0                     | 488.0                     | 0.7               | 0.9            | -123.29                     | 131.9                                   | -113.6        | 174.6                      | 173.0                       | 1.53                         | 114.250              |                    |        |
| 500.0   | 500.0                     | 588.0                     | 588.0                     | 0.9               | 1.0            | -123.99                     | 131.9                                   | -113.6        | 176.0                      | 174.1                       | 1.88                         | 93.633               |                    |        |
| 600.0   | 599.9                     | 687.9                     | 687.9                     | 1.0               | 1.2            | -125.13                     | 131.9                                   | -113.6        | 178.5                      | 176.2                       | 2.24                         | 79.818               |                    |        |
| 700.0   | 699.7                     | 787.7                     | 787.7                     | 1.2               | 1.4            | -126.67                     | 131.9                                   | -113.6        | 182.1                      | 179.5                       | 2.60                         | 70.062               |                    |        |
| 800.0   | 799.4                     | 887.4                     | 887.4                     | 1.4               | 1.5            | -128.56                     | 131.9                                   | -113.6        | 186.9                      | 183.9                       | 2.97                         | 62.956               |                    |        |
| 900.0   | 898.9                     | 986.9                     | 986.9                     | 1.7               | 1.7            | -130.73                     | 131.9                                   | -113.6        | 193.0                      | 189.7                       | 3.34                         | 57.702               |                    |        |
| 1,000.0   | 998.3                     | 1,086.3                   | 1,086.3                   | 1.9               | 1.9            | -133.12                     | 131.9                                   | -113.6        | 200.6                      | 196.9                       | 3.73                         | 53.816               |                    |        |
| 1,100.0   | 1,097.4                   | 1,185.4                   | 1,185.4                   | 2.2               | 2.1            | -135.65                     | 131.9                                   | -113.6        | 209.8                      | 205.6                       | 4.11                         | 50.982               |                    |        |
| 1,200.0   | 1,196.3                   | 1,284.3                   | 1,284.3                   | 2.5               | 2.2            | -138.24                     | 131.9                                   | -113.6        | 220.6                      | 216.1                       | 4.50                         | 48.984               |                    |        |
| 1,300.0   | 1,294.9                   | 1,382.9                   | 1,382.9                   | 2.8               | 2.4            | -140.85                     | 131.9                                   | -113.6        | 233.3                      | 228.4                       | 4.89                         | 47.665               |                    |        |
| 1,400.0   | 1,393.3                   | 1,481.3                   | 1,481.3                   | 3.2               | 2.6            | -143.41                     | 131.9                                   | -113.6        | 247.7                      | 242.5                       | 5.28                         | 46.904               |                    |        |
| 1,500.0   | 1,491.3                   | 1,579.3                   | 1,579.3                   | 3.5               | 2.8            | -145.90                     | 131.9                                   | -113.6        | 263.9                      | 258.2                       | 5.66                         | 46.601               |                    |        |
| 1,600.0   | 1,589.3                   | 1,677.3                   | 1,677.3                   | 3.9               | 2.9            | -148.16                     | 131.9                                   | -113.6        | 280.7                      | 274.6                       | 6.04                         | 46.495 SF            |                    |        |
| 1,700.0   | 1,687.3                   | 1,775.3                   | 1,775.3                   | 4.3               | 3.1            | -150.17                     | 131.9                                   | -113.6        | 297.8                      | 291.4                       | 6.40                         | 46.507               |                    |        |
| 1,800.0   | 1,785.3                   | 1,873.3                   | 1,873.3                   | 4.6               | 3.3            | -151.96                     | 131.9                                   | -113.6        | 315.3                      | 308.5                       | 6.77                         | 46.601               |                    |        |
| 1,900.0   | 1,883.3                   | 1,971.3                   | 1,971.3                   | 5.0               | 3.4            | -153.56                     | 131.9                                   | -113.6        | 333.0                      | 325.9                       | 7.12                         | 46.753               |                    |        |
| 2,000.0   | 1,981.3                   | 2,069.3                   | 2,069.3                   | 5.4               | 3.6            | -155.00                     | 131.9                                   | -113.6        | 351.0                      | 343.5                       | 7.48                         | 46.943               |                    |        |
| 2,100.0   | 2,079.3                   | 2,167.3                   | 2,167.3                   | 5.8               | 3.8            | -156.30                     | 131.9                                   | -113.6        | 369.2                      | 361.3                       | 7.83                         | 47.159               |                    |        |
| 2,200.0   | 2,177.3                   | 2,265.3                   | 2,265.3                   | 6.2               | 4.0            | -157.47                     | 131.9                                   | -113.6        | 387.5                      | 379.3                       | 8.18                         | 47.391               |                    |        |
| 2,300.0   | 2,275.4                   | 2,363.4                   | 2,363.4                   | 6.6               | 4.1            | -158.55                     | 131.9                                   | -113.6        | 406.0                      | 397.4                       | 8.52                         | 47.631               |                    |        |
| 2,400.0   | 2,373.4                   | 2,461.4                   | 2,461.4                   | 6.9               | 4.3            | -159.52                     | 131.9                                   | -113.6        | 424.6                      | 415.7                       | 8.87                         | 47.876               |                    |        |
| 2,500.0   | 2,471.4                   | 2,559.4                   | 2,559.4                   | 7.3               | 4.5            | -160.42                     | 131.9                                   | -113.6        | 443.3                      | 434.1                       | 9.21                         | 48.122               |                    |        |
| 2,600.0   | 2,569.4                   | 2,657.4                   | 2,657.4                   | 7.7               | 4.6            | -161.24                     | 131.9                                   | -113.6        | 462.1                      | 452.5                       | 9.55                         | 48.365               |                    |        |
| 2,700.0   | 2,667.4                   | 2,755.4                   | 2,755.4                   | 8.1               | 4.8            | -162.00                     | 131.9                                   | -113.6        | 481.0                      | 471.1                       | 9.90                         | 48.604               |                    |        |
| 2,800.0   | 2,765.4                   | 2,853.4                   | 2,853.4                   | 8.5               | 5.0            | -162.71                     | 131.9                                   | -113.6        | 499.9                      | 489.7                       | 10.24                        | 48.837               |                    |        |
| 2,900.0   | 2,863.4                   | 2,951.4                   | 2,951.4                   | 8.9               | 5.2            | -163.36                     | 131.9                                   | -113.6        | 519.0                      | 508.4                       | 10.58                        | 49.064               |                    |        |
| 3,000.0   | 2,961.4                   | 3,049.4                   | 3,049.4                   | 9.3               | 5.3            | -163.96                     | 131.9                                   | -113.6        | 538.1                      | 527.1                       | 10.92                        | 49.285               |                    |        |
| 3,100.0   | 3,059.4                   | 3,147.4                   | 3,147.4                   | 9.7               | 5.5            | -164.53                     | 131.9                                   | -113.6        | 557.2                      | 545.9                       | 11.26                        | 49.498               |                    |        |
| 3,200.0   | 3,157.4                   | 3,245.4                   | 3,245.4                   | 10.1              | 5.7            | -165.05                     | 131.9                                   | -113.6        | 576.4                      | 564.8                       | 11.60                        | 49.704               |                    |        |
| 3,300.0   | 3,255.4                   | 3,343.4                   | 3,343.4                   | 10.4              | 5.8            | -165.54                     | 131.9                                   | -113.6        | 595.6                      | 583.7                       | 11.94                        | 49.903               |                    |        |
| 3,400.0   | 3,353.4                   | 3,441.4                   | 3,441.4                   | 10.8              | 6.0            | -166.01                     | 131.9                                   | -113.6        | 614.9                      | 602.6                       | 12.28                        | 50.094               |                    |        |
| 3,500.0   | 3,451.4                   | 3,539.4                   | 3,539.4                   | 11.2              | 6.2            | -166.44                     | 131.9                                   | -113.6        | 634.2                      | 621.6                       | 12.61                        | 50.279               |                    |        |
| 3,600.0   | 3,549.4                   | 3,637.4                   | 3,637.4                   | 11.6              | 6.3            | -166.85                     | 131.9                                   | -113.6        | 653.6                      | 640.6                       | 12.95                        | 50.456               |                    |        |
| 3,700.0   | 3,647.4                   | 3,735.4                   | 3,735.4                   | 12.0              | 6.5            | -167.23                     | 131.9                                   | -113.6        | 673.0                      | 659.7                       | 13.29                        | 50.627               |                    |        |
| 3,800.0   | 3,745.5                   | 3,833.5                   | 3,833.5                   | 12.4              | 6.7            | -167.59                     | 131.9                                   | -113.6        | 692.4                      | 678.7                       | 13.63                        | 50.792               |                    |        |
| 3,900.0   | 3,843.5                   | 3,931.5                   | 3,931.5                   | 12.8              | 6.9            | -167.94                     | 131.9                                   | -113.6        | 711.8                      | 697.8                       | 13.97                        | 50.950               |                    |        |
| 4,000.0   | 3,941.5                   | 4,029.5                   | 4,029.5                   | 13.2              | 7.0            | -168.26                     | 131.9                                   | -113.6        | 731.3                      | 717.0                       | 14.31                        | 51.102               |                    |        |
| 4,100.0   | 4,039.5                   | 4,127.5                   | 4,127.5                   | 13.6              | 7.2            | -168.57                     | 131.9                                   | -113.6        | 750.7                      | 736.1                       | 14.65                        | 51.248               |                    |        |
| 4,200.0   | 4,137.5                   | 4,225.5                   | 4,225.5                   | 14.0              | 7.4            | -168.86                     | 131.9                                   | -113.6        | 770.2                      | 755.2                       | 14.99                        | 51.389               |                    |        |
| 4,300.0   | 4,235.5                   | 4,323.5                   | 4,323.5                   | 14.4              | 7.5            | -169.14                     | 131.9                                   | -113.6        | 789.8                      | 774.4                       | 15.33                        | 51.525               |                    |        |
| 4,400.0   | 4,333.5                   | 4,421.5                   | 4,421.5                   | 14.8              | 7.7            | -169.41                     | 131.9                                   | -113.6        | 809.3                      | 793.6                       | 15.67                        | 51.656               |                    |        |
| 4,500.0   | 4,431.5                   | 4,519.5                   | 4,519.5                   | 15.2              | 7.9            | -169.66                     | 131.9                                   | -113.6        | 828.8                      | 812.8                       | 16.01                        | 51.781               |                    |        |
| 4,600.0   | 4,529.5                   | 4,617.5                   | 4,617.5                   | 15.5              | 8.1            | -169.90                     | 131.9                                   | -113.6        | 848.4                      | 832.1                       | 16.35                        | 51.903               |                    |        |
| 4,700.0   | 4,627.5                   | 4,715.5                   | 4,715.5                   | 15.9              | 8.2            | -170.13                     | 131.9                                   | -113.6        | 868.0                      | 851.3                       | 16.69                        | 52.020               |                    |        |
| 4,800.0   | 4,725.5                   | 4,813.5                   | 4,813.5                   | 16.3              | 8.4            | -170.35                     | 131.9                                   | -113.6        | 887.6                      | 870.5                       | 17.03                        | 52.132               |                    |        |
| 4,900.0   | 4,823.5                   | 4,911.5                   | 4,911.5                   | 16.7              | 8.6            | -170.56                     | 131.9                                   | -113.6        | 907.2                      | 889.8                       | 17.37                        | 52.241               |                    |        |
| 5,000.0   | 4,921.5                   | 5,009.5                   | 5,009.5                   | 17.1              | 8.7            | -170.76                     | 131.9                                   | -113.6        | 926.8                      | 909.1                       | 17.70                        | 52.346               |                    |        |
| 5,100.0   | 5,019.5                   | 5,107.5                   | 5,107.5                   | 17.5              | 8.9            | -170.95                     | 131.9                                   | -113.6        | 946.4                      | 928.4                       | 18.04                        | 52.447               |                    |        |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design   |                |                |                |           |        |                   |                        |            |                 |                  |                        |                   | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 12-7 (EXISTING) - ENCANA WELL - N |  | Offset Site Error: |  | 0.0 ft |  |
|-----------------|----------------|----------------|----------------|-----------|--------|-------------------|------------------------|------------|-----------------|------------------|------------------------|-------------------|---|--|--------------------|--|--------|--|
| Survey Program: |                |                |                |           |        |                   |                        |            |                 |                  |                        |                   | 8325-Geolink 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 |            | Between Centres | Between Ellipses | Total Uncertainty Axis | Separation Factor | Warning   |  |                    |  |        |  |
| (ft)            | (ft)           | (ft)           | (ft)           | (ft)      | (ft)   | (°)               | +N/-S (ft)             | +E/-W (ft) |                 | (ft)             | (ft)                   |                   |   |  |                    |  |        |  |
| 5,200.0         | 5,117.5        | 5,205.5        | 5,205.5        | 17.9      | 9.1    | -171.14           | 131.9                  | -113.6     | 966.0           | 947.7            | 18.38                  | 52.545            |   |  |                    |  |        |  |
| 5,300.0         | 5,215.6        | 5,303.6        | 5,303.6        | 18.3      | 9.3    | -171.32           | 131.9                  | -113.6     | 985.7           | 967.0            | 18.73                  | 52.640            |   |  |                    |  |        |  |
| 5,400.0         | 5,313.6        | 5,401.6        | 5,401.6        | 18.7      | 9.4    | -171.49           | 131.9                  | -113.6     | 1,005.3         | 986.3            | 19.07                  | 52.731            |   |  |                    |  |        |  |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 21-7 (EXISTING) - ENCANA WELL - G |                     |                     |                     |                 |             |                       |                                   |            |                      | Offset Site Error:    |                        | 0.0 ft            |         |
|---|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|---------|
| Survey Program: 100-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 |         |
| 7,900.0   | 7,497.2             | 7,524.1             | 7,521.5             | 30.1            | 13.2        | -62.01                | 1,609.3                           | 1,143.5    | 949.9                | 907.5                 | 42.40                  | 22.405            |         |
| 8,000.0   | 7,500.0             | 7,531.2             | 7,528.6             | 31.0            | 13.2        | -84.17                | 1,609.6                           | 1,143.8    | 852.7                | 809.7                 | 43.00                  | 19.830            |         |
| 8,100.0   | 7,500.0             | 7,535.0             | 7,532.4             | 31.9            | 13.2        | -85.24                | 1,609.7                           | 1,143.9    | 755.8                | 712.1                 | 43.70                  | 17.295            |         |
| 8,200.0   | 7,500.0             | 7,538.7             | 7,536.0             | 32.9            | 13.2        | -86.28                | 1,609.8                           | 1,144.1    | 659.9                | 615.4                 | 44.56                  | 14.811            |         |
| 8,300.0   | 7,500.0             | 7,542.2             | 7,539.6             | 33.9            | 13.2        | -87.29                | 1,609.9                           | 1,144.2    | 565.4                | 519.8                 | 45.61                  | 12.397            |         |
| 8,400.0   | 7,500.0             | 7,545.7             | 7,543.0             | 35.0            | 13.2        | -88.28                | 1,610.1                           | 1,144.4    | 473.1                | 426.2                 | 46.93                  | 10.082            |         |
| 8,500.0   | 7,500.0             | 7,549.0             | 7,546.4             | 36.2            | 13.2        | -89.24                | 1,610.2                           | 1,144.5    | 384.7                | 336.1                 | 48.57                  | 7.921             |         |
| 8,600.0   | 7,500.0             | 7,552.3             | 7,549.6             | 37.4            | 13.2        | -90.18                | 1,610.3                           | 1,144.6    | 303.5                | 253.1                 | 50.40                  | 6.022             |         |
| 8,700.0   | 7,500.0             | 7,555.4             | 7,552.8             | 38.6            | 13.2        | -91.09                | 1,610.4                           | 1,144.8    | 237.1                | 185.7                 | 51.41                  | 4.612             |         |
| 8,800.0   | 7,500.0             | 7,558.5             | 7,555.8             | 39.9            | 13.2        | -91.97                | 1,610.5                           | 1,144.9    | 200.8                | 152.6                 | 48.13                  | 4.171 ES, SF      |         |
| 8,829.7   | 7,500.0             | 7,559.4             | 7,556.7             | 40.3            | 13.2        | -92.23                | 1,610.5                           | 1,144.9    | 198.6                | 152.8                 | 45.79                  | 4.336 CC          |         |
| 8,900.0   | 7,500.0             | 7,561.5             | 7,558.8             | 41.2            | 13.3        | -92.83                | 1,610.5                           | 1,145.0    | 210.6                | 171.8                 | 38.81                  | 5.427             |         |
| 9,000.0   | 7,500.0             | 7,564.4             | 7,561.7             | 42.5            | 13.3        | -93.67                | 1,610.6                           | 1,145.1    | 261.5                | 230.4                 | 31.17                  | 8.390             |         |
| 9,100.0   | 7,500.0             | 7,567.2             | 7,564.5             | 43.9            | 13.3        | -94.49                | 1,610.7                           | 1,145.2    | 335.3                | 306.2                 | 29.12                  | 11.514            |         |
| 9,200.0   | 7,500.0             | 7,570.0             | 7,567.3             | 45.3            | 13.3        | -95.28                | 1,610.8                           | 1,145.3    | 420.1                | 390.2                 | 29.81                  | 14.092            |         |
| 9,300.0   | 7,500.0             | 7,572.7             | 7,570.0             | 46.7            | 13.3        | -96.05                | 1,610.9                           | 1,145.4    | 510.3                | 479.3                 | 31.04                  | 16.441            |         |
| 9,400.0   | 7,500.0             | 7,575.3             | 7,572.6             | 48.2            | 13.3        | -96.80                | 1,610.9                           | 1,145.5    | 603.7                | 571.5                 | 32.19                  | 18.751            |         |
| 9,500.0   | 7,500.0             | 7,577.8             | 7,575.1             | 49.6            | 13.3        | -97.53                | 1,611.0                           | 1,145.6    | 698.8                | 665.7                 | 33.17                  | 21.068            |         |
| 9,600.0   | 7,500.0             | 7,580.3             | 7,577.6             | 51.1            | 13.3        | -98.02                | 1,611.1                           | 1,145.7    | 795.2                | 761.2                 | 33.98                  | 23.398            |         |
| 9,700.0   | 7,500.0             | 7,582.7             | 7,580.0             | 52.6            | 13.3        | -98.12                | 1,611.1                           | 1,145.8    | 891.9                | 857.2                 | 34.69                  | 25.714            |         |
| 9,800.0   | 7,500.0             | 7,584.9             | 7,582.2             | 54.1            | 13.3        | -98.11                | 1,611.2                           | 1,145.9    | 989.0                | 953.7                 | 35.32                  | 28.002            |         |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - S |                     |                     |                     |                 |             |                       |                                   |            |                      |                       | Offset Site Error: 0.0 ft |                   |         |
|---|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|---------------------------|-------------------|---------|
| Survey Program: 71-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 |         |
| 3,300.0   | 3,255.4             | 3,608.0             | 3,458.9             | 10.4            | 17.6        | -30.87                | 674.9                             | 1,282.7    | 1,021.1              | 998.5                 | 22.63                     | 45.127            |         |
| 3,400.0   | 3,353.4             | 3,682.2             | 3,529.5             | 10.8            | 18.1        | -30.08                | 652.7                             | 1,287.3    | 990.6                | 967.3                 | 23.35                     | 42.431            |         |
| 3,500.0   | 3,451.4             | 3,765.4             | 3,609.1             | 11.2            | 18.5        | -29.19                | 628.9                             | 1,293.1    | 961.8                | 937.7                 | 24.05                     | 39.989            |         |
| 3,600.0   | 3,549.4             | 3,870.8             | 3,710.9             | 11.6            | 19.0        | -28.26                | 602.2                             | 1,298.0    | 933.4                | 908.7                 | 24.73                     | 37.737            |         |
| 3,700.0   | 3,647.4             | 4,005.0             | 3,840.5             | 12.0            | 19.6        | -27.13                | 567.5                             | 1,299.5    | 902.0                | 876.5                 | 25.46                     | 35.428            |         |
| 3,800.0   | 3,745.5             | 4,089.0             | 3,920.7             | 12.4            | 20.1        | -26.19                | 542.9                             | 1,300.5    | 869.1                | 842.9                 | 26.18                     | 33.201            |         |
| 3,900.0   | 3,843.5             | 4,170.1             | 3,998.0             | 12.8            | 20.6        | -25.09                | 518.6                             | 1,304.1    | 838.6                | 811.7                 | 26.92                     | 31.149            |         |
| 4,000.0   | 3,941.5             | 4,280.2             | 4,102.1             | 13.2            | 21.3        | -23.26                | 482.9                             | 1,310.0    | 808.2                | 780.4                 | 27.77                     | 29.099            |         |
| 4,100.0   | 4,039.5             | 4,384.2             | 4,199.4             | 13.6            | 21.9        | -21.25                | 446.6                             | 1,314.6    | 776.3                | 747.6                 | 28.62                     | 27.125            |         |
| 4,200.0   | 4,137.5             | 4,469.4             | 4,279.0             | 14.0            | 22.5        | -19.45                | 416.6                             | 1,318.2    | 744.9                | 715.5                 | 29.44                     | 25.306            |         |
| 4,300.0   | 4,235.5             | 4,550.3             | 4,354.9             | 14.4            | 22.9        | -17.67                | 389.0                             | 1,322.2    | 715.6                | 685.4                 | 30.20                     | 23.691            |         |
| 4,400.0   | 4,333.5             | 4,632.3             | 4,432.8             | 14.8            | 23.4        | -15.93                | 363.6                             | 1,326.6    | 688.6                | 657.7                 | 30.92                     | 22.268            |         |
| 4,500.0   | 4,431.5             | 4,723.1             | 4,519.6             | 15.2            | 23.9        | -14.04                | 337.5                             | 1,331.6    | 663.5                | 631.9                 | 31.63                     | 20.974            |         |
| 4,600.0   | 4,529.5             | 4,821.1             | 4,613.6             | 15.5            | 24.4        | -11.94                | 310.1                             | 1,336.6    | 639.1                | 606.7                 | 32.32                     | 19.771            |         |
| 4,700.0   | 4,627.5             | 4,925.7             | 4,714.3             | 15.9            | 24.9        | -9.69                 | 282.1                             | 1,340.0    | 614.2                | 581.3                 | 32.99                     | 18.618            |         |
| 4,800.0   | 4,725.5             | 5,012.0             | 4,797.7             | 16.3            | 25.3        | -7.81                 | 260.2                             | 1,342.4    | 590.2                | 556.6                 | 33.60                     | 17.563            |         |
| 4,900.0   | 4,823.5             | 5,100.2             | 4,883.6             | 16.7            | 25.7        | -5.97                 | 240.1                             | 1,345.5    | 568.1                | 534.0                 | 34.17                     | 16.629            |         |
| 5,000.0   | 4,921.5             | 5,197.1             | 4,978.6             | 17.1            | 26.0        | -4.14                 | 221.3                             | 1,348.6    | 547.2                | 512.5                 | 34.68                     | 15.779            |         |
| 5,100.0   | 5,019.5             | 5,293.6             | 5,073.7             | 17.5            | 26.3        | -2.52                 | 205.5                             | 1,351.0    | 526.7                | 491.6                 | 35.15                     | 14.985            |         |
| 5,200.0   | 5,117.5             | 5,391.7             | 5,170.8             | 17.9            | 26.6        | -0.98                 | 191.5                             | 1,353.1    | 506.6                | 471.0                 | 35.60                     | 14.233            |         |
| 5,300.0   | 5,215.6             | 5,491.2             | 5,269.6             | 18.3            | 26.8        | 0.45                  | 179.4                             | 1,354.5    | 486.4                | 450.4                 | 36.00                     | 13.510            |         |
| 5,400.0   | 5,313.6             | 5,590.9             | 5,368.8             | 18.7            | 27.0        | 1.66                  | 169.8                             | 1,355.0    | 466.0                | 429.7                 | 36.37                     | 12.814            |         |
| 5,500.0   | 5,411.6             | 5,685.9             | 5,463.6             | 19.1            | 27.2        | 2.61                  | 163.1                             | 1,355.2    | 445.7                | 409.0                 | 36.71                     | 12.143            |         |
| 5,600.0   | 5,509.6             | 5,778.2             | 5,555.8             | 19.5            | 27.3        | 3.29                  | 159.1                             | 1,356.2    | 426.5                | 389.5                 | 36.99                     | 11.530            |         |
| 5,700.0   | 5,607.6             | 5,889.1             | 5,666.7             | 19.9            | 27.4        | 3.61                  | 158.1                             | 1,356.1    | 406.5                | 369.3                 | 37.20                     | 10.927            |         |
| 5,800.0   | 5,705.6             | 5,981.4             | 5,758.9             | 20.3            | 27.4        | 3.80                  | 157.9                             | 1,355.1    | 385.7                | 348.2                 | 37.47                     | 10.293            |         |
| 5,900.0   | 5,803.6             | 6,075.5             | 5,853.0             | 20.7            | 27.5        | 4.05                  | 157.6                             | 1,355.5    | 366.2                | 328.4                 | 37.72                     | 9.707             |         |
| 6,000.0   | 5,901.6             | 6,173.8             | 5,951.3             | 21.1            | 27.6        | 4.29                  | 157.6                             | 1,356.1    | 347.0                | 309.1                 | 37.96                     | 9.143             |         |
| 6,100.0   | 5,999.6             | 6,271.4             | 6,049.0             | 21.4            | 27.6        | 4.46                  | 158.2                             | 1,356.8    | 327.9                | 289.7                 | 38.19                     | 8.584             |         |
| 6,200.0   | 6,097.6             | 6,368.3             | 6,145.8             | 21.8            | 27.7        | 4.66                  | 158.6                             | 1,357.7    | 309.1                | 270.6                 | 38.44                     | 8.040             |         |
| 6,300.0   | 6,195.6             | 6,466.9             | 6,244.5             | 22.2            | 27.7        | 4.92                  | 159.0                             | 1,358.9    | 290.5                | 251.8                 | 38.68                     | 7.510             |         |
| 6,400.0   | 6,293.6             | 6,566.3             | 6,343.8             | 22.6            | 27.8        | 5.22                  | 159.3                             | 1,359.8    | 271.5                | 232.6                 | 38.92                     | 6.977             |         |
| 6,500.0   | 6,391.6             | 6,664.5             | 6,442.0             | 23.0            | 27.9        | 5.57                  | 159.6                             | 1,360.4    | 252.4                | 213.2                 | 39.17                     | 6.443             |         |
| 6,600.0   | 6,489.6             | 6,762.5             | 6,540.0             | 23.4            | 28.0        | 6.01                  | 159.8                             | 1,361.1    | 233.3                | 193.9                 | 39.43                     | 5.917             |         |
| 6,700.0   | 6,587.6             | 6,860.4             | 6,637.9             | 23.8            | 28.0        | 6.56                  | 159.8                             | 1,361.8    | 214.3                | 174.6                 | 39.69                     | 5.398             |         |
| 6,800.0   | 6,685.7             | 6,958.4             | 6,735.9             | 24.2            | 28.1        | 7.27                  | 159.7                             | 1,362.6    | 195.4                | 155.4                 | 39.96                     | 4.888             |         |
| 6,900.0   | 6,783.7             | 7,056.4             | 6,833.9             | 24.6            | 28.2        | 8.15                  | 159.5                             | 1,363.5    | 176.6                | 136.3                 | 40.25                     | 4.387             |         |
| 7,000.0   | 6,881.7             | 7,154.2             | 6,931.7             | 25.0            | 28.3        | 9.30                  | 159.1                             | 1,364.6    | 158.0                | 117.4                 | 40.56                     | 3.895             |         |
| 7,100.0   | 6,979.6             | 7,251.9             | 7,029.4             | 25.4            | 28.4        | 23.87                 | 158.1                             | 1,365.9    | 139.8                | 98.9                  | 40.93                     | 3.417             |         |
| 7,200.0   | 7,076.3             | 7,349.3             | 7,126.7             | 25.8            | 28.5        | 64.47                 | 156.8                             | 1,367.3    | 124.1                | 82.3                  | 41.80                     | 2.968             |         |
| 7,279.1   | 7,149.9             | 7,423.6             | 7,201.0             | 26.2            | 28.5        | 88.95                 | 156.0                             | 1,367.8    | 118.4                | 75.4                  | 42.97                     | 2.755 CC, ES      |         |
| 7,300.0   | 7,168.8             | 7,442.6             | 7,220.0             | 26.3            | 28.6        | 94.90                 | 155.9                             | 1,367.9    | 118.9                | 75.7                  | 43.19                     | 2.754 SF          |         |
| 7,400.0   | 7,254.2             | 7,528.9             | 7,306.3             | 26.8            | 28.6        | 119.64                | 155.4                             | 1,367.8    | 137.9                | 95.0                  | 42.83                     | 3.218             |         |
| 7,500.0   | 7,330.1             | 7,605.3             | 7,382.7             | 27.3            | 28.7        | 136.51                | 155.1                             | 1,366.9    | 184.7                | 143.2                 | 41.57                     | 4.444             |         |
| 7,600.0   | 7,394.0             | 7,668.9             | 7,446.4             | 27.9            | 28.7        | 146.33                | 155.0                             | 1,365.7    | 253.0                | 211.8                 | 41.23                     | 6.136             |         |
| 7,700.0   | 7,444.1             | 7,718.6             | 7,496.0             | 28.6            | 28.8        | 151.11                | 154.9                             | 1,365.0    | 335.7                | 294.3                 | 41.36                     | 8.115             |         |
| 7,800.0   | 7,478.8             | 7,753.0             | 7,530.5             | 29.4            | 28.8        | 151.22                | 154.8                             | 1,364.6    | 427.7                | 386.2                 | 41.56                     | 10.292            |         |
| 7,900.0   | 7,497.2             | 7,771.1             | 7,548.5             | 30.1            | 28.8        | 138.75                | 154.8                             | 1,364.4    | 525.3                | 483.6                 | 41.71                     | 12.593            |         |
| 8,000.0   | 7,500.0             | 7,773.8             | 7,551.2             | 31.0            | 28.8        | 88.63                 | 154.8                             | 1,364.3    | 625.0                | 583.2                 | 41.82                     | 14.944            |         |
| 8,100.0   | 7,500.0             | 7,773.6             | 7,551.0             | 31.9            | 28.8        | 88.32                 | 154.8                             | 1,364.3    | 724.8                | 682.9                 | 41.93                     | 17.289            |         |
| 8,200.0   | 7,500.0             | 7,773.4             | 7,550.8             | 32.9            | 28.8        | 88.00                 | 154.8                             | 1,364.3    | 824.8                | 782.7                 | 42.02                     | 19.626            |         |
| 8,300.0   | 7,500.0             | 7,773.2             | 7,550.6             | 33.9            | 28.8        | 87.69                 | 154.8                             | 1,364.4    | 924.7                | 882.6                 | 42.12                     | 21.954            |         |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

|  |                |                |                |                 |        |                   |                              |         |                 |                  |                        |                   |                                  |
|--|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------------|---------|-----------------|------------------|------------------------|-------------------|----------------------------------|
| <b>Offset Design</b> S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - S |                |                |                |                 |        |                   |                              |         |                 |                  |                        |                   | <b>Offset Site Error:</b> 0.0 ft |
| Survey Program: 71-Geolink MWD   |                |                |                |                 |        |                   |                              |         |                 |                  |                        |                   | <b>Offset Well Error:</b> 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 +N/-S | +E/-W   | Between Centres | Between Ellipses | Total Uncertainty Axis | Separation Factor |                                  |
| (ft)   | (ft)           | (ft)           | (ft)           | (ft)            | (ft)   | (°)               | (ft)                         | (ft)    | (ft)            | (ft)             |                        |                   |                                  |
| 8,400.0  | 7,500.0        | 7,773.0        | 7,550.5        | 35.0            | 28.8   | 87.38             | 154.8                        | 1,364.4 | 1,024.6         | 982.4            | 42.21                  | 24.273            |                                  |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        |                   | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|
| Survey Program: 41-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            |        |
| 2,600.0  | 2,569.4             | 3,153.4             | 2,972.7             | 7.7             | 17.6        | -37.07                | 654.0                             | 1,026.0    | 981.4                | 964.5                 | 16.93                  | 57.971            |                    |        |
| 2,700.0  | 2,667.4             | 3,253.0             | 3,062.1             | 8.1             | 18.4        | -36.06                | 611.0                             | 1,017.6    | 930.6                | 912.9                 | 17.71                  | 52.542            |                    |        |
| 2,800.0  | 2,765.4             | 3,325.8             | 3,127.1             | 8.5             | 19.0        | -35.18                | 578.9                             | 1,011.7    | 879.6                | 861.0                 | 18.51                  | 47.528            |                    |        |
| 2,900.0  | 2,863.4             | 3,421.5             | 3,212.8             | 8.9             | 19.8        | -33.86                | 536.6                             | 1,004.7    | 829.2                | 809.9                 | 19.35                  | 42.853            |                    |        |
| 3,000.0  | 2,961.4             | 3,499.3             | 3,282.2             | 9.3             | 20.4        | -32.66                | 502.1                             | 998.3      | 778.5                | 758.3                 | 20.22                  | 38.505            |                    |        |
| 3,100.0  | 3,059.4             | 3,578.8             | 3,353.2             | 9.7             | 21.0        | -31.22                | 466.7                             | 993.0      | 729.1                | 708.0                 | 21.15                  | 34.479            |                    |        |
| 3,200.0  | 3,157.4             | 3,668.2             | 3,433.1             | 10.1            | 21.8        | -29.37                | 427.0                             | 987.2      | 680.3                | 658.2                 | 22.12                  | 30.760            |                    |        |
| 3,300.0  | 3,255.4             | 3,755.9             | 3,511.6             | 10.4            | 22.5        | -27.40                | 388.6                             | 980.2      | 631.4                | 608.3                 | 23.10                  | 27.334            |                    |        |
| 3,400.0  | 3,353.4             | 3,837.8             | 3,585.4             | 10.8            | 23.1        | -25.44                | 353.8                             | 972.8      | 583.1                | 559.1                 | 24.09                  | 24.206            |                    |        |
| 3,500.0  | 3,451.4             | 3,919.7             | 3,659.9             | 11.2            | 23.7        | -23.37                | 320.7                             | 965.0      | 536.2                | 511.1                 | 25.11                  | 21.354            |                    |        |
| 3,600.0  | 3,549.4             | 4,001.1             | 3,734.1             | 11.6            | 24.3        | -20.94                | 287.9                             | 957.8      | 490.7                | 464.5                 | 26.22                  | 18.717            |                    |        |
| 3,700.0  | 3,647.4             | 4,086.1             | 3,811.5             | 12.0            | 24.9        | -17.82                | 253.3                             | 951.6      | 447.2                | 419.7                 | 27.44                  | 16.293            |                    |        |
| 3,800.0  | 3,745.5             | 4,168.9             | 3,886.5             | 12.4            | 25.6        | -14.07                | 218.8                             | 945.9      | 405.1                | 376.2                 | 28.82                  | 14.055            |                    |        |
| 3,900.0  | 3,843.5             | 4,249.2             | 3,959.0             | 12.8            | 26.2        | -9.54                 | 184.6                             | 942.4      | 366.9                | 336.6                 | 30.36                  | 12.085            |                    |        |
| 4,000.0  | 3,941.5             | 4,335.8             | 4,037.3             | 13.2            | 26.8        | -3.74                 | 147.6                             | 939.0      | 332.3                | 300.2                 | 32.03                  | 10.374            |                    |        |
| 4,100.0  | 4,039.5             | 4,423.0             | 4,116.3             | 13.6            | 27.5        | 3.06                  | 110.9                             | 935.8      | 302.2                | 268.4                 | 33.82                  | 8.935             |                    |        |
| 4,200.0  | 4,137.5             | 4,512.5             | 4,195.9             | 14.0            | 28.2        | 11.76                 | 70.3                              | 931.8      | 277.1                | 241.3                 | 35.80                  | 7.742             |                    |        |
| 4,300.0  | 4,235.5             | 4,598.7             | 4,271.8             | 14.4            | 29.0        | 21.58                 | 29.7                              | 926.9      | 259.7                | 222.2                 | 37.52                  | 6.921             |                    |        |
| 4,400.0  | 4,333.5             | 4,683.2             | 4,346.3             | 14.8            | 29.7        | 31.79                 | -9.7                              | 921.9      | 252.7                | 214.3                 | 38.39                  | 6.582             |                    |        |
| 4,413.1  | 4,346.4             | 4,694.4             | 4,356.4             | 14.8            | 29.8        | 33.13                 | -14.8                             | 921.3      | 252.6                | 214.2                 | 38.42                  | 6.574 CC, ES, SF  |                    |        |
| 4,500.0  | 4,431.5             | 4,772.0             | 4,426.2             | 15.2            | 30.3        | 42.01                 | -48.4                             | 917.8      | 256.2                | 218.0                 | 38.24                  | 6.701             |                    |        |
| 4,600.0  | 4,529.5             | 4,867.6             | 4,513.9             | 15.5            | 31.0        | 51.76                 | -86.1                             | 914.0      | 267.0                | 229.6                 | 37.38                  | 7.143             |                    |        |
| 4,700.0  | 4,627.5             | 4,967.1             | 4,606.8             | 15.9            | 31.6        | 60.57                 | -121.6                            | 910.0      | 282.2                | 246.1                 | 36.10                  | 7.817             |                    |        |
| 4,800.0  | 4,725.5             | 5,064.6             | 4,698.9             | 16.3            | 32.2        | 68.15                 | -153.2                            | 905.0      | 299.9                | 265.3                 | 34.53                  | 8.683             |                    |        |
| 4,900.0  | 4,823.5             | 5,167.8             | 4,797.4             | 16.7            | 32.7        | 74.93                 | -183.8                            | 900.5      | 319.9                | 286.8                 | 33.07                  | 9.671             |                    |        |
| 5,000.0  | 4,921.5             | 5,273.7             | 4,899.7             | 17.1            | 33.2        | 80.74                 | -210.6                            | 896.3      | 339.3                | 307.5                 | 31.82                  | 10.664            |                    |        |
| 5,100.0  | 5,019.5             | 5,385.6             | 5,009.2             | 17.5            | 33.6        | 85.85                 | -233.5                            | 892.8      | 356.8                | 325.9                 | 30.84                  | 11.567            |                    |        |
| 5,200.0  | 5,117.5             | 5,489.3             | 5,111.4             | 17.9            | 33.9        | 89.96                 | -251.1                            | 890.1      | 372.8                | 342.8                 | 30.03                  | 12.412            |                    |        |
| 5,300.0  | 5,215.6             | 5,603.2             | 5,224.0             | 18.3            | 34.2        | 94.08                 | -267.2                            | 886.9      | 387.8                | 358.3                 | 29.48                  | 13.156            |                    |        |
| 5,400.0  | 5,313.6             | 5,709.9             | 5,330.2             | 18.7            | 34.4        | 97.65                 | -277.8                            | 883.8      | 400.0                | 370.8                 | 29.12                  | 13.733            |                    |        |
| 5,500.0  | 5,411.6             | 5,822.3             | 5,442.3             | 19.1            | 34.6        | 101.15                | -285.4                            | 880.8      | 410.3                | 381.2                 | 29.02                  | 14.139            |                    |        |
| 5,600.0  | 5,509.6             | 5,929.8             | 5,549.7             | 19.5            | 34.7        | 104.23                | -289.5                            | 879.1      | 418.8                | 389.6                 | 29.16                  | 14.358            |                    |        |
| 5,700.0  | 5,607.6             | 6,037.4             | 5,657.2             | 19.9            | 34.8        | 107.25                | -291.1                            | 877.2      | 426.0                | 396.5                 | 29.52                  | 14.430            |                    |        |
| 5,800.0  | 5,705.6             | 6,136.7             | 5,756.5             | 20.3            | 34.8        | 109.99                | -291.0                            | 875.3      | 432.7                | 402.6                 | 30.09                  | 14.381            |                    |        |
| 5,900.0  | 5,803.6             | 6,233.7             | 5,853.5             | 20.7            | 34.9        | 112.57                | -290.9                            | 873.6      | 440.4                | 409.6                 | 30.81                  | 14.293            |                    |        |
| 6,000.0  | 5,901.6             | 6,330.8             | 5,950.6             | 21.1            | 35.0        | 115.05                | -291.0                            | 871.9      | 449.2                | 417.5                 | 31.63                  | 14.199            |                    |        |
| 6,100.0  | 5,999.6             | 6,428.6             | 6,048.4             | 21.4            | 35.0        | 117.45                | -291.1                            | 870.3      | 458.8                | 426.3                 | 32.51                  | 14.111            |                    |        |
| 6,200.0  | 6,097.6             | 6,527.7             | 6,147.4             | 21.8            | 35.1        | 119.76                | -291.2                            | 868.8      | 469.1                | 435.7                 | 33.42                  | 14.038            |                    |        |
| 6,300.0  | 6,195.6             | 6,628.7             | 6,248.5             | 22.2            | 35.1        | 121.98                | -290.9                            | 867.7      | 479.6                | 445.3                 | 34.32                  | 13.976            |                    |        |
| 6,400.0  | 6,293.6             | 6,726.8             | 6,346.5             | 22.6            | 35.2        | 124.02                | -290.3                            | 867.2      | 490.3                | 455.1                 | 35.20                  | 13.927            |                    |        |
| 6,500.0  | 6,391.6             | 6,823.1             | 6,442.9             | 23.0            | 35.2        | 125.92                | -290.0                            | 866.6      | 501.8                | 465.7                 | 36.07                  | 13.913            |                    |        |
| 6,600.0  | 6,489.6             | 6,920.0             | 6,539.8             | 23.4            | 35.3        | 127.74                | -289.9                            | 865.9      | 514.1                | 477.2                 | 36.90                  | 13.933            |                    |        |
| 6,700.0  | 6,587.6             | 7,017.0             | 6,636.8             | 23.8            | 35.4        | 129.49                | -289.9                            | 865.1      | 527.1                | 489.4                 | 37.70                  | 13.982            |                    |        |
| 6,800.0  | 6,685.7             | 7,113.5             | 6,733.2             | 24.2            | 35.4        | 131.15                | -290.1                            | 864.1      | 540.8                | 502.4                 | 38.46                  | 14.060            |                    |        |
| 6,900.0  | 6,783.7             | 7,210.1             | 6,829.8             | 24.6            | 35.5        | 132.75                | -290.3                            | 862.9      | 555.2                | 516.0                 | 39.20                  | 14.165            |                    |        |
| 7,000.0  | 6,881.7             | 7,307.4             | 6,927.2             | 25.0            | 35.6        | 134.29                | -290.6                            | 861.5      | 570.1                | 530.2                 | 39.89                  | 14.292            |                    |        |
| 7,100.0  | 6,979.6             | 7,404.8             | 7,024.6             | 25.4            | 35.6        | 148.15                | -290.9                            | 860.0      | 586.0                | 545.4                 | 40.54                  | 14.455            |                    |        |
| 7,200.0  | 7,076.3             | 7,501.0             | 7,120.7             | 25.8            | 35.7        | -178.93               | -291.1                            | 858.3      | 611.8                | 570.9                 | 40.87                  | 14.968            |                    |        |
| 7,300.0  | 7,168.8             | 7,593.4             | 7,213.0             | 26.3            | 35.8        | -163.47               | -291.1                            | 856.5      | 650.2                | 609.3                 | 40.87                  | 15.908            |                    |        |
| 7,400.0  | 7,254.2             | 7,679.0             | 7,298.6             | 26.8            | 35.8        | -154.48               | -291.0                            | 854.9      | 700.2                | 659.6                 | 40.60                  | 17.246            |                    |        |
| 7,500.0  | 7,330.1             | 7,755.6             | 7,375.3             | 27.3            | 35.9        | -147.59               | -290.9                            | 853.4      | 760.9                | 720.8                 | 40.14                  | 18.958            |                    |        |
| 7,600.0  | 7,394.0             | 7,820.9             | 7,440.6             | 27.9            | 35.9        | -140.60               | -290.6                            | 852.2      | 831.2                | 791.7                 | 39.56                  | 21.011            |                    |        |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

|                 |  |          |  |          |  |          |  |                 |  |        |  |  |  |                        |  |         |  |         |  |         |  |       |  |                    |  |             |  |
|-----------------|--|----------|--|----------|--|----------|--|-----------------|--|--------|--|--|--|------------------------|--|---------|--|---------|--|---------|--|-------|--|--------------------|--|-------------|--|
| Offset Design   |  |          |  |          |  |          |  |                 |  |        |  | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S |  |                        |  |         |  |         |  |         |  |       |  | Offset Site Error: |  | 0.0 ft      |  |
| Survey Program: |  |          |  |          |  |          |  |                 |  |        |  | 41-Geolink MWD   |  |                        |  |         |  |         |  |         |  |       |  | Offset Well Error: |  | 0.0 ft      |  |
| Reference       |  |          |  | Offset   |  |          |  | Semi Major Axis |  |        |  | Distance   |  |                        |  |         |  |         |  | Warning |  |       |  |                    |  |             |  |
| Measured        |  | Vertical |  | Measured |  | Vertical |  | Reference       |  | Offset |  | Highside   |  | Offset Wellbore Centre |  | Between |  | Between |  |         |  |       |  | Total              |  | Separation  |  |
| Depth           |  | Depth    |  | Depth    |  | Depth    |  | (ft)            |  | (ft)   |  | Toolface   |  | +N/-S                  |  | +E/-W   |  | Centres |  |         |  |       |  | Ellipses           |  | Uncertainty |  |
| (ft)            |  | (ft)     |  | (ft)     |  | (ft)     |  |                 |  |        |  | (°)  |  | (ft)                   |  | (ft)    |  | (ft)    |  | (ft)    |  | Axis  |  | Factor             |  |             |  |
| 7,700.0         |  | 7,444.1  |  | 7,872.5  |  | 7,492.1  |  | 28.6            |  | 35.9   |  | -131.79  |  | -290.3                 |  | 851.1   |  | 909.7   |  | 870.7   |  | 38.95 |  | 23.358             |  |             |  |
| 7,800.0         |  | 7,478.8  |  | 7,909.3  |  | 7,528.9  |  | 29.4            |  | 36.0   |  | -119.38  |  | -290.1                 |  | 850.4   |  | 994.5   |  | 956.2   |  | 38.34 |  | 25.936             |  |             |  |



# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design   |                | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - S |                |                 |        |                   |                        |                 |                  |                        |                   | Offset Site Error: |  | 0.0 ft  |  |
|-----------------|----------------|--|----------------|-----------------|--------|-------------------|------------------------|-----------------|------------------|------------------------|-------------------|--------------------|--|---------|--|
| Survey Program: |                | 71-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 Axis | Separation Factor |                    |  |         |  |
| (ft)            | (ft)           | (ft)   | (ft)           | (ft)            | (ft)   | (°)               | +N/-S (ft)             | +E/-W (ft)      | (ft)             | (ft)                   |                   |                    |  |         |  |
| 8,500.0         | 7,500.0        | 7,608.2  | 7,527.1        | 36.2            | 19.3   | 86.09             | 2,166.6                | 1,712.5         | 962.7            | 928.6                  | 34.14             | 28.201             |  |         |  |
| 8,600.0         | 7,500.0        | 7,610.5  | 7,529.4        | 37.4            | 19.3   | 86.44             | 2,166.7                | 1,712.6         | 871.0            | 838.2                  | 32.77             | 26.582             |  |         |  |
| 8,700.0         | 7,500.0        | 7,612.8  | 7,531.6        | 38.6            | 19.3   | 86.80             | 2,166.7                | 1,712.6         | 781.3            | 750.1                  | 31.29             | 24.974             |  |         |  |
| 8,800.0         | 7,500.0        | 7,615.0  | 7,533.9        | 39.9            | 19.3   | 87.16             | 2,166.8                | 1,712.6         | 694.5            | 664.6                  | 29.86             | 23.257             |  |         |  |
| 8,900.0         | 7,500.0        | 7,617.3  | 7,536.2        | 41.2            | 19.3   | 87.52             | 2,166.8                | 1,712.6         | 611.7            | 582.7                  | 28.96             | 21.123             |  |         |  |
| 9,000.0         | 7,500.0        | 7,619.6  | 7,538.5        | 42.5            | 19.3   | 87.88             | 2,166.9                | 1,712.7         | 534.7            | 505.2                  | 29.54             | 18.102             |  |         |  |
| 9,100.0         | 7,500.0        | 7,621.9  | 7,540.8        | 43.9            | 19.3   | 88.24             | 2,167.0                | 1,712.7         | 466.6            | 433.7                  | 32.89             | 14.187             |  |         |  |
| 9,200.0         | 7,500.0        | 7,624.2  | 7,543.1        | 45.3            | 19.3   | 88.60             | 2,167.0                | 1,712.7         | 411.7            | 372.0                  | 39.71             | 10.368             |  |         |  |
| 9,300.0         | 7,500.0        | 7,626.5  | 7,545.4        | 46.7            | 19.3   | 88.96             | 2,167.1                | 1,712.8         | 375.8            | 326.5                  | 49.30             | 7.624              |  |         |  |
| 9,391.2         | 7,500.0        | 7,628.6  | 7,547.5        | 48.1            | 19.3   | 89.29             | 2,167.1                | 1,712.8         | 364.6            | 306.2                  | 58.42             | 6.241 CC           |  |         |  |
| 9,400.0         | 7,500.0        | 7,628.8  | 7,547.7        | 48.2            | 19.3   | 89.32             | 2,167.1                | 1,712.8         | 364.7            | 305.5                  | 59.22             | 6.158 ES           |  |         |  |
| 9,500.0         | 7,500.0        | 7,631.2  | 7,550.0        | 49.6            | 19.3   | 89.69             | 2,167.2                | 1,712.8         | 380.5            | 314.0                  | 66.51             | 5.721 SF           |  |         |  |
| 9,600.0         | 7,500.0        | 7,633.5  | 7,552.3        | 51.1            | 19.3   | 90.05             | 2,167.2                | 1,712.8         | 420.2            | 350.2                  | 70.06             | 5.998              |  |         |  |
| 9,700.0         | 7,500.0        | 7,635.8  | 7,554.6        | 52.6            | 19.3   | 90.42             | 2,167.3                | 1,712.9         | 479.1            | 408.2                  | 70.84             | 6.763              |  |         |  |
| 9,800.0         | 7,500.0        | 7,638.1  | 7,556.9        | 54.1            | 19.3   | 90.80             | 2,167.3                | 1,712.9         | 551.0            | 480.8                  | 70.24             | 7.845              |  |         |  |
| 9,900.0         | 7,500.0        | 7,640.3  | 7,559.2        | 55.6            | 19.3   | 91.20             | 2,167.4                | 1,712.9         | 631.6            | 562.5                  | 69.15             | 9.134              |  |         |  |
| 10,000.0        | 7,500.0        | 7,642.6  | 7,561.4        | 57.1            | 19.3   | 91.62             | 2,167.4                | 1,713.0         | 718.0            | 650.0                  | 68.00             | 10.559             |  |         |  |
| 10,100.0        | 7,500.0        | 7,644.8  | 7,563.7        | 58.6            | 19.3   | 92.08             | 2,167.5                | 1,713.0         | 808.2            | 741.3                  | 66.95             | 12.071             |  |         |  |
| 10,200.0        | 7,500.0        | 7,647.0  | 7,565.9        | 60.1            | 19.3   | 92.58             | 2,167.5                | 1,713.0         | 901.1            | 835.1                  | 66.05             | 13.643             |  |         |  |
| 10,300.0        | 7,500.0        | 7,649.2  | 7,568.1        | 61.6            | 19.3   | 93.00             | 2,167.6                | 1,713.1         | 995.7            | 930.4                  | 65.31             | 15.247             |  |         |  |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY F UNIT 1 (EXISTING) - ENCANA WEL |                     |                     |                     |                 |             |                       |                                   |            |                      | Offset Site Error:    |                        | 0.0 ft            |         |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|---------|
| Survey Program: 100-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 |         |
| 1,600.0  | 1,589.3             | 1,633.7             | 1,633.5             | 3.9             | 2.9         | -44.17                | 803.2                             | 772.7      | 1,005.1              | 998.9                 | 6.20                   | 162.120           |         |
| 1,700.0  | 1,687.3             | 1,726.5             | 1,726.3             | 4.3             | 3.0         | -45.00                | 803.8                             | 771.4      | 990.5                | 983.8                 | 6.67                   | 148.601           |         |
| 1,800.0  | 1,785.3             | 1,823.7             | 1,823.5             | 4.6             | 3.2         | -45.90                | 804.7                             | 770.2      | 976.4                | 969.2                 | 7.15                   | 136.593           |         |
| 1,900.0  | 1,883.3             | 1,920.9             | 1,920.7             | 5.0             | 3.4         | -46.84                | 805.7                             | 768.7      | 962.5                | 954.8                 | 7.64                   | 125.978           |         |
| 2,000.0  | 1,981.3             | 2,014.3             | 2,014.1             | 5.4             | 3.5         | -47.77                | 807.0                             | 767.4      | 949.2                | 941.0                 | 8.14                   | 116.672           |         |
| 2,100.0  | 2,079.3             | 2,105.5             | 2,105.3             | 5.8             | 3.7         | -48.70                | 808.7                             | 766.5      | 936.7                | 928.1                 | 8.63                   | 108.480           |         |
| 2,200.0  | 2,177.3             | 2,200.0             | 2,199.8             | 6.2             | 3.9         | -49.68                | 810.8                             | 765.9      | 925.1                | 916.0                 | 9.15                   | 101.122           |         |
| 2,300.0  | 2,275.4             | 2,296.4             | 2,296.1             | 6.6             | 4.0         | -50.70                | 813.0                             | 765.6      | 914.1                | 904.4                 | 9.67                   | 94.500            |         |
| 2,400.0  | 2,373.4             | 2,399.0             | 2,398.7             | 6.9             | 4.2         | -51.79                | 815.2                             | 765.4      | 903.1                | 892.9                 | 10.22                  | 88.412            |         |
| 2,500.0  | 2,471.4             | 2,502.0             | 2,501.7             | 7.3             | 4.4         | -52.89                | 816.7                             | 765.2      | 892.0                | 881.2                 | 10.76                  | 82.867            |         |
| 2,600.0  | 2,569.4             | 2,601.1             | 2,600.8             | 7.7             | 4.6         | -53.96                | 817.7                             | 765.0      | 880.8                | 869.5                 | 11.31                  | 77.853            |         |
| 2,700.0  | 2,667.4             | 2,701.6             | 2,701.3             | 8.1             | 4.7         | -55.08                | 818.6                             | 764.6      | 869.7                | 857.8                 | 11.87                  | 73.248            |         |
| 2,800.0  | 2,765.4             | 2,798.3             | 2,798.0             | 8.5             | 4.9         | -56.19                | 819.4                             | 764.2      | 858.9                | 846.5                 | 12.43                  | 69.076            |         |
| 2,900.0  | 2,863.4             | 2,898.6             | 2,898.3             | 8.9             | 5.1         | -57.36                | 820.2                             | 763.7      | 848.4                | 835.4                 | 13.01                  | 65.216            |         |
| 3,000.0  | 2,961.4             | 2,996.1             | 2,995.8             | 9.3             | 5.3         | -58.57                | 821.0                             | 762.8      | 838.1                | 824.5                 | 13.59                  | 61.675            |         |
| 3,100.0  | 3,059.4             | 3,095.2             | 3,094.8             | 9.7             | 5.4         | -59.84                | 822.0                             | 761.6      | 828.1                | 814.0                 | 14.18                  | 58.408            |         |
| 3,200.0  | 3,157.4             | 3,195.0             | 3,194.6             | 10.1            | 5.6         | -61.15                | 822.7                             | 760.3      | 818.4                | 803.6                 | 14.78                  | 55.385            |         |
| 3,300.0  | 3,255.4             | 3,291.4             | 3,291.1             | 10.4            | 5.8         | -62.46                | 823.5                             | 758.7      | 809.1                | 793.7                 | 15.38                  | 52.615            |         |
| 3,400.0  | 3,353.4             | 3,385.7             | 3,385.3             | 10.8            | 5.9         | -63.78                | 824.5                             | 757.3      | 800.4                | 784.5                 | 15.98                  | 50.093            |         |
| 3,500.0  | 3,451.4             | 3,481.6             | 3,481.2             | 11.2            | 6.1         | -65.12                | 825.8                             | 756.1      | 792.7                | 776.1                 | 16.59                  | 47.789            |         |
| 3,600.0  | 3,549.4             | 3,574.2             | 3,573.7             | 11.6            | 6.3         | -66.40                | 827.3                             | 755.7      | 785.7                | 768.5                 | 17.19                  | 45.709            |         |
| 3,700.0  | 3,647.4             | 3,666.1             | 3,665.7             | 12.0            | 6.4         | -67.68                | 829.3                             | 755.6      | 780.0                | 762.2                 | 17.79                  | 43.839            |         |
| 3,800.0  | 3,745.5             | 3,765.1             | 3,764.6             | 12.4            | 6.6         | -69.08                | 832.0                             | 755.6      | 775.3                | 756.8                 | 18.41                  | 42.104            |         |
| 3,900.0  | 3,843.5             | 3,871.1             | 3,870.6             | 12.8            | 6.8         | -70.62                | 834.3                             | 755.0      | 770.3                | 751.3                 | 19.05                  | 40.436            |         |
| 4,000.0  | 3,941.5             | 3,973.7             | 3,973.2             | 13.2            | 7.0         | -72.13                | 835.5                             | 754.4      | 764.9                | 745.2                 | 19.68                  | 38.866            |         |
| 4,100.0  | 4,039.5             | 4,078.9             | 4,078.4             | 13.6            | 7.2         | -73.74                | 836.2                             | 753.1      | 759.4                | 739.1                 | 20.32                  | 37.374            |         |
| 4,200.0  | 4,137.5             | 4,174.9             | 4,174.4             | 14.0            | 7.3         | -75.27                | 836.3                             | 751.2      | 753.9                | 732.9                 | 20.94                  | 35.995            |         |
| 4,300.0  | 4,235.5             | 4,274.7             | 4,274.1             | 14.4            | 7.5         | -76.90                | 836.7                             | 749.1      | 749.1                | 727.6                 | 21.57                  | 34.727            |         |
| 4,400.0  | 4,333.5             | 4,372.8             | 4,372.3             | 14.8            | 7.7         | -78.47                | 836.7                             | 747.7      | 744.6                | 722.5                 | 22.19                  | 33.554            |         |
| 4,500.0  | 4,431.5             | 4,467.2             | 4,466.6             | 15.2            | 7.8         | -80.01                | 836.9                             | 746.1      | 741.0                | 718.2                 | 22.80                  | 32.492            |         |
| 4,600.0  | 4,529.5             | 4,558.0             | 4,557.3             | 15.5            | 8.0         | -81.56                | 837.7                             | 743.8      | 738.6                | 715.2                 | 23.41                  | 31.554            |         |
| 4,700.0  | 4,627.5             | 4,656.0             | 4,655.3             | 15.9            | 8.2         | -83.24                | 839.3                             | 741.4      | 737.6                | 713.5                 | 24.01                  | 30.714            |         |
| 4,800.0  | 4,725.5             | 4,757.5             | 4,756.9             | 16.3            | 8.4         | -84.95                | 840.3                             | 739.5      | 736.5                | 711.9                 | 24.62                  | 29.916            |         |
| 4,900.0  | 4,823.5             | 4,860.6             | 4,859.9             | 16.7            | 8.5         | -86.69                | 840.9                             | 737.5      | 735.8                | 710.5                 | 25.22                  | 29.176            |         |
| 5,000.0  | 4,921.5             | 4,962.3             | 4,961.6             | 17.1            | 8.7         | -88.35                | 840.6                             | 736.4      | 734.7                | 708.9                 | 25.80                  | 28.475            |         |
| 5,088.7  | 5,008.5             | 5,046.6             | 5,045.8             | 17.5            | 8.9         | -89.74                | 840.3                             | 735.2      | 734.3                | 708.0                 | 26.30                  | 27.914            |         |
| 5,100.0  | 5,019.5             | 5,057.0             | 5,056.2             | 17.5            | 8.9         | -89.91                | 840.3                             | 735.1      | 734.3                | 707.9                 | 26.37                  | 27.848            |         |
| 5,200.0  | 5,117.5             | 5,150.9             | 5,150.1             | 17.9            | 9.1         | -91.48                | 840.6                             | 733.6      | 735.0                | 708.1                 | 26.92                  | 27.306            |         |
| 5,300.0  | 5,215.6             | 5,248.2             | 5,247.5             | 18.3            | 9.2         | -93.12                | 841.1                             | 731.7      | 736.7                | 709.2                 | 27.46                  | 26.825            |         |
| 5,400.0  | 5,313.6             | 5,345.9             | 5,345.1             | 18.7            | 9.4         | -94.76                | 841.5                             | 729.7      | 738.9                | 710.9                 | 28.00                  | 26.393            |         |
| 5,500.0  | 5,411.6             | 5,444.4             | 5,443.6             | 19.1            | 9.6         | -96.34                | 842.1                             | 728.6      | 741.8                | 713.3                 | 28.52                  | 26.011            |         |
| 5,600.0  | 5,509.6             | 5,543.2             | 5,542.4             | 19.5            | 9.7         | -97.92                | 842.5                             | 727.5      | 745.0                | 716.0                 | 29.03                  | 25.663            |         |
| 5,700.0  | 5,607.6             | 5,638.8             | 5,638.0             | 19.9            | 9.9         | -99.43                | 843.0                             | 726.3      | 748.9                | 719.4                 | 29.52                  | 25.370            |         |
| 5,800.0  | 5,705.6             | 5,735.7             | 5,734.8             | 20.3            | 10.1        | -100.99               | 843.6                             | 724.6      | 753.7                | 723.7                 | 30.00                  | 25.123            |         |
| 5,900.0  | 5,803.6             | 5,833.7             | 5,832.9             | 20.7            | 10.3        | -102.57               | 844.0                             | 722.5      | 758.9                | 728.5                 | 30.47                  | 24.911            |         |
| 6,000.0  | 5,901.6             | 5,930.7             | 5,929.9             | 21.1            | 10.4        | -104.11               | 844.5                             | 720.4      | 764.9                | 734.0                 | 30.92                  | 24.741            |         |
| 6,100.0  | 5,999.6             | 6,029.9             | 6,029.0             | 21.4            | 10.6        | -105.65               | 845.0                             | 718.5      | 771.3                | 740.0                 | 31.36                  | 24.598            |         |
| 6,200.0  | 6,097.6             | 6,129.3             | 6,128.3             | 21.8            | 10.8        | -107.21               | 845.0                             | 716.2      | 778.1                | 746.3                 | 31.78                  | 24.480            |         |
| 6,300.0  | 6,195.6             | 6,226.8             | 6,225.8             | 22.2            | 11.0        | -108.73               | 844.8                             | 713.7      | 785.3                | 753.1                 | 32.19                  | 24.396            |         |
| 6,400.0  | 6,293.6             | 6,324.7             | 6,323.7             | 22.6            | 11.1        | -110.21               | 844.7                             | 711.4      | 793.0                | 760.5                 | 32.58                  | 24.339            |         |
| 6,500.0  | 6,391.6             | 6,420.9             | 6,419.9             | 23.0            | 11.3        | -111.61               | 844.8                             | 709.6      | 801.3                | 768.3                 | 32.96                  | 24.307            |         |
| 6,600.0  | 6,489.6             | 6,512.1             | 6,511.1             | 23.4            | 11.5        | -112.89               | 845.6                             | 707.7      | 810.7                | 777.4                 | 33.32                  | 24.328            |         |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY F UNIT 1 (EXISTING) - ENCANA WEL |                |                |                |                 |        |                   |                        |            |                 |                  | Offset Site Error:     |                   | 0.0 ft  |
|--|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------|------------|-----------------|------------------|------------------------|-------------------|---------|
| Survey Program: 100-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 Axis | Separation Factor |         |
| (ft)   | (ft)           | (ft)           | (ft)           | (ft)            | (ft)   | (°)               | +N/-S (ft)             | +E/-W (ft) | (ft)            | (ft)             |                        |                   |         |
| 6,700.0  | 6,587.6        | 6,617.5        | 6,616.5        | 23.8            | 11.7   | -114.30           | 846.5                  | 706.2      | 820.3           | 786.5            | 33.71                  | 24.333            |         |
| 6,800.0  | 6,685.7        | 6,713.1        | 6,712.0        | 24.2            | 11.8   | -115.55           | 847.1                  | 704.9      | 830.1           | 796.1            | 34.06                  | 24.371            |         |
| 6,900.0  | 6,783.7        | 6,815.8        | 6,814.8        | 24.6            | 12.0   | -116.87           | 847.5                  | 703.6      | 840.1           | 805.6            | 34.42                  | 24.405            |         |
| 7,000.0  | 6,881.7        | 6,909.0        | 6,908.0        | 25.0            | 12.2   | -118.07           | 847.7                  | 702.1      | 850.5           | 815.7            | 34.75                  | 24.477            |         |
| 7,100.0  | 6,979.6        | 7,002.0        | 7,001.0        | 25.4            | 12.3   | -106.99           | 848.0                  | 700.0      | 861.4           | 826.3            | 35.06                  | 24.567            |         |
| 7,200.0  | 7,076.3        | 7,109.8        | 7,108.7        | 25.8            | 12.5   | -78.23            | 848.1                  | 698.0      | 862.3           | 826.8            | 35.47                  | 24.310            |         |
| 7,300.0  | 7,168.8        | 7,195.4        | 7,194.3        | 26.3            | 12.7   | -67.98            | 847.8                  | 696.2      | 850.7           | 814.9            | 35.84                  | 23.735            |         |
| 7,400.0  | 7,254.2        | 7,279.3        | 7,278.1        | 26.8            | 12.8   | -66.02            | 847.2                  | 693.7      | 829.0           | 792.8            | 36.20                  | 22.903            |         |
| 7,500.0  | 7,330.1        | 7,362.3        | 7,361.0        | 27.3            | 13.0   | -68.69            | 845.6                  | 690.6      | 799.0           | 762.5            | 36.49                  | 21.895            |         |
| 7,600.0  | 7,394.0        | 7,465.8        | 7,464.3        | 27.9            | 13.1   | -76.16            | 839.5                  | 687.2      | 763.0           | 726.3            | 36.64                  | 20.823            |         |
| 7,700.0  | 7,444.1        | 7,527.0        | 7,525.2        | 28.6            | 13.2   | -83.18            | 833.7                  | 687.7      | 724.0           | 687.5            | 36.53                  | 19.821            |         |
| 7,800.0  | 7,478.8        | 7,554.7        | 7,552.8        | 29.4            | 13.3   | -88.17            | 831.4                  | 688.3      | 689.8           | 653.6            | 36.15                  | 19.081            |         |
| 7,900.0  | 7,497.2        | 7,566.8        | 7,564.9        | 30.1            | 13.3   | -91.45            | 830.5                  | 688.7      | 664.1           | 628.7            | 35.42                  | 18.748 SF         |         |
| 8,000.0  | 7,500.0        | 7,562.0        | 7,560.1        | 31.0            | 13.3   | -91.95            | 830.9                  | 688.5      | 650.0           | 615.6            | 34.36                  | 18.915            |         |
| 8,046.4  | 7,500.0        | 7,557.9        | 7,556.1        | 31.4            | 13.3   | -91.60            | 831.2                  | 688.4      | 648.4           | 614.6            | 33.79                  | 19.185 CC, ES     |         |
| 8,100.0  | 7,500.0        | 7,553.0        | 7,551.1        | 31.9            | 13.3   | -91.16            | 831.5                  | 688.3      | 650.5           | 617.5            | 33.08                  | 19.666            |         |
| 8,200.0  | 7,500.0        | 7,542.8        | 7,540.9        | 32.9            | 13.3   | -90.26            | 832.3                  | 688.0      | 666.2           | 634.4            | 31.73                  | 20.996            |         |
| 8,300.0  | 7,500.0        | 7,531.1        | 7,529.3        | 33.9            | 13.3   | -89.23            | 833.3                  | 687.8      | 695.8           | 665.3            | 30.49                  | 22.824            |         |
| 8,400.0  | 7,500.0        | 7,517.5        | 7,515.8        | 35.0            | 13.2   | -88.04            | 834.6                  | 687.5      | 737.8           | 708.3            | 29.48                  | 25.023            |         |
| 8,500.0  | 7,500.0        | 7,501.7        | 7,500.0        | 36.2            | 13.2   | -86.65            | 836.1                  | 687.3      | 790.1           | 761.3            | 28.77                  | 27.459            |         |
| 8,600.0  | 7,500.0        | 7,489.9        | 7,488.3        | 37.4            | 13.2   | -85.62            | 837.3                  | 687.2      | 850.8           | 822.4            | 28.36                  | 29.994            |         |
| 8,700.0  | 7,500.0        | 7,479.8        | 7,478.2        | 38.6            | 13.2   | -84.74            | 838.3                  | 687.2      | 918.3           | 890.1            | 28.20                  | 32.561            |         |
| 8,800.0  | 7,500.0        | 7,470.8        | 7,469.3        | 39.9            | 13.2   | -83.96            | 839.1                  | 687.2      | 991.2           | 963.0            | 28.22                  | 35.126            |         |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #3 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                  |               | Offset Site Error: | 0.0 ft |
|---|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------|---------------|--------------------|--------|
| Survey Program: 0-Geolink MWD   |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                  |               | Offset Well Error: | 0.0 ft |
| Reference   |                     | Offset              |                     | Semi Major Axis |             |                       | Distance                          |            |                      |                       | Total            | Separation    | 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 | Factor        |                    |        |
| 0.0   | 0.0                 | 0.0                 | 0.0                 | 0.0             | 0.0         | -89.44                | 0.4                               | -37.5      | 37.5                 |                       |                  |               |                    |        |
| 100.0   | 100.0               | 100.0               | 100.0               | 0.2             | 0.2         | -89.44                | 0.4                               | -37.5      | 37.5                 | 37.2                  | 0.30             | 123.501       |                    |        |
| 200.0   | 200.0               | 200.0               | 200.0               | 0.3             | 0.3         | -89.44                | 0.4                               | -37.5      | 37.5                 | 36.9                  | 0.65             | 57.458 CC, ES |                    |        |
| 300.0   | 300.0               | 299.4               | 299.4               | 0.5             | 0.5         | -90.10                | -0.1                              | -38.3      | 38.3                 | 37.3                  | 1.00             | 38.218        |                    |        |
| 400.0   | 400.0               | 398.8               | 398.7               | 0.7             | 0.7         | -174.34               | -1.4                              | -40.5      | 41.4                 | 40.1                  | 1.35             | 30.673        |                    |        |
| 500.0   | 500.0               | 497.8               | 497.7               | 0.9             | 0.9         | -177.06               | -3.5                              | -44.2      | 47.9                 | 46.2                  | 1.70             | 28.189 SF     |                    |        |
| 600.0   | 599.9               | 596.5               | 596.2               | 1.0             | 1.1         | -179.82               | -6.5                              | -49.4      | 57.8                 | 55.7                  | 2.05             | 28.226        |                    |        |
| 700.0   | 699.7               | 695.9               | 695.4               | 1.2             | 1.3         | 178.63                | -9.2                              | -55.3      | 70.2                 | 67.8                  | 2.39             | 29.302        |                    |        |
| 800.0   | 799.4               | 795.0               | 794.3               | 1.4             | 1.5         | 178.43                | -10.6                             | -61.2      | 84.0                 | 81.3                  | 2.74             | 30.645        |                    |        |
| 900.0   | 898.9               | 893.8               | 892.9               | 1.7             | 1.7         | 178.36                | -11.9                             | -67.0      | 99.6                 | 96.5                  | 3.09             | 32.250        |                    |        |
| 1,000.0   | 998.3               | 992.3               | 991.2               | 1.9             | 1.9         | 178.33                | -13.2                             | -72.8      | 116.8                | 113.4                 | 3.43             | 34.038        |                    |        |
| 1,100.0   | 1,097.4             | 1,090.5             | 1,089.2             | 2.2             | 2.1         | 178.32                | -14.5                             | -78.5      | 135.8                | 132.0                 | 3.78             | 35.959        |                    |        |
| 1,200.0   | 1,196.3             | 1,188.3             | 1,186.9             | 2.5             | 2.2         | 178.34                | -15.9                             | -84.3      | 156.5                | 152.4                 | 4.12             | 37.982        |                    |        |
| 1,300.0   | 1,294.9             | 1,285.8             | 1,284.2             | 2.8             | 2.4         | 178.37                | -17.2                             | -90.0      | 178.9                | 174.5                 | 4.46             | 40.082        |                    |        |
| 1,400.0   | 1,393.3             | 1,382.8             | 1,381.0             | 3.2             | 2.6         | 178.40                | -18.5                             | -95.7      | 203.0                | 198.2                 | 4.81             | 42.243        |                    |        |
| 1,500.0   | 1,491.3             | 1,479.5             | 1,477.5             | 3.5             | 2.8         | 178.44                | -19.8                             | -101.4     | 228.6                | 223.4                 | 5.15             | 44.406        |                    |        |
| 1,600.0   | 1,589.3             | 1,576.1             | 1,574.0             | 3.9             | 3.0         | 178.47                | -21.1                             | -107.1     | 254.3                | 248.8                 | 5.49             | 46.334        |                    |        |
| 1,700.0   | 1,687.3             | 1,672.8             | 1,670.5             | 4.3             | 3.2         | 178.50                | -22.4                             | -112.7     | 280.0                | 274.2                 | 5.83             | 48.036        |                    |        |
| 1,800.0   | 1,785.3             | 1,769.4             | 1,766.9             | 4.6             | 3.4         | 178.52                | -23.7                             | -118.4     | 305.7                | 299.6                 | 6.17             | 49.551        |                    |        |
| 1,900.0   | 1,883.3             | 1,866.0             | 1,863.4             | 5.0             | 3.6         | 178.54                | -25.0                             | -124.1     | 331.5                | 324.9                 | 6.51             | 50.908        |                    |        |
| 2,000.0   | 1,981.3             | 1,962.7             | 1,959.8             | 5.4             | 3.8         | 178.56                | -26.3                             | -129.8     | 357.2                | 350.3                 | 6.85             | 52.130        |                    |        |
| 2,100.0   | 2,079.3             | 2,059.3             | 2,056.3             | 5.8             | 4.0         | 178.57                | -27.6                             | -135.5     | 382.9                | 375.7                 | 7.19             | 53.237        |                    |        |
| 2,200.0   | 2,177.3             | 2,155.9             | 2,152.8             | 6.2             | 4.2         | 178.59                | -28.9                             | -141.1     | 408.6                | 401.1                 | 7.53             | 54.243        |                    |        |
| 2,300.0   | 2,275.4             | 2,252.6             | 2,249.2             | 6.6             | 4.4         | 178.60                | -30.2                             | -146.8     | 434.3                | 426.5                 | 7.87             | 55.163        |                    |        |
| 2,400.0   | 2,373.4             | 2,349.2             | 2,345.7             | 6.9             | 4.6         | 178.61                | -31.5                             | -152.5     | 460.1                | 451.9                 | 8.21             | 56.006        |                    |        |
| 2,500.0   | 2,471.4             | 2,445.9             | 2,442.1             | 7.3             | 4.8         | 178.62                | -32.8                             | -158.2     | 485.8                | 477.2                 | 8.56             | 56.783        |                    |        |
| 2,600.0   | 2,569.4             | 2,542.5             | 2,538.6             | 7.7             | 5.0         | 178.63                | -34.1                             | -163.9     | 511.5                | 502.6                 | 8.90             | 57.500        |                    |        |
| 2,700.0   | 2,667.4             | 2,639.1             | 2,635.1             | 8.1             | 5.2         | 178.63                | -35.4                             | -169.5     | 537.2                | 528.0                 | 9.24             | 58.164        |                    |        |
| 2,800.0   | 2,765.4             | 2,735.8             | 2,731.5             | 8.5             | 5.4         | 178.64                | -36.7                             | -175.2     | 563.0                | 553.4                 | 9.58             | 58.781        |                    |        |
| 2,900.0   | 2,863.4             | 2,832.4             | 2,828.0             | 8.9             | 5.6         | 178.65                | -38.0                             | -180.9     | 588.7                | 578.8                 | 9.92             | 59.356        |                    |        |
| 3,000.0   | 2,961.4             | 2,929.0             | 2,924.4             | 9.3             | 5.8         | 178.65                | -39.3                             | -186.6     | 614.4                | 604.1                 | 10.26            | 59.892        |                    |        |
| 3,100.0   | 3,059.4             | 3,025.7             | 3,020.9             | 9.7             | 6.0         | 178.66                | -40.6                             | -192.3     | 640.1                | 629.5                 | 10.60            | 60.394        |                    |        |
| 3,200.0   | 3,157.4             | 3,122.3             | 3,117.4             | 10.1            | 6.2         | 178.66                | -41.9                             | -197.9     | 665.8                | 654.9                 | 10.94            | 60.865        |                    |        |
| 3,300.0   | 3,255.4             | 3,218.9             | 3,213.8             | 10.4            | 6.4         | 178.67                | -43.2                             | -203.6     | 691.6                | 680.3                 | 11.28            | 61.308        |                    |        |
| 3,400.0   | 3,353.4             | 3,315.6             | 3,310.3             | 10.8            | 6.6         | 178.67                | -44.5                             | -209.3     | 717.3                | 705.7                 | 11.62            | 61.725        |                    |        |
| 3,500.0   | 3,451.4             | 3,412.2             | 3,406.7             | 11.2            | 6.8         | 178.67                | -45.8                             | -215.0     | 743.0                | 731.0                 | 11.96            | 62.118        |                    |        |
| 3,600.0   | 3,549.4             | 3,508.8             | 3,503.2             | 11.6            | 7.0         | 178.68                | -47.1                             | -220.7     | 768.7                | 756.4                 | 12.30            | 62.489        |                    |        |
| 3,700.0   | 3,647.4             | 3,605.5             | 3,599.6             | 12.0            | 7.2         | 178.68                | -48.4                             | -226.3     | 794.5                | 781.8                 | 12.64            | 62.840        |                    |        |
| 3,800.0   | 3,745.5             | 3,702.1             | 3,696.1             | 12.4            | 7.4         | 178.68                | -49.7                             | -232.0     | 820.2                | 807.2                 | 12.98            | 63.173        |                    |        |
| 3,900.0   | 3,843.5             | 3,798.7             | 3,792.6             | 12.8            | 7.6         | 178.69                | -51.1                             | -237.7     | 845.9                | 832.6                 | 13.32            | 63.489        |                    |        |
| 4,000.0   | 3,941.5             | 3,895.4             | 3,889.0             | 13.2            | 7.8         | 178.69                | -52.4                             | -243.4     | 871.6                | 858.0                 | 13.66            | 63.789        |                    |        |
| 4,100.0   | 4,039.5             | 3,992.0             | 3,985.5             | 13.6            | 8.0         | 178.69                | -53.7                             | -249.1     | 897.3                | 883.3                 | 14.00            | 64.074        |                    |        |
| 4,200.0   | 4,137.5             | 4,088.7             | 4,081.9             | 14.0            | 8.1         | 178.69                | -55.0                             | -254.7     | 923.1                | 908.7                 | 14.35            | 64.346        |                    |        |
| 4,300.0   | 4,235.5             | 4,185.3             | 4,178.4             | 14.4            | 8.3         | 178.70                | -56.3                             | -260.4     | 948.8                | 934.1                 | 14.69            | 64.606        |                    |        |
| 4,400.0   | 4,333.5             | 4,281.9             | 4,274.9             | 14.8            | 8.5         | 178.70                | -57.6                             | -266.1     | 974.5                | 959.5                 | 15.03            | 64.853        |                    |        |
| 4,500.0   | 4,431.5             | 4,378.6             | 4,371.3             | 15.2            | 8.7         | 178.70                | -58.9                             | -271.8     | 1,000.2              | 984.9                 | 15.37            | 65.090        |                    |        |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2B-7H-E168 - Hz - Plan #3 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        |                   | 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         | -89.31                | 0.4                               | -30.2      | 30.2                 |                       |                        |                   |                    |         |
| 100.0   | 100.0               | 100.0               | 100.0               | 0.2             | 0.2         | -89.31                | 0.4                               | -30.2      | 30.2                 | 29.9                  | 0.30                   | 99.540            |                    |         |
| 200.0   | 200.0               | 200.0               | 200.0               | 0.3             | 0.3         | -89.31                | 0.4                               | -30.2      | 30.2                 | 29.6                  | 0.65                   | 46.310            |                    |         |
| 300.0   | 300.0               | 300.0               | 300.0               | 0.5             | 0.5         | -89.31                | 0.4                               | -30.2      | 30.2                 | 29.2                  | 1.00                   | 30.174 CC, ES     |                    |         |
| 400.0   | 400.0               | 399.6               | 399.6               | 0.7             | 0.7         | -173.05               | -0.3                              | -30.8      | 31.7                 | 30.3                  | 1.35                   | 23.437            |                    |         |
| 500.0   | 500.0               | 499.1               | 499.1               | 0.9             | 0.9         | -176.68               | -2.3                              | -32.5      | 36.0                 | 34.3                  | 1.70                   | 21.185 SF         |                    |         |
| 600.0   | 599.9               | 598.3               | 598.2               | 1.0             | 1.0         | 178.92                | -5.6                              | -35.2      | 43.5                 | 41.5                  | 2.05                   | 21.220            |                    |         |
| 700.0   | 699.7               | 698.6               | 698.3               | 1.2             | 1.2         | 175.71                | -9.1                              | -37.9      | 52.9                 | 50.5                  | 2.41                   | 21.997            |                    |         |
| 800.0   | 799.4               | 799.0               | 798.7               | 1.4             | 1.4         | 174.25                | -11.6                             | -39.2      | 62.5                 | 59.7                  | 2.76                   | 22.663            |                    |         |
| 900.0   | 898.9               | 899.4               | 899.1               | 1.7             | 1.6         | 173.85                | -13.0                             | -39.1      | 72.3                 | 69.2                  | 3.11                   | 23.240            |                    |         |
| 1,000.0   | 998.3               | 998.8               | 998.5               | 1.9             | 1.7         | 173.83                | -14.2                             | -38.5      | 83.2                 | 79.8                  | 3.46                   | 24.061            |                    |         |
| 1,100.0   | 1,097.4             | 1,098.0             | 1,097.7             | 2.2             | 1.9         | 173.92                | -15.3                             | -37.9      | 95.9                 | 92.1                  | 3.81                   | 25.185            |                    |         |
| 1,200.0   | 1,196.3             | 1,196.9             | 1,196.6             | 2.5             | 2.1         | 174.09                | -16.4                             | -37.4      | 110.4                | 106.2                 | 4.16                   | 26.535            |                    |         |
| 1,300.0   | 1,294.9             | 1,295.6             | 1,295.3             | 2.8             | 2.3         | 174.29                | -17.5                             | -36.8      | 126.5                | 122.0                 | 4.51                   | 28.060            |                    |         |
| 1,400.0   | 1,393.3             | 1,394.0             | 1,393.7             | 3.2             | 2.4         | 174.50                | -18.6                             | -36.3      | 144.3                | 139.5                 | 4.86                   | 29.722            |                    |         |
| 1,500.0   | 1,491.3             | 1,492.1             | 1,491.8             | 3.5             | 2.6         | 174.73                | -19.7                             | -35.7      | 163.7                | 158.5                 | 5.20                   | 31.447            |                    |         |
| 1,600.0   | 1,589.3             | 1,590.2             | 1,589.9             | 3.9             | 2.8         | 174.92                | -20.8                             | -35.2      | 183.1                | 177.6                 | 5.55                   | 32.989            |                    |         |
| 1,700.0   | 1,687.3             | 1,688.3             | 1,687.9             | 4.3             | 3.0         | 175.07                | -21.9                             | -34.6      | 202.6                | 196.7                 | 5.90                   | 34.350            |                    |         |
| 1,800.0   | 1,785.3             | 1,786.4             | 1,786.0             | 4.6             | 3.1         | 175.19                | -23.0                             | -34.0      | 222.1                | 215.9                 | 6.25                   | 35.561            |                    |         |
| 1,900.0   | 1,883.3             | 1,884.4             | 1,884.1             | 5.0             | 3.3         | 175.30                | -24.1                             | -33.5      | 241.6                | 235.0                 | 6.59                   | 36.645            |                    |         |
| 2,000.0   | 1,981.3             | 1,982.5             | 1,982.2             | 5.4             | 3.5         | 175.39                | -25.2                             | -32.9      | 261.1                | 254.2                 | 6.94                   | 37.620            |                    |         |
| 2,100.0   | 2,079.3             | 2,080.6             | 2,080.2             | 5.8             | 3.6         | 175.47                | -26.3                             | -32.4      | 280.6                | 273.3                 | 7.29                   | 38.503            |                    |         |
| 2,200.0   | 2,177.3             | 2,178.7             | 2,178.3             | 6.2             | 3.8         | 175.53                | -27.4                             | -31.8      | 300.1                | 292.5                 | 7.64                   | 39.306            |                    |         |
| 2,300.0   | 2,275.4             | 2,276.8             | 2,276.4             | 6.6             | 4.0         | 175.59                | -28.5                             | -31.3      | 319.6                | 311.6                 | 7.98                   | 40.039            |                    |         |
| 2,400.0   | 2,373.4             | 2,374.8             | 2,374.4             | 6.9             | 4.2         | 175.65                | -29.6                             | -30.7      | 339.1                | 330.8                 | 8.33                   | 40.711            |                    |         |
| 2,500.0   | 2,471.4             | 2,472.9             | 2,472.5             | 7.3             | 4.3         | 175.69                | -30.7                             | -30.2      | 358.6                | 349.9                 | 8.68                   | 41.330            |                    |         |
| 2,600.0   | 2,569.4             | 2,571.0             | 2,570.6             | 7.7             | 4.5         | 175.73                | -31.8                             | -29.6      | 378.1                | 369.1                 | 9.02                   | 41.900            |                    |         |
| 2,700.0   | 2,667.4             | 2,669.1             | 2,668.7             | 8.1             | 4.7         | 175.77                | -32.9                             | -29.0      | 397.6                | 388.2                 | 9.37                   | 42.429            |                    |         |
| 2,800.0   | 2,765.4             | 2,767.2             | 2,766.7             | 8.5             | 4.8         | 175.81                | -34.0                             | -28.5      | 417.1                | 407.4                 | 9.72                   | 42.920            |                    |         |
| 2,900.0   | 2,863.4             | 2,865.3             | 2,864.8             | 8.9             | 5.0         | 175.84                | -35.2                             | -27.9      | 436.6                | 426.5                 | 10.06                  | 43.378            |                    |         |
| 3,000.0   | 2,961.4             | 2,963.3             | 2,962.9             | 9.3             | 5.2         | 175.86                | -36.3                             | -27.4      | 456.1                | 445.7                 | 10.41                  | 43.805            |                    |         |
| 3,100.0   | 3,059.4             | 3,061.4             | 3,061.0             | 9.7             | 5.4         | 175.89                | -37.4                             | -26.8      | 475.6                | 464.8                 | 10.76                  | 44.204            |                    |         |
| 3,200.0   | 3,157.4             | 3,159.5             | 3,159.0             | 10.1            | 5.5         | 175.91                | -38.5                             | -26.3      | 495.1                | 484.0                 | 11.11                  | 44.579            |                    |         |
| 3,300.0   | 3,255.4             | 3,257.6             | 3,257.1             | 10.4            | 5.7         | 175.94                | -39.6                             | -25.7      | 514.6                | 503.1                 | 11.45                  | 44.931            |                    |         |
| 3,400.0   | 3,353.4             | 3,355.7             | 3,355.2             | 10.8            | 5.9         | 175.96                | -40.7                             | -25.2      | 534.1                | 522.3                 | 11.80                  | 45.262            |                    |         |
| 3,500.0   | 3,451.4             | 3,453.7             | 3,453.2             | 11.2            | 6.1         | 175.98                | -41.8                             | -24.6      | 553.6                | 541.4                 | 12.15                  | 45.574            |                    |         |
| 3,600.0   | 3,549.4             | 3,551.8             | 3,551.3             | 11.6            | 6.2         | 175.99                | -42.9                             | -24.1      | 573.1                | 560.6                 | 12.49                  | 45.869            |                    |         |
| 3,700.0   | 3,647.4             | 3,649.9             | 3,649.4             | 12.0            | 6.4         | 176.01                | -44.0                             | -23.5      | 592.6                | 579.7                 | 12.84                  | 46.148            |                    |         |
| 3,800.0   | 3,745.5             | 3,748.0             | 3,747.5             | 12.4            | 6.6         | 176.03                | -45.1                             | -22.9      | 612.1                | 598.9                 | 13.19                  | 46.413            |                    |         |
| 3,900.0   | 3,843.5             | 3,846.1             | 3,845.5             | 12.8            | 6.7         | 176.04                | -46.2                             | -22.4      | 631.6                | 618.0                 | 13.53                  | 46.664            |                    |         |
| 4,000.0   | 3,941.5             | 3,944.1             | 3,943.6             | 13.2            | 6.9         | 176.06                | -47.3                             | -21.8      | 651.1                | 637.2                 | 13.88                  | 46.902            |                    |         |
| 4,100.0   | 4,039.5             | 4,042.2             | 4,041.7             | 13.6            | 7.1         | 176.07                | -48.4                             | -21.3      | 670.6                | 656.3                 | 14.23                  | 47.129            |                    |         |
| 4,200.0   | 4,137.5             | 4,140.3             | 4,139.8             | 14.0            | 7.3         | 176.08                | -49.5                             | -20.7      | 690.1                | 675.5                 | 14.58                  | 47.345            |                    |         |
| 4,300.0   | 4,235.5             | 4,238.4             | 4,237.8             | 14.4            | 7.4         | 176.09                | -50.6                             | -20.2      | 709.6                | 694.6                 | 14.92                  | 47.551            |                    |         |
| 4,400.0   | 4,333.5             | 4,336.5             | 4,335.9             | 14.8            | 7.6         | 176.10                | -51.7                             | -19.6      | 729.1                | 713.8                 | 15.27                  | 47.747            |                    |         |
| 4,500.0   | 4,431.5             | 4,434.5             | 4,434.0             | 15.2            | 7.8         | 176.11                | -52.8                             | -19.1      | 748.6                | 732.9                 | 15.62                  | 47.935            |                    |         |
| 4,600.0   | 4,529.5             | 4,532.6             | 4,532.0             | 15.5            | 7.9         | 176.12                | -53.9                             | -18.5      | 768.1                | 752.1                 | 15.96                  | 48.115            |                    |         |
| 4,700.0   | 4,627.5             | 4,630.7             | 4,630.1             | 15.9            | 8.1         | 176.13                | -55.0                             | -17.9      | 787.6                | 771.3                 | 16.31                  | 48.287            |                    |         |
| 4,800.0   | 4,725.5             | 4,728.8             | 4,728.2             | 16.3            | 8.3         | 176.14                | -56.1                             | -17.4      | 807.1                | 790.4                 | 16.66                  | 48.452            |                    |         |
| 4,900.0   | 4,823.5             | 4,826.9             | 4,826.3             | 16.7            | 8.5         | 176.15                | -57.2                             | -16.8      | 826.6                | 809.6                 | 17.00                  | 48.610            |                    |         |
| 5,000.0   | 4,921.5             | 4,924.9             | 4,924.3             | 17.1            | 8.6         | 176.16                | -58.3                             | -16.3      | 846.1                | 828.7                 | 17.35                  | 48.762            |                    |         |
| 5,100.0   | 5,019.5             | 5,023.0             | 5,022.4             | 17.5            | 8.8         | 176.17                | -59.4                             | -15.7      | 865.6                | 847.9                 | 17.70                  | 48.908            |                    |         |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2B-7H-E168 - Hz - Plan #3 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        | 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 |
| 5,200.0   | 5,117.5             | 5,121.1             | 5,120.5             | 17.9            | 9.0         | 176.17                | -60.5                             | -15.2      | 885.1                | 867.0                 | 18.04                  | 49.048             |                   |
| 5,300.0   | 5,215.6             | 5,219.2             | 5,218.6             | 18.3            | 9.2         | 176.18                | -61.6                             | -14.6      | 904.6                | 886.2                 | 18.39                  | 49.183             |                   |
| 5,400.0   | 5,313.6             | 5,317.3             | 5,316.6             | 18.7            | 9.3         | 176.19                | -62.7                             | -14.1      | 924.1                | 905.3                 | 18.74                  | 49.313             |                   |
| 5,500.0   | 5,411.6             | 5,415.3             | 5,414.7             | 19.1            | 9.5         | 176.19                | -63.8                             | -13.5      | 943.5                | 924.5                 | 19.09                  | 49.439             |                   |
| 5,600.0   | 5,509.6             | 5,513.4             | 5,512.8             | 19.5            | 9.7         | 176.20                | -64.9                             | -12.9      | 963.0                | 943.6                 | 19.43                  | 49.560             |                   |
| 5,700.0   | 5,607.6             | 5,611.5             | 5,610.8             | 19.9            | 9.8         | 176.21                | -66.0                             | -12.4      | 982.5                | 962.8                 | 19.78                  | 49.676             |                   |
| 5,800.0   | 5,705.6             | 5,709.6             | 5,708.9             | 20.3            | 10.0        | 176.21                | -67.1                             | -11.8      | 1,002.0              | 981.9                 | 20.13                  | 49.789             |                   |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2C-7H-E168 - Hz - Plan #5 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        | 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 |
| 0.0   | 0.0                 | 0.0                 | 0.0                 | 0.0             | 0.0         | -89.10                | 0.4                               | -22.7      | 22.7                 |                       |                        |                           |         |
| 100.0   | 100.0               | 100.0               | 100.0               | 0.2             | 0.2         | -89.10                | 0.4                               | -22.7      | 22.7                 | 22.4                  | 0.30                   | 74.659                    |         |
| 200.0   | 200.0               | 200.0               | 200.0               | 0.3             | 0.3         | -89.10                | 0.4                               | -22.7      | 22.7                 | 22.0                  | 0.65                   | 34.734                    |         |
| 300.0   | 300.0               | 300.0               | 300.0               | 0.5             | 0.5         | -89.10                | 0.4                               | -22.7      | 22.7                 | 21.7                  | 1.00                   | 22.632                    | CC, ES  |
| 400.0   | 400.0               | 400.0               | 400.0               | 0.7             | 0.7         | -171.72               | 0.4                               | -22.7      | 23.5                 | 22.2                  | 1.35                   | 17.423                    |         |
| 500.0   | 500.0               | 500.0               | 500.0               | 0.9             | 0.8         | -172.54               | 0.4                               | -22.7      | 26.1                 | 24.4                  | 1.70                   | 15.370                    |         |
| 600.0   | 599.9               | 599.9               | 599.9               | 1.0             | 1.0         | -173.60               | 0.4                               | -22.7      | 30.5                 | 28.4                  | 2.05                   | 14.866                    |         |
| 700.0   | 699.7               | 700.3               | 700.3               | 1.2             | 1.2         | -174.88               | 0.3                               | -21.8      | 35.7                 | 33.3                  | 2.40                   | 14.870                    |         |
| 800.0   | 799.4               | 800.8               | 800.8               | 1.4             | 1.4         | -176.44               | 0.0                               | -19.2      | 40.9                 | 38.2                  | 2.75                   | 14.884                    |         |
| 900.0   | 898.9               | 901.4               | 901.3               | 1.7             | 1.6         | -178.18               | -0.5                              | -14.8      | 46.2                 | 43.1                  | 3.10                   | 14.910                    |         |
| 1,000.0   | 998.3               | 1,001.3             | 1,001.1             | 1.9             | 1.7         | -179.85               | -1.1                              | -9.3       | 52.2                 | 48.7                  | 3.45                   | 15.131                    |         |
| 1,100.0   | 1,097.4             | 1,101.0             | 1,100.6             | 2.2             | 1.9         | 178.85                | -1.7                              | -3.9       | 59.9                 | 56.1                  | 3.80                   | 15.771                    |         |
| 1,200.0   | 1,196.3             | 1,200.6             | 1,200.0             | 2.5             | 2.1         | 177.90                | -2.3                              | 1.6        | 69.4                 | 65.3                  | 4.15                   | 16.726                    |         |
| 1,300.0   | 1,294.9             | 1,299.9             | 1,299.2             | 2.8             | 2.3         | 177.24                | -2.9                              | 7.1        | 80.7                 | 76.2                  | 4.50                   | 17.920                    |         |
| 1,400.0   | 1,393.3             | 1,399.1             | 1,398.2             | 3.2             | 2.5         | 176.79                | -3.5                              | 12.5       | 93.6                 | 88.8                  | 4.85                   | 19.299                    |         |
| 1,500.0   | 1,491.3             | 1,498.0             | 1,497.0             | 3.5             | 2.7         | 176.51                | -4.1                              | 17.9       | 108.1                | 102.9                 | 5.20                   | 20.776                    |         |
| 1,600.0   | 1,589.3             | 1,597.0             | 1,595.8             | 3.9             | 2.9         | 176.30                | -4.7                              | 23.4       | 122.7                | 117.2                 | 5.55                   | 22.099                    |         |
| 1,700.0   | 1,687.3             | 1,695.9             | 1,694.5             | 4.3             | 3.1         | 176.14                | -5.4                              | 28.8       | 137.4                | 131.5                 | 5.90                   | 23.265                    |         |
| 1,800.0   | 1,785.3             | 1,794.8             | 1,793.3             | 4.6             | 3.3         | 176.00                | -6.0                              | 34.2       | 152.0                | 145.8                 | 6.26                   | 24.299                    |         |
| 1,900.0   | 1,883.3             | 1,893.7             | 1,892.1             | 5.0             | 3.5         | 175.89                | -6.6                              | 39.6       | 166.7                | 160.1                 | 6.61                   | 25.222                    |         |
| 2,000.0   | 1,981.3             | 1,992.6             | 1,990.8             | 5.4             | 3.7         | 175.80                | -7.2                              | 45.1       | 181.3                | 174.4                 | 6.96                   | 26.053                    |         |
| 2,100.0   | 2,079.3             | 2,091.6             | 2,089.6             | 5.8             | 3.9         | 175.72                | -7.8                              | 50.5       | 196.0                | 188.6                 | 7.31                   | 26.803                    |         |
| 2,200.0   | 2,177.3             | 2,190.5             | 2,188.4             | 6.2             | 4.1         | 175.66                | -8.4                              | 55.9       | 210.6                | 202.9                 | 7.66                   | 27.483                    |         |
| 2,300.0   | 2,275.4             | 2,289.4             | 2,287.2             | 6.6             | 4.3         | 175.60                | -9.0                              | 61.4       | 225.3                | 217.2                 | 8.01                   | 28.104                    |         |
| 2,400.0   | 2,373.4             | 2,388.3             | 2,385.9             | 6.9             | 4.5         | 175.55                | -9.6                              | 66.8       | 239.9                | 231.5                 | 8.37                   | 28.673                    |         |
| 2,500.0   | 2,471.4             | 2,487.3             | 2,484.7             | 7.3             | 4.6         | 175.50                | -10.2                             | 72.2       | 254.5                | 245.8                 | 8.72                   | 29.195                    |         |
| 2,600.0   | 2,569.4             | 2,586.2             | 2,583.5             | 7.7             | 4.8         | 175.46                | -10.8                             | 77.6       | 269.2                | 260.1                 | 9.07                   | 29.677                    |         |
| 2,700.0   | 2,667.4             | 2,685.1             | 2,682.2             | 8.1             | 5.0         | 175.42                | -11.4                             | 83.1       | 283.8                | 274.4                 | 9.42                   | 30.123                    |         |
| 2,800.0   | 2,765.4             | 2,784.0             | 2,781.0             | 8.5             | 5.2         | 175.39                | -12.0                             | 88.5       | 298.5                | 288.7                 | 9.77                   | 30.536                    |         |
| 2,900.0   | 2,863.4             | 2,882.9             | 2,879.8             | 8.9             | 5.4         | 175.36                | -12.6                             | 93.9       | 313.1                | 303.0                 | 10.13                  | 30.921                    |         |
| 3,000.0   | 2,961.4             | 2,981.9             | 2,978.5             | 9.3             | 5.6         | 175.34                | -13.2                             | 99.3       | 327.8                | 317.3                 | 10.48                  | 31.280                    |         |
| 3,100.0   | 3,059.4             | 3,080.8             | 3,077.3             | 9.7             | 5.8         | 175.31                | -13.8                             | 104.8      | 342.4                | 331.6                 | 10.83                  | 31.615                    |         |
| 3,200.0   | 3,157.4             | 3,179.7             | 3,176.1             | 10.1            | 6.0         | 175.29                | -14.4                             | 110.2      | 357.1                | 345.9                 | 11.18                  | 31.929                    |         |
| 3,300.0   | 3,255.4             | 3,278.6             | 3,274.9             | 10.4            | 6.2         | 175.27                | -15.0                             | 115.6      | 371.7                | 360.2                 | 11.54                  | 32.224                    |         |
| 3,400.0   | 3,353.4             | 3,377.5             | 3,373.6             | 10.8            | 6.4         | 175.25                | -15.6                             | 121.1      | 386.4                | 374.5                 | 11.89                  | 32.501                    |         |
| 3,500.0   | 3,451.4             | 3,476.5             | 3,472.4             | 11.2            | 6.6         | 175.23                | -16.2                             | 126.5      | 401.0                | 388.8                 | 12.24                  | 32.763                    |         |
| 3,600.0   | 3,549.4             | 3,575.4             | 3,571.2             | 11.6            | 6.8         | 175.21                | -16.8                             | 131.9      | 415.7                | 403.1                 | 12.59                  | 33.009                    |         |
| 3,700.0   | 3,647.4             | 3,674.3             | 3,669.9             | 12.0            | 7.0         | 175.20                | -17.4                             | 137.3      | 430.3                | 417.4                 | 12.94                  | 33.243                    |         |
| 3,800.0   | 3,745.5             | 3,773.2             | 3,768.7             | 12.4            | 7.2         | 175.18                | -18.0                             | 142.8      | 445.0                | 431.7                 | 13.30                  | 33.463                    |         |
| 3,900.0   | 3,843.5             | 3,872.2             | 3,867.5             | 12.8            | 7.4         | 175.17                | -18.6                             | 148.2      | 459.6                | 446.0                 | 13.65                  | 33.673                    |         |
| 4,000.0   | 3,941.5             | 3,971.1             | 3,966.3             | 13.2            | 7.6         | 175.16                | -19.2                             | 153.6      | 474.3                | 460.3                 | 14.00                  | 33.872                    |         |
| 4,100.0   | 4,039.5             | 4,070.0             | 4,065.0             | 13.6            | 7.8         | 175.15                | -19.8                             | 159.1      | 488.9                | 474.5                 | 14.35                  | 34.061                    |         |
| 4,200.0   | 4,137.5             | 4,168.9             | 4,163.8             | 14.0            | 8.0         | 175.13                | -20.4                             | 164.5      | 503.5                | 488.8                 | 14.71                  | 34.241                    |         |
| 4,300.0   | 4,235.5             | 4,267.8             | 4,262.6             | 14.4            | 8.2         | 175.12                | -21.0                             | 169.9      | 518.2                | 503.1                 | 15.06                  | 34.412                    |         |
| 4,400.0   | 4,333.5             | 4,366.8             | 4,361.3             | 14.8            | 8.4         | 175.11                | -21.6                             | 175.3      | 532.8                | 517.4                 | 15.41                  | 34.576                    |         |
| 4,500.0   | 4,431.5             | 4,465.7             | 4,460.1             | 15.2            | 8.6         | 175.10                | -22.2                             | 180.8      | 547.5                | 531.7                 | 15.76                  | 34.732                    |         |
| 4,600.0   | 4,529.5             | 4,564.6             | 4,558.9             | 15.5            | 8.8         | 175.09                | -22.8                             | 186.2      | 562.1                | 546.0                 | 16.12                  | 34.882                    |         |
| 4,700.0   | 4,627.5             | 4,663.5             | 4,657.6             | 15.9            | 9.0         | 175.09                | -23.4                             | 191.6      | 576.8                | 560.3                 | 16.47                  | 35.025                    |         |
| 4,800.0   | 4,725.5             | 4,762.4             | 4,756.4             | 16.3            | 9.2         | 175.08                | -24.0                             | 197.1      | 591.4                | 574.6                 | 16.82                  | 35.162                    |         |
| 4,900.0   | 4,823.5             | 4,861.4             | 4,855.2             | 16.7            | 9.4         | 175.07                | -24.6                             | 202.5      | 606.1                | 588.9                 | 17.17                  | 35.293                    |         |
| 5,000.0   | 4,921.5             | 4,960.3             | 4,954.0             | 17.1            | 9.6         | 175.06                | -25.2                             | 207.9      | 620.7                | 603.2                 | 17.53                  | 35.419                    |         |
| 5,100.0   | 5,019.5             | 5,059.2             | 5,052.7             | 17.5            | 9.8         | 175.06                | -25.8                             | 213.3      | 635.4                | 617.5                 | 17.88                  | 35.540                    |         |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2C-7H-E168 - Hz - Plan #5 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       | 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 |         |
| 5,200.0   | 5,117.5             | 5,158.1             | 5,151.5             | 17.9            | 10.0        | 175.05                | -26.4                             | 218.8      | 650.0                | 631.8                 | 18.23                     | 35.657            |         |
| 5,300.0   | 5,215.6             | 5,257.1             | 5,250.3             | 18.3            | 10.1        | 175.04                | -27.0                             | 224.2      | 664.7                | 646.1                 | 18.58                     | 35.769            |         |
| 5,400.0   | 5,313.6             | 5,356.0             | 5,349.0             | 18.7            | 10.3        | 175.04                | -27.6                             | 229.6      | 679.3                | 660.4                 | 18.93                     | 35.877            |         |
| 5,500.0   | 5,411.6             | 5,454.9             | 5,447.8             | 19.1            | 10.5        | 175.03                | -28.2                             | 235.0      | 694.0                | 674.7                 | 19.29                     | 35.981            |         |
| 5,600.0   | 5,509.6             | 5,553.8             | 5,546.6             | 19.5            | 10.7        | 175.03                | -28.8                             | 240.5      | 708.6                | 689.0                 | 19.64                     | 36.081            |         |
| 5,700.0   | 5,607.6             | 5,652.7             | 5,645.4             | 19.9            | 10.9        | 175.02                | -29.4                             | 245.9      | 723.3                | 703.3                 | 19.99                     | 36.177            |         |
| 5,800.0   | 5,705.6             | 5,751.7             | 5,744.1             | 20.3            | 11.1        | 175.01                | -30.0                             | 251.3      | 737.9                | 717.6                 | 20.34                     | 36.271            |         |
| 5,900.0   | 5,803.6             | 5,850.6             | 5,842.9             | 20.7            | 11.3        | 175.01                | -30.6                             | 256.8      | 752.6                | 731.9                 | 20.70                     | 36.361            |         |
| 6,000.0   | 5,901.6             | 5,949.5             | 5,941.7             | 21.1            | 11.5        | 175.00                | -31.2                             | 262.2      | 767.2                | 746.2                 | 21.05                     | 36.448            |         |
| 6,100.0   | 5,999.6             | 6,048.4             | 6,040.4             | 21.4            | 11.7        | 175.00                | -31.8                             | 267.6      | 781.9                | 760.5                 | 21.40                     | 36.532            |         |
| 6,200.0   | 6,097.6             | 6,147.3             | 6,139.2             | 21.8            | 11.9        | 175.00                | -32.4                             | 273.0      | 796.5                | 774.8                 | 21.75                     | 36.613            |         |
| 6,300.0   | 6,195.6             | 6,246.3             | 6,238.0             | 22.2            | 12.1        | 174.99                | -33.0                             | 278.5      | 811.2                | 789.0                 | 22.11                     | 36.692            |         |
| 6,400.0   | 6,293.6             | 6,345.2             | 6,336.7             | 22.6            | 12.3        | 174.99                | -33.6                             | 283.9      | 825.8                | 803.3                 | 22.46                     | 36.769            |         |
| 6,500.0   | 6,391.6             | 6,444.1             | 6,435.5             | 23.0            | 12.5        | 174.98                | -34.2                             | 289.3      | 840.4                | 817.6                 | 22.81                     | 36.843            |         |
| 6,600.0   | 6,489.6             | 6,543.0             | 6,534.3             | 23.4            | 12.7        | 174.98                | -34.9                             | 294.8      | 855.1                | 831.9                 | 23.16                     | 36.914            |         |
| 6,700.0   | 6,587.6             | 6,641.9             | 6,633.1             | 23.8            | 12.9        | 174.98                | -35.5                             | 300.2      | 869.7                | 846.2                 | 23.52                     | 36.984            |         |
| 6,800.0   | 6,685.7             | 6,740.9             | 6,731.8             | 24.2            | 13.1        | 174.97                | -36.1                             | 305.6      | 884.4                | 860.5                 | 23.87                     | 37.052            |         |
| 6,900.0   | 6,783.7             | 6,839.8             | 6,830.6             | 24.6            | 13.3        | 174.97                | -36.7                             | 311.0      | 899.0                | 874.8                 | 24.22                     | 37.117            |         |
| 7,000.0   | 6,881.7             | 6,938.7             | 6,929.4             | 25.0            | 13.5        | 174.97                | -37.3                             | 316.5      | 913.7                | 889.1                 | 24.57                     | 37.181            |         |
| 7,100.0   | 6,979.6             | 7,037.6             | 7,028.1             | 25.4            | 13.7        | -172.55               | -37.9                             | 321.9      | 928.5                | 903.5                 | 24.93                     | 37.249            |         |
| 7,200.0   | 7,076.3             | 7,135.1             | 7,125.4             | 25.8            | 13.9        | -140.99               | -38.5                             | 327.2      | 946.0                | 920.7                 | 25.29                     | 37.408            |         |
| 7,300.0   | 7,168.8             | 7,266.2             | 7,256.0             | 26.3            | 14.1        | -127.79               | -31.8                             | 334.3      | 966.5                | 940.8                 | 25.71                     | 37.599            |         |
| 7,400.0   | 7,254.2             | 7,435.1             | 7,416.5             | 26.8            | 14.5        | -121.22               | 18.4                              | 342.2      | 984.9                | 959.0                 | 25.93                     | 37.981            |         |
| 7,500.0   | 7,330.1             | 7,615.5             | 7,563.8             | 27.3            | 15.0        | -116.68               | 121.0                             | 348.5      | 999.2                | 972.9                 | 26.31                     | 37.984            |         |
| 7,600.0   | 7,394.0             | 7,796.8             | 7,762.7             | 27.9            | 15.9        | -112.68               | 265.0                             | 352.0      | 1,008.6              | 980.8                 | 27.73                     | 36.365            |         |
| 7,700.0   | 7,444.1             | 7,968.3             | 7,729.6             | 28.6            | 17.2        | -108.84               | 426.1                             | 352.3      | 1,013.1              | 982.4                 | 30.63                     | 33.079            |         |
| 7,800.0   | 7,478.8             | 8,106.9             | 7,740.0             | 29.4            | 18.6        | -105.62               | 564.0                             | 350.4      | 1,014.0              | 980.1                 | 33.88                     | 29.928            |         |
| 7,900.0   | 7,497.2             | 8,204.9             | 7,740.0             | 30.1            | 19.7        | -104.03               | 662.0                             | 348.7      | 1,015.5              | 979.2                 | 36.28                     | 27.988            |         |
| 8,000.0   | 7,500.0             | 8,304.8             | 7,740.0             | 31.0            | 21.0        | -103.64               | 761.8                             | 347.0      | 1,017.9              | 979.1                 | 38.80                     | 26.235            |         |
| 8,100.0   | 7,500.0             | 8,404.7             | 7,740.0             | 31.9            | 22.2        | -103.61               | 861.8                             | 345.2      | 1,020.5              | 979.0                 | 41.44                     | 24.628            |         |
| 8,200.0   | 7,500.0             | 8,504.7             | 7,740.0             | 32.9            | 23.6        | -103.57               | 961.7                             | 343.5      | 1,023.0              | 978.9                 | 44.18                     | 23.157            |         |
| 8,300.0   | 7,500.0             | 8,604.7             | 7,740.0             | 33.9            | 25.0        | -103.54               | 1,061.7                           | 341.8      | 1,025.6              | 978.6                 | 47.01                     | 21.816            |         |
| 8,400.0   | 7,500.0             | 8,704.6             | 7,740.0             | 35.0            | 26.4        | -103.50               | 1,161.6                           | 340.0      | 1,028.1              | 978.2                 | 49.91                     | 20.598            |         |
| 8,500.0   | 7,500.0             | 8,804.6             | 7,740.0             | 36.2            | 27.9        | -103.47               | 1,261.6                           | 338.3      | 1,030.7              | 977.8                 | 52.88                     | 19.490            |         |
| 8,600.0   | 7,500.0             | 8,904.6             | 7,740.0             | 37.4            | 29.4        | -103.44               | 1,361.5                           | 336.5      | 1,033.2              | 977.3                 | 55.90                     | 18.483            |         |
| 8,700.0   | 7,500.0             | 9,004.5             | 7,740.0             | 38.6            | 30.9        | -103.40               | 1,461.5                           | 334.8      | 1,035.8              | 976.8                 | 58.96                     | 17.566            |         |
| 8,800.0   | 7,500.0             | 9,104.5             | 7,740.0             | 39.9            | 32.5        | -103.37               | 1,561.4                           | 333.0      | 1,038.3              | 976.2                 | 62.07                     | 16.729            |         |
| 8,900.0   | 7,500.0             | 9,204.5             | 7,740.0             | 41.2            | 34.1        | -103.34               | 1,661.4                           | 331.3      | 1,040.9              | 975.6                 | 65.20                     | 15.964            |         |
| 9,000.0   | 7,500.0             | 9,304.4             | 7,740.0             | 42.5            | 35.7        | -103.30               | 1,761.3                           | 329.5      | 1,043.4              | 975.0                 | 68.36                     | 15.263            |         |
| 9,100.0   | 7,500.0             | 9,404.4             | 7,740.0             | 43.9            | 37.3        | -103.27               | 1,861.3                           | 327.8      | 1,045.9              | 974.4                 | 71.55                     | 14.618            |         |
| 9,200.0   | 7,500.0             | 9,504.4             | 7,740.0             | 45.3            | 38.9        | -103.24               | 1,961.2                           | 326.1      | 1,048.5              | 973.7                 | 74.76                     | 14.025            |         |
| 9,300.0   | 7,500.0             | 9,604.3             | 7,740.0             | 46.7            | 40.5        | -103.20               | 2,061.2                           | 324.3      | 1,051.0              | 973.1                 | 77.99                     | 13.477            |         |
| 9,400.0   | 7,500.0             | 9,704.3             | 7,740.0             | 48.2            | 42.2        | -103.17               | 2,161.1                           | 322.6      | 1,053.6              | 972.4                 | 81.23                     | 12.970            |         |
| 9,500.0   | 7,500.0             | 9,804.3             | 7,740.0             | 49.6            | 43.8        | -103.14               | 2,261.1                           | 320.8      | 1,056.1              | 971.6                 | 84.49                     | 12.500            |         |
| 9,600.0   | 7,500.0             | 9,904.2             | 7,740.0             | 51.1            | 45.5        | -103.11               | 2,361.1                           | 319.1      | 1,058.5              | 970.8                 | 87.76                     | 12.061            |         |
| 9,700.0   | 7,500.0             | 10,004.2            | 7,740.0             | 52.6            | 47.1        | -103.09               | 2,461.0                           | 317.3      | 1,059.5              | 968.5                 | 91.04                     | 11.637            |         |
| 9,800.0   | 7,500.0             | 10,104.2            | 7,740.0             | 54.1            | 48.8        | -103.10               | 2,561.0                           | 315.6      | 1,058.8              | 964.5                 | 94.33                     | 11.225            |         |
| 9,900.0   | 7,500.0             | 10,204.2            | 7,740.0             | 55.6            | 50.5        | -103.14               | 2,661.0                           | 313.8      | 1,056.4              | 958.8                 | 97.61                     | 10.822            |         |
| 10,000.0  | 7,500.0             | 10,304.1            | 7,740.0             | 57.1            | 52.1        | -103.20               | 2,760.9                           | 312.1      | 1,052.3              | 951.4                 | 100.90                    | 10.429            |         |
| 10,100.0  | 7,500.0             | 10,403.9            | 7,740.0             | 58.6            | 53.8        | -103.29               | 2,860.7                           | 310.4      | 1,046.5              | 942.3                 | 104.18                    | 10.045            |         |
| 10,200.0  | 7,500.0             | 10,503.6            | 7,740.0             | 60.1            | 55.5        | -103.40               | 2,960.4                           | 308.6      | 1,038.9              | 931.5                 | 107.45                    | 9.669             |         |
| 10,300.0  | 7,500.0             | 10,603.2            | 7,740.0             | 61.6            | 57.2        | -103.52               | 3,060.0                           | 306.9      | 1,030.5              | 919.8                 | 110.72                    | 9.307             |         |

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



# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2C-7H-E168 - Hz - Plan #5 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       | 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 |
| 10,400.0  | 7,500.0             | 10,702.9            | 7,740.0             | 63.1            | 58.9        | -103.63               | 3,159.6                           | 305.1      | 1,022.0              | 908.0                 | 113.98                    | 8.966    |                   |
| 10,500.0  | 7,500.0             | 10,802.5            | 7,740.0             | 64.6            | 60.6        | -103.75               | 3,259.2                           | 303.4      | 1,013.5              | 896.3                 | 117.25                    | 8.644    |                   |
| 10,600.0  | 7,500.0             | 10,902.1            | 7,740.0             | 66.2            | 62.3        | -103.87               | 3,358.8                           | 301.7      | 1,005.1              | 884.5                 | 120.52                    | 8.339    |                   |
| 10,700.0  | 7,500.0             | 11,001.7            | 7,740.0             | 67.7            | 64.0        | -103.99               | 3,458.4                           | 299.9      | 996.6                | 872.8                 | 123.79                    | 8.051    |                   |
| 10,800.0  | 7,500.0             | 11,101.3            | 7,740.0             | 69.3            | 65.7        | -104.11               | 3,558.0                           | 298.2      | 988.1                | 861.1                 | 127.06                    | 7.777    |                   |
| 10,900.0  | 7,500.0             | 11,200.9            | 7,740.0             | 70.9            | 67.4        | -104.23               | 3,657.6                           | 296.4      | 979.7                | 849.4                 | 130.33                    | 7.517    |                   |
| 11,000.0  | 7,500.0             | 11,300.6            | 7,740.0             | 72.5            | 69.1        | -104.36               | 3,757.2                           | 294.7      | 971.2                | 837.7                 | 133.59                    | 7.270    |                   |
| 11,100.0  | 7,500.0             | 11,400.2            | 7,740.0             | 74.1            | 70.8        | -104.49               | 3,856.8                           | 293.0      | 962.8                | 826.0                 | 136.85                    | 7.035    |                   |
| 11,200.0  | 7,500.0             | 11,499.8            | 7,740.0             | 75.7            | 72.5        | -104.62               | 3,956.4                           | 291.2      | 954.4                | 814.3                 | 140.11                    | 6.811    |                   |
| 11,300.0  | 7,500.0             | 11,599.4            | 7,740.0             | 77.3            | 74.2        | -104.75               | 4,056.0                           | 289.5      | 945.9                | 802.6                 | 143.37                    | 6.598    |                   |
| 11,400.0  | 7,500.0             | 11,699.0            | 7,740.0             | 78.9            | 75.9        | -104.89               | 4,155.6                           | 287.8      | 937.5                | 790.9                 | 146.62                    | 6.394    |                   |
| 11,500.0  | 7,500.0             | 11,798.7            | 7,740.0             | 80.5            | 77.7        | -105.02               | 4,255.2                           | 286.0      | 929.1                | 779.2                 | 149.87                    | 6.199    |                   |
| 11,600.0  | 7,500.0             | 11,898.3            | 7,740.0             | 82.1            | 79.4        | -105.17               | 4,354.8                           | 284.3      | 920.7                | 767.6                 | 153.11                    | 6.013    |                   |
| 11,700.0  | 7,500.0             | 11,997.9            | 7,740.0             | 83.8            | 81.1        | -105.31               | 4,454.4                           | 282.5      | 912.3                | 755.9                 | 156.35                    | 5.835    |                   |
| 11,800.0  | 7,500.0             | 12,097.5            | 7,740.0             | 85.4            | 82.8        | -105.45               | 4,554.0                           | 280.8      | 903.8                | 744.3                 | 159.59                    | 5.664    |                   |
| 11,900.0  | 7,500.0             | 12,197.2            | 7,740.0             | 87.1            | 84.5        | -105.57               | 4,653.7                           | 279.1      | 896.2                | 733.3                 | 162.82                    | 5.504    |                   |
| 12,000.0  | 7,500.0             | 12,297.0            | 7,740.0             | 88.7            | 86.3        | -105.66               | 4,753.5                           | 277.3      | 890.2                | 724.1                 | 166.08                    | 5.360    |                   |
| 12,100.0  | 7,500.0             | 12,396.9            | 7,740.0             | 90.4            | 88.0        | -105.73               | 4,853.4                           | 275.6      | 885.8                | 716.5                 | 169.36                    | 5.230    |                   |
| 12,200.0  | 7,500.0             | 12,496.9            | 7,740.0             | 92.1            | 89.7        | -105.77               | 4,953.3                           | 273.8      | 883.2                | 710.5                 | 172.66                    | 5.115    |                   |
| 12,300.0  | 7,500.0             | 12,596.9            | 7,740.0             | 93.8            | 91.4        | -105.79               | 5,053.3                           | 272.1      | 882.2                | 706.2                 | 175.99                    | 5.013    |                   |
| 12,307.7  | 7,500.0             | 12,604.6            | 7,740.0             | 93.9            | 91.6        | -105.79               | 5,061.0                           | 271.9      | 882.2                | 706.0                 | 176.25                    | 5.006    |                   |
| 12,400.0  | 7,500.0             | 12,696.9            | 7,740.0             | 95.4            | 93.2        | -105.77               | 5,153.3                           | 270.3      | 882.9                | 703.6                 | 179.34                    | 4.923    |                   |
| 12,500.0  | 7,500.0             | 12,796.8            | 7,740.0             | 97.2            | 94.9        | -105.74               | 5,253.2                           | 268.6      | 885.3                | 702.6                 | 182.72                    | 4.845    |                   |
| 12,600.0  | 7,500.0             | 12,896.7            | 7,740.0             | 98.9            | 96.6        | -105.67               | 5,353.1                           | 266.8      | 889.4                | 703.2                 | 186.12                    | 4.778    |                   |
| 12,700.0  | 7,500.0             | 12,996.6            | 7,740.0             | 100.6           | 98.4        | -105.59               | 5,452.9                           | 265.1      | 895.1                | 705.6                 | 189.56                    | 4.722    |                   |
| 12,800.0  | 7,500.0             | 13,096.3            | 7,740.0             | 102.3           | 100.1       | -105.48               | 5,552.6                           | 263.4      | 902.6                | 709.5                 | 193.02                    | 4.676    |                   |
| 12,900.0  | 7,500.0             | 13,195.9            | 7,740.0             | 104.0           | 101.8       | -105.33               | 5,652.2                           | 261.6      | 911.0                | 714.5                 | 196.50                    | 4.636    |                   |
| 13,000.0  | 7,500.0             | 13,295.5            | 7,740.0             | 105.8           | 103.6       | -105.19               | 5,751.8                           | 259.9      | 919.5                | 719.5                 | 199.98                    | 4.598    |                   |
| 13,100.0  | 7,500.0             | 13,395.1            | 7,740.0             | 107.5           | 105.3       | -105.04               | 5,851.4                           | 258.2      | 928.0                | 724.5                 | 203.46                    | 4.561    |                   |
| 13,200.0  | 7,500.0             | 13,494.7            | 7,740.0             | 109.2           | 107.0       | -104.90               | 5,951.0                           | 256.4      | 936.5                | 729.6                 | 206.94                    | 4.525    |                   |
| 13,300.0  | 7,500.0             | 13,594.3            | 7,740.0             | 111.0           | 108.8       | -104.77               | 6,050.6                           | 254.7      | 945.0                | 734.6                 | 210.43                    | 4.491    |                   |
| 13,400.0  | 7,500.0             | 13,693.9            | 7,740.0             | 112.7           | 110.5       | -104.63               | 6,150.2                           | 252.9      | 953.5                | 739.6                 | 213.91                    | 4.457    |                   |
| 13,500.0  | 7,500.0             | 13,793.5            | 7,740.0             | 114.5           | 112.2       | -104.50               | 6,249.8                           | 251.2      | 962.0                | 744.6                 | 217.40                    | 4.425    |                   |
| 13,600.0  | 7,500.0             | 13,893.2            | 7,740.0             | 116.2           | 114.0       | -104.37               | 6,349.4                           | 249.5      | 970.5                | 749.6                 | 220.89                    | 4.394    |                   |
| 13,700.0  | 7,500.0             | 13,992.8            | 7,740.0             | 117.9           | 115.7       | -104.24               | 6,449.0                           | 247.7      | 979.1                | 754.7                 | 224.38                    | 4.363    |                   |
| 13,800.0  | 7,500.0             | 14,090.3            | 7,740.0             | 119.7           | 117.4       | -104.12               | 6,546.5                           | 246.0      | 987.6                | 759.8                 | 227.77                    | 4.336    |                   |
| 13,900.0  | 7,500.0             | 14,175.5            | 7,740.0             | 121.4           | 118.9       | -104.00               | 6,631.6                           | 243.7      | 997.1                | 766.5                 | 230.58                    | 4.324    |                   |
| 14,000.0  | 7,500.0             | 14,260.4            | 7,740.0             | 123.1           | 120.3       | -103.87               | 6,716.5                           | 240.1      | 1,008.0              | 774.6                 | 233.35                    | 4.320    |                   |
| 14,100.0  | 7,500.0             | 14,346.0            | 7,740.0             | 124.9           | 121.8       | -103.72               | 6,801.9                           | 235.3      | 1,020.3              | 784.2                 | 236.13                    | 4.321    |                   |
| 14,200.0  | 7,500.0             | 14,445.1            | 7,740.0             | 126.6           | 123.5       | -103.55               | 6,900.8                           | 229.0      | 1,033.3              | 793.6                 | 239.67                    | 4.311    |                   |
| 14,300.0  | 7,500.0             | 14,544.2            | 7,740.0             | 128.4           | 125.3       | -103.38               | 6,999.7                           | 222.8      | 1,046.3              | 803.1                 | 243.20                    | 4.302    |                   |
| 14,341.7  | 7,500.0             | 14,585.5            | 7,740.0             | 129.1           | 126.0       | -103.31               | 7,041.0                           | 220.2      | 1,051.7              | 807.0                 | 244.67                    | 4.298 SF |                   |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #5 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       | 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 |         |
| 0.0   | 0.0                 | 0.0                 | 0.0                 | 0.0             | 0.0         | -88.65                | 0.4                               | -15.1      | 15.1                 |                       |                           |                   |         |
| 100.0   | 100.0               | 100.0               | 100.0               | 0.2             | 0.2         | -88.65                | 0.4                               | -15.1      | 15.1                 | 14.8                  | 0.30                      | 49.780            |         |
| 200.0   | 200.0               | 200.0               | 200.0               | 0.3             | 0.3         | -88.65                | 0.4                               | -15.1      | 15.1                 | 14.5                  | 0.65                      | 23.160            |         |
| 300.0   | 300.0               | 300.0               | 300.0               | 0.5             | 0.5         | -88.65                | 0.4                               | -15.1      | 15.1                 | 14.1                  | 1.00                      | 15.090 CC, ES     |         |
| 400.0   | 400.0               | 400.0               | 400.0               | 0.7             | 0.7         | -171.44               | 0.4                               | -15.1      | 16.0                 | 14.6                  | 1.35                      | 11.829            |         |
| 500.0   | 500.0               | 500.0               | 500.0               | 0.9             | 0.8         | -172.64               | 0.4                               | -15.1      | 18.6                 | 16.9                  | 1.70                      | 10.925            |         |
| 600.0   | 599.9               | 600.2               | 600.2               | 1.0             | 1.0         | -174.35               | 0.3                               | -14.2      | 22.0                 | 20.0                  | 2.05                      | 10.754            |         |
| 700.0   | 699.7               | 700.6               | 700.6               | 1.2             | 1.2         | -176.55               | 0.0                               | -11.6      | 25.5                 | 23.1                  | 2.40                      | 10.646            |         |
| 800.0   | 799.4               | 801.0               | 800.9               | 1.4             | 1.4         | -179.04               | -0.5                              | -7.3       | 29.1                 | 26.4                  | 2.75                      | 10.587            |         |
| 900.0   | 898.9               | 901.4               | 901.1               | 1.7             | 1.6         | 178.27                | -1.1                              | -1.1       | 32.8                 | 29.7                  | 3.10                      | 10.569            |         |
| 1,000.0   | 998.3               | 1,001.9             | 1,001.3             | 1.9             | 1.8         | 175.48                | -2.0                              | 6.7        | 36.5                 | 33.1                  | 3.45                      | 10.582            |         |
| 1,100.0   | 1,097.4             | 1,102.1             | 1,101.0             | 2.2             | 2.0         | 172.76                | -3.0                              | 16.1       | 40.7                 | 36.9                  | 3.81                      | 10.680            |         |
| 1,200.0   | 1,196.3             | 1,201.9             | 1,200.4             | 2.5             | 2.2         | 170.82                | -4.0                              | 25.5       | 46.5                 | 42.4                  | 4.18                      | 11.135            |         |
| 1,300.0   | 1,294.9             | 1,301.6             | 1,299.6             | 2.8             | 2.4         | 169.65                | -5.0                              | 35.0       | 54.1                 | 49.6                  | 4.55                      | 11.894            |         |
| 1,400.0   | 1,393.3             | 1,401.2             | 1,398.8             | 3.2             | 2.7         | 169.06                | -6.1                              | 44.5       | 63.4                 | 58.5                  | 4.92                      | 12.886            |         |
| 1,500.0   | 1,491.3             | 1,500.6             | 1,497.7             | 3.5             | 2.9         | 168.86                | -7.1                              | 53.9       | 74.1                 | 68.8                  | 5.29                      | 14.016            |         |
| 1,600.0   | 1,589.3             | 1,600.0             | 1,596.7             | 3.9             | 3.1         | 168.74                | -8.1                              | 63.4       | 85.1                 | 79.4                  | 5.66                      | 15.028            |         |
| 1,700.0   | 1,687.3             | 1,699.4             | 1,695.6             | 4.3             | 3.4         | 168.65                | -9.1                              | 72.8       | 96.0                 | 90.0                  | 6.03                      | 15.914            |         |
| 1,800.0   | 1,785.3             | 1,798.8             | 1,794.6             | 4.6             | 3.6         | 168.57                | -10.1                             | 82.2       | 106.9                | 100.5                 | 6.40                      | 16.695            |         |
| 1,900.0   | 1,883.3             | 1,898.2             | 1,893.5             | 5.0             | 3.8         | 168.51                | -11.1                             | 91.7       | 117.8                | 111.1                 | 6.78                      | 17.388            |         |
| 2,000.0   | 1,981.3             | 1,997.6             | 1,992.5             | 5.4             | 4.1         | 168.46                | -12.2                             | 101.1      | 128.8                | 121.6                 | 7.15                      | 18.008            |         |
| 2,100.0   | 2,079.3             | 2,097.0             | 2,091.4             | 5.8             | 4.3         | 168.42                | -13.2                             | 110.6      | 139.7                | 132.2                 | 7.52                      | 18.566            |         |
| 2,200.0   | 2,177.3             | 2,196.4             | 2,190.4             | 6.2             | 4.5         | 168.38                | -14.2                             | 120.0      | 150.6                | 142.7                 | 7.90                      | 19.069            |         |
| 2,300.0   | 2,275.4             | 2,295.8             | 2,289.3             | 6.6             | 4.8         | 168.35                | -15.2                             | 129.5      | 161.5                | 153.3                 | 8.27                      | 19.527            |         |
| 2,400.0   | 2,373.4             | 2,395.2             | 2,388.2             | 6.9             | 5.0         | 168.33                | -16.2                             | 138.9      | 172.5                | 163.8                 | 8.65                      | 19.944            |         |
| 2,500.0   | 2,471.4             | 2,494.6             | 2,487.2             | 7.3             | 5.2         | 168.30                | -17.2                             | 148.3      | 183.4                | 174.4                 | 9.02                      | 20.326            |         |
| 2,600.0   | 2,569.4             | 2,594.0             | 2,586.1             | 7.7             | 5.5         | 168.28                | -18.3                             | 157.8      | 194.3                | 184.9                 | 9.40                      | 20.677            |         |
| 2,700.0   | 2,667.4             | 2,693.4             | 2,685.1             | 8.1             | 5.7         | 168.26                | -19.3                             | 167.2      | 205.2                | 195.5                 | 9.77                      | 21.001            |         |
| 2,800.0   | 2,765.4             | 2,792.8             | 2,784.0             | 8.5             | 6.0         | 168.24                | -20.3                             | 176.7      | 216.2                | 206.0                 | 10.15                     | 21.300            |         |
| 2,900.0   | 2,863.4             | 2,892.2             | 2,883.0             | 8.9             | 6.2         | 168.23                | -21.3                             | 186.1      | 227.1                | 216.6                 | 10.52                     | 21.578            |         |
| 3,000.0   | 2,961.4             | 2,991.6             | 2,981.9             | 9.3             | 6.4         | 168.22                | -22.3                             | 195.5      | 238.0                | 227.1                 | 10.90                     | 21.837            |         |
| 3,100.0   | 3,059.4             | 3,091.1             | 3,080.9             | 9.7             | 6.7         | 168.20                | -23.3                             | 205.0      | 248.9                | 237.7                 | 11.28                     | 22.077            |         |
| 3,200.0   | 3,157.4             | 3,190.5             | 3,179.8             | 10.1            | 6.9         | 168.19                | -24.4                             | 214.4      | 259.9                | 248.2                 | 11.65                     | 22.303            |         |
| 3,300.0   | 3,255.4             | 3,289.9             | 3,278.8             | 10.4            | 7.2         | 168.18                | -25.4                             | 223.9      | 270.8                | 258.8                 | 12.03                     | 22.514            |         |
| 3,400.0   | 3,353.4             | 3,389.3             | 3,377.7             | 10.8            | 7.4         | 168.17                | -26.4                             | 233.3      | 281.7                | 269.3                 | 12.40                     | 22.711            |         |
| 3,500.0   | 3,451.4             | 3,488.7             | 3,476.7             | 11.2            | 7.6         | 168.16                | -27.4                             | 242.8      | 292.6                | 279.9                 | 12.78                     | 22.898            |         |
| 3,600.0   | 3,549.4             | 3,588.1             | 3,575.6             | 11.6            | 7.9         | 168.15                | -28.4                             | 252.2      | 303.6                | 290.4                 | 13.16                     | 23.073            |         |
| 3,700.0   | 3,647.4             | 3,687.5             | 3,674.6             | 12.0            | 8.1         | 168.14                | -29.4                             | 261.6      | 314.5                | 301.0                 | 13.53                     | 23.238            |         |
| 3,800.0   | 3,745.5             | 3,786.9             | 3,773.5             | 12.4            | 8.3         | 168.14                | -30.5                             | 271.1      | 325.4                | 311.5                 | 13.91                     | 23.395            |         |
| 3,900.0   | 3,843.5             | 3,886.3             | 3,872.4             | 12.8            | 8.6         | 168.13                | -31.5                             | 280.5      | 336.4                | 322.1                 | 14.29                     | 23.543            |         |
| 4,000.0   | 3,941.5             | 3,985.7             | 3,971.4             | 13.2            | 8.8         | 168.12                | -32.5                             | 290.0      | 347.3                | 332.6                 | 14.66                     | 23.683            |         |
| 4,100.0   | 4,039.5             | 4,085.1             | 4,070.3             | 13.6            | 9.1         | 168.12                | -33.5                             | 299.4      | 358.2                | 343.2                 | 15.04                     | 23.817            |         |
| 4,200.0   | 4,137.5             | 4,184.5             | 4,169.3             | 14.0            | 9.3         | 168.11                | -34.5                             | 308.9      | 369.1                | 353.7                 | 15.42                     | 23.943            |         |
| 4,300.0   | 4,235.5             | 4,283.9             | 4,268.2             | 14.4            | 9.5         | 168.11                | -35.5                             | 318.3      | 380.1                | 364.3                 | 15.79                     | 24.064            |         |
| 4,400.0   | 4,333.5             | 4,383.3             | 4,367.2             | 14.8            | 9.8         | 168.10                | -36.6                             | 327.7      | 391.0                | 374.8                 | 16.17                     | 24.179            |         |
| 4,500.0   | 4,431.5             | 4,482.7             | 4,466.1             | 15.2            | 10.0        | 168.10                | -37.6                             | 337.2      | 401.9                | 385.4                 | 16.55                     | 24.288            |         |
| 4,600.0   | 4,529.5             | 4,582.1             | 4,565.1             | 15.5            | 10.3        | 168.09                | -38.6                             | 346.6      | 412.8                | 395.9                 | 16.92                     | 24.393            |         |
| 4,700.0   | 4,627.5             | 4,681.5             | 4,664.0             | 15.9            | 10.5        | 168.09                | -39.6                             | 356.1      | 423.8                | 406.5                 | 17.30                     | 24.493            |         |
| 4,800.0   | 4,725.5             | 4,780.9             | 4,763.0             | 16.3            | 10.7        | 168.08                | -40.6                             | 365.5      | 434.7                | 417.0                 | 17.68                     | 24.589            |         |
| 4,900.0   | 4,823.5             | 4,880.3             | 4,861.9             | 16.7            | 11.0        | 168.08                | -41.6                             | 375.0      | 445.6                | 427.6                 | 18.06                     | 24.681            |         |
| 5,000.0   | 4,921.5             | 4,979.7             | 4,960.9             | 17.1            | 11.2        | 168.08                | -42.7                             | 384.4      | 456.5                | 438.1                 | 18.43                     | 24.769            |         |
| 5,100.0   | 5,019.5             | 5,079.1             | 5,059.8             | 17.5            | 11.5        | 168.07                | -43.7                             | 393.8      | 467.5                | 448.7                 | 18.81                     | 24.853            |         |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #5 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       | 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 |         |
| 5,200.0   | 5,117.5             | 5,178.5             | 5,158.7             | 17.9            | 11.7        | 168.07                | -44.7                             | 403.3      | 478.4                | 459.2                 | 19.19                     | 24.934            |         |
| 5,300.0   | 5,215.6             | 5,277.9             | 5,257.7             | 18.3            | 11.9        | 168.07                | -45.7                             | 412.7      | 489.3                | 469.8                 | 19.56                     | 25.012            |         |
| 5,400.0   | 5,313.6             | 5,377.3             | 5,356.6             | 18.7            | 12.2        | 168.06                | -46.7                             | 422.2      | 500.2                | 480.3                 | 19.94                     | 25.087            |         |
| 5,500.0   | 5,411.6             | 5,476.7             | 5,455.6             | 19.1            | 12.4        | 168.06                | -47.7                             | 431.6      | 511.2                | 490.8                 | 20.32                     | 25.159            |         |
| 5,600.0   | 5,509.6             | 5,576.1             | 5,554.5             | 19.5            | 12.7        | 168.06                | -48.8                             | 441.0      | 522.1                | 501.4                 | 20.69                     | 25.228            |         |
| 5,700.0   | 5,607.6             | 5,675.5             | 5,653.5             | 19.9            | 12.9        | 168.05                | -49.8                             | 450.5      | 533.0                | 511.9                 | 21.07                     | 25.295            |         |
| 5,800.0   | 5,705.6             | 5,774.9             | 5,752.4             | 20.3            | 13.1        | 168.05                | -50.8                             | 459.9      | 543.9                | 522.5                 | 21.45                     | 25.360            |         |
| 5,900.0   | 5,803.6             | 5,874.3             | 5,851.4             | 20.7            | 13.4        | 168.05                | -51.8                             | 469.4      | 554.9                | 533.0                 | 21.83                     | 25.422            |         |
| 6,000.0   | 5,901.6             | 5,973.7             | 5,950.3             | 21.1            | 13.6        | 168.05                | -52.8                             | 478.8      | 565.8                | 543.6                 | 22.20                     | 25.482            |         |
| 6,100.0   | 5,999.6             | 6,073.1             | 6,049.3             | 21.4            | 13.9        | 168.04                | -53.8                             | 488.3      | 576.7                | 554.1                 | 22.58                     | 25.541            |         |
| 6,200.0   | 6,097.6             | 6,172.5             | 6,148.2             | 21.8            | 14.1        | 168.04                | -54.9                             | 497.7      | 587.6                | 564.7                 | 22.96                     | 25.597            |         |
| 6,300.0   | 6,195.6             | 6,271.9             | 6,247.2             | 22.2            | 14.3        | 168.04                | -55.9                             | 507.1      | 598.6                | 575.2                 | 23.34                     | 25.651            |         |
| 6,400.0   | 6,293.6             | 6,371.3             | 6,346.1             | 22.6            | 14.6        | 168.04                | -56.9                             | 516.6      | 609.5                | 585.8                 | 23.71                     | 25.704            |         |
| 6,500.0   | 6,391.6             | 6,470.7             | 6,445.1             | 23.0            | 14.8        | 168.04                | -57.9                             | 526.0      | 620.4                | 596.3                 | 24.09                     | 25.755            |         |
| 6,600.0   | 6,489.6             | 6,570.1             | 6,544.0             | 23.4            | 15.1        | 168.03                | -58.9                             | 535.5      | 631.4                | 606.9                 | 24.47                     | 25.804            |         |
| 6,700.0   | 6,587.6             | 6,669.5             | 6,642.9             | 23.8            | 15.3        | 168.03                | -59.9                             | 544.9      | 642.3                | 617.4                 | 24.84                     | 25.852            |         |
| 6,800.0   | 6,685.7             | 6,768.9             | 6,741.9             | 24.2            | 15.5        | 168.03                | -61.0                             | 554.4      | 653.2                | 628.0                 | 25.22                     | 25.899            |         |
| 6,900.0   | 6,783.7             | 6,868.3             | 6,840.8             | 24.6            | 15.8        | 168.03                | -62.0                             | 563.8      | 664.1                | 638.5                 | 25.60                     | 25.944            |         |
| 7,000.0   | 6,881.7             | 6,978.3             | 6,950.3             | 25.0            | 16.0        | 168.07                | -62.5                             | 574.2      | 674.9                | 649.0                 | 25.98                     | 25.975            |         |
| 7,100.0   | 6,979.6             | 7,141.0             | 7,109.2             | 25.4            | 16.4        | -177.42               | -33.9                             | 589.7      | 679.8                | 654.0                 | 25.85                     | 26.299            |         |
| 7,200.0   | 7,076.3             | 7,289.3             | 7,241.8             | 25.8            | 16.8        | -142.95               | 30.2                              | 603.1      | 680.9                | 655.5                 | 25.42                     | 26.784            |         |
| 7,300.0   | 7,168.8             | 7,422.7             | 7,343.5             | 26.3            | 17.2        | -125.67               | 115.4                             | 613.7      | 681.4                | 655.8                 | 25.59                     | 26.630            |         |
| 7,400.0   | 7,254.2             | 7,542.6             | 7,416.0             | 26.8            | 17.7        | -115.10               | 210.3                             | 621.6      | 682.3                | 655.6                 | 26.67                     | 25.579            |         |
| 7,500.0   | 7,330.1             | 7,651.2             | 7,463.4             | 27.3            | 18.4        | -107.47               | 307.6                             | 627.1      | 684.3                | 655.8                 | 28.49                     | 24.018            |         |
| 7,600.0   | 7,394.0             | 7,750.8             | 7,490.1             | 27.9            | 19.2        | -101.43               | 403.4                             | 630.7      | 687.6                | 656.9                 | 30.64                     | 22.442            |         |
| 7,700.0   | 7,444.1             | 7,843.3             | 7,499.8             | 28.6            | 20.0        | -96.44                | 495.3                             | 632.6      | 692.0                | 659.3                 | 32.77                     | 21.119            |         |
| 7,800.0   | 7,478.8             | 7,936.4             | 7,500.0             | 29.4            | 20.9        | -92.50                | 588.4                             | 633.6      | 696.9                | 661.9                 | 34.96                     | 19.934            |         |
| 7,900.0   | 7,497.2             | 8,034.6             | 7,500.0             | 30.1            | 21.9        | -90.33                | 686.5                             | 634.6      | 700.1                | 662.7                 | 37.41                     | 18.713            |         |
| 8,000.0   | 7,500.0             | 8,134.5             | 7,500.0             | 31.0            | 23.1        | -90.00                | 786.4                             | 635.7      | 700.5                | 660.4                 | 40.07                     | 17.481            |         |
| 8,100.0   | 7,500.0             | 8,234.5             | 7,500.0             | 31.9            | 24.3        | -90.00                | 886.4                             | 636.7      | 700.3                | 657.4                 | 42.86                     | 16.340            |         |
| 8,200.0   | 7,500.0             | 8,334.5             | 7,500.0             | 32.9            | 25.6        | -90.00                | 986.4                             | 637.7      | 700.1                | 654.4                 | 45.75                     | 15.305            |         |
| 8,300.0   | 7,500.0             | 8,434.5             | 7,500.0             | 33.9            | 26.9        | -90.00                | 1,086.4                           | 638.8      | 699.9                | 651.2                 | 48.72                     | 14.368            |         |
| 8,400.0   | 7,500.0             | 8,534.5             | 7,500.0             | 35.0            | 28.3        | -90.00                | 1,186.4                           | 639.8      | 699.8                | 648.0                 | 51.75                     | 13.522            |         |
| 8,500.0   | 7,500.0             | 8,634.5             | 7,500.0             | 36.2            | 29.7        | -90.00                | 1,286.4                           | 640.9      | 699.6                | 644.7                 | 54.85                     | 12.756            |         |
| 8,600.0   | 7,500.0             | 8,734.5             | 7,500.0             | 37.4            | 31.2        | -90.00                | 1,386.4                           | 641.9      | 699.4                | 641.4                 | 57.99                     | 12.062            |         |
| 8,700.0   | 7,500.0             | 8,834.5             | 7,500.0             | 38.6            | 32.7        | -90.00                | 1,486.4                           | 643.0      | 699.2                | 638.1                 | 61.17                     | 11.432            |         |
| 8,800.0   | 7,500.0             | 8,934.5             | 7,500.0             | 39.9            | 34.2        | -90.00                | 1,586.4                           | 644.0      | 699.1                | 634.7                 | 64.38                     | 10.858            |         |
| 8,900.0   | 7,500.0             | 9,034.5             | 7,500.0             | 41.2            | 35.7        | -90.00                | 1,686.4                           | 645.1      | 698.9                | 631.3                 | 67.62                     | 10.335            |         |
| 9,000.0   | 7,500.0             | 9,134.5             | 7,500.0             | 42.5            | 37.2        | -90.00                | 1,786.4                           | 646.1      | 698.7                | 627.8                 | 70.89                     | 9.856             |         |
| 9,100.0   | 7,500.0             | 9,234.5             | 7,500.0             | 43.9            | 38.8        | -90.00                | 1,886.4                           | 647.2      | 698.5                | 624.4                 | 74.18                     | 9.416             |         |
| 9,200.0   | 7,500.0             | 9,334.5             | 7,500.0             | 45.3            | 40.4        | -90.00                | 1,986.4                           | 648.2      | 698.4                | 620.9                 | 77.49                     | 9.012             |         |
| 9,300.0   | 7,500.0             | 9,434.5             | 7,500.0             | 46.7            | 42.0        | -90.00                | 2,086.4                           | 649.3      | 698.2                | 617.4                 | 80.82                     | 8.639             |         |
| 9,400.0   | 7,500.0             | 9,534.5             | 7,500.0             | 48.2            | 43.6        | -90.00                | 2,186.4                           | 650.3      | 698.0                | 613.9                 | 84.16                     | 8.294             |         |
| 9,500.0   | 7,500.0             | 9,634.5             | 7,500.0             | 49.6            | 45.2        | -90.00                | 2,286.4                           | 651.4      | 697.8                | 610.3                 | 87.52                     | 7.974             |         |
| 9,600.0   | 7,500.0             | 9,734.5             | 7,500.0             | 51.1            | 46.9        | -90.00                | 2,386.3                           | 652.4      | 697.5                | 606.6                 | 90.88                     | 7.675             |         |
| 9,700.0   | 7,500.0             | 9,834.4             | 7,500.0             | 52.6            | 48.5        | -90.00                | 2,486.3                           | 653.5      | 695.7                | 601.5                 | 94.26                     | 7.381             |         |
| 9,800.0   | 7,500.0             | 9,934.4             | 7,500.0             | 54.1            | 50.1        | -90.00                | 2,586.3                           | 654.5      | 692.2                | 594.6                 | 97.64                     | 7.089             |         |
| 9,900.0   | 7,500.0             | 10,034.2            | 7,500.0             | 55.6            | 51.8        | -90.00                | 2,686.1                           | 655.5      | 686.9                | 585.9                 | 101.04                    | 6.799             |         |
| 10,000.0  | 7,500.0             | 10,124.9            | 7,500.0             | 57.1            | 53.3        | -90.00                | 2,776.8                           | 656.0      | 680.5                | 576.6                 | 103.84                    | 6.553             |         |
| 10,100.0  | 7,500.0             | 10,214.2            | 7,500.0             | 58.6            | 54.8        | -90.00                | 2,866.0                           | 655.0      | 673.8                | 567.3                 | 106.53                    | 6.326             |         |
| 10,200.0  | 7,500.0             | 10,300.0            | 7,500.0             | 60.1            | 56.2        | -90.00                | 2,951.8                           | 652.8      | 667.0                | 558.1                 | 108.95                    | 6.122             |         |
| 10,300.0  | 7,500.0             | 10,392.9            | 7,500.0             | 61.6            | 57.7        | -90.00                | 3,044.7                           | 649.0      | 660.7                | 548.9                 | 111.86                    | 5.907             |         |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #5 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       | 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 |         |
| 10,400.0  | 7,500.0             | 10,482.5            | 7,500.0             | 63.1            | 59.2        | -90.00                | 3,134.1                           | 643.8      | 656.0                | 541.5                 | 114.50                    | 5.729             |         |
| 10,500.0  | 7,500.0             | 10,572.2            | 7,500.0             | 64.6            | 60.7        | -90.00                | 3,223.6                           | 637.3      | 652.8                | 535.7                 | 117.12                    | 5.574             |         |
| 10,600.0  | 7,500.0             | 10,662.0            | 7,500.0             | 66.2            | 62.2        | -90.00                | 3,313.0                           | 629.3      | 651.2                | 531.5                 | 119.72                    | 5.440             |         |
| 10,651.8  | 7,500.0             | 10,708.5            | 7,500.0             | 67.0            | 62.9        | -90.00                | 3,359.3                           | 624.6      | 651.0                | 530.0                 | 121.06                    | 5.378             |         |
| 10,700.0  | 7,500.0             | 10,751.8            | 7,500.0             | 67.7            | 63.6        | -90.00                | 3,402.3                           | 619.9      | 651.2                | 528.9                 | 122.30                    | 5.325             |         |
| 10,800.0  | 7,500.0             | 10,841.5            | 7,500.0             | 69.3            | 65.1        | -90.00                | 3,491.4                           | 609.2      | 652.7                | 527.9                 | 124.85                    | 5.228             |         |
| 10,900.0  | 7,500.0             | 10,933.9            | 7,500.0             | 70.9            | 66.6        | -90.00                | 3,582.9                           | 596.7      | 655.8                | 528.2                 | 127.61                    | 5.139             |         |
| 11,000.0  | 7,500.0             | 11,033.8            | 7,500.0             | 72.5            | 68.3        | -90.00                | 3,681.9                           | 582.8      | 659.3                | 528.2                 | 131.06                    | 5.030             |         |
| 11,100.0  | 7,500.0             | 11,133.7            | 7,500.0             | 74.1            | 70.0        | -90.00                | 3,780.8                           | 568.9      | 662.8                | 528.3                 | 134.52                    | 4.927             |         |
| 11,200.0  | 7,500.0             | 11,233.7            | 7,500.0             | 75.7            | 71.6        | -90.00                | 3,879.8                           | 555.0      | 666.3                | 528.3                 | 137.98                    | 4.829             |         |
| 11,300.0  | 7,500.0             | 11,343.6            | 7,500.0             | 77.3            | 73.5        | -90.00                | 3,988.7                           | 540.3      | 669.2                | 526.9                 | 142.32                    | 4.702             |         |
| 11,400.0  | 7,500.0             | 11,456.8            | 7,500.0             | 78.9            | 75.4        | -90.00                | 4,101.2                           | 527.3      | 670.2                | 523.3                 | 146.91                    | 4.562             |         |
| 11,500.0  | 7,500.0             | 11,570.0            | 7,500.0             | 80.5            | 77.3        | -90.00                | 4,213.9                           | 516.6      | 669.3                | 517.8                 | 151.46                    | 4.419             |         |
| 11,600.0  | 7,500.0             | 11,683.2            | 7,500.0             | 82.1            | 79.2        | -90.00                | 4,326.7                           | 508.1      | 666.3                | 510.4                 | 155.95                    | 4.273             |         |
| 11,700.0  | 7,500.0             | 11,796.1            | 7,500.0             | 83.8            | 81.2        | -90.00                | 4,439.5                           | 501.8      | 661.4                | 501.1                 | 160.37                    | 4.124             |         |
| 11,800.0  | 7,500.0             | 11,908.9            | 7,500.0             | 85.4            | 83.1        | -90.00                | 4,552.2                           | 497.7      | 654.6                | 489.8                 | 164.74                    | 3.973             |         |
| 11,900.0  | 7,500.0             | 12,021.3            | 7,500.0             | 87.1            | 85.0        | -90.00                | 4,664.6                           | 495.9      | 646.5                | 477.4                 | 169.03                    | 3.825             |         |
| 12,000.0  | 7,500.0             | 12,133.5            | 7,500.0             | 88.7            | 87.0        | -90.00                | 4,776.8                           | 496.3      | 638.2                | 464.9                 | 173.26                    | 3.683             |         |
| 12,100.0  | 7,500.0             | 12,237.4            | 7,500.0             | 90.4            | 88.8        | -90.00                | 4,880.7                           | 498.2      | 630.1                | 453.1                 | 176.97                    | 3.560             |         |
| 12,200.0  | 7,500.0             | 12,337.2            | 7,500.0             | 92.1            | 90.5        | -90.00                | 4,980.4                           | 500.2      | 623.6                | 443.2                 | 180.43                    | 3.456             |         |
| 12,300.0  | 7,500.0             | 12,437.1            | 7,500.0             | 93.8            | 92.2        | -90.00                | 5,080.3                           | 502.1      | 618.9                | 435.0                 | 183.90                    | 3.365             |         |
| 12,400.0  | 7,500.0             | 12,537.0            | 7,500.0             | 95.4            | 93.9        | -90.00                | 5,180.2                           | 504.1      | 615.9                | 428.5                 | 187.37                    | 3.287             |         |
| 12,500.0  | 7,500.0             | 12,637.0            | 7,500.0             | 97.2            | 95.7        | -90.00                | 5,280.2                           | 506.1      | 614.7                | 423.8                 | 190.85                    | 3.221             |         |
| 12,520.7  | 7,500.0             | 12,657.8            | 7,500.0             | 97.5            | 96.0        | -90.00                | 5,300.9                           | 506.5      | 614.6                | 423.1                 | 191.57                    | 3.208             |         |
| 12,600.0  | 7,500.0             | 12,737.0            | 7,500.0             | 98.9            | 97.4        | -90.00                | 5,380.2                           | 508.0      | 615.2                | 420.8                 | 194.33                    | 3.166             |         |
| 12,700.0  | 7,500.0             | 12,837.0            | 7,500.0             | 100.6           | 99.1        | -90.00                | 5,480.1                           | 510.0      | 617.4                | 419.6                 | 197.81                    | 3.121             |         |
| 12,800.0  | 7,500.0             | 12,936.9            | 7,500.0             | 102.3           | 100.9       | -90.00                | 5,580.0                           | 512.0      | 621.4                | 420.1                 | 201.29                    | 3.087             |         |
| 12,900.0  | 7,500.0             | 13,036.8            | 7,500.0             | 104.0           | 102.6       | -90.00                | 5,679.9                           | 514.0      | 626.5                | 421.7                 | 204.77                    | 3.060             |         |
| 13,000.0  | 7,500.0             | 13,136.7            | 7,500.0             | 105.8           | 104.3       | -90.00                | 5,779.7                           | 515.9      | 631.6                | 423.3                 | 208.25                    | 3.033             |         |
| 13,100.0  | 7,500.0             | 13,236.5            | 7,500.0             | 107.5           | 106.1       | -90.00                | 5,879.6                           | 517.9      | 636.7                | 424.9                 | 211.73                    | 3.007             |         |
| 13,200.0  | 7,500.0             | 13,336.4            | 7,500.0             | 109.2           | 107.8       | -90.00                | 5,979.4                           | 519.9      | 641.8                | 426.5                 | 215.22                    | 2.982             |         |
| 13,300.0  | 7,500.0             | 13,436.3            | 7,500.0             | 111.0           | 109.6       | -90.00                | 6,079.3                           | 521.8      | 646.8                | 428.1                 | 218.70                    | 2.958             |         |
| 13,400.0  | 7,500.0             | 13,536.1            | 7,500.0             | 112.7           | 111.3       | -90.00                | 6,179.1                           | 523.8      | 651.9                | 429.7                 | 222.18                    | 2.934             |         |
| 13,500.0  | 7,500.0             | 13,636.0            | 7,500.0             | 114.5           | 113.0       | -90.00                | 6,279.0                           | 525.8      | 657.0                | 431.3                 | 225.67                    | 2.911             |         |
| 13,600.0  | 7,500.0             | 13,735.9            | 7,500.0             | 116.2           | 114.8       | -90.00                | 6,378.8                           | 527.7      | 662.1                | 432.9                 | 229.16                    | 2.889             |         |
| 13,700.0  | 7,500.0             | 13,835.8            | 7,500.0             | 117.9           | 116.5       | -90.00                | 6,478.7                           | 529.7      | 667.2                | 434.5                 | 232.64                    | 2.868             |         |
| 13,800.0  | 7,500.0             | 13,935.6            | 7,500.0             | 119.7           | 118.2       | -90.00                | 6,578.5                           | 531.7      | 672.3                | 436.1                 | 236.13                    | 2.847             |         |
| 13,900.0  | 7,500.0             | 14,035.5            | 7,500.0             | 121.4           | 120.0       | -90.00                | 6,678.4                           | 533.7      | 677.4                | 437.7                 | 239.62                    | 2.827             |         |
| 14,000.0  | 7,500.0             | 14,135.4            | 7,500.0             | 123.1           | 121.7       | -90.00                | 6,778.2                           | 535.6      | 682.4                | 439.3                 | 243.11                    | 2.807             |         |
| 14,100.0  | 7,500.0             | 14,235.2            | 7,500.0             | 124.9           | 123.5       | -90.00                | 6,878.1                           | 537.6      | 687.5                | 440.9                 | 246.60                    | 2.788             |         |
| 14,200.0  | 7,500.0             | 14,335.1            | 7,500.0             | 126.6           | 125.2       | -90.00                | 6,978.0                           | 539.6      | 692.6                | 442.5                 | 250.09                    | 2.769             |         |
| 14,300.0  | 7,500.0             | 14,435.0            | 7,500.0             | 128.4           | 126.9       | -90.00                | 7,077.8                           | 541.5      | 697.7                | 444.1                 | 253.58                    | 2.751 SF          |         |
| 14,341.7  | 7,500.0             | 14,458.1            | 7,500.0             | 129.1           | 127.3       | -90.00                | 7,100.9                           | 542.0      | 700.1                | 446.1                 | 253.92                    | 2.757             |         |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        |                   | 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         | -87.24                | 0.4                               | -7.6       | 7.6                  |                       |                        |                   |                    |         |
| 100.0   | 100.0               | 100.0               | 100.0               | 0.2             | 0.2         | -87.24                | 0.4                               | -7.6       | 7.6                  | 7.3                   | 0.30                   | 24.912            |                    |         |
| 200.0   | 200.0               | 200.0               | 200.0               | 0.3             | 0.3         | -87.24                | 0.4                               | -7.6       | 7.6                  | 6.9                   | 0.65                   | 11.590            |                    |         |
| 300.0   | 300.0               | 300.0               | 300.0               | 0.5             | 0.5         | -87.24                | 0.4                               | -7.6       | 7.6                  | 6.6                   | 1.00                   | 7.552 CC, ES      |                    |         |
| 400.0   | 400.0               | 400.0               | 400.0               | 0.7             | 0.7         | -170.62               | 0.4                               | -7.6       | 8.4                  | 7.1                   | 1.35                   | 6.237             |                    |         |
| 500.0   | 500.0               | 500.1               | 500.1               | 0.9             | 0.9         | -173.22               | 0.3                               | -6.7       | 10.1                 | 8.4                   | 1.70                   | 5.967             |                    |         |
| 600.0   | 599.9               | 600.3               | 600.3               | 1.0             | 1.0         | -176.77               | 0.1                               | -4.1       | 11.9                 | 9.8                   | 2.05                   | 5.801             |                    |         |
| 700.0   | 699.7               | 700.5               | 700.4               | 1.2             | 1.2         | 179.13                | -0.2                              | 0.3        | 13.7                 | 11.3                  | 2.40                   | 5.711             |                    |         |
| 800.0   | 799.4               | 800.7               | 800.4               | 1.4             | 1.4         | 174.71                | -0.6                              | 6.4        | 15.6                 | 12.9                  | 2.75                   | 5.680             |                    |         |
| 900.0   | 898.9               | 901.0               | 900.3               | 1.7             | 1.6         | 170.17                | -1.1                              | 14.3       | 17.7                 | 14.6                  | 3.11                   | 5.696             |                    |         |
| 1,000.0   | 998.3               | 1,001.2             | 1,000.1             | 1.9             | 1.8         | 165.64                | -1.8                              | 23.9       | 20.0                 | 16.5                  | 3.48                   | 5.744             |                    |         |
| 1,100.0   | 1,097.4             | 1,101.5             | 1,099.8             | 2.2             | 2.1         | 161.23                | -2.5                              | 35.2       | 22.5                 | 18.6                  | 3.87                   | 5.811             |                    |         |
| 1,200.0   | 1,196.3             | 1,201.5             | 1,199.0             | 2.5             | 2.3         | 158.15                | -3.4                              | 47.4       | 26.0                 | 21.8                  | 4.29                   | 6.076             |                    |         |
| 1,300.0   | 1,294.9             | 1,301.3             | 1,298.1             | 2.8             | 2.6         | 157.11                | -4.2                              | 59.5       | 31.2                 | 26.5                  | 4.70                   | 6.647             |                    |         |
| 1,400.0   | 1,393.3             | 1,401.1             | 1,397.1             | 3.2             | 2.8         | 157.41                | -5.0                              | 71.7       | 38.0                 | 32.9                  | 5.10                   | 7.453             |                    |         |
| 1,500.0   | 1,491.3             | 1,500.7             | 1,496.0             | 3.5             | 3.1         | 158.33                | -5.8                              | 83.8       | 46.2                 | 40.7                  | 5.50                   | 8.407             |                    |         |
| 1,600.0   | 1,589.3             | 1,600.4             | 1,594.9             | 3.9             | 3.4         | 159.05                | -6.7                              | 95.9       | 54.6                 | 48.7                  | 5.89                   | 9.263             |                    |         |
| 1,700.0   | 1,687.3             | 1,700.0             | 1,693.8             | 4.3             | 3.6         | 159.58                | -7.5                              | 108.0      | 63.0                 | 56.7                  | 6.29                   | 10.010            |                    |         |
| 1,800.0   | 1,785.3             | 1,799.7             | 1,792.7             | 4.6             | 3.9         | 159.99                | -8.3                              | 120.1      | 71.3                 | 64.6                  | 6.69                   | 10.668            |                    |         |
| 1,900.0   | 1,883.3             | 1,899.3             | 1,891.6             | 5.0             | 4.2         | 160.31                | -9.1                              | 132.2      | 79.7                 | 72.6                  | 7.08                   | 11.250            |                    |         |
| 2,000.0   | 1,981.3             | 1,999.0             | 1,990.5             | 5.4             | 4.4         | 160.57                | -10.0                             | 144.3      | 88.1                 | 80.6                  | 7.48                   | 11.770            |                    |         |
| 2,100.0   | 2,079.3             | 2,098.6             | 2,089.4             | 5.8             | 4.7         | 160.78                | -10.8                             | 156.5      | 96.5                 | 88.6                  | 7.88                   | 12.236            |                    |         |
| 2,200.0   | 2,177.3             | 2,198.3             | 2,188.4             | 6.2             | 5.0         | 160.96                | -11.6                             | 168.6      | 104.8                | 96.6                  | 8.28                   | 12.657            |                    |         |
| 2,300.0   | 2,275.4             | 2,297.9             | 2,287.3             | 6.6             | 5.3         | 161.11                | -12.4                             | 180.7      | 113.2                | 104.5                 | 8.68                   | 13.038            |                    |         |
| 2,400.0   | 2,373.4             | 2,397.6             | 2,386.2             | 6.9             | 5.5         | 161.25                | -13.2                             | 192.8      | 121.6                | 112.5                 | 9.08                   | 13.386            |                    |         |
| 2,500.0   | 2,471.4             | 2,497.2             | 2,485.1             | 7.3             | 5.8         | 161.36                | -14.1                             | 204.9      | 130.0                | 120.5                 | 9.49                   | 13.703            |                    |         |
| 2,600.0   | 2,569.4             | 2,596.9             | 2,584.0             | 7.7             | 6.1         | 161.46                | -14.9                             | 217.0      | 138.4                | 128.5                 | 9.89                   | 13.994            |                    |         |
| 2,700.0   | 2,667.4             | 2,696.5             | 2,682.9             | 8.1             | 6.3         | 161.55                | -15.7                             | 229.1      | 146.7                | 136.5                 | 10.29                  | 14.263            |                    |         |
| 2,800.0   | 2,765.4             | 2,796.2             | 2,781.8             | 8.5             | 6.6         | 161.63                | -16.5                             | 241.3      | 155.1                | 144.4                 | 10.69                  | 14.511            |                    |         |
| 2,900.0   | 2,863.4             | 2,895.8             | 2,880.7             | 8.9             | 6.9         | 161.70                | -17.4                             | 253.4      | 163.5                | 152.4                 | 11.09                  | 14.740            |                    |         |
| 3,000.0   | 2,961.4             | 2,995.5             | 2,979.6             | 9.3             | 7.2         | 161.77                | -18.2                             | 265.5      | 171.9                | 160.4                 | 11.49                  | 14.954            |                    |         |
| 3,100.0   | 3,059.4             | 3,095.1             | 3,078.5             | 9.7             | 7.4         | 161.83                | -19.0                             | 277.6      | 180.3                | 168.4                 | 11.90                  | 15.153            |                    |         |
| 3,200.0   | 3,157.4             | 3,194.8             | 3,177.4             | 10.1            | 7.7         | 161.88                | -19.8                             | 289.7      | 188.7                | 176.4                 | 12.30                  | 15.338            |                    |         |
| 3,300.0   | 3,255.4             | 3,294.4             | 3,276.3             | 10.4            | 8.0         | 161.93                | -20.7                             | 301.8      | 197.0                | 184.3                 | 12.70                  | 15.512            |                    |         |
| 3,400.0   | 3,353.4             | 3,394.1             | 3,375.2             | 10.8            | 8.3         | 161.97                | -21.5                             | 313.9      | 205.4                | 192.3                 | 13.11                  | 15.675            |                    |         |
| 3,500.0   | 3,451.4             | 3,493.7             | 3,474.1             | 11.2            | 8.5         | 162.02                | -22.3                             | 326.0      | 213.8                | 200.3                 | 13.51                  | 15.828            |                    |         |
| 3,600.0   | 3,549.4             | 3,593.3             | 3,573.0             | 11.6            | 8.8         | 162.05                | -23.1                             | 338.2      | 222.2                | 208.3                 | 13.91                  | 15.972            |                    |         |
| 3,700.0   | 3,647.4             | 3,693.0             | 3,671.9             | 12.0            | 9.1         | 162.09                | -23.9                             | 350.3      | 230.6                | 216.3                 | 14.31                  | 16.108            |                    |         |
| 3,800.0   | 3,745.5             | 3,792.6             | 3,770.8             | 12.4            | 9.3         | 162.12                | -24.8                             | 362.4      | 239.0                | 224.2                 | 14.72                  | 16.236            |                    |         |
| 3,900.0   | 3,843.5             | 3,892.3             | 3,869.7             | 12.8            | 9.6         | 162.15                | -25.6                             | 374.5      | 247.3                | 232.2                 | 15.12                  | 16.358            |                    |         |
| 4,000.0   | 3,941.5             | 3,991.9             | 3,968.6             | 13.2            | 9.9         | 162.18                | -26.4                             | 386.6      | 255.7                | 240.2                 | 15.52                  | 16.473            |                    |         |
| 4,100.0   | 4,039.5             | 4,091.6             | 4,067.6             | 13.6            | 10.2        | 162.21                | -27.2                             | 398.7      | 264.1                | 248.2                 | 15.93                  | 16.582            |                    |         |
| 4,200.0   | 4,137.5             | 4,191.2             | 4,166.5             | 14.0            | 10.4        | 162.23                | -28.1                             | 410.8      | 272.5                | 256.2                 | 16.33                  | 16.686            |                    |         |
| 4,300.0   | 4,235.5             | 4,290.9             | 4,265.4             | 14.4            | 10.7        | 162.26                | -28.9                             | 423.0      | 280.9                | 264.1                 | 16.73                  | 16.785            |                    |         |
| 4,400.0   | 4,333.5             | 4,390.5             | 4,364.3             | 14.8            | 11.0        | 162.28                | -29.7                             | 435.1      | 289.3                | 272.1                 | 17.14                  | 16.879            |                    |         |
| 4,500.0   | 4,431.5             | 4,490.2             | 4,463.2             | 15.2            | 11.3        | 162.30                | -30.5                             | 447.2      | 297.6                | 280.1                 | 17.54                  | 16.968            |                    |         |
| 4,600.0   | 4,529.5             | 4,589.8             | 4,562.1             | 15.5            | 11.5        | 162.32                | -31.4                             | 459.3      | 306.0                | 288.1                 | 17.94                  | 17.054            |                    |         |
| 4,700.0   | 4,627.5             | 4,689.5             | 4,661.0             | 15.9            | 11.8        | 162.34                | -32.2                             | 471.4      | 314.4                | 296.1                 | 18.35                  | 17.136            |                    |         |
| 4,800.0   | 4,725.5             | 4,789.1             | 4,759.9             | 16.3            | 12.1        | 162.36                | -33.0                             | 483.5      | 322.8                | 304.0                 | 18.75                  | 17.214            |                    |         |
| 4,900.0   | 4,823.5             | 4,888.8             | 4,858.8             | 16.7            | 12.4        | 162.38                | -33.8                             | 495.6      | 331.2                | 312.0                 | 19.16                  | 17.289            |                    |         |
| 5,000.0   | 4,921.5             | 4,988.4             | 4,957.7             | 17.1            | 12.6        | 162.39                | -34.6                             | 507.8      | 339.6                | 320.0                 | 19.56                  | 17.360            |                    |         |
| 5,100.0   | 5,019.5             | 5,088.1             | 5,056.6             | 17.5            | 12.9        | 162.41                | -35.5                             | 519.9      | 347.9                | 328.0                 | 19.96                  | 17.429            |                    |         |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        | 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         |         |
| 5,200.0   | 5,117.5             | 5,187.7             | 5,155.5             | 17.9            | 13.2        | 162.42                | -36.3                             | 532.0      | 356.3                | 336.0                 | 20.37                  | 17.495                    |         |
| 5,300.0   | 5,215.6             | 5,287.4             | 5,254.4             | 18.3            | 13.5        | 162.44                | -37.1                             | 544.1      | 364.7                | 343.9                 | 20.77                  | 17.559                    |         |
| 5,400.0   | 5,313.6             | 5,387.0             | 5,353.3             | 18.7            | 13.7        | 162.45                | -37.9                             | 556.2      | 373.1                | 351.9                 | 21.17                  | 17.620                    |         |
| 5,500.0   | 5,411.6             | 5,486.7             | 5,452.2             | 19.1            | 14.0        | 162.46                | -38.8                             | 568.3      | 381.5                | 359.9                 | 21.58                  | 17.679                    |         |
| 5,600.0   | 5,509.6             | 5,586.3             | 5,551.1             | 19.5            | 14.3        | 162.47                | -39.6                             | 580.4      | 389.9                | 367.9                 | 21.98                  | 17.735                    |         |
| 5,700.0   | 5,607.6             | 5,686.0             | 5,650.0             | 19.9            | 14.6        | 162.49                | -40.4                             | 592.6      | 398.3                | 375.9                 | 22.39                  | 17.790                    |         |
| 5,800.0   | 5,705.6             | 5,785.6             | 5,748.9             | 20.3            | 14.8        | 162.50                | -41.2                             | 604.7      | 406.6                | 383.8                 | 22.79                  | 17.842                    |         |
| 5,900.0   | 5,803.6             | 5,885.2             | 5,847.9             | 20.7            | 15.1        | 162.51                | -42.1                             | 616.8      | 415.0                | 391.8                 | 23.19                  | 17.893                    |         |
| 6,000.0   | 5,901.6             | 5,984.9             | 5,946.8             | 21.1            | 15.4        | 162.52                | -42.9                             | 628.9      | 423.4                | 399.8                 | 23.60                  | 17.942                    |         |
| 6,100.0   | 5,999.6             | 6,084.5             | 6,045.7             | 21.4            | 15.7        | 162.53                | -43.7                             | 641.0      | 431.8                | 407.8                 | 24.00                  | 17.989                    |         |
| 6,200.0   | 6,097.6             | 6,184.2             | 6,144.6             | 21.8            | 15.9        | 162.54                | -44.5                             | 653.1      | 440.2                | 415.8                 | 24.41                  | 18.035                    |         |
| 6,300.0   | 6,195.6             | 6,283.8             | 6,243.5             | 22.2            | 16.2        | 162.55                | -45.3                             | 665.2      | 448.6                | 423.8                 | 24.81                  | 18.079                    |         |
| 6,400.0   | 6,293.6             | 6,383.5             | 6,342.4             | 22.6            | 16.5        | 162.56                | -46.2                             | 677.4      | 456.9                | 431.7                 | 25.21                  | 18.122                    |         |
| 6,500.0   | 6,391.6             | 6,483.1             | 6,441.3             | 23.0            | 16.8        | 162.57                | -47.0                             | 689.5      | 465.3                | 439.7                 | 25.62                  | 18.164                    |         |
| 6,600.0   | 6,489.6             | 6,582.8             | 6,540.2             | 23.4            | 17.0        | 162.57                | -47.8                             | 701.6      | 473.7                | 447.7                 | 26.02                  | 18.204                    |         |
| 6,700.0   | 6,587.6             | 6,682.4             | 6,639.1             | 23.8            | 17.3        | 162.58                | -48.6                             | 713.7      | 482.1                | 455.7                 | 26.43                  | 18.243                    |         |
| 6,800.0   | 6,685.7             | 6,782.1             | 6,738.0             | 24.2            | 17.6        | 162.59                | -49.5                             | 725.8      | 490.5                | 463.7                 | 26.83                  | 18.281                    |         |
| 6,900.0   | 6,783.7             | 6,881.7             | 6,836.9             | 24.6            | 17.9        | 162.60                | -50.3                             | 737.9      | 498.9                | 471.6                 | 27.24                  | 18.317                    |         |
| 7,000.0   | 6,881.7             | 6,981.4             | 6,935.8             | 25.0            | 18.1        | 162.60                | -51.1                             | 750.0      | 507.3                | 479.6                 | 27.64                  | 18.353                    |         |
| 7,100.0   | 6,979.6             | 7,081.0             | 7,034.7             | 25.4            | 18.4        | 174.91                | -51.9                             | 762.1      | 515.9                | 487.8                 | 28.05                  | 18.392                    |         |
| 7,200.0   | 7,076.3             | 7,179.2             | 7,132.1             | 25.8            | 18.7        | -154.49               | -52.7                             | 774.1      | 530.0                | 501.3                 | 28.68                  | 18.481                    |         |
| 7,300.0   | 7,168.8             | 7,322.7             | 7,274.0             | 26.3            | 19.1        | -142.86               | -43.5                             | 791.4      | 549.5                | 520.2                 | 29.30                  | 18.752                    |         |
| 7,400.0   | 7,254.2             | 7,507.4             | 7,445.9             | 26.8            | 19.5        | -137.25               | 18.5                              | 811.9      | 564.0                | 535.8                 | 28.20                  | 20.003                    |         |
| 7,500.0   | 7,330.1             | 7,700.3             | 7,595.0             | 27.3            | 20.2        | -132.60               | 138.2                             | 829.1      | 570.6                | 544.5                 | 26.09                  | 21.869                    |         |
| 7,600.0   | 7,394.0             | 7,887.0             | 7,694.2             | 27.9            | 21.1        | -127.60               | 295.1                             | 839.8      | 569.2                | 543.3                 | 25.89                  | 21.988                    |         |
| 7,700.0   | 7,444.1             | 8,056.3             | 7,736.6             | 28.6            | 22.2        | -122.22               | 458.3                             | 843.6      | 561.8                | 532.6                 | 29.13                  | 19.284                    |         |
| 7,800.0   | 7,478.8             | 8,175.0             | 7,740.0             | 29.4            | 23.2        | -118.26               | 576.9                             | 843.0      | 552.7                | 520.2                 | 32.55                  | 16.979                    |         |
| 7,900.0   | 7,497.2             | 8,273.0             | 7,740.0             | 30.1            | 24.1        | -116.32               | 674.9                             | 842.1      | 549.1                | 514.1                 | 35.01                  | 15.684                    |         |
| 7,938.1   | 7,500.2             | 8,311.0             | 7,740.0             | 30.5            | 24.5        | -115.96               | 712.9                             | 841.8      | 548.9                | 513.0                 | 35.94                  | 15.275                    |         |
| 8,000.0   | 7,500.0             | 8,372.9             | 7,740.0             | 31.0            | 25.1        | -115.88               | 774.8                             | 841.3      | 550.0                | 512.6                 | 37.38                  | 14.713                    |         |
| 8,100.0   | 7,500.0             | 8,472.9             | 7,740.0             | 31.9            | 26.2        | -115.80               | 874.8                             | 840.4      | 551.5                | 511.7                 | 39.81                  | 13.853                    |         |
| 8,200.0   | 7,500.0             | 8,572.9             | 7,740.0             | 32.9            | 27.4        | -115.72               | 974.7                             | 839.5      | 553.1                | 510.8                 | 42.35                  | 13.061                    |         |
| 8,300.0   | 7,500.0             | 8,672.9             | 7,740.0             | 33.9            | 28.6        | -115.64               | 1,074.7                           | 838.7      | 554.7                | 509.7                 | 44.97                  | 12.334                    |         |
| 8,400.0   | 7,500.0             | 8,772.9             | 7,740.0             | 35.0            | 29.9        | -115.56               | 1,174.7                           | 837.8      | 556.2                | 508.6                 | 47.66                  | 11.670                    |         |
| 8,500.0   | 7,500.0             | 8,872.8             | 7,740.0             | 36.2            | 31.2        | -115.49               | 1,274.7                           | 836.9      | 557.8                | 507.4                 | 50.42                  | 11.064                    |         |
| 8,600.0   | 7,500.0             | 8,972.8             | 7,740.0             | 37.4            | 32.6        | -115.41               | 1,374.7                           | 836.0      | 559.4                | 506.2                 | 53.23                  | 10.510                    |         |
| 8,700.0   | 7,500.0             | 9,072.8             | 7,740.0             | 38.6            | 34.0        | -115.33               | 1,474.7                           | 835.2      | 561.0                | 504.9                 | 56.08                  | 10.003                    |         |
| 8,800.0   | 7,500.0             | 9,172.8             | 7,740.0             | 39.9            | 35.4        | -115.26               | 1,574.6                           | 834.3      | 562.6                | 503.6                 | 58.97                  | 9.540                     |         |
| 8,900.0   | 7,500.0             | 9,272.8             | 7,740.0             | 41.2            | 36.9        | -115.18               | 1,674.6                           | 833.4      | 564.1                | 502.2                 | 61.89                  | 9.114                     |         |
| 9,000.0   | 7,500.0             | 9,372.8             | 7,740.0             | 42.5            | 38.3        | -115.11               | 1,774.6                           | 832.5      | 565.7                | 500.9                 | 64.85                  | 8.723                     |         |
| 9,100.0   | 7,500.0             | 9,472.7             | 7,740.0             | 43.9            | 39.9        | -115.03               | 1,874.6                           | 831.7      | 567.3                | 499.5                 | 67.83                  | 8.363                     |         |
| 9,200.0   | 7,500.0             | 9,572.7             | 7,740.0             | 45.3            | 41.4        | -114.96               | 1,974.6                           | 830.8      | 568.9                | 498.0                 | 70.84                  | 8.031                     |         |
| 9,300.0   | 7,500.0             | 9,672.7             | 7,740.0             | 46.7            | 42.9        | -114.88               | 2,074.5                           | 829.9      | 570.5                | 496.6                 | 73.87                  | 7.723                     |         |
| 9,400.0   | 7,500.0             | 9,772.7             | 7,740.0             | 48.2            | 44.5        | -114.81               | 2,174.5                           | 829.1      | 572.0                | 495.1                 | 76.91                  | 7.438                     |         |
| 9,500.0   | 7,500.0             | 9,872.7             | 7,740.0             | 49.6            | 46.1        | -114.74               | 2,274.5                           | 828.2      | 573.6                | 493.7                 | 79.97                  | 7.173                     |         |
| 9,600.0   | 7,500.0             | 9,972.7             | 7,740.0             | 51.1            | 47.6        | -114.67               | 2,374.5                           | 827.3      | 575.1                | 492.0                 | 83.05                  | 6.924                     |         |
| 9,700.0   | 7,500.0             | 10,072.7            | 7,740.0             | 52.6            | 49.2        | -114.66               | 2,474.5                           | 826.4      | 575.2                | 489.1                 | 86.10                  | 6.680                     |         |
| 9,800.0   | 7,500.0             | 10,172.7            | 7,740.0             | 54.1            | 50.8        | -114.74               | 2,574.5                           | 825.6      | 573.7                | 484.6                 | 89.12                  | 6.438                     |         |
| 9,900.0   | 7,500.0             | 10,272.6            | 7,740.0             | 55.6            | 52.5        | -114.89               | 2,674.4                           | 824.7      | 570.7                | 478.6                 | 92.10                  | 6.197                     |         |
| 10,000.0  | 7,500.0             | 10,372.5            | 7,740.0             | 57.1            | 54.1        | -115.13               | 2,774.3                           | 823.8      | 566.1                | 471.0                 | 95.02                  | 5.957                     |         |
| 10,100.0  | 7,500.0             | 10,472.2            | 7,740.0             | 58.6            | 55.7        | -115.45               | 2,874.0                           | 823.0      | 559.9                | 462.0                 | 97.87                  | 5.720                     |         |
| 10,200.0  | 7,500.0             | 10,571.9            | 7,740.0             | 60.1            | 57.4        | -115.87               | 2,973.7                           | 822.1      | 552.1                | 451.5                 | 100.65                 | 5.486                     |         |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        | 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 |
| 10,300.0  | 7,500.0             | 10,671.4            | 7,740.0             | 61.6            | 59.0        | -116.31               | 3,073.2                           | 821.2      | 543.5                | 440.2                 | 103.36                 | 5.258              |         |
| 10,400.0  | 7,500.0             | 10,770.9            | 7,740.0             | 63.1            | 60.6        | -116.76               | 3,172.7                           | 820.3      | 534.9                | 428.9                 | 106.04                 | 5.045              |         |
| 10,500.0  | 7,500.0             | 10,870.5            | 7,740.0             | 64.6            | 62.3        | -117.23               | 3,272.3                           | 819.5      | 526.4                | 417.7                 | 108.68                 | 4.844              |         |
| 10,600.0  | 7,500.0             | 10,970.0            | 7,740.0             | 66.2            | 63.9        | -117.72               | 3,371.8                           | 818.6      | 517.9                | 406.6                 | 111.27                 | 4.654              |         |
| 10,700.0  | 7,500.0             | 11,069.6            | 7,740.0             | 67.7            | 65.6        | -118.22               | 3,471.3                           | 817.7      | 509.4                | 395.6                 | 113.82                 | 4.475              |         |
| 10,800.0  | 7,500.0             | 11,169.1            | 7,740.0             | 69.3            | 67.3        | -118.74               | 3,570.9                           | 816.9      | 501.0                | 384.6                 | 116.33                 | 4.307              |         |
| 10,900.0  | 7,500.0             | 11,268.6            | 7,740.0             | 70.9            | 68.9        | -119.27               | 3,670.4                           | 816.0      | 492.6                | 373.8                 | 118.78                 | 4.147              |         |
| 11,000.0  | 7,500.0             | 11,368.2            | 7,740.0             | 72.5            | 70.6        | -119.83               | 3,769.9                           | 815.1      | 484.2                | 363.1                 | 121.17                 | 3.996              |         |
| 11,100.0  | 7,500.0             | 11,473.1            | 7,740.0             | 74.1            | 72.4        | -120.46               | 3,874.8                           | 814.7      | 475.5                | 351.6                 | 123.92                 | 3.837              |         |
| 11,200.0  | 7,500.0             | 11,579.9            | 7,740.0             | 75.7            | 74.2        | -121.25               | 3,981.6                           | 816.2      | 465.4                | 338.8                 | 126.62                 | 3.676              |         |
| 11,300.0  | 7,500.0             | 11,679.6            | 7,740.0             | 77.3            | 75.9        | -122.10               | 4,081.3                           | 818.6      | 454.4                | 325.9                 | 128.54                 | 3.535              |         |
| 11,400.0  | 7,500.0             | 11,778.8            | 7,740.0             | 78.9            | 77.6        | -122.98               | 4,180.5                           | 821.0      | 443.5                | 313.3                 | 130.29                 | 3.404              |         |
| 11,500.0  | 7,500.0             | 11,878.0            | 7,740.0             | 80.5            | 79.3        | -123.90               | 4,279.6                           | 823.4      | 432.8                | 300.9                 | 131.89                 | 3.281              |         |
| 11,600.0  | 7,500.0             | 11,977.1            | 7,740.0             | 82.1            | 81.0        | -124.87               | 4,378.8                           | 825.8      | 422.1                | 288.8                 | 133.33                 | 3.166              |         |
| 11,700.0  | 7,500.0             | 12,076.3            | 7,740.0             | 83.8            | 82.7        | -125.89               | 4,477.9                           | 828.2      | 411.6                | 277.0                 | 134.60                 | 3.058              |         |
| 11,800.0  | 7,500.0             | 12,175.5            | 7,740.0             | 85.4            | 84.4        | -126.97               | 4,577.1                           | 830.6      | 401.2                | 265.5                 | 135.68                 | 2.957              |         |
| 11,900.0  | 7,500.0             | 12,274.7            | 7,740.0             | 87.1            | 86.1        | -127.98               | 4,676.3                           | 833.0      | 391.6                | 254.9                 | 136.65                 | 2.865              |         |
| 12,000.0  | 7,500.0             | 12,374.2            | 7,740.0             | 88.7            | 87.8        | -128.88               | 4,775.7                           | 835.5      | 383.4                | 245.7                 | 137.71                 | 2.784              |         |
| 12,100.0  | 7,500.0             | 12,473.8            | 7,740.0             | 90.4            | 89.5        | -129.66               | 4,875.3                           | 837.9      | 376.7                | 237.8                 | 138.90                 | 2.712              |         |
| 12,200.0  | 7,500.0             | 12,573.6            | 7,740.0             | 92.1            | 91.2        | -130.31               | 4,975.0                           | 840.3      | 371.4                | 231.1                 | 140.28                 | 2.647              |         |
| 12,300.0  | 7,500.0             | 12,673.4            | 7,740.0             | 93.8            | 92.9        | -130.81               | 5,074.9                           | 842.7      | 367.4                | 225.5                 | 141.91                 | 2.589              |         |
| 12,400.0  | 7,500.0             | 12,773.4            | 7,740.0             | 95.4            | 94.6        | -131.14               | 5,174.8                           | 845.2      | 364.8                | 221.0                 | 143.83                 | 2.537              |         |
| 12,500.0  | 7,500.0             | 12,873.4            | 7,740.0             | 97.2            | 96.4        | -131.31               | 5,274.7                           | 847.6      | 363.6                | 217.5                 | 146.09                 | 2.489              |         |
| 12,547.1  | 7,500.0             | 12,920.4            | 7,740.0             | 98.0            | 97.2        | -131.33               | 5,321.8                           | 848.7      | 363.4                | 216.1                 | 147.28                 | 2.467              |         |
| 12,600.0  | 7,500.0             | 12,973.4            | 7,740.0             | 98.9            | 98.1        | -131.31               | 5,374.7                           | 850.0      | 363.6                | 214.9                 | 148.72                 | 2.445              |         |
| 12,700.0  | 7,500.0             | 13,073.3            | 7,740.0             | 100.6           | 99.8        | -131.13               | 5,474.6                           | 852.5      | 365.0                | 213.2                 | 151.74                 | 2.405              |         |
| 12,800.0  | 7,500.0             | 13,173.3            | 7,740.0             | 102.3           | 101.5       | -130.78               | 5,574.6                           | 854.9      | 367.6                | 212.5                 | 155.16                 | 2.369              |         |
| 12,900.0  | 7,500.0             | 13,273.2            | 7,740.0             | 104.0           | 103.2       | -130.32               | 5,674.4                           | 857.3      | 371.1                | 212.3                 | 158.82                 | 2.337              |         |
| 13,000.0  | 7,500.0             | 13,373.1            | 7,740.0             | 105.8           | 105.0       | -129.86               | 5,774.3                           | 859.8      | 374.7                | 212.2                 | 162.50                 | 2.306              |         |
| 13,100.0  | 7,500.0             | 13,473.0            | 7,740.0             | 107.5           | 106.7       | -129.41               | 5,874.1                           | 862.2      | 378.2                | 212.1                 | 166.18                 | 2.276              |         |
| 13,200.0  | 7,500.0             | 13,572.9            | 7,740.0             | 109.2           | 108.4       | -128.97               | 5,974.0                           | 864.6      | 381.8                | 212.0                 | 169.87                 | 2.248              |         |
| 13,300.0  | 7,500.0             | 13,672.7            | 7,740.0             | 111.0           | 110.2       | -128.54               | 6,073.9                           | 867.0      | 385.4                | 211.9                 | 173.56                 | 2.221              |         |
| 13,400.0  | 7,500.0             | 13,772.6            | 7,740.0             | 112.7           | 111.9       | -128.12               | 6,173.7                           | 869.5      | 389.1                | 211.8                 | 177.26                 | 2.195              |         |
| 13,500.0  | 7,500.0             | 13,872.5            | 7,740.0             | 114.5           | 113.6       | -127.70               | 6,273.6                           | 871.9      | 392.7                | 211.7                 | 180.97                 | 2.170              |         |
| 13,600.0  | 7,500.0             | 13,972.4            | 7,740.0             | 116.2           | 115.3       | -127.29               | 6,373.5                           | 874.3      | 396.4                | 211.7                 | 184.68                 | 2.146              |         |
| 13,700.0  | 7,500.0             | 14,072.3            | 7,740.0             | 117.9           | 117.1       | -126.89               | 6,473.3                           | 876.8      | 400.1                | 211.7                 | 188.40                 | 2.124              |         |
| 13,800.0  | 7,500.0             | 14,172.2            | 7,740.0             | 119.7           | 118.8       | -126.50               | 6,573.2                           | 879.2      | 403.8                | 211.7                 | 192.12                 | 2.102              |         |
| 13,900.0  | 7,500.0             | 14,272.1            | 7,740.0             | 121.4           | 120.5       | -126.11               | 6,673.0                           | 881.6      | 407.5                | 211.7                 | 195.84                 | 2.081              |         |
| 14,000.0  | 7,500.0             | 14,372.0            | 7,740.0             | 123.1           | 122.3       | -125.73               | 6,772.9                           | 884.0      | 411.3                | 211.7                 | 199.57                 | 2.061              |         |
| 14,100.0  | 7,500.0             | 14,471.9            | 7,740.0             | 124.9           | 124.0       | -125.36               | 6,872.8                           | 886.5      | 415.0                | 211.7                 | 203.30                 | 2.041              |         |
| 14,200.0  | 7,500.0             | 14,571.8            | 7,740.0             | 126.6           | 125.7       | -124.99               | 6,972.6                           | 888.9      | 418.8                | 211.8                 | 207.03                 | 2.023              |         |
| 14,300.0  | 7,500.0             | 14,671.7            | 7,740.0             | 128.4           | 127.5       | -124.63               | 7,072.5                           | 891.3      | 422.6                | 211.9                 | 210.77                 | 2.005 SF           |         |
| 14,341.7  | 7,500.0             | 14,699.3            | 7,740.0             | 129.1           | 128.0       | -124.53               | 7,100.2                           | 892.0      | 424.4                | 213.4                 | 211.03                 | 2.011              |         |



# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #3 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        |                   | 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 |                    |         |
| 0.0   | 0.0                 | 0.0                 | 0.0                 | 0.0             | 0.0         | 90.03                 | 0.0                               | 7.3        | 7.3                  |                       |                        |                   |                    |         |
| 100.0   | 100.0               | 100.0               | 100.0               | 0.2             | 0.2         | 90.03                 | 0.0                               | 7.3        | 7.3                  | 7.0                   | 0.30                   | 23.962            |                    |         |
| 200.0   | 200.0               | 200.0               | 200.0               | 0.3             | 0.3         | 90.03                 | 0.0                               | 7.3        | 7.3                  | 6.6                   | 0.65                   | 11.148            |                    |         |
| 203.4   | 203.4               | 203.4               | 203.4               | 0.3             | 0.3         | 90.03                 | 0.0                               | 7.3        | 7.3                  | 6.6                   | 0.66                   | 10.951 CC         |                    |         |
| 300.0   | 300.0               | 299.9               | 299.9               | 0.5             | 0.5         | 90.32                 | 0.0                               | 7.5        | 7.5                  | 6.5                   | 1.00                   | 7.479 ES          |                    |         |
| 400.0   | 400.0               | 399.8               | 399.8               | 0.7             | 0.7         | 10.86                 | -0.3                              | 9.2        | 8.4                  | 7.0                   | 1.35                   | 6.188             |                    |         |
| 500.0   | 500.0               | 499.6               | 499.6               | 0.9             | 0.9         | 16.46                 | -0.9                              | 12.6       | 9.3                  | 7.6                   | 1.70                   | 5.468             |                    |         |
| 600.0   | 599.9               | 599.4               | 599.2               | 1.0             | 1.1         | 23.88                 | -1.9                              | 17.8       | 10.4                 | 8.4                   | 2.05                   | 5.084             |                    |         |
| 700.0   | 699.7               | 699.2               | 698.8               | 1.2             | 1.3         | 32.18                 | -3.1                              | 24.6       | 11.9                 | 9.5                   | 2.41                   | 4.935             |                    |         |
| 800.0   | 799.4               | 799.0               | 798.1               | 1.4             | 1.5         | 40.47                 | -4.6                              | 33.2       | 13.8                 | 11.0                  | 2.79                   | 4.954             |                    |         |
| 900.0   | 898.9               | 898.7               | 897.3               | 1.7             | 1.7         | 48.12                 | -6.4                              | 43.4       | 16.3                 | 13.1                  | 3.21                   | 5.084             |                    |         |
| 1,000.0   | 998.3               | 998.4               | 996.3               | 1.9             | 2.0         | 54.79                 | -8.5                              | 55.3       | 19.4                 | 15.7                  | 3.67                   | 5.278             |                    |         |
| 1,100.0   | 1,097.4             | 1,098.0             | 1,094.9             | 2.2             | 2.3         | 60.42                 | -10.9                             | 69.0       | 23.0                 | 18.9                  | 4.19                   | 5.502             |                    |         |
| 1,200.0   | 1,196.3             | 1,197.6             | 1,193.3             | 2.5             | 2.6         | 65.10                 | -13.6                             | 84.3       | 27.3                 | 22.5                  | 4.76                   | 5.735             |                    |         |
| 1,300.0   | 1,294.9             | 1,297.1             | 1,291.3             | 2.8             | 2.9         | 68.97                 | -16.6                             | 101.2      | 32.2                 | 26.8                  | 5.40                   | 5.963             |                    |         |
| 1,400.0   | 1,393.3             | 1,396.6             | 1,388.9             | 3.2             | 3.3         | 72.17                 | -19.9                             | 119.9      | 37.6                 | 31.5                  | 6.09                   | 6.178             |                    |         |
| 1,500.0   | 1,491.3             | 1,496.0             | 1,486.2             | 3.5             | 3.6         | 74.54                 | -23.4                             | 140.2      | 43.7                 | 36.9                  | 6.82                   | 6.404             |                    |         |
| 1,600.0   | 1,589.3             | 1,595.3             | 1,583.0             | 3.9             | 4.1         | 74.88                 | -27.3                             | 162.1      | 50.7                 | 43.1                  | 7.54                   | 6.717             |                    |         |
| 1,700.0   | 1,687.3             | 1,694.5             | 1,679.2             | 4.3             | 4.5         | 73.71                 | -31.5                             | 185.6      | 58.6                 | 50.3                  | 8.25                   | 7.106             |                    |         |
| 1,800.0   | 1,785.3             | 1,794.2             | 1,775.6             | 4.6             | 5.0         | 71.64                 | -35.7                             | 210.8      | 67.3                 | 58.4                  | 8.92                   | 7.540             |                    |         |
| 1,900.0   | 1,883.3             | 1,894.9             | 1,872.9             | 5.0             | 5.5         | 69.25                 | -38.6                             | 236.7      | 75.0                 | 65.4                  | 9.59                   | 7.819             |                    |         |
| 2,000.0   | 1,981.3             | 1,995.7             | 1,970.3             | 5.4             | 5.9         | 66.59                 | -39.7                             | 262.7      | 81.4                 | 71.2                  | 10.22                  | 7.962             |                    |         |
| 2,100.0   | 2,079.3             | 2,096.3             | 2,067.8             | 5.8             | 6.4         | 64.68                 | -40.2                             | 287.6      | 86.8                 | 75.9                  | 10.84                  | 8.004             |                    |         |
| 2,200.0   | 2,177.3             | 2,196.7             | 2,165.4             | 6.2             | 6.8         | 63.80                 | -40.6                             | 310.9      | 91.4                 | 79.9                  | 11.50                  | 7.942             |                    |         |
| 2,300.0   | 2,275.4             | 2,296.6             | 2,262.6             | 6.6             | 7.3         | 63.13                 | -41.0                             | 333.9      | 95.8                 | 83.6                  | 12.17                  | 7.872             |                    |         |
| 2,400.0   | 2,373.4             | 2,396.5             | 2,359.8             | 6.9             | 7.7         | 62.52                 | -41.4                             | 356.9      | 100.3                | 87.4                  | 12.84                  | 7.812             |                    |         |
| 2,500.0   | 2,471.4             | 2,496.4             | 2,457.0             | 7.3             | 8.1         | 61.96                 | -41.9                             | 379.9      | 104.8                | 91.3                  | 13.50                  | 7.759             |                    |         |
| 2,600.0   | 2,569.4             | 2,596.2             | 2,554.2             | 7.7             | 8.6         | 61.45                 | -42.3                             | 402.9      | 109.2                | 95.1                  | 14.17                  | 7.712             |                    |         |
| 2,700.0   | 2,667.4             | 2,696.1             | 2,651.4             | 8.1             | 9.0         | 60.98                 | -42.7                             | 425.9      | 113.7                | 98.9                  | 14.83                  | 7.671             |                    |         |
| 2,800.0   | 2,765.4             | 2,796.0             | 2,748.6             | 8.5             | 9.5         | 60.54                 | -43.1                             | 448.9      | 118.2                | 102.8                 | 15.49                  | 7.634             |                    |         |
| 2,900.0   | 2,863.4             | 2,895.9             | 2,845.8             | 8.9             | 9.9         | 60.14                 | -43.5                             | 471.9      | 122.7                | 106.6                 | 16.15                  | 7.601             |                    |         |
| 3,000.0   | 2,961.4             | 2,995.8             | 2,943.0             | 9.3             | 10.3        | 59.76                 | -43.9                             | 494.9      | 127.3                | 110.5                 | 16.81                  | 7.571             |                    |         |
| 3,100.0   | 3,059.4             | 3,095.7             | 3,040.3             | 9.7             | 10.8        | 59.41                 | -44.3                             | 517.9      | 131.8                | 114.3                 | 17.47                  | 7.545             |                    |         |
| 3,200.0   | 3,157.4             | 3,195.6             | 3,137.5             | 10.1            | 11.2        | 59.08                 | -44.8                             | 540.9      | 136.3                | 118.2                 | 18.12                  | 7.521             |                    |         |
| 3,300.0   | 3,255.4             | 3,295.5             | 3,234.7             | 10.4            | 11.7        | 58.78                 | -45.2                             | 563.9      | 140.8                | 122.1                 | 18.78                  | 7.499             |                    |         |
| 3,400.0   | 3,353.4             | 3,395.4             | 3,331.9             | 10.8            | 12.1        | 58.49                 | -45.6                             | 586.9      | 145.4                | 125.9                 | 19.44                  | 7.479             |                    |         |
| 3,500.0   | 3,451.4             | 3,495.3             | 3,429.1             | 11.2            | 12.6        | 58.22                 | -46.0                             | 609.9      | 149.9                | 129.8                 | 20.09                  | 7.461             |                    |         |
| 3,600.0   | 3,549.4             | 3,595.2             | 3,526.3             | 11.6            | 13.0        | 57.97                 | -46.4                             | 632.9      | 154.4                | 133.7                 | 20.75                  | 7.444             |                    |         |
| 3,700.0   | 3,647.4             | 3,695.1             | 3,623.5             | 12.0            | 13.4        | 57.73                 | -46.8                             | 655.9      | 159.0                | 137.6                 | 21.40                  | 7.429             |                    |         |
| 3,800.0   | 3,745.5             | 3,795.0             | 3,720.7             | 12.4            | 13.9        | 57.50                 | -47.3                             | 678.9      | 163.5                | 141.5                 | 22.05                  | 7.414             |                    |         |
| 3,900.0   | 3,843.5             | 3,894.9             | 3,817.9             | 12.8            | 14.3        | 57.29                 | -47.7                             | 701.9      | 168.1                | 145.4                 | 22.71                  | 7.401             |                    |         |
| 4,000.0   | 3,941.5             | 3,994.8             | 3,915.2             | 13.2            | 14.8        | 57.09                 | -48.1                             | 724.9      | 172.6                | 149.3                 | 23.36                  | 7.389             |                    |         |
| 4,100.0   | 4,039.5             | 4,094.7             | 4,012.4             | 13.6            | 15.2        | 56.89                 | -48.5                             | 747.9      | 177.2                | 153.1                 | 24.01                  | 7.378             |                    |         |
| 4,200.0   | 4,137.5             | 4,194.6             | 4,109.6             | 14.0            | 15.7        | 56.71                 | -48.9                             | 770.9      | 181.7                | 157.0                 | 24.66                  | 7.368             |                    |         |
| 4,300.0   | 4,235.5             | 4,294.5             | 4,206.8             | 14.4            | 16.1        | 56.54                 | -49.3                             | 793.8      | 186.3                | 161.0                 | 25.32                  | 7.358             |                    |         |
| 4,400.0   | 4,333.5             | 4,394.4             | 4,304.0             | 14.8            | 16.6        | 56.37                 | -49.8                             | 816.8      | 190.8                | 164.9                 | 25.97                  | 7.349             |                    |         |
| 4,500.0   | 4,431.5             | 4,494.2             | 4,401.2             | 15.2            | 17.0        | 56.22                 | -50.2                             | 839.8      | 195.4                | 168.8                 | 26.62                  | 7.340             |                    |         |
| 4,600.0   | 4,529.5             | 4,594.1             | 4,498.4             | 15.5            | 17.5        | 56.07                 | -50.6                             | 862.8      | 199.9                | 172.7                 | 27.27                  | 7.332             |                    |         |
| 4,700.0   | 4,627.5             | 4,694.0             | 4,595.6             | 15.9            | 17.9        | 55.92                 | -51.0                             | 885.8      | 204.5                | 176.6                 | 27.92                  | 7.325             |                    |         |
| 4,800.0   | 4,725.5             | 4,793.9             | 4,692.8             | 16.3            | 18.3        | 55.78                 | -51.4                             | 908.8      | 209.1                | 180.5                 | 28.57                  | 7.318             |                    |         |
| 4,900.0   | 4,823.5             | 4,893.8             | 4,790.1             | 16.7            | 18.8        | 55.65                 | -51.8                             | 931.8      | 213.6                | 184.4                 | 29.22                  | 7.311             |                    |         |
| 5,000.0   | 4,921.5             | 4,993.7             | 4,887.3             | 17.1            | 19.2        | 55.53                 | -52.2                             | 954.8      | 218.2                | 188.3                 | 29.87                  | 7.305             |                    |         |

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



# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #3 |                     |                     |                     |                 |             |                       |                                   |                   |                      |                       |                        |                   | 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) | Centre +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor |                           |         |
| 5,100.0   | 5,019.5             | 5,093.6             | 4,984.5             | 17.5            | 19.7        | 55.41                 | -52.7                             | 977.8             | 222.7                | 192.2                 | 30.52                  | 7.299             |                           |         |
| 5,200.0   | 5,117.5             | 5,193.5             | 5,081.7             | 17.9            | 20.1        | 55.29                 | -53.1                             | 1,000.8           | 227.3                | 196.1                 | 31.16                  | 7.294             |                           |         |
| 5,300.0   | 5,215.6             | 5,293.4             | 5,178.9             | 18.3            | 20.6        | 55.18                 | -53.5                             | 1,023.8           | 231.9                | 200.1                 | 31.81                  | 7.289             |                           |         |
| 5,400.0   | 5,313.6             | 5,393.3             | 5,276.1             | 18.7            | 21.0        | 55.07                 | -53.9                             | 1,046.8           | 236.4                | 204.0                 | 32.46                  | 7.284             |                           |         |
| 5,500.0   | 5,411.6             | 5,493.2             | 5,373.3             | 19.1            | 21.5        | 54.97                 | -54.3                             | 1,069.8           | 241.0                | 207.9                 | 33.11                  | 7.279             |                           |         |
| 5,600.0   | 5,509.6             | 5,593.1             | 5,470.5             | 19.5            | 21.9        | 54.87                 | -54.7                             | 1,092.8           | 245.6                | 211.8                 | 33.76                  | 7.275             |                           |         |
| 5,700.0   | 5,607.6             | 5,693.0             | 5,567.7             | 19.9            | 22.4        | 54.77                 | -55.2                             | 1,115.8           | 250.1                | 215.7                 | 34.41                  | 7.270             |                           |         |
| 5,800.0   | 5,705.6             | 5,792.9             | 5,665.0             | 20.3            | 22.8        | 54.68                 | -55.6                             | 1,138.8           | 254.7                | 219.7                 | 35.05                  | 7.266             |                           |         |
| 5,900.0   | 5,803.6             | 5,892.8             | 5,762.2             | 20.7            | 23.3        | 54.59                 | -56.0                             | 1,161.8           | 259.3                | 223.6                 | 35.70                  | 7.263             |                           |         |
| 6,000.0   | 5,901.6             | 5,992.7             | 5,859.4             | 21.1            | 23.7        | 54.51                 | -56.4                             | 1,184.8           | 263.9                | 227.5                 | 36.35                  | 7.259             |                           |         |
| 6,100.0   | 5,999.6             | 6,092.6             | 5,956.6             | 21.4            | 24.1        | 54.42                 | -56.8                             | 1,207.8           | 268.4                | 231.4                 | 37.00                  | 7.256             |                           |         |
| 6,200.0   | 6,097.6             | 6,192.5             | 6,053.8             | 21.8            | 24.6        | 54.34                 | -57.2                             | 1,230.8           | 273.0                | 235.4                 | 37.64                  | 7.252             |                           |         |
| 6,300.0   | 6,195.6             | 6,292.4             | 6,151.0             | 22.2            | 25.0        | 54.27                 | -57.7                             | 1,253.8           | 277.6                | 239.3                 | 38.29                  | 7.249             |                           |         |
| 6,400.0   | 6,293.6             | 6,392.2             | 6,248.2             | 22.6            | 25.5        | 54.19                 | -58.1                             | 1,276.8           | 282.1                | 243.2                 | 38.94                  | 7.246             |                           |         |
| 6,500.0   | 6,391.6             | 6,492.1             | 6,345.4             | 23.0            | 25.9        | 54.12                 | -58.5                             | 1,299.7           | 286.7                | 247.1                 | 39.58                  | 7.243             |                           |         |
| 6,600.0   | 6,489.6             | 6,592.0             | 6,442.6             | 23.4            | 26.4        | 54.05                 | -58.9                             | 1,322.7           | 291.3                | 251.1                 | 40.23                  | 7.240             |                           |         |
| 6,700.0   | 6,587.6             | 6,691.9             | 6,539.9             | 23.8            | 26.8        | 53.98                 | -59.3                             | 1,345.7           | 295.9                | 255.0                 | 40.88                  | 7.238             |                           |         |
| 6,800.0   | 6,685.7             | 6,791.8             | 6,637.1             | 24.2            | 27.3        | 53.92                 | -59.7                             | 1,368.7           | 300.4                | 258.9                 | 41.52                  | 7.235             |                           |         |
| 6,900.0   | 6,783.7             | 6,891.7             | 6,734.3             | 24.6            | 27.7        | 53.85                 | -60.1                             | 1,391.7           | 305.0                | 262.8                 | 42.17                  | 7.233             |                           |         |
| 7,000.0   | 6,881.7             | 6,991.6             | 6,831.5             | 25.0            | 28.2        | 53.79                 | -60.6                             | 1,414.7           | 309.6                | 266.8                 | 42.82                  | 7.230             |                           |         |
| 7,100.0   | 6,979.6             | 7,091.5             | 6,928.7             | 25.4            | 28.6        | 65.83                 | -61.0                             | 1,437.7           | 314.6                | 271.1                 | 43.51                  | 7.230             |                           |         |
| 7,200.0   | 7,076.3             | 7,190.0             | 7,024.5             | 25.8            | 29.1        | 97.00                 | -61.4                             | 1,460.4           | 328.7                | 283.6                 | 45.05                  | 7.296             |                           |         |
| 7,300.0   | 7,168.8             | 7,284.1             | 7,116.2             | 26.3            | 29.5        | 111.53                | -61.8                             | 1,482.1           | 355.8                | 308.4                 | 47.44                  | 7.500             |                           |         |
| 7,400.0   | 7,254.2             | 7,400.2             | 7,229.0             | 26.8            | 30.0        | 120.73                | -60.0                             | 1,508.8           | 395.7                | 345.5                 | 50.24                  | 7.877             |                           |         |
| 7,500.0   | 7,330.1             | 7,634.0             | 7,445.7             | 27.3            | 31.0        | 129.39                | 6.2                               | 1,559.7           | 429.5                | 380.5                 | 49.02                  | 8.762             |                           |         |
| 7,600.0   | 7,394.0             | 7,918.3             | 7,648.0             | 27.9            | 32.1        | 132.91                | 196.2                             | 1,606.5           | 440.4                | 401.2                 | 39.18                  | 11.238            |                           |         |
| 7,700.0   | 7,444.1             | 8,193.3             | 7,737.1             | 28.6            | 33.4        | 131.06                | 452.8                             | 1,626.2           | 423.6                | 396.5                 | 27.02                  | 15.676            |                           |         |
| 7,800.0   | 7,478.8             | 8,323.3             | 7,740.0             | 29.4            | 34.1        | 129.81                | 582.7                             | 1,626.2           | 394.8                | 367.8                 | 27.04                  | 14.601            |                           |         |
| 7,900.0   | 7,497.2             | 8,421.4             | 7,740.0             | 30.1            | 34.7        | 129.60                | 680.7                             | 1,625.7           | 379.1                | 349.7                 | 29.44                  | 12.876            |                           |         |
| 8,000.0   | 7,500.0             | 8,521.3             | 7,740.0             | 31.0            | 35.5        | 129.70                | 780.6                             | 1,625.2           | 375.8                | 344.2                 | 31.57                  | 11.902            |                           |         |
| 8,100.0   | 7,500.0             | 8,621.3             | 7,740.0             | 31.9            | 36.2        | 129.83                | 880.6                             | 1,624.7           | 374.7                | 341.0                 | 33.70                  | 11.119            |                           |         |
| 8,200.0   | 7,500.0             | 8,721.3             | 7,740.0             | 32.9            | 37.1        | 129.97                | 980.6                             | 1,624.2           | 373.6                | 337.7                 | 35.89                  | 10.411            |                           |         |
| 8,300.0   | 7,500.0             | 8,821.2             | 7,740.0             | 33.9            | 38.0        | 130.11                | 1,080.6                           | 1,623.6           | 372.5                | 334.4                 | 38.13                  | 9.772             |                           |         |
| 8,400.0   | 7,500.0             | 8,921.2             | 7,740.0             | 35.0            | 38.9        | 130.25                | 1,180.6                           | 1,623.1           | 371.5                | 331.1                 | 40.40                  | 9.194             |                           |         |
| 8,500.0   | 7,500.0             | 9,021.2             | 7,740.0             | 36.2            | 40.0        | 130.39                | 1,280.6                           | 1,622.6           | 370.4                | 327.7                 | 42.71                  | 8.672             |                           |         |
| 8,600.0   | 7,500.0             | 9,121.2             | 7,740.0             | 37.4            | 41.0        | 130.53                | 1,380.6                           | 1,622.1           | 369.4                | 324.3                 | 45.05                  | 8.199             |                           |         |
| 8,700.0   | 7,500.0             | 9,221.2             | 7,740.0             | 38.6            | 42.1        | 130.67                | 1,480.5                           | 1,621.5           | 368.3                | 320.9                 | 47.40                  | 7.770             |                           |         |
| 8,800.0   | 7,500.0             | 9,321.2             | 7,740.0             | 39.9            | 43.3        | 130.81                | 1,580.5                           | 1,621.0           | 367.2                | 317.5                 | 49.77                  | 7.379             |                           |         |
| 8,900.0   | 7,500.0             | 9,421.2             | 7,740.0             | 41.2            | 44.5        | 130.95                | 1,680.5                           | 1,620.5           | 366.2                | 314.0                 | 52.14                  | 7.022             |                           |         |
| 9,000.0   | 7,500.0             | 9,521.2             | 7,740.0             | 42.5            | 45.7        | 131.10                | 1,780.5                           | 1,620.0           | 365.1                | 310.6                 | 54.53                  | 6.696             |                           |         |
| 9,100.0   | 7,500.0             | 9,621.2             | 7,740.0             | 43.9            | 47.0        | 131.24                | 1,880.5                           | 1,619.4           | 364.1                | 307.2                 | 56.92                  | 6.397             |                           |         |
| 9,200.0   | 7,500.0             | 9,721.2             | 7,740.0             | 45.3            | 48.3        | 131.39                | 1,980.5                           | 1,618.9           | 363.0                | 303.7                 | 59.31                  | 6.121             |                           |         |
| 9,300.0   | 7,500.0             | 9,821.1             | 7,740.0             | 46.7            | 49.6        | 131.53                | 2,080.5                           | 1,618.4           | 362.0                | 300.3                 | 61.70                  | 5.867             |                           |         |
| 9,400.0   | 7,500.0             | 9,921.1             | 7,740.0             | 48.2            | 51.0        | 131.68                | 2,180.5                           | 1,617.9           | 360.9                | 296.9                 | 64.09                  | 5.632             |                           |         |
| 9,500.0   | 7,500.0             | 10,021.1            | 7,740.0             | 49.6            | 52.3        | 131.83                | 2,280.5                           | 1,617.4           | 359.9                | 293.4                 | 66.47                  | 5.414             |                           |         |
| 9,600.0   | 7,500.0             | 10,121.1            | 7,740.0             | 51.1            | 53.7        | 131.96                | 2,380.4                           | 1,616.8           | 359.0                | 290.1                 | 68.87                  | 5.212             |                           |         |
| 9,637.7   | 7,500.0             | 10,158.8            | 7,740.0             | 51.7            | 54.3        | 131.97                | 2,418.2                           | 1,616.6           | 358.9                | 289.1                 | 69.81                  | 5.141             |                           |         |
| 9,700.0   | 7,500.0             | 10,221.1            | 7,740.0             | 52.6            | 55.2        | 131.94                | 2,480.4                           | 1,616.3           | 359.1                | 287.7                 | 71.42                  | 5.029             |                           |         |
| 9,800.0   | 7,500.0             | 10,321.1            | 7,740.0             | 54.1            | 56.6        | 131.74                | 2,580.4                           | 1,615.8           | 360.6                | 286.4                 | 74.16                  | 4.862             |                           |         |
| 9,900.0   | 7,500.0             | 10,421.0            | 7,740.0             | 55.6            | 58.0        | 131.37                | 2,680.3                           | 1,615.3           | 363.4                | 286.2                 | 77.12                  | 4.712             |                           |         |
| 10,000.0  | 7,500.0             | 10,520.9            | 7,740.0             | 57.1            | 59.5        | 130.83                | 2,780.2                           | 1,614.7           | 367.5                | 287.2                 | 80.29                  | 4.577             |                           |         |
| 10,100.0  | 7,500.0             | 10,620.6            | 7,740.0             | 58.6            | 61.0        | 130.15                | 2,879.9                           | 1,614.2           | 372.9                | 289.3                 | 83.68                  | 4.457             |                           |         |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #3 |                     |                     |                     |                 |             |                       |                                   |            |                      | 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  |  |         |
| 10,200.0  | 7,500.0             | 10,720.2            | 7,740.0             | 60.1            | 62.5        | 129.32                | 2,979.6                           | 1,613.7    | 379.8                | 292.5                 | 87.28                  | 4.352              |  |         |
| 10,300.0  | 7,500.0             | 10,819.7            | 7,740.0             | 61.6            | 64.0        | 128.40                | 3,079.0                           | 1,613.2    | 387.6                | 296.6                 | 91.00                  | 4.259              |  |         |
| 10,400.0  | 7,500.0             | 10,919.2            | 7,740.0             | 63.1            | 65.5        | 127.51                | 3,178.5                           | 1,612.7    | 395.4                | 300.7                 | 94.73                  | 4.174              |  |         |
| 10,500.0  | 7,500.0             | 11,018.7            | 7,740.0             | 64.6            | 67.1        | 126.65                | 3,278.0                           | 1,612.1    | 403.4                | 304.9                 | 98.47                  | 4.096              |  |         |
| 10,600.0  | 7,500.0             | 11,118.2            | 7,740.0             | 66.2            | 68.6        | 125.82                | 3,377.5                           | 1,611.6    | 411.4                | 309.2                 | 102.21                 | 4.025              |  |         |
| 10,700.0  | 7,500.0             | 11,217.7            | 7,740.0             | 67.7            | 70.1        | 125.03                | 3,477.1                           | 1,611.1    | 419.5                | 313.5                 | 105.96                 | 3.959              |  |         |
| 10,800.0  | 7,500.0             | 11,317.3            | 7,740.0             | 69.3            | 71.7        | 124.27                | 3,576.6                           | 1,610.6    | 427.7                | 318.0                 | 109.71                 | 3.898              |  |         |
| 10,900.0  | 7,500.0             | 11,416.8            | 7,740.0             | 70.9            | 73.3        | 123.54                | 3,676.1                           | 1,610.0    | 435.9                | 322.5                 | 113.46                 | 3.842              |  |         |
| 11,000.0  | 7,500.0             | 11,516.3            | 7,740.0             | 72.5            | 74.9        | 122.83                | 3,775.6                           | 1,609.5    | 444.3                | 327.0                 | 117.21                 | 3.790              |  |         |
| 11,100.0  | 7,500.0             | 11,615.8            | 7,740.0             | 74.1            | 76.4        | 122.15                | 3,875.1                           | 1,609.0    | 452.6                | 331.7                 | 120.96                 | 3.742              |  |         |
| 11,200.0  | 7,500.0             | 11,715.3            | 7,740.0             | 75.7            | 78.0        | 121.49                | 3,974.6                           | 1,608.5    | 461.1                | 336.4                 | 124.71                 | 3.697              |  |         |
| 11,300.0  | 7,500.0             | 11,814.8            | 7,740.0             | 77.3            | 79.6        | 120.86                | 4,074.1                           | 1,608.0    | 469.6                | 341.1                 | 128.46                 | 3.656              |  |         |
| 11,400.0  | 7,500.0             | 11,914.3            | 7,740.0             | 78.9            | 81.2        | 120.25                | 4,173.6                           | 1,607.4    | 478.2                | 346.0                 | 132.21                 | 3.617              |  |         |
| 11,500.0  | 7,500.0             | 12,013.8            | 7,740.0             | 80.5            | 82.8        | 119.66                | 4,273.1                           | 1,606.9    | 486.8                | 350.8                 | 135.95                 | 3.581              |  |         |
| 11,600.0  | 7,500.0             | 12,113.3            | 7,740.0             | 82.1            | 84.4        | 119.09                | 4,372.6                           | 1,606.4    | 495.4                | 355.8                 | 139.69                 | 3.547              |  |         |
| 11,700.0  | 7,500.0             | 12,212.8            | 7,740.0             | 83.8            | 86.1        | 118.55                | 4,472.1                           | 1,605.9    | 504.2                | 360.7                 | 143.43                 | 3.515              |  |         |
| 11,800.0  | 7,500.0             | 12,312.3            | 7,740.0             | 85.4            | 87.7        | 118.02                | 4,571.6                           | 1,605.4    | 512.9                | 365.7                 | 147.17                 | 3.485              |  |         |
| 11,900.0  | 7,500.0             | 12,411.9            | 7,740.0             | 87.1            | 89.3        | 117.51                | 4,671.2                           | 1,604.8    | 521.1                | 370.2                 | 150.85                 | 3.454              |  |         |
| 12,000.0  | 7,500.0             | 12,511.6            | 7,740.0             | 88.7            | 91.0        | 117.10                | 4,770.9                           | 1,604.3    | 527.7                | 373.3                 | 154.42                 | 3.417              |  |         |
| 12,100.0  | 7,500.0             | 12,611.4            | 7,740.0             | 90.4            | 92.6        | 116.80                | 4,870.7                           | 1,603.8    | 532.8                | 374.9                 | 157.89                 | 3.374              |  |         |
| 12,200.0  | 7,500.0             | 12,711.4            | 7,740.0             | 92.1            | 94.3        | 116.59                | 4,970.6                           | 1,603.3    | 536.3                | 375.1                 | 161.25                 | 3.326              |  |         |
| 12,300.0  | 7,500.0             | 12,811.3            | 7,740.0             | 93.8            | 95.9        | 116.48                | 5,070.6                           | 1,602.7    | 538.3                | 373.8                 | 164.51                 | 3.272              |  |         |
| 12,400.0  | 7,500.0             | 12,911.3            | 7,740.0             | 95.4            | 97.6        | 116.45                | 5,170.6                           | 1,602.2    | 538.8                | 371.1                 | 167.65                 | 3.214              |  |         |
| 12,500.0  | 7,500.0             | 13,011.3            | 7,740.0             | 97.2            | 99.2        | 116.52                | 5,270.6                           | 1,601.7    | 537.6                | 366.9                 | 170.68                 | 3.150              |  |         |
| 12,600.0  | 7,500.0             | 13,111.3            | 7,740.0             | 98.9            | 100.9       | 116.67                | 5,370.6                           | 1,601.2    | 534.9                | 361.4                 | 173.59                 | 3.082              |  |         |
| 12,700.0  | 7,500.0             | 13,211.2            | 7,740.0             | 100.6           | 102.6       | 116.92                | 5,470.4                           | 1,600.7    | 530.7                | 354.3                 | 176.36                 | 3.009              |  |         |
| 12,800.0  | 7,500.0             | 13,310.9            | 7,740.0             | 102.3           | 104.2       | 117.27                | 5,570.2                           | 1,600.1    | 524.9                | 345.9                 | 178.98                 | 2.933              |  |         |
| 12,900.0  | 7,500.0             | 13,410.7            | 7,740.0             | 104.0           | 105.9       | 117.66                | 5,669.9                           | 1,599.6    | 518.2                | 336.7                 | 181.47                 | 2.856              |  |         |
| 13,000.0  | 7,500.0             | 13,510.4            | 7,740.0             | 105.8           | 107.6       | 118.05                | 5,769.6                           | 1,599.1    | 511.5                | 327.6                 | 183.92                 | 2.781              |  |         |
| 13,100.0  | 7,500.0             | 13,610.1            | 7,740.0             | 107.5           | 109.2       | 118.46                | 5,869.4                           | 1,598.6    | 504.8                | 318.5                 | 186.33                 | 2.709              |  |         |
| 13,200.0  | 7,500.0             | 13,709.8            | 7,740.0             | 109.2           | 110.9       | 118.87                | 5,969.1                           | 1,598.0    | 498.2                | 309.5                 | 188.68                 | 2.640              |  |         |
| 13,300.0  | 7,500.0             | 13,809.5            | 7,740.0             | 111.0           | 112.6       | 119.30                | 6,068.8                           | 1,597.5    | 491.5                | 300.6                 | 190.98                 | 2.574              |  |         |
| 13,400.0  | 7,500.0             | 13,909.2            | 7,740.0             | 112.7           | 114.3       | 119.73                | 6,168.5                           | 1,597.0    | 484.9                | 291.7                 | 193.23                 | 2.510              |  |         |
| 13,500.0  | 7,500.0             | 14,008.9            | 7,740.0             | 114.5           | 115.9       | 120.18                | 6,268.2                           | 1,596.5    | 478.4                | 283.0                 | 195.42                 | 2.448              |  |         |
| 13,600.0  | 7,500.0             | 14,108.6            | 7,740.0             | 116.2           | 117.6       | 120.65                | 6,367.9                           | 1,596.0    | 471.8                | 274.3                 | 197.54                 | 2.389              |  |         |
| 13,700.0  | 7,500.0             | 14,208.4            | 7,740.0             | 117.9           | 119.3       | 121.12                | 6,467.6                           | 1,595.4    | 465.3                | 265.7                 | 199.60                 | 2.331              |  |         |
| 13,800.0  | 7,500.0             | 14,308.1            | 7,740.0             | 119.7           | 121.0       | 121.61                | 6,567.3                           | 1,594.9    | 458.9                | 257.3                 | 201.60                 | 2.276              |  |         |
| 13,900.0  | 7,500.0             | 14,407.8            | 7,740.0             | 121.4           | 122.7       | 122.11                | 6,667.0                           | 1,594.4    | 452.4                | 248.9                 | 203.51                 | 2.223              |  |         |
| 14,000.0  | 7,500.0             | 14,507.5            | 7,740.0             | 123.1           | 124.4       | 122.63                | 6,766.8                           | 1,593.9    | 446.0                | 240.7                 | 205.35                 | 2.172              |  |         |
| 14,100.0  | 7,500.0             | 14,607.2            | 7,740.0             | 124.9           | 126.1       | 123.16                | 6,866.5                           | 1,593.3    | 439.7                | 232.5                 | 207.11                 | 2.123              |  |         |
| 14,200.0  | 7,500.0             | 14,706.9            | 7,740.0             | 126.6           | 127.8       | 123.71                | 6,966.2                           | 1,592.8    | 433.3                | 224.5                 | 208.79                 | 2.075              |  |         |
| 14,300.0  | 7,500.0             | 14,806.6            | 7,740.0             | 128.4           | 129.5       | 124.27                | 7,065.9                           | 1,592.3    | 427.0                | 216.7                 | 210.37                 | 2.030              |  |         |
| 14,341.7  | 7,500.0             | 14,848.2            | 7,740.0             | 129.1           | 130.2       | 124.51                | 7,107.5                           | 1,592.1    | 424.4                | 213.4                 | 211.00                 | 2.012 SF           |  |         |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #4 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        | 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         |         |
| 0.0   | 0.0                 | 0.0                 | 0.0                 | 0.0             | 0.0         | 90.00                 | 0.0                               | 14.8       | 14.8                 |                       |                        |                           |         |
| 100.0   | 100.0               | 100.0               | 100.0               | 0.2             | 0.2         | 90.00                 | 0.0                               | 14.8       | 14.8                 | 14.5                  | 0.30                   | 48.845                    | CC, ES  |
| 200.0   | 200.0               | 200.0               | 200.0               | 0.3             | 0.3         | 90.00                 | 0.0                               | 14.8       | 14.8                 | 14.2                  | 0.65                   | 22.725                    |         |
| 300.0   | 300.0               | 299.7               | 299.7               | 0.5             | 0.5         | 90.10                 | 0.0                               | 15.7       | 15.7                 | 14.7                  | 1.00                   | 15.684                    |         |
| 400.0   | 400.0               | 399.4               | 399.4               | 0.7             | 0.7         | 8.43                  | -0.1                              | 18.3       | 17.4                 | 16.1                  | 1.35                   | 12.930                    |         |
| 500.0   | 500.0               | 499.1               | 499.0               | 0.9             | 0.9         | 9.81                  | -0.2                              | 22.6       | 19.2                 | 17.5                  | 1.70                   | 11.319                    |         |
| 600.0   | 599.9               | 598.7               | 598.4               | 1.0             | 1.1         | 11.73                 | -0.4                              | 28.7       | 21.0                 | 19.0                  | 2.05                   | 10.274                    |         |
| 700.0   | 699.7               | 698.3               | 697.7               | 1.2             | 1.3         | 14.05                 | -0.7                              | 36.5       | 22.9                 | 20.5                  | 2.40                   | 9.552                     |         |
| 800.0   | 799.4               | 797.9               | 796.8               | 1.4             | 1.5         | 16.67                 | -1.0                              | 46.0       | 24.8                 | 22.1                  | 2.75                   | 9.033                     |         |
| 900.0   | 898.9               | 897.4               | 895.7               | 1.7             | 1.8         | 19.50                 | -1.3                              | 57.2       | 26.9                 | 23.8                  | 3.11                   | 8.648                     |         |
| 1,000.0   | 998.3               | 996.9               | 994.3               | 1.9             | 2.0         | 22.46                 | -1.7                              | 70.1       | 29.1                 | 25.6                  | 3.48                   | 8.350                     |         |
| 1,100.0   | 1,097.4             | 1,096.4             | 1,092.7             | 2.2             | 2.3         | 25.48                 | -2.2                              | 84.8       | 31.4                 | 27.5                  | 3.87                   | 8.107                     |         |
| 1,200.0   | 1,196.3             | 1,195.8             | 1,190.8             | 2.5             | 2.7         | 28.53                 | -2.7                              | 101.1      | 33.9                 | 29.6                  | 4.30                   | 7.897                     |         |
| 1,300.0   | 1,294.9             | 1,295.1             | 1,288.5             | 2.8             | 3.0         | 31.54                 | -3.2                              | 119.1      | 36.7                 | 31.9                  | 4.76                   | 7.701                     |         |
| 1,400.0   | 1,393.3             | 1,394.5             | 1,385.8             | 3.2             | 3.4         | 34.48                 | -3.8                              | 138.8      | 39.6                 | 34.3                  | 5.27                   | 7.509                     |         |
| 1,500.0   | 1,491.3             | 1,493.8             | 1,482.8             | 3.5             | 3.8         | 37.14                 | -4.5                              | 160.2      | 43.0                 | 37.1                  | 5.83                   | 7.367                     |         |
| 1,600.0   | 1,589.3             | 1,592.9             | 1,579.3             | 3.9             | 4.2         | 38.52                 | -5.2                              | 183.2      | 47.8                 | 41.4                  | 6.39                   | 7.477                     |         |
| 1,700.0   | 1,687.3             | 1,692.0             | 1,675.2             | 4.3             | 4.7         | 38.72                 | -6.0                              | 207.9      | 54.1                 | 47.2                  | 6.93                   | 7.817                     |         |
| 1,800.0   | 1,785.3             | 1,790.8             | 1,770.4             | 4.6             | 5.2         | 38.10                 | -6.8                              | 234.2      | 62.0                 | 54.6                  | 7.42                   | 8.350                     |         |
| 1,900.0   | 1,883.3             | 1,889.3             | 1,865.0             | 5.0             | 5.7         | 36.97                 | -7.7                              | 262.0      | 71.4                 | 63.5                  | 7.89                   | 9.050                     |         |
| 2,000.0   | 1,981.3             | 1,987.6             | 1,958.7             | 5.4             | 6.2         | 35.56                 | -8.6                              | 291.3      | 82.3                 | 74.0                  | 8.31                   | 9.897                     |         |
| 2,100.0   | 2,079.3             | 2,085.8             | 2,052.0             | 5.8             | 6.8         | 34.07                 | -9.5                              | 322.2      | 94.7                 | 86.0                  | 8.72                   | 10.864                    |         |
| 2,200.0   | 2,177.3             | 2,185.0             | 2,146.0             | 6.2             | 7.4         | 32.82                 | -10.5                             | 353.7      | 107.5                | 98.4                  | 9.13                   | 11.776                    |         |
| 2,300.0   | 2,275.4             | 2,284.1             | 2,240.0             | 6.6             | 8.0         | 31.84                 | -11.5                             | 385.2      | 120.4                | 110.9                 | 9.55                   | 12.604                    |         |
| 2,400.0   | 2,373.4             | 2,383.3             | 2,334.0             | 6.9             | 8.6         | 31.05                 | -12.5                             | 416.8      | 133.3                | 123.4                 | 9.98                   | 13.358                    |         |
| 2,500.0   | 2,471.4             | 2,482.4             | 2,428.0             | 7.3             | 9.2         | 30.40                 | -13.5                             | 448.3      | 146.3                | 135.9                 | 10.41                  | 14.047                    |         |
| 2,600.0   | 2,569.4             | 2,581.6             | 2,521.9             | 7.7             | 9.8         | 29.85                 | -14.4                             | 479.9      | 159.2                | 148.4                 | 10.85                  | 14.679                    |         |
| 2,700.0   | 2,667.4             | 2,680.7             | 2,615.9             | 8.1             | 10.3        | 29.39                 | -15.4                             | 511.4      | 172.2                | 160.9                 | 11.28                  | 15.259                    |         |
| 2,800.0   | 2,765.4             | 2,779.9             | 2,709.9             | 8.5             | 10.9        | 28.99                 | -16.4                             | 542.9      | 185.2                | 173.4                 | 11.72                  | 15.795                    |         |
| 2,900.0   | 2,863.4             | 2,879.0             | 2,803.9             | 8.9             | 11.5        | 28.64                 | -17.4                             | 574.5      | 198.1                | 186.0                 | 12.16                  | 16.291                    |         |
| 3,000.0   | 2,961.4             | 2,978.2             | 2,897.9             | 9.3             | 12.1        | 28.34                 | -18.3                             | 606.0      | 211.1                | 198.5                 | 12.60                  | 16.751                    |         |
| 3,100.0   | 3,059.4             | 3,077.3             | 2,991.9             | 9.7             | 12.7        | 28.07                 | -19.3                             | 637.5      | 224.1                | 211.1                 | 13.05                  | 17.179                    |         |
| 3,200.0   | 3,157.4             | 3,176.4             | 3,085.9             | 10.1            | 13.3        | 27.83                 | -20.3                             | 669.1      | 237.1                | 223.6                 | 13.49                  | 17.577                    |         |
| 3,300.0   | 3,255.4             | 3,275.6             | 3,179.9             | 10.4            | 13.9        | 27.61                 | -21.3                             | 700.6      | 250.1                | 236.2                 | 13.93                  | 17.950                    |         |
| 3,400.0   | 3,353.4             | 3,374.7             | 3,273.9             | 10.8            | 14.5        | 27.42                 | -22.3                             | 732.2      | 263.1                | 248.7                 | 14.38                  | 18.299                    |         |
| 3,500.0   | 3,451.4             | 3,473.9             | 3,367.9             | 11.2            | 15.1        | 27.25                 | -23.2                             | 763.7      | 276.1                | 261.3                 | 14.82                  | 18.627                    |         |
| 3,600.0   | 3,549.4             | 3,573.0             | 3,461.9             | 11.6            | 15.7        | 27.09                 | -24.2                             | 795.2      | 289.1                | 273.9                 | 15.27                  | 18.935                    |         |
| 3,700.0   | 3,647.4             | 3,672.2             | 3,555.9             | 12.0            | 16.3        | 26.94                 | -25.2                             | 826.8      | 302.1                | 286.4                 | 15.72                  | 19.225                    |         |
| 3,800.0   | 3,745.5             | 3,771.3             | 3,649.9             | 12.4            | 16.9        | 26.81                 | -26.2                             | 858.3      | 315.1                | 299.0                 | 16.16                  | 19.499                    |         |
| 3,900.0   | 3,843.5             | 3,870.5             | 3,743.9             | 12.8            | 17.5        | 26.68                 | -27.2                             | 889.8      | 328.2                | 311.5                 | 16.61                  | 19.758                    |         |
| 4,000.0   | 3,941.5             | 3,969.6             | 3,837.8             | 13.2            | 18.1        | 26.57                 | -28.1                             | 921.4      | 341.2                | 324.1                 | 17.06                  | 20.003                    |         |
| 4,100.0   | 4,039.5             | 4,068.8             | 3,931.8             | 13.6            | 18.7        | 26.47                 | -29.1                             | 952.9      | 354.2                | 336.7                 | 17.50                  | 20.235                    |         |
| 4,200.0   | 4,137.5             | 4,167.9             | 4,025.8             | 14.0            | 19.3        | 26.37                 | -30.1                             | 984.5      | 367.2                | 349.2                 | 17.95                  | 20.455                    |         |
| 4,300.0   | 4,235.5             | 4,267.1             | 4,119.8             | 14.4            | 19.9        | 26.28                 | -31.1                             | 1,016.0    | 380.2                | 361.8                 | 18.40                  | 20.665                    |         |
| 4,400.0   | 4,333.5             | 4,366.2             | 4,213.8             | 14.8            | 20.5        | 26.19                 | -32.0                             | 1,047.5    | 393.2                | 374.4                 | 18.85                  | 20.864                    |         |
| 4,500.0   | 4,431.5             | 4,465.4             | 4,307.8             | 15.2            | 21.1        | 26.11                 | -33.0                             | 1,079.1    | 406.2                | 387.0                 | 19.30                  | 21.054                    |         |
| 4,600.0   | 4,529.5             | 4,564.5             | 4,401.8             | 15.5            | 21.7        | 26.04                 | -34.0                             | 1,110.6    | 419.3                | 399.5                 | 19.74                  | 21.235                    |         |
| 4,700.0   | 4,627.5             | 4,663.7             | 4,495.8             | 15.9            | 22.3        | 25.97                 | -35.0                             | 1,142.1    | 432.3                | 412.1                 | 20.19                  | 21.408                    |         |
| 4,800.0   | 4,725.5             | 4,762.8             | 4,589.8             | 16.3            | 22.9        | 25.90                 | -36.0                             | 1,173.7    | 445.3                | 424.7                 | 20.64                  | 21.573                    |         |
| 4,900.0   | 4,823.5             | 4,862.0             | 4,683.8             | 16.7            | 23.5        | 25.84                 | -36.9                             | 1,205.2    | 458.3                | 437.2                 | 21.09                  | 21.731                    |         |
| 5,000.0   | 4,921.5             | 4,961.1             | 4,777.8             | 17.1            | 24.1        | 25.78                 | -37.9                             | 1,236.8    | 471.3                | 449.8                 | 21.54                  | 21.882                    |         |
| 5,100.0   | 5,019.5             | 5,060.2             | 4,871.8             | 17.5            | 24.7        | 25.72                 | -38.9                             | 1,268.3    | 484.4                | 462.4                 | 21.99                  | 22.028                    |         |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #4 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       | 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 |
| 5,200.0   | 5,117.5             | 5,159.4             | 4,965.8             | 17.9            | 25.3        | 25.67                 | -39.9                             | 1,299.8    | 497.4                | 475.0                 | 22.44                     | 22.167  |                   |
| 5,300.0   | 5,215.6             | 5,258.5             | 5,059.8             | 18.3            | 25.9        | 25.62                 | -40.9                             | 1,331.4    | 510.4                | 487.5                 | 22.89                     | 22.300  |                   |
| 5,400.0   | 5,313.6             | 5,357.7             | 5,153.7             | 18.7            | 26.5        | 25.57                 | -41.8                             | 1,362.9    | 523.4                | 500.1                 | 23.34                     | 22.429  |                   |
| 5,500.0   | 5,411.6             | 5,456.8             | 5,247.7             | 19.1            | 27.1        | 25.53                 | -42.8                             | 1,394.4    | 536.5                | 512.7                 | 23.79                     | 22.553  |                   |
| 5,600.0   | 5,509.6             | 5,556.0             | 5,341.7             | 19.5            | 27.7        | 25.49                 | -43.8                             | 1,426.0    | 549.5                | 525.2                 | 24.24                     | 22.671  |                   |
| 5,700.0   | 5,607.6             | 5,655.1             | 5,435.7             | 19.9            | 28.3        | 25.44                 | -44.8                             | 1,457.5    | 562.5                | 537.8                 | 24.69                     | 22.786  |                   |
| 5,800.0   | 5,705.6             | 5,754.3             | 5,529.7             | 20.3            | 28.9        | 25.40                 | -45.8                             | 1,489.1    | 575.5                | 550.4                 | 25.14                     | 22.896  |                   |
| 5,900.0   | 5,803.6             | 5,853.4             | 5,623.7             | 20.7            | 29.5        | 25.37                 | -46.7                             | 1,520.6    | 588.6                | 563.0                 | 25.59                     | 23.003  |                   |
| 6,000.0   | 5,901.6             | 5,952.6             | 5,717.7             | 21.1            | 30.1        | 25.33                 | -47.7                             | 1,552.1    | 601.6                | 575.5                 | 26.04                     | 23.105  |                   |
| 6,100.0   | 5,999.6             | 6,051.7             | 5,811.7             | 21.4            | 30.7        | 25.30                 | -48.7                             | 1,583.7    | 614.6                | 588.1                 | 26.49                     | 23.205  |                   |
| 6,200.0   | 6,097.6             | 6,150.9             | 5,905.7             | 21.8            | 31.3        | 25.26                 | -49.7                             | 1,615.2    | 627.6                | 600.7                 | 26.94                     | 23.300  |                   |
| 6,300.0   | 6,195.6             | 6,250.0             | 5,999.7             | 22.2            | 31.9        | 25.23                 | -50.6                             | 1,646.7    | 640.7                | 613.3                 | 27.39                     | 23.393  |                   |
| 6,400.0   | 6,293.6             | 6,349.2             | 6,093.7             | 22.6            | 32.5        | 25.20                 | -51.6                             | 1,678.3    | 653.7                | 625.8                 | 27.84                     | 23.483  |                   |
| 6,500.0   | 6,391.6             | 6,448.3             | 6,187.7             | 23.0            | 33.1        | 25.17                 | -52.6                             | 1,709.8    | 666.7                | 638.4                 | 28.29                     | 23.569  |                   |
| 6,600.0   | 6,489.6             | 6,547.5             | 6,281.7             | 23.4            | 33.7        | 25.14                 | -53.6                             | 1,741.4    | 679.7                | 651.0                 | 28.74                     | 23.653  |                   |
| 6,700.0   | 6,587.6             | 6,646.6             | 6,375.7             | 23.8            | 34.4        | 25.12                 | -54.6                             | 1,772.9    | 692.8                | 663.6                 | 29.19                     | 23.735  |                   |
| 6,800.0   | 6,685.7             | 6,745.8             | 6,469.6             | 24.2            | 35.0        | 25.09                 | -55.5                             | 1,804.4    | 705.8                | 676.2                 | 29.64                     | 23.814  |                   |
| 6,900.0   | 6,783.7             | 6,844.9             | 6,563.6             | 24.6            | 35.6        | 25.07                 | -56.5                             | 1,836.0    | 718.8                | 688.7                 | 30.09                     | 23.890  |                   |
| 7,000.0   | 6,881.7             | 6,944.0             | 6,657.6             | 25.0            | 36.2        | 25.04                 | -57.5                             | 1,867.5    | 731.8                | 701.3                 | 30.54                     | 23.964  |                   |
| 7,100.0   | 6,979.6             | 7,043.2             | 6,751.6             | 25.4            | 36.8        | 25.01                 | -58.5                             | 1,899.0    | 745.0                | 714.0                 | 31.03                     | 24.014  |                   |
| 7,200.0   | 7,076.3             | 7,140.9             | 6,844.2             | 25.8            | 37.4        | 25.00                 | -59.4                             | 1,930.1    | 758.1                | 727.9                 | 31.52                     | 24.063  |                   |
| 7,300.0   | 7,168.8             | 7,234.2             | 6,932.7             | 26.3            | 37.9        | 25.00                 | -60.4                             | 1,959.8    | 771.2                | 740.7                 | 32.01                     | 24.112  |                   |
| 7,400.0   | 7,254.2             | 7,324.6             | 7,020.2             | 26.8            | 38.3        | 25.00                 | -61.4                             | 1,989.0    | 784.3                | 753.8                 | 32.50                     | 24.161  |                   |
| 7,500.0   | 7,330.1             | 7,404.1             | 7,108.1             | 27.3            | 38.7        | 25.00                 | -62.4                             | 2,017.5    | 797.4                | 766.9                 | 32.99                     | 24.210  |                   |
| 7,600.0   | 7,394.0             | 7,482.8             | 7,196.8             | 27.9            | 39.1        | 25.00                 | -63.4                             | 2,045.0    | 810.5                | 779.9                 | 33.48                     | 24.259  |                   |
| 7,700.0   | 7,444.1             | 7,538.5             | 7,285.0             | 28.6            | 39.5        | 25.00                 | -64.4                             | 2,071.5    | 823.6                | 793.0                 | 33.97                     | 24.308  |                   |
| 7,800.0   | 7,478.8             | 7,573.0             | 7,373.8             | 29.4            | 40.0        | 25.00                 | -65.4                             | 2,097.0    | 836.7                | 806.1                 | 34.46                     | 24.357  |                   |
| 7,900.0   | 7,497.2             | 7,592.2             | 7,462.8             | 30.1            | 40.5        | 25.00                 | -66.4                             | 2,122.5    | 849.8                | 819.2                 | 34.95                     | 24.406  |                   |
| 8,000.0   | 7,500.0             | 7,600.0             | 7,551.8             | 31.0            | 41.0        | 25.00                 | -67.4                             | 2,148.0    | 862.9                | 832.3                 | 35.44                     | 24.455  |                   |
| 8,100.0   | 7,500.0             | 7,600.0             | 7,640.8             | 31.9            | 41.5        | 25.00                 | -68.4                             | 2,173.5    | 876.0                | 845.4                 | 35.93                     | 24.504  |                   |
| 8,200.0   | 7,500.0             | 7,600.0             | 7,730.8             | 32.9            | 42.0        | 25.00                 | -69.4                             | 2,199.0    | 889.1                | 858.5                 | 36.42                     | 24.553  |                   |
| 8,300.0   | 7,500.0             | 7,600.0             | 7,820.8             | 33.9            | 42.5        | 25.00                 | -70.4                             | 2,224.5    | 902.2                | 871.6                 | 36.91                     | 24.602  |                   |
| 8,400.0   | 7,500.0             | 7,600.0             | 7,910.8             | 35.0            | 43.0        | 25.00                 | -71.4                             | 2,250.0    | 915.3                | 884.7                 | 37.40                     | 24.651  |                   |
| 8,500.0   | 7,500.0             | 7,600.0             | 8,000.8             | 36.2            | 43.5        | 25.00                 | -72.4                             | 2,275.5    | 928.4                | 897.8                 | 37.89                     | 24.700  |                   |
| 8,600.0   | 7,500.0             | 7,600.0             | 8,090.8             | 37.4            | 44.1        | 25.00                 | -73.4                             | 2,301.0    | 941.5                | 910.9                 | 38.38                     | 24.749  |                   |
| 8,700.0   | 7,500.0             | 7,600.0             | 8,180.8             | 38.6            | 44.8        | 25.00                 | -74.4                             | 2,326.5    | 954.6                | 924.0                 | 38.87                     | 24.798  |                   |
| 8,800.0   | 7,500.0             | 7,600.0             | 8,270.8             | 39.9            | 45.5        | 25.00                 | -75.4                             | 2,352.0    | 967.7                | 937.1                 | 39.36                     | 24.847  |                   |
| 8,900.0   | 7,500.0             | 7,600.0             | 8,360.8             | 41.2            | 46.2        | 25.00                 | -76.4                             | 2,377.5    | 980.8                | 950.2                 | 39.85                     | 24.896  |                   |
| 9,000.0   | 7,500.0             | 7,600.0             | 8,450.8             | 42.5            | 47.0        | 25.00                 | -77.4                             | 2,403.0    | 993.9                | 963.3                 | 40.34                     | 24.945  |                   |
| 9,100.0   | 7,500.0             | 7,600.0             | 8,540.8             | 43.9            | 47.8        | 25.00                 | -78.4                             | 2,428.5    | 1,007.0              | 976.4                 | 40.83                     | 24.994  |                   |
| 9,200.0   | 7,500.0             | 7,600.0             | 8,630.8             | 45.3            | 48.6        | 25.00                 | -79.4                             | 2,454.0    | 1,020.1              | 989.5                 | 41.32                     | 25.043  |                   |
| 9,300.0   | 7,500.0             | 7,600.0             | 8,720.8             | 46.7            | 49.4        | 25.00                 | -80.4                             | 2,479.5    | 1,033.2              | 1,002.6               | 41.81                     | 25.092  |                   |
| 9,400.0   | 7,500.0             | 7,600.0             | 8,810.8             | 48.2            | 50.2        | 25.00                 | -81.4                             | 2,505.0    | 1,046.3              | 1,015.7               | 42.30                     | 25.141  |                   |
| 9,500.0   | 7,500.0             | 7,600.0             | 8,900.8             | 49.6            | 51.0        | 25.00                 | -82.4                             | 2,530.5    | 1,059.4              | 1,028.8               | 42.79                     | 25.190  |                   |
| 9,600.0   | 7,500.0             | 7,600.0             | 9,000.8             | 51.1            | 51.8        | 25.00                 | -83.4                             | 2,556.0    | 1,072.5              | 1,041.9               | 43.28                     | 25.239  |                   |
| 9,700.0   | 7,500.0             | 7,600.0             | 9,100.8             | 52.6            | 52.6        | 25.00                 | -84.4                             | 2,581.5    | 1,085.6              | 1,055.0               | 43.77                     | 25.288  |                   |
| 9,800.0   | 7,500.0             | 7,600.0             | 9,200.8             | 54.1            | 53.4        | 25.00                 | -85.4                             | 2,607.0    | 1,098.7              | 1,068.1               | 44.26                     | 25.337  |                   |
| 9,900.0   | 7,500.0             | 7,600.0             | 9,300.8             | 55.6            | 54.2        | 25.00                 | -86.4                             | 2,632.5    | 1,111.8              | 1,081.2               | 44.75                     | 25.386  |                   |
| 10,000.0  | 7,500.0             | 7,600.0             | 9,400.8             | 57.1            | 55.0        | 25.00                 | -87.4                             | 2,658.0    | 1,124.9              | 1,094.3               | 45.24                     | 25.435  |                   |
| 10,100.0  | 7,500.0             | 7,600.0             | 9,500.8             | 58.6            | 55.8        | 25.00                 | -88.4                             | 2,683.5    | 1,138.0              | 1,107.4               | 45.73                     | 25.484  |                   |
| 10,157.7  | 7,500.0             | 7,600.0             | 9,600.8             | 59.4            | 56.6        | 25.00                 | -89.4                             | 2,709.0    | 1,151.1              | 1,120.5               | 46.22                     | 25.533  |                   |
| 10,200.0  | 7,500.0             | 7,600.0             | 9,700.8             | 60.1            | 57.4        | 25.00                 | -90.4                             | 2,734.5    | 1,164.2              | 1,133.6               | 46.71                     | 25.582  |                   |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #4 |                     |                     |                     |                 |             |                       |                                   |            |                      | 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 |         |
| 10,300.0  | 7,500.0             | 10,767.5            | 7,500.0             | 61.6            | 67.0        | 90.00                 | 3,123.9                           | 1,843.2    | 536.4                | 426.0                 | 110.35                 | 4.861             |         |
| 10,400.0  | 7,500.0             | 10,858.9            | 7,500.0             | 63.1            | 68.3        | 90.00                 | 3,215.0                           | 1,836.0    | 539.0                | 424.4                 | 114.60                 | 4.703             |         |
| 10,500.0  | 7,500.0             | 10,950.2            | 7,500.0             | 64.6            | 69.7        | 90.00                 | 3,306.1                           | 1,830.3    | 543.2                | 424.3                 | 118.83                 | 4.571             |         |
| 10,600.0  | 7,500.0             | 11,041.3            | 7,500.0             | 66.2            | 71.0        | 90.00                 | 3,397.1                           | 1,826.0    | 548.9                | 425.9                 | 123.03                 | 4.462             |         |
| 10,700.0  | 7,500.0             | 11,132.3            | 7,500.0             | 67.7            | 72.4        | 90.00                 | 3,488.1                           | 1,823.2    | 556.3                | 429.1                 | 127.20                 | 4.374             |         |
| 10,800.0  | 7,500.0             | 11,223.0            | 7,500.0             | 69.3            | 73.7        | 90.00                 | 3,578.8                           | 1,821.8    | 565.3                | 433.9                 | 131.34                 | 4.304             |         |
| 10,900.0  | 7,500.0             | 11,318.4            | 7,500.0             | 70.9            | 75.2        | 90.00                 | 3,674.2                           | 1,821.7    | 575.6                | 440.5                 | 135.07                 | 4.261             |         |
| 11,000.0  | 7,500.0             | 11,417.9            | 7,500.0             | 72.5            | 76.7        | 90.00                 | 3,773.6                           | 1,821.7    | 586.0                | 447.5                 | 138.50                 | 4.231             |         |
| 11,100.0  | 7,500.0             | 11,517.3            | 7,500.0             | 74.1            | 78.3        | 90.00                 | 3,873.1                           | 1,821.7    | 596.5                | 454.5                 | 141.94                 | 4.202             |         |
| 11,200.0  | 7,500.0             | 11,616.8            | 7,500.0             | 75.7            | 79.8        | 90.00                 | 3,972.5                           | 1,821.7    | 606.9                | 461.5                 | 145.37                 | 4.175             |         |
| 11,300.0  | 7,500.0             | 11,716.2            | 7,500.0             | 77.3            | 81.4        | 90.00                 | 4,072.0                           | 1,821.7    | 617.4                | 468.6                 | 148.81                 | 4.149             |         |
| 11,400.0  | 7,500.0             | 11,815.7            | 7,500.0             | 78.9            | 82.9        | 90.00                 | 4,171.4                           | 1,821.7    | 627.8                | 475.6                 | 152.25                 | 4.123             |         |
| 11,500.0  | 7,500.0             | 11,915.1            | 7,500.0             | 80.5            | 84.5        | 90.00                 | 4,270.9                           | 1,821.7    | 638.3                | 482.6                 | 155.70                 | 4.099             |         |
| 11,600.0  | 7,500.0             | 12,014.6            | 7,500.0             | 82.1            | 86.1        | 90.00                 | 4,370.3                           | 1,821.7    | 648.7                | 489.6                 | 159.15                 | 4.076             |         |
| 11,700.0  | 7,500.0             | 12,114.0            | 7,500.0             | 83.8            | 87.7        | 90.00                 | 4,469.8                           | 1,821.7    | 659.2                | 496.6                 | 162.59                 | 4.054             |         |
| 11,800.0  | 7,500.0             | 12,213.5            | 7,500.0             | 85.4            | 89.3        | 90.00                 | 4,569.2                           | 1,821.7    | 669.6                | 503.6                 | 166.05                 | 4.033             |         |
| 11,900.0  | 7,500.0             | 12,313.0            | 7,500.0             | 87.1            | 90.9        | 90.00                 | 4,668.8                           | 1,821.7    | 679.3                | 509.8                 | 169.50                 | 4.008             |         |
| 12,000.0  | 7,500.0             | 12,412.7            | 7,500.0             | 88.7            | 92.5        | 90.00                 | 4,768.4                           | 1,821.7    | 687.3                | 514.4                 | 172.96                 | 3.974             |         |
| 12,100.0  | 7,500.0             | 12,512.5            | 7,500.0             | 90.4            | 94.1        | 90.00                 | 4,868.2                           | 1,821.7    | 693.6                | 517.1                 | 176.42                 | 3.931             |         |
| 12,200.0  | 7,500.0             | 12,612.4            | 7,500.0             | 92.1            | 95.7        | 90.00                 | 4,968.1                           | 1,821.7    | 698.1                | 518.2                 | 179.89                 | 3.880             |         |
| 12,300.0  | 7,500.0             | 12,712.3            | 7,500.0             | 93.8            | 97.3        | 90.00                 | 5,068.1                           | 1,821.7    | 700.8                | 517.5                 | 183.36                 | 3.822             |         |
| 12,400.0  | 7,500.0             | 12,812.3            | 7,500.0             | 95.4            | 99.0        | 90.00                 | 5,168.1                           | 1,821.7    | 701.8                | 515.0                 | 186.83                 | 3.757             |         |
| 12,500.0  | 7,500.0             | 12,912.3            | 7,500.0             | 97.2            | 100.6       | 90.00                 | 5,268.1                           | 1,821.7    | 701.1                | 510.8                 | 190.30                 | 3.684             |         |
| 12,600.0  | 7,500.0             | 13,012.3            | 7,500.0             | 98.9            | 102.2       | 90.00                 | 5,368.1                           | 1,821.7    | 698.6                | 504.8                 | 193.77                 | 3.605             |         |
| 12,700.0  | 7,500.0             | 13,112.2            | 7,500.0             | 100.6           | 103.9       | 90.00                 | 5,468.0                           | 1,821.7    | 694.4                | 497.1                 | 197.24                 | 3.520             |         |
| 12,800.0  | 7,500.0             | 13,212.0            | 7,500.0             | 102.3           | 105.5       | 90.00                 | 5,567.8                           | 1,821.7    | 688.4                | 487.7                 | 200.72                 | 3.430             |         |
| 12,900.0  | 7,500.0             | 13,311.8            | 7,500.0             | 104.0           | 107.2       | 90.00                 | 5,667.5                           | 1,821.7    | 681.4                | 477.2                 | 204.19                 | 3.337             |         |
| 13,000.0  | 7,500.0             | 13,411.5            | 7,500.0             | 105.8           | 108.8       | 90.00                 | 5,767.3                           | 1,821.7    | 674.3                | 466.6                 | 207.66                 | 3.247             |         |
| 13,100.0  | 7,500.0             | 13,511.3            | 7,500.0             | 107.5           | 110.5       | 90.00                 | 5,867.0                           | 1,821.7    | 667.3                | 456.1                 | 211.14                 | 3.160             |         |
| 13,200.0  | 7,500.0             | 13,611.0            | 7,500.0             | 109.2           | 112.1       | 90.00                 | 5,966.8                           | 1,821.7    | 660.2                | 445.6                 | 214.61                 | 3.076             |         |
| 13,300.0  | 7,500.0             | 13,710.8            | 7,500.0             | 111.0           | 113.8       | 90.00                 | 6,066.5                           | 1,821.7    | 653.1                | 435.1                 | 218.09                 | 2.995             |         |
| 13,400.0  | 7,500.0             | 13,800.0            | 7,500.0             | 112.7           | 115.3       | 90.00                 | 6,155.7                           | 1,821.8    | 646.3                | 424.1                 | 222.21                 | 2.909             |         |
| 13,500.0  | 7,500.0             | 13,894.3            | 7,500.0             | 114.5           | 116.9       | 90.00                 | 6,250.1                           | 1,823.3    | 640.9                | 414.8                 | 226.01                 | 2.836             |         |
| 13,600.0  | 7,500.0             | 13,983.4            | 7,500.0             | 116.2           | 118.4       | 90.00                 | 6,339.1                           | 1,826.3    | 637.1                | 407.1                 | 230.08                 | 2.769             |         |
| 13,700.0  | 7,500.0             | 14,072.5            | 7,500.0             | 117.9           | 119.9       | 90.00                 | 6,428.1                           | 1,830.8    | 635.1                | 401.0                 | 234.09                 | 2.713             |         |
| 13,767.9  | 7,500.0             | 14,133.1            | 7,500.0             | 119.1           | 120.9       | 90.00                 | 6,488.5                           | 1,834.7    | 634.7                | 398.0                 | 236.78                 | 2.681             |         |
| 13,800.0  | 7,500.0             | 14,161.7            | 7,500.0             | 119.7           | 121.4       | 90.00                 | 6,517.0                           | 1,836.8    | 634.8                | 396.8                 | 238.04                 | 2.667             |         |
| 13,900.0  | 7,500.0             | 14,250.8            | 7,500.0             | 121.4           | 123.0       | 90.00                 | 6,605.9                           | 1,844.3    | 636.2                | 394.3                 | 241.93                 | 2.630             |         |
| 14,000.0  | 7,500.0             | 14,339.9            | 7,500.0             | 123.1           | 124.5       | 90.00                 | 6,694.5                           | 1,853.4    | 639.3                | 393.6                 | 245.75                 | 2.602             |         |
| 14,100.0  | 7,500.0             | 14,428.9            | 7,500.0             | 124.9           | 126.0       | 90.00                 | 6,782.8                           | 1,863.9    | 644.1                | 394.6                 | 249.49                 | 2.582             |         |
| 14,200.0  | 7,500.0             | 14,517.7            | 7,500.0             | 126.6           | 127.6       | 90.00                 | 6,870.8                           | 1,875.9    | 650.6                | 397.5                 | 253.17                 | 2.570             |         |
| 14,300.0  | 7,500.0             | 14,606.2            | 7,500.0             | 128.4           | 129.1       | 90.00                 | 6,958.3                           | 1,889.4    | 658.8                | 402.1                 | 256.76                 | 2.566 SF          |         |
| 14,341.7  | 7,500.0             | 14,643.1            | 7,500.0             | 129.1           | 129.8       | 90.00                 | 6,994.7                           | 1,895.4    | 662.8                | 404.5                 | 258.24                 | 2.566             |         |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2A-7H-E168 - Hz - Plan #3 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                  |            | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------|------------|--------------------|--------|
| Survey Program: 0-Geolink MWD  |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                  |            | Offset Well Error: | 0.0 ft |
| Reference  |                     | Offset              |                     | Semi Major Axis |             |                       | Distance                          |            |                      |                       | Total            | Separation | 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 | Factor     |                    |        |
| 0.0  | 0.0                 | 0.0                 | 0.0                 | 0.0             | 0.0         | -89.54                | 0.7                               | -90.1      | 90.1                 |                       |                  |            |                    |        |
| 100.0  | 100.0               | 100.0               | 100.0               | 0.2             | 0.2         | -89.54                | 0.7                               | -90.1      | 90.1                 | 89.8                  | 0.30             | 296.766    |                    |        |
| 200.0  | 200.0               | 200.0               | 200.0               | 0.3             | 0.3         | -89.54                | 0.7                               | -90.1      | 90.1                 | 89.5                  | 0.65             | 138.068    | CC, ES             |        |
| 300.0  | 300.0               | 299.0               | 299.0               | 0.5             | 0.5         | -89.12                | 1.4                               | -90.7      | 90.7                 | 89.7                  | 1.00             | 90.623     |                    |        |
| 400.0  | 400.0               | 397.9               | 397.9               | 0.7             | 0.7         | -170.29               | 3.4                               | -92.3      | 93.2                 | 91.9                  | 1.35             | 69.021     |                    |        |
| 500.0  | 500.0               | 496.6               | 496.5               | 0.9             | 0.9         | -168.66               | 6.7                               | -94.9      | 98.7                 | 97.0                  | 1.70             | 57.902     |                    |        |
| 600.0  | 599.9               | 595.0               | 594.7               | 1.0             | 1.1         | -166.75               | 11.3                              | -98.7      | 107.1                | 105.0                 | 2.06             | 51.934     |                    |        |
| 700.0  | 699.7               | 692.9               | 692.3               | 1.2             | 1.3         | -164.75               | 17.2                              | -103.4     | 118.5                | 116.1                 | 2.42             | 48.877     |                    |        |
| 800.0  | 799.4               | 790.7               | 789.7               | 1.4             | 1.5         | -162.84               | 24.3                              | -109.2     | 132.9                | 130.1                 | 2.79             | 47.599     |                    |        |
| 900.0  | 898.9               | 889.3               | 887.8               | 1.7             | 1.7         | -161.38               | 31.8                              | -115.3     | 149.4                | 146.2                 | 3.17             | 47.183     | SF                 |        |
| 1,000.0  | 998.3               | 987.6               | 985.6               | 1.9             | 1.9         | -160.40               | 39.3                              | -121.3     | 167.5                | 164.0                 | 3.54             | 47.288     |                    |        |
| 1,100.0  | 1,097.4             | 1,085.6             | 1,083.1             | 2.2             | 2.2         | -159.77               | 46.7                              | -127.3     | 187.3                | 183.4                 | 3.92             | 47.745     |                    |        |
| 1,200.0  | 1,196.3             | 1,183.3             | 1,180.3             | 2.5             | 2.4         | -159.42               | 54.2                              | -133.3     | 208.7                | 204.4                 | 4.31             | 48.451     |                    |        |
| 1,300.0  | 1,294.9             | 1,280.6             | 1,277.2             | 2.8             | 2.6         | -159.27               | 61.6                              | -139.3     | 231.7                | 227.0                 | 4.70             | 49.338     |                    |        |
| 1,400.0  | 1,393.3             | 1,377.5             | 1,373.7             | 3.2             | 2.9         | -159.27               | 68.9                              | -145.3     | 256.3                | 251.2                 | 5.09             | 50.363     |                    |        |
| 1,500.0  | 1,491.3             | 1,474.1             | 1,469.8             | 3.5             | 3.1         | -159.41               | 76.3                              | -151.2     | 282.2                | 276.7                 | 5.48             | 51.468     |                    |        |
| 1,600.0  | 1,589.3             | 1,570.6             | 1,565.8             | 3.9             | 3.3         | -159.57               | 83.6                              | -157.1     | 308.3                | 302.4                 | 5.88             | 52.443     |                    |        |
| 1,700.0  | 1,687.3             | 1,667.1             | 1,661.9             | 4.3             | 3.6         | -159.71               | 90.9                              | -163.1     | 334.4                | 328.1                 | 6.28             | 53.287     |                    |        |
| 1,800.0  | 1,785.3             | 1,763.7             | 1,758.0             | 4.6             | 3.8         | -159.83               | 98.3                              | -169.0     | 360.5                | 353.8                 | 6.67             | 54.025     |                    |        |
| 1,900.0  | 1,883.3             | 1,860.2             | 1,854.0             | 5.0             | 4.0         | -159.93               | 105.6                             | -174.9     | 386.6                | 379.6                 | 7.07             | 54.675     |                    |        |
| 2,000.0  | 1,981.3             | 1,956.7             | 1,950.1             | 5.4             | 4.3         | -160.02               | 112.9                             | -180.9     | 412.7                | 405.3                 | 7.47             | 55.251     |                    |        |
| 2,100.0  | 2,079.3             | 2,053.3             | 2,046.2             | 5.8             | 4.5         | -160.10               | 120.3                             | -186.8     | 438.8                | 431.0                 | 7.87             | 55.766     |                    |        |
| 2,200.0  | 2,177.3             | 2,149.8             | 2,142.2             | 6.2             | 4.7         | -160.17               | 127.6                             | -192.7     | 465.0                | 456.7                 | 8.27             | 56.229     |                    |        |
| 2,300.0  | 2,275.4             | 2,246.3             | 2,238.3             | 6.6             | 5.0         | -160.23               | 135.0                             | -198.6     | 491.1                | 482.4                 | 8.67             | 56.647     |                    |        |
| 2,400.0  | 2,373.4             | 2,342.9             | 2,334.4             | 6.9             | 5.2         | -160.28               | 142.3                             | -204.6     | 517.2                | 508.1                 | 9.07             | 57.027     |                    |        |
| 2,500.0  | 2,471.4             | 2,439.4             | 2,430.4             | 7.3             | 5.4         | -160.34               | 149.6                             | -210.5     | 543.3                | 533.8                 | 9.47             | 57.373     |                    |        |
| 2,600.0  | 2,569.4             | 2,535.9             | 2,526.5             | 7.7             | 5.7         | -160.38               | 157.0                             | -216.4     | 569.4                | 559.5                 | 9.87             | 57.690     |                    |        |
| 2,700.0  | 2,667.4             | 2,632.4             | 2,622.6             | 8.1             | 5.9         | -160.42               | 164.3                             | -222.4     | 595.5                | 585.2                 | 10.27            | 57.981     |                    |        |
| 2,800.0  | 2,765.4             | 2,729.0             | 2,718.7             | 8.5             | 6.2         | -160.46               | 171.6                             | -228.3     | 621.6                | 610.9                 | 10.67            | 58.249     |                    |        |
| 2,900.0  | 2,863.4             | 2,825.5             | 2,814.7             | 8.9             | 6.4         | -160.50               | 179.0                             | -234.2     | 647.7                | 636.7                 | 11.07            | 58.497     |                    |        |
| 3,000.0  | 2,961.4             | 2,922.0             | 2,910.8             | 9.3             | 6.6         | -160.53               | 186.3                             | -240.2     | 673.8                | 662.4                 | 11.47            | 58.727     |                    |        |
| 3,100.0  | 3,059.4             | 3,018.6             | 3,006.9             | 9.7             | 6.9         | -160.56               | 193.7                             | -246.1     | 700.0                | 688.1                 | 11.88            | 58.941     |                    |        |
| 3,200.0  | 3,157.4             | 3,115.1             | 3,102.9             | 10.1            | 7.1         | -160.59               | 201.0                             | -252.0     | 726.1                | 713.8                 | 12.28            | 59.141     |                    |        |
| 3,300.0  | 3,255.4             | 3,211.6             | 3,199.0             | 10.4            | 7.3         | -160.61               | 208.3                             | -258.0     | 752.2                | 739.5                 | 12.68            | 59.327     |                    |        |
| 3,400.0  | 3,353.4             | 3,308.2             | 3,295.1             | 10.8            | 7.6         | -160.64               | 215.7                             | -263.9     | 778.3                | 765.2                 | 13.08            | 59.502     |                    |        |
| 3,500.0  | 3,451.4             | 3,404.7             | 3,391.1             | 11.2            | 7.8         | -160.66               | 223.0                             | -269.8     | 804.4                | 790.9                 | 13.48            | 59.666     |                    |        |
| 3,600.0  | 3,549.4             | 3,501.2             | 3,487.2             | 11.6            | 8.0         | -160.68               | 230.3                             | -275.8     | 830.5                | 816.6                 | 13.88            | 59.820     |                    |        |
| 3,700.0  | 3,647.4             | 3,597.7             | 3,583.3             | 12.0            | 8.3         | -160.70               | 237.7                             | -281.7     | 856.6                | 842.3                 | 14.29            | 59.965     |                    |        |
| 3,800.0  | 3,745.5             | 3,694.3             | 3,679.3             | 12.4            | 8.5         | -160.72               | 245.0                             | -287.6     | 882.7                | 868.1                 | 14.69            | 60.102     |                    |        |
| 3,900.0  | 3,843.5             | 3,790.8             | 3,775.4             | 12.8            | 8.7         | -160.74               | 252.3                             | -293.6     | 908.9                | 893.8                 | 15.09            | 60.232     |                    |        |
| 4,000.0  | 3,941.5             | 3,887.3             | 3,871.5             | 13.2            | 9.0         | -160.76               | 259.7                             | -299.5     | 935.0                | 919.5                 | 15.49            | 60.354     |                    |        |
| 4,100.0  | 4,039.5             | 3,983.9             | 3,967.5             | 13.6            | 9.2         | -160.77               | 267.0                             | -305.4     | 961.1                | 945.2                 | 15.89            | 60.471     |                    |        |
| 4,200.0  | 4,137.5             | 4,080.4             | 4,063.6             | 14.0            | 9.4         | -160.79               | 274.4                             | -311.3     | 987.2                | 970.9                 | 16.30            | 60.581     |                    |        |
| 4,300.0  | 4,235.5             | 4,176.9             | 4,159.7             | 14.4            | 9.7         | -160.80               | 281.7                             | -317.3     | 1,013.3              | 996.6                 | 16.70            | 60.686     |                    |        |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #3 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        | 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         | -89.49                | 0.7                               | -82.6      | 82.6                 |                       |                        |                           |         |
| 100.0  | 100.0               | 100.0               | 100.0               | 0.2             | 0.2         | -89.49                | 0.7                               | -82.6      | 82.6                 | 82.3                  | 0.30                   | 271.884                   |         |
| 200.0  | 200.0               | 200.0               | 200.0               | 0.3             | 0.3         | -89.49                | 0.7                               | -82.6      | 82.6                 | 81.9                  | 0.65                   | 126.491                   |         |
| 300.0  | 300.0               | 300.0               | 300.0               | 0.5             | 0.5         | -89.49                | 0.7                               | -82.6      | 82.6                 | 81.6                  | 1.00                   | 82.418 CC, ES             |         |
| 400.0  | 400.0               | 399.0               | 399.0               | 0.7             | 0.7         | -171.43               | 1.4                               | -83.1      | 84.0                 | 82.6                  | 1.35                   | 62.238                    |         |
| 500.0  | 500.0               | 498.0               | 497.9               | 0.9             | 0.9         | -170.42               | 3.3                               | -84.8      | 88.3                 | 86.6                  | 1.70                   | 51.970                    |         |
| 600.0  | 599.9               | 596.6               | 596.5               | 1.0             | 1.0         | -168.93               | 6.6                               | -87.5      | 95.5                 | 93.5                  | 2.05                   | 46.561                    |         |
| 700.0  | 699.7               | 694.8               | 694.5               | 1.2             | 1.2         | -167.19               | 11.1                              | -91.3      | 105.7                | 103.3                 | 2.41                   | 43.895                    |         |
| 800.0  | 799.4               | 793.9               | 793.4               | 1.4             | 1.4         | -165.61               | 16.4                              | -95.7      | 118.3                | 115.5                 | 2.77                   | 42.725                    |         |
| 900.0  | 898.9               | 892.9               | 892.1               | 1.7             | 1.6         | -164.54               | 21.7                              | -100.2     | 132.6                | 129.5                 | 3.13                   | 42.348 SF                 |         |
| 1,000.0  | 998.3               | 991.6               | 990.5               | 1.9             | 1.8         | -163.85               | 27.0                              | -104.6     | 148.7                | 145.2                 | 3.50                   | 42.506                    |         |
| 1,100.0  | 1,097.4             | 1,090.0             | 1,088.7             | 2.2             | 2.0         | -163.45               | 32.3                              | -109.0     | 166.4                | 162.5                 | 3.87                   | 43.039                    |         |
| 1,200.0  | 1,196.3             | 1,188.1             | 1,186.6             | 2.5             | 2.2         | -163.27               | 37.5                              | -113.4     | 185.7                | 181.5                 | 4.24                   | 43.844                    |         |
| 1,300.0  | 1,294.9             | 1,287.8             | 1,286.0             | 2.8             | 2.4         | -163.11               | 43.3                              | -117.4     | 206.3                | 201.7                 | 4.62                   | 44.648                    |         |
| 1,400.0  | 1,393.3             | 1,387.9             | 1,385.8             | 3.2             | 2.7         | -162.74               | 50.3                              | -120.1     | 227.5                | 222.4                 | 5.02                   | 45.326                    |         |
| 1,500.0  | 1,491.3             | 1,487.1             | 1,484.7             | 3.5             | 2.9         | -162.27               | 58.3                              | -121.6     | 249.0                | 243.6                 | 5.42                   | 45.915                    |         |
| 1,600.0  | 1,589.3             | 1,584.8             | 1,582.0             | 3.9             | 3.1         | -161.85               | 66.4                              | -122.8     | 270.6                | 264.8                 | 5.83                   | 46.416                    |         |
| 1,700.0  | 1,687.3             | 1,682.4             | 1,679.3             | 4.3             | 3.3         | -161.50               | 74.6                              | -124.1     | 292.1                | 285.9                 | 6.24                   | 46.828                    |         |
| 1,800.0  | 1,785.3             | 1,780.0             | 1,776.6             | 4.6             | 3.5         | -161.19               | 82.7                              | -125.3     | 313.7                | 307.1                 | 6.65                   | 47.170                    |         |
| 1,900.0  | 1,883.3             | 1,877.7             | 1,873.9             | 5.0             | 3.7         | -160.93               | 90.9                              | -126.5     | 335.3                | 328.2                 | 7.06                   | 47.457                    |         |
| 2,000.0  | 1,981.3             | 1,975.3             | 1,971.2             | 5.4             | 3.9         | -160.69               | 99.0                              | -127.7     | 356.9                | 349.4                 | 7.48                   | 47.700                    |         |
| 2,100.0  | 2,079.3             | 2,072.9             | 2,068.5             | 5.8             | 4.2         | -160.48               | 107.1                             | -128.9     | 378.5                | 370.6                 | 7.90                   | 47.908                    |         |
| 2,200.0  | 2,177.3             | 2,170.6             | 2,165.7             | 6.2             | 4.4         | -160.30               | 115.3                             | -130.2     | 400.0                | 391.7                 | 8.32                   | 48.086                    |         |
| 2,300.0  | 2,275.4             | 2,268.2             | 2,263.0             | 6.6             | 4.6         | -160.13               | 123.4                             | -131.4     | 421.6                | 412.9                 | 8.74                   | 48.240                    |         |
| 2,400.0  | 2,373.4             | 2,365.8             | 2,360.3             | 6.9             | 4.8         | -159.98               | 131.6                             | -132.6     | 443.2                | 434.1                 | 9.16                   | 48.375                    |         |
| 2,500.0  | 2,471.4             | 2,463.5             | 2,457.6             | 7.3             | 5.0         | -159.85               | 139.7                             | -133.8     | 464.8                | 455.2                 | 9.59                   | 48.492                    |         |
| 2,600.0  | 2,569.4             | 2,561.1             | 2,554.9             | 7.7             | 5.3         | -159.72               | 147.8                             | -135.0     | 486.4                | 476.4                 | 10.01                  | 48.596                    |         |
| 2,700.0  | 2,667.4             | 2,658.7             | 2,652.2             | 8.1             | 5.5         | -159.61               | 156.0                             | -136.3     | 508.0                | 497.6                 | 10.43                  | 48.687                    |         |
| 2,800.0  | 2,765.4             | 2,756.4             | 2,749.5             | 8.5             | 5.7         | -159.50               | 164.1                             | -137.5     | 529.6                | 518.8                 | 10.86                  | 48.769                    |         |
| 2,900.0  | 2,863.4             | 2,854.0             | 2,846.7             | 8.9             | 5.9         | -159.41               | 172.3                             | -138.7     | 551.3                | 540.0                 | 11.29                  | 48.842                    |         |
| 3,000.0  | 2,961.4             | 2,951.6             | 2,944.0             | 9.3             | 6.1         | -159.32               | 180.4                             | -139.9     | 572.9                | 561.1                 | 11.71                  | 48.907                    |         |
| 3,100.0  | 3,059.4             | 3,049.3             | 3,041.3             | 9.7             | 6.4         | -159.24               | 188.5                             | -141.1     | 594.5                | 582.3                 | 12.14                  | 48.965                    |         |
| 3,200.0  | 3,157.4             | 3,146.9             | 3,138.6             | 10.1            | 6.6         | -159.16               | 196.7                             | -142.4     | 616.1                | 603.5                 | 12.57                  | 49.018                    |         |
| 3,300.0  | 3,255.4             | 3,244.5             | 3,235.9             | 10.4            | 6.8         | -159.09               | 204.8                             | -143.6     | 637.7                | 624.7                 | 13.00                  | 49.066                    |         |
| 3,400.0  | 3,353.4             | 3,342.2             | 3,333.2             | 10.8            | 7.0         | -159.02               | 213.0                             | -144.8     | 659.3                | 645.9                 | 13.43                  | 49.110                    |         |
| 3,500.0  | 3,451.4             | 3,439.8             | 3,430.5             | 11.2            | 7.2         | -158.96               | 221.1                             | -146.0     | 680.9                | 667.1                 | 13.85                  | 49.150                    |         |
| 3,600.0  | 3,549.4             | 3,537.4             | 3,527.8             | 11.6            | 7.5         | -158.90               | 229.3                             | -147.2     | 702.5                | 688.3                 | 14.28                  | 49.186                    |         |
| 3,700.0  | 3,647.4             | 3,635.1             | 3,625.0             | 12.0            | 7.7         | -158.85               | 237.4                             | -148.5     | 724.1                | 709.4                 | 14.71                  | 49.219                    |         |
| 3,800.0  | 3,745.5             | 3,732.7             | 3,722.3             | 12.4            | 7.9         | -158.79               | 245.5                             | -149.7     | 745.8                | 730.6                 | 15.14                  | 49.250                    |         |
| 3,900.0  | 3,843.5             | 3,830.3             | 3,819.6             | 12.8            | 8.1         | -158.75               | 253.7                             | -150.9     | 767.4                | 751.8                 | 15.57                  | 49.278                    |         |
| 4,000.0  | 3,941.5             | 3,928.0             | 3,916.9             | 13.2            | 8.3         | -158.70               | 261.8                             | -152.1     | 789.0                | 773.0                 | 16.00                  | 49.304                    |         |
| 4,100.0  | 4,039.5             | 4,025.6             | 4,014.2             | 13.6            | 8.6         | -158.66               | 270.0                             | -153.3     | 810.6                | 794.2                 | 16.43                  | 49.328                    |         |
| 4,200.0  | 4,137.5             | 4,123.2             | 4,111.5             | 14.0            | 8.8         | -158.61               | 278.1                             | -154.6     | 832.2                | 815.4                 | 16.86                  | 49.351                    |         |
| 4,300.0  | 4,235.5             | 4,220.9             | 4,208.8             | 14.4            | 9.0         | -158.57               | 286.2                             | -155.8     | 853.8                | 836.6                 | 17.29                  | 49.371                    |         |
| 4,400.0  | 4,333.5             | 4,318.5             | 4,306.0             | 14.8            | 9.2         | -158.54               | 294.4                             | -157.0     | 875.5                | 857.7                 | 17.73                  | 49.391                    |         |
| 4,500.0  | 4,431.5             | 4,416.1             | 4,403.3             | 15.2            | 9.5         | -158.50               | 302.5                             | -158.2     | 897.1                | 878.9                 | 18.16                  | 49.408                    |         |
| 4,600.0  | 4,529.5             | 4,513.8             | 4,500.6             | 15.5            | 9.7         | -158.47               | 310.7                             | -159.4     | 918.7                | 900.1                 | 18.59                  | 49.425                    |         |
| 4,700.0  | 4,627.5             | 4,611.4             | 4,597.9             | 15.9            | 9.9         | -158.44               | 318.8                             | -160.7     | 940.3                | 921.3                 | 19.02                  | 49.441                    |         |
| 4,800.0  | 4,725.5             | 4,709.0             | 4,695.2             | 16.3            | 10.1        | -158.40               | 326.9                             | -161.9     | 961.9                | 942.5                 | 19.45                  | 49.456                    |         |
| 4,900.0  | 4,823.5             | 4,806.7             | 4,792.5             | 16.7            | 10.3        | -158.37               | 335.1                             | -163.1     | 983.6                | 963.7                 | 19.88                  | 49.469                    |         |
| 5,000.0  | 4,921.5             | 4,904.3             | 4,889.8             | 17.1            | 10.6        | -158.35               | 343.2                             | -164.3     | 1,005.2              | 984.9                 | 20.31                  | 49.482                    |         |

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



# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #3 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        |                   | 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         | -89.44                | 0.7                               | -75.0      | 75.0                 |                       |                        |                   |                    |         |
| 100.0  | 100.0               | 100.0               | 100.0               | 0.2             | 0.2         | -89.44                | 0.7                               | -75.0      | 75.0                 | 74.7                  | 0.30                   | 247.001           |                    |         |
| 200.0  | 200.0               | 200.0               | 200.0               | 0.3             | 0.3         | -89.44                | 0.7                               | -75.0      | 75.0                 | 74.4                  | 0.65                   | 114.915           |                    |         |
| 300.0  | 300.0               | 300.0               | 300.0               | 0.5             | 0.5         | -89.44                | 0.7                               | -75.0      | 75.0                 | 74.0                  | 1.00                   | 74.875 CC, ES     |                    |         |
| 400.0  | 400.0               | 400.0               | 400.0               | 0.7             | 0.7         | -171.84               | 0.7                               | -75.0      | 75.9                 | 74.5                  | 1.35                   | 56.167            |                    |         |
| 500.0  | 500.0               | 500.6               | 500.6               | 0.9             | 0.9         | -171.53               | 1.5                               | -74.6      | 78.1                 | 76.4                  | 1.70                   | 45.892            |                    |         |
| 600.0  | 599.9               | 601.1               | 601.0               | 1.0             | 1.0         | -170.29               | 3.9                               | -73.4      | 81.3                 | 79.2                  | 2.05                   | 39.557            |                    |         |
| 700.0  | 699.7               | 701.5               | 701.4               | 1.2             | 1.2         | -168.29               | 7.8                               | -71.5      | 85.5                 | 83.1                  | 2.41                   | 35.430            |                    |         |
| 800.0  | 799.4               | 801.9               | 801.5               | 1.4             | 1.4         | -165.69               | 13.4                              | -68.8      | 91.0                 | 88.2                  | 2.79                   | 32.669            |                    |         |
| 900.0  | 898.9               | 902.0               | 901.4               | 1.7             | 1.6         | -162.70               | 20.4                              | -65.3      | 97.7                 | 94.6                  | 3.17                   | 30.808            |                    |         |
| 1,000.0  | 998.3               | 1,001.5             | 1,000.5             | 1.9             | 1.8         | -159.99               | 28.2                              | -61.4      | 106.2                | 102.6                 | 3.57                   | 29.723            |                    |         |
| 1,100.0  | 1,097.4             | 1,100.9             | 1,099.5             | 2.2             | 2.0         | -157.99               | 36.0                              | -57.6      | 116.4                | 112.4                 | 3.98                   | 29.234            |                    |         |
| 1,200.0  | 1,196.3             | 1,200.2             | 1,198.4             | 2.5             | 2.3         | -156.61               | 43.7                              | -53.7      | 128.3                | 123.9                 | 4.40                   | 29.165 SF         |                    |         |
| 1,300.0  | 1,294.9             | 1,299.3             | 1,297.1             | 2.8             | 2.5         | -155.75               | 51.4                              | -49.9      | 141.9                | 137.0                 | 4.83                   | 29.399            |                    |         |
| 1,400.0  | 1,393.3             | 1,398.1             | 1,395.6             | 3.2             | 2.7         | -155.29               | 59.2                              | -46.1      | 157.0                | 151.8                 | 5.26                   | 29.863            |                    |         |
| 1,500.0  | 1,491.3             | 1,496.7             | 1,493.8             | 3.5             | 2.9         | -155.14               | 66.9                              | -42.3      | 173.5                | 167.8                 | 5.69                   | 30.475            |                    |         |
| 1,600.0  | 1,589.3             | 1,595.3             | 1,592.0             | 3.9             | 3.1         | -155.07               | 74.6                              | -38.4      | 190.2                | 184.0                 | 6.13                   | 31.013            |                    |         |
| 1,700.0  | 1,687.3             | 1,693.9             | 1,690.3             | 4.3             | 3.4         | -155.01               | 82.3                              | -34.6      | 206.8                | 200.2                 | 6.57                   | 31.467            |                    |         |
| 1,800.0  | 1,785.3             | 1,792.5             | 1,788.5             | 4.6             | 3.6         | -154.95               | 90.0                              | -30.8      | 223.5                | 216.5                 | 7.02                   | 31.855            |                    |         |
| 1,900.0  | 1,883.3             | 1,891.1             | 1,886.7             | 5.0             | 3.8         | -154.91               | 97.7                              | -27.0      | 240.1                | 232.7                 | 7.46                   | 32.189            |                    |         |
| 2,000.0  | 1,981.3             | 1,989.7             | 1,985.0             | 5.4             | 4.0         | -154.87               | 105.4                             | -23.2      | 256.8                | 248.9                 | 7.91                   | 32.479            |                    |         |
| 2,100.0  | 2,079.3             | 2,088.3             | 2,083.2             | 5.8             | 4.3         | -154.84               | 113.1                             | -19.4      | 273.4                | 265.1                 | 8.35                   | 32.734            |                    |         |
| 2,200.0  | 2,177.3             | 2,186.9             | 2,181.4             | 6.2             | 4.5         | -154.81               | 120.8                             | -15.6      | 290.1                | 281.3                 | 8.80                   | 32.959            |                    |         |
| 2,300.0  | 2,275.4             | 2,285.5             | 2,279.6             | 6.6             | 4.7         | -154.78               | 128.5                             | -11.8      | 306.7                | 297.5                 | 9.25                   | 33.159            |                    |         |
| 2,400.0  | 2,373.4             | 2,384.1             | 2,377.9             | 6.9             | 4.9         | -154.75               | 136.2                             | -7.9       | 323.4                | 313.7                 | 9.70                   | 33.338            |                    |         |
| 2,500.0  | 2,471.4             | 2,482.8             | 2,476.1             | 7.3             | 5.2         | -154.73               | 143.9                             | -4.1       | 340.1                | 329.9                 | 10.15                  | 33.499            |                    |         |
| 2,600.0  | 2,569.4             | 2,581.4             | 2,574.3             | 7.7             | 5.4         | -154.71               | 151.6                             | -0.3       | 356.7                | 346.1                 | 10.60                  | 33.644            |                    |         |
| 2,700.0  | 2,667.4             | 2,680.0             | 2,672.6             | 8.1             | 5.6         | -154.70               | 159.3                             | 3.5        | 373.4                | 362.3                 | 11.05                  | 33.776            |                    |         |
| 2,800.0  | 2,765.4             | 2,778.6             | 2,770.8             | 8.5             | 5.9         | -154.68               | 167.0                             | 7.3        | 390.0                | 378.5                 | 11.51                  | 33.897            |                    |         |
| 2,900.0  | 2,863.4             | 2,877.2             | 2,869.0             | 8.9             | 6.1         | -154.66               | 174.7                             | 11.1       | 406.7                | 394.7                 | 11.96                  | 34.007            |                    |         |
| 3,000.0  | 2,961.4             | 2,975.8             | 2,967.2             | 9.3             | 6.3         | -154.65               | 182.4                             | 14.9       | 423.3                | 410.9                 | 12.41                  | 34.108            |                    |         |
| 3,100.0  | 3,059.4             | 3,074.4             | 3,065.5             | 9.7             | 6.5         | -154.64               | 190.1                             | 18.7       | 440.0                | 427.1                 | 12.86                  | 34.201            |                    |         |
| 3,200.0  | 3,157.4             | 3,173.0             | 3,163.7             | 10.1            | 6.8         | -154.63               | 197.8                             | 22.6       | 456.7                | 443.3                 | 13.32                  | 34.287            |                    |         |
| 3,300.0  | 3,255.4             | 3,271.6             | 3,261.9             | 10.4            | 7.0         | -154.61               | 205.5                             | 26.4       | 473.3                | 459.5                 | 13.77                  | 34.367            |                    |         |
| 3,400.0  | 3,353.4             | 3,370.2             | 3,360.1             | 10.8            | 7.2         | -154.60               | 213.2                             | 30.2       | 490.0                | 475.7                 | 14.23                  | 34.441            |                    |         |
| 3,500.0  | 3,451.4             | 3,468.8             | 3,458.4             | 11.2            | 7.4         | -154.59               | 220.9                             | 34.0       | 506.6                | 491.9                 | 14.68                  | 34.510            |                    |         |
| 3,600.0  | 3,549.4             | 3,567.4             | 3,556.6             | 11.6            | 7.7         | -154.58               | 228.6                             | 37.8       | 523.3                | 508.1                 | 15.13                  | 34.575            |                    |         |
| 3,700.0  | 3,647.4             | 3,666.0             | 3,654.8             | 12.0            | 7.9         | -154.58               | 236.3                             | 41.6       | 539.9                | 524.3                 | 15.59                  | 34.635            |                    |         |
| 3,800.0  | 3,745.5             | 3,764.6             | 3,753.1             | 12.4            | 8.1         | -154.57               | 244.0                             | 45.4       | 556.6                | 540.5                 | 16.04                  | 34.692            |                    |         |
| 3,900.0  | 3,843.5             | 3,863.2             | 3,851.3             | 12.8            | 8.4         | -154.56               | 251.7                             | 49.3       | 573.2                | 556.7                 | 16.50                  | 34.745            |                    |         |
| 4,000.0  | 3,941.5             | 3,961.8             | 3,949.5             | 13.2            | 8.6         | -154.55               | 259.4                             | 53.1       | 589.9                | 572.9                 | 16.95                  | 34.795            |                    |         |
| 4,100.0  | 4,039.5             | 4,060.4             | 4,047.7             | 13.6            | 8.8         | -154.55               | 267.1                             | 56.9       | 606.6                | 589.2                 | 17.41                  | 34.842            |                    |         |
| 4,200.0  | 4,137.5             | 4,159.0             | 4,146.0             | 14.0            | 9.0         | -154.54               | 274.8                             | 60.7       | 623.2                | 605.4                 | 17.86                  | 34.887            |                    |         |
| 4,300.0  | 4,235.5             | 4,257.6             | 4,244.2             | 14.4            | 9.3         | -154.53               | 282.5                             | 64.5       | 639.9                | 621.6                 | 18.32                  | 34.929            |                    |         |
| 4,400.0  | 4,333.5             | 4,356.2             | 4,342.4             | 14.8            | 9.5         | -154.53               | 290.2                             | 68.3       | 656.5                | 637.8                 | 18.77                  | 34.969            |                    |         |
| 4,500.0  | 4,431.5             | 4,454.8             | 4,440.7             | 15.2            | 9.7         | -154.52               | 297.9                             | 72.1       | 673.2                | 654.0                 | 19.23                  | 35.007            |                    |         |
| 4,600.0  | 4,529.5             | 4,553.4             | 4,538.9             | 15.5            | 10.0        | -154.52               | 305.6                             | 75.9       | 689.8                | 670.2                 | 19.69                  | 35.043            |                    |         |
| 4,700.0  | 4,627.5             | 4,652.0             | 4,637.1             | 15.9            | 10.2        | -154.51               | 313.3                             | 79.8       | 706.5                | 686.4                 | 20.14                  | 35.077            |                    |         |
| 4,800.0  | 4,725.5             | 4,750.6             | 4,735.3             | 16.3            | 10.4        | -154.51               | 321.0                             | 83.6       | 723.2                | 702.6                 | 20.60                  | 35.110            |                    |         |
| 4,900.0  | 4,823.5             | 4,849.2             | 4,833.6             | 16.7            | 10.6        | -154.50               | 328.7                             | 87.4       | 739.8                | 718.8                 | 21.05                  | 35.141            |                    |         |
| 5,000.0  | 4,921.5             | 4,947.8             | 4,931.8             | 17.1            | 10.9        | -154.50               | 336.4                             | 91.2       | 756.5                | 735.0                 | 21.51                  | 35.170            |                    |         |
| 5,100.0  | 5,019.5             | 5,046.4             | 5,030.0             | 17.5            | 11.1        | -154.50               | 344.1                             | 95.0       | 773.1                | 751.2                 | 21.96                  | 35.199            |                    |         |

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



# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #3 |                |                |                |                 |        |                   |                        |            |                 |                  | 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   | 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)             |                        |                   |         |
| 5,200.0  | 5,117.5        | 5,145.0        | 5,128.3        | 17.9            | 11.3   | -154.49           | 351.8                  | 98.8       | 789.8           | 767.4            | 22.42                  | 35.226            |         |
| 5,300.0  | 5,215.6        | 5,243.6        | 5,226.5        | 18.3            | 11.5   | -154.49           | 359.5                  | 102.6      | 806.4           | 783.6            | 22.88                  | 35.252            |         |
| 5,400.0  | 5,313.6        | 5,342.2        | 5,324.7        | 18.7            | 11.8   | -154.48           | 367.2                  | 106.4      | 823.1           | 799.8            | 23.33                  | 35.276            |         |
| 5,500.0  | 5,411.6        | 5,440.8        | 5,422.9        | 19.1            | 12.0   | -154.48           | 374.9                  | 110.3      | 839.7           | 816.0            | 23.79                  | 35.300            |         |
| 5,600.0  | 5,509.6        | 5,539.4        | 5,521.2        | 19.5            | 12.2   | -154.48           | 382.6                  | 114.1      | 856.4           | 832.2            | 24.24                  | 35.323            |         |
| 5,700.0  | 5,607.6        | 5,638.0        | 5,619.4        | 19.9            | 12.5   | -154.47           | 390.3                  | 117.9      | 873.1           | 848.4            | 24.70                  | 35.345            |         |
| 5,800.0  | 5,705.6        | 5,736.7        | 5,717.6        | 20.3            | 12.7   | -154.47           | 398.0                  | 121.7      | 889.7           | 864.6            | 25.16                  | 35.366            |         |
| 5,900.0  | 5,803.6        | 5,835.3        | 5,815.8        | 20.7            | 12.9   | -154.47           | 405.7                  | 125.5      | 906.4           | 880.8            | 25.61                  | 35.386            |         |
| 6,000.0  | 5,901.6        | 5,933.9        | 5,914.1        | 21.1            | 13.1   | -154.47           | 413.4                  | 129.3      | 923.0           | 897.0            | 26.07                  | 35.406            |         |
| 6,100.0  | 5,999.6        | 6,032.5        | 6,012.3        | 21.4            | 13.4   | -154.46           | 421.1                  | 133.1      | 939.7           | 913.2            | 26.53                  | 35.425            |         |
| 6,200.0  | 6,097.6        | 6,131.1        | 6,110.5        | 21.8            | 13.6   | -154.46           | 428.8                  | 137.0      | 956.3           | 929.4            | 26.98                  | 35.443            |         |
| 6,300.0  | 6,195.6        | 6,229.7        | 6,208.8        | 22.2            | 13.8   | -154.46           | 436.5                  | 140.8      | 973.0           | 945.6            | 27.44                  | 35.460            |         |
| 6,400.0  | 6,293.6        | 6,328.3        | 6,307.0        | 22.6            | 14.1   | -154.46           | 444.2                  | 144.6      | 989.7           | 961.8            | 27.90                  | 35.477            |         |
| 6,500.0  | 6,391.6        | 6,426.9        | 6,405.2        | 23.0            | 14.3   | -154.45           | 451.9                  | 148.4      | 1,006.3         | 978.0            | 28.35                  | 35.493            |         |
| 6,600.0  | 6,489.6        | 6,525.5        | 6,503.4        | 23.4            | 14.5   | -154.45           | 459.6                  | 152.2      | 1,023.0         | 994.2            | 28.81                  | 35.509            |         |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2D-7H-E168 - HZ - Plan #3 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        | 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         | -89.38                | 0.7                               | -67.7      | 67.7                 |                       |                        |                    |         |
| 100.0  | 100.0               | 100.0               | 100.0               | 0.2             | 0.2         | -89.38                | 0.7                               | -67.7      | 67.7                 | 67.4                  | 0.30                   | 223.041            |         |
| 200.0  | 200.0               | 200.0               | 200.0               | 0.3             | 0.3         | -89.38                | 0.7                               | -67.7      | 67.7                 | 67.1                  | 0.65                   | 103.768            |         |
| 300.0  | 300.0               | 300.0               | 300.0               | 0.5             | 0.5         | -89.38                | 0.7                               | -67.7      | 67.7                 | 66.7                  | 1.00                   | 67.612 CC, ES      |         |
| 400.0  | 400.0               | 400.0               | 400.0               | 0.7             | 0.7         | -171.79               | 0.7                               | -67.7      | 68.6                 | 67.2                  | 1.35                   | 50.780             |         |
| 500.0  | 500.0               | 500.0               | 500.0               | 0.9             | 0.8         | -172.09               | 0.7                               | -67.7      | 71.2                 | 69.5                  | 1.70                   | 41.877             |         |
| 600.0  | 599.9               | 600.7               | 600.7               | 1.0             | 1.0         | -172.02               | 1.4                               | -67.2      | 75.0                 | 72.9                  | 2.05                   | 36.548             |         |
| 700.0  | 699.7               | 701.4               | 701.4               | 1.2             | 1.2         | -171.14               | 3.5                               | -65.5      | 79.3                 | 76.9                  | 2.40                   | 33.010             |         |
| 800.0  | 799.4               | 802.2               | 802.0               | 1.4             | 1.4         | -169.60               | 6.9                               | -62.7      | 84.4                 | 81.6                  | 2.76                   | 30.568             |         |
| 900.0  | 898.9               | 902.9               | 902.5               | 1.7             | 1.6         | -167.55               | 11.7                              | -58.7      | 90.2                 | 87.1                  | 3.13                   | 28.844             |         |
| 1,000.0  | 998.3               | 1,003.5             | 1,002.8             | 1.9             | 1.8         | -165.11               | 17.8                              | -53.7      | 96.9                 | 93.4                  | 3.51                   | 27.606             |         |
| 1,100.0  | 1,097.4             | 1,104.0             | 1,102.9             | 2.2             | 2.0         | -162.44               | 25.3                              | -47.5      | 104.4                | 100.5                 | 3.91                   | 26.703             |         |
| 1,200.0  | 1,196.3             | 1,204.3             | 1,202.6             | 2.5             | 2.3         | -159.63               | 34.1                              | -40.2      | 113.0                | 108.7                 | 4.34                   | 26.031             |         |
| 1,300.0  | 1,294.9             | 1,303.7             | 1,301.2             | 2.8             | 2.5         | -157.20               | 43.5                              | -32.5      | 123.1                | 118.3                 | 4.79                   | 25.685             |         |
| 1,400.0  | 1,393.3             | 1,402.9             | 1,399.7             | 3.2             | 2.7         | -155.43               | 52.8                              | -24.8      | 135.0                | 129.7                 | 5.26                   | 25.656 SF          |         |
| 1,500.0  | 1,491.3             | 1,502.0             | 1,498.0             | 3.5             | 3.0         | -154.22               | 62.2                              | -17.1      | 148.3                | 142.5                 | 5.74                   | 25.833             |         |
| 1,600.0  | 1,589.3             | 1,601.1             | 1,596.3             | 3.9             | 3.3         | -153.26               | 71.5                              | -9.4       | 161.7                | 155.5                 | 6.23                   | 25.980             |         |
| 1,700.0  | 1,687.3             | 1,700.1             | 1,694.6             | 4.3             | 3.5         | -152.44               | 80.8                              | -1.8       | 175.3                | 168.5                 | 6.72                   | 26.079             |         |
| 1,800.0  | 1,785.3             | 1,799.2             | 1,792.9             | 4.6             | 3.8         | -151.75               | 90.2                              | 5.9        | 188.8                | 181.6                 | 7.22                   | 26.146             |         |
| 1,900.0  | 1,883.3             | 1,898.2             | 1,891.3             | 5.0             | 4.0         | -151.14               | 99.5                              | 13.6       | 202.4                | 194.7                 | 7.73                   | 26.189             |         |
| 2,000.0  | 1,981.3             | 1,997.3             | 1,989.6             | 5.4             | 4.3         | -150.62               | 108.8                             | 21.3       | 216.0                | 207.8                 | 8.24                   | 26.214             |         |
| 2,100.0  | 2,079.3             | 2,096.3             | 2,087.9             | 5.8             | 4.6         | -150.15               | 118.2                             | 29.0       | 229.6                | 220.9                 | 8.76                   | 26.227             |         |
| 2,200.0  | 2,177.3             | 2,195.4             | 2,186.2             | 6.2             | 4.8         | -149.74               | 127.5                             | 36.7       | 243.3                | 234.0                 | 9.27                   | 26.231             |         |
| 2,300.0  | 2,275.4             | 2,294.4             | 2,284.5             | 6.6             | 5.1         | -149.37               | 136.8                             | 44.4       | 256.9                | 247.1                 | 9.79                   | 26.229             |         |
| 2,400.0  | 2,373.4             | 2,393.5             | 2,382.8             | 6.9             | 5.4         | -149.04               | 146.2                             | 52.1       | 270.5                | 260.2                 | 10.32                  | 26.221             |         |
| 2,500.0  | 2,471.4             | 2,492.5             | 2,481.1             | 7.3             | 5.6         | -148.74               | 155.5                             | 59.8       | 284.2                | 273.4                 | 10.84                  | 26.211             |         |
| 2,600.0  | 2,569.4             | 2,591.6             | 2,579.4             | 7.7             | 5.9         | -148.47               | 164.8                             | 67.4       | 297.9                | 286.5                 | 11.37                  | 26.198             |         |
| 2,700.0  | 2,667.4             | 2,690.6             | 2,677.7             | 8.1             | 6.2         | -148.22               | 174.2                             | 75.1       | 311.5                | 299.6                 | 11.90                  | 26.183             |         |
| 2,800.0  | 2,765.4             | 2,789.7             | 2,776.1             | 8.5             | 6.4         | -147.99               | 183.5                             | 82.8       | 325.2                | 312.8                 | 12.43                  | 26.167             |         |
| 2,900.0  | 2,863.4             | 2,888.7             | 2,874.4             | 8.9             | 6.7         | -147.78               | 192.8                             | 90.5       | 338.9                | 325.9                 | 12.96                  | 26.150             |         |
| 3,000.0  | 2,961.4             | 2,987.8             | 2,972.7             | 9.3             | 7.0         | -147.59               | 202.2                             | 98.2       | 352.6                | 339.1                 | 13.49                  | 26.133             |         |
| 3,100.0  | 3,059.4             | 3,086.8             | 3,071.0             | 9.7             | 7.3         | -147.41               | 211.5                             | 105.9      | 366.3                | 352.2                 | 14.02                  | 26.116             |         |
| 3,200.0  | 3,157.4             | 3,185.9             | 3,169.3             | 10.1            | 7.5         | -147.24               | 220.8                             | 113.6      | 380.0                | 365.4                 | 14.56                  | 26.099             |         |
| 3,300.0  | 3,255.4             | 3,285.0             | 3,267.6             | 10.4            | 7.8         | -147.09               | 230.2                             | 121.3      | 393.6                | 378.6                 | 15.09                  | 26.082             |         |
| 3,400.0  | 3,353.4             | 3,384.0             | 3,365.9             | 10.8            | 8.1         | -146.95               | 239.5                             | 129.0      | 407.3                | 391.7                 | 15.63                  | 26.065             |         |
| 3,500.0  | 3,451.4             | 3,483.1             | 3,464.2             | 11.2            | 8.3         | -146.81               | 248.9                             | 136.6      | 421.0                | 404.9                 | 16.16                  | 26.048             |         |
| 3,600.0  | 3,549.4             | 3,582.1             | 3,562.6             | 11.6            | 8.6         | -146.69               | 258.2                             | 144.3      | 434.7                | 418.0                 | 16.70                  | 26.032             |         |
| 3,700.0  | 3,647.4             | 3,681.2             | 3,660.9             | 12.0            | 8.9         | -146.57               | 267.5                             | 152.0      | 448.5                | 431.2                 | 17.24                  | 26.016             |         |
| 3,800.0  | 3,745.5             | 3,780.2             | 3,759.2             | 12.4            | 9.2         | -146.46               | 276.9                             | 159.7      | 462.2                | 444.4                 | 17.77                  | 26.001             |         |
| 3,900.0  | 3,843.5             | 3,879.3             | 3,857.5             | 12.8            | 9.4         | -146.35               | 286.2                             | 167.4      | 475.9                | 457.6                 | 18.31                  | 25.986             |         |
| 4,000.0  | 3,941.5             | 3,978.3             | 3,955.8             | 13.2            | 9.7         | -146.25               | 295.5                             | 175.1      | 489.6                | 470.7                 | 18.85                  | 25.971             |         |
| 4,100.0  | 4,039.5             | 4,077.4             | 4,054.1             | 13.6            | 10.0        | -146.16               | 304.9                             | 182.8      | 503.3                | 483.9                 | 19.39                  | 25.957             |         |
| 4,200.0  | 4,137.5             | 4,176.4             | 4,152.4             | 14.0            | 10.2        | -146.07               | 314.2                             | 190.5      | 517.0                | 497.1                 | 19.93                  | 25.943             |         |
| 4,300.0  | 4,235.5             | 4,275.5             | 4,250.7             | 14.4            | 10.5        | -145.99               | 323.5                             | 198.2      | 530.7                | 510.2                 | 20.47                  | 25.930             |         |
| 4,400.0  | 4,333.5             | 4,374.5             | 4,349.0             | 14.8            | 10.8        | -145.91               | 332.9                             | 205.8      | 544.4                | 523.4                 | 21.01                  | 25.917             |         |
| 4,500.0  | 4,431.5             | 4,473.6             | 4,447.4             | 15.2            | 11.1        | -145.83               | 342.2                             | 213.5      | 558.1                | 536.6                 | 21.55                  | 25.904             |         |
| 4,600.0  | 4,529.5             | 4,572.6             | 4,545.7             | 15.5            | 11.3        | -145.76               | 351.5                             | 221.2      | 571.8                | 549.8                 | 22.09                  | 25.892             |         |
| 4,700.0  | 4,627.5             | 4,671.7             | 4,644.0             | 15.9            | 11.6        | -145.69               | 360.9                             | 228.9      | 585.6                | 562.9                 | 22.63                  | 25.880             |         |
| 4,800.0  | 4,725.5             | 4,770.7             | 4,742.3             | 16.3            | 11.9        | -145.62               | 370.2                             | 236.6      | 599.3                | 576.1                 | 23.17                  | 25.869             |         |
| 4,900.0  | 4,823.5             | 4,869.8             | 4,840.6             | 16.7            | 12.1        | -145.56               | 379.5                             | 244.3      | 613.0                | 589.3                 | 23.71                  | 25.857             |         |
| 5,000.0  | 4,921.5             | 4,968.8             | 4,938.9             | 17.1            | 12.4        | -145.50               | 388.9                             | 252.0      | 626.7                | 602.5                 | 24.25                  | 25.847             |         |
| 5,100.0  | 5,019.5             | 5,067.9             | 5,037.2             | 17.5            | 12.7        | -145.44               | 398.2                             | 259.7      | 640.4                | 615.6                 | 24.79                  | 25.836             |         |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2D-7H-E168 - HZ - Plan #3 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        | 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         |         |
| 5,200.0  | 5,117.5             | 5,167.0             | 5,135.5             | 17.9            | 13.0        | -145.39               | 407.5                             | 267.3      | 654.2                | 628.8                 | 25.33                  | 25.826                    |         |
| 5,300.0  | 5,215.6             | 5,266.0             | 5,233.8             | 18.3            | 13.2        | -145.33               | 416.9                             | 275.0      | 667.9                | 642.0                 | 25.87                  | 25.816                    |         |
| 5,400.0  | 5,313.6             | 5,365.1             | 5,332.2             | 18.7            | 13.5        | -145.28               | 426.2                             | 282.7      | 681.6                | 655.2                 | 26.41                  | 25.807                    |         |
| 5,500.0  | 5,411.6             | 5,464.1             | 5,430.5             | 19.1            | 13.8        | -145.24               | 435.6                             | 290.4      | 695.3                | 668.4                 | 26.95                  | 25.797                    |         |
| 5,600.0  | 5,509.6             | 5,563.2             | 5,528.8             | 19.5            | 14.1        | -145.19               | 444.9                             | 298.1      | 709.0                | 681.5                 | 27.49                  | 25.788                    |         |
| 5,700.0  | 5,607.6             | 5,662.2             | 5,627.1             | 19.9            | 14.3        | -145.14               | 454.2                             | 305.8      | 722.8                | 694.7                 | 28.04                  | 25.779                    |         |
| 5,800.0  | 5,705.6             | 5,761.3             | 5,725.4             | 20.3            | 14.6        | -145.10               | 463.6                             | 313.5      | 736.5                | 707.9                 | 28.58                  | 25.771                    |         |
| 5,900.0  | 5,803.6             | 5,860.3             | 5,823.7             | 20.7            | 14.9        | -145.06               | 472.9                             | 321.2      | 750.2                | 721.1                 | 29.12                  | 25.763                    |         |
| 6,000.0  | 5,901.6             | 5,959.4             | 5,922.0             | 21.1            | 15.1        | -145.02               | 482.2                             | 328.9      | 763.9                | 734.3                 | 29.66                  | 25.755                    |         |
| 6,100.0  | 5,999.6             | 6,058.4             | 6,020.3             | 21.4            | 15.4        | -144.98               | 491.6                             | 336.5      | 777.6                | 747.4                 | 30.20                  | 25.747                    |         |
| 6,200.0  | 6,097.6             | 6,157.5             | 6,118.6             | 21.8            | 15.7        | -144.94               | 500.9                             | 344.2      | 791.4                | 760.6                 | 30.75                  | 25.739                    |         |
| 6,300.0  | 6,195.6             | 6,256.5             | 6,217.0             | 22.2            | 16.0        | -144.91               | 510.2                             | 351.9      | 805.1                | 773.8                 | 31.29                  | 25.732                    |         |
| 6,400.0  | 6,293.6             | 6,355.6             | 6,315.3             | 22.6            | 16.2        | -144.87               | 519.6                             | 359.6      | 818.8                | 787.0                 | 31.83                  | 25.725                    |         |
| 6,500.0  | 6,391.6             | 6,454.6             | 6,413.6             | 23.0            | 16.5        | -144.84               | 528.9                             | 367.3      | 832.5                | 800.2                 | 32.37                  | 25.718                    |         |
| 6,600.0  | 6,489.6             | 6,553.7             | 6,511.9             | 23.4            | 16.8        | -144.80               | 538.2                             | 375.0      | 846.3                | 813.4                 | 32.92                  | 25.711                    |         |
| 6,700.0  | 6,587.6             | 6,652.7             | 6,610.2             | 23.8            | 17.1        | -144.77               | 547.6                             | 382.7      | 860.0                | 826.5                 | 33.46                  | 25.704                    |         |
| 6,800.0  | 6,685.7             | 6,751.8             | 6,708.5             | 24.2            | 17.3        | -144.74               | 556.9                             | 390.4      | 873.7                | 839.7                 | 34.00                  | 25.698                    |         |
| 6,900.0  | 6,783.7             | 6,850.8             | 6,806.8             | 24.6            | 17.6        | -144.71               | 566.2                             | 398.1      | 887.4                | 852.9                 | 34.54                  | 25.691                    |         |
| 7,000.0  | 6,881.7             | 7,028.0             | 6,983.0             | 25.0            | 17.9        | -145.24               | 572.7                             | 411.8      | 899.8                | 864.8                 | 35.04                  | 25.683                    |         |
| 7,100.0  | 6,979.6             | 7,322.8             | 7,255.8             | 25.4            | 17.5        | -140.69               | 472.1                             | 433.2      | 893.8                | 861.7                 | 32.03                  | 27.906                    |         |
| 7,200.0  | 7,076.3             | 7,470.9             | 7,364.7             | 25.8            | 17.0        | -119.36               | 372.6                             | 441.7      | 875.3                | 845.7                 | 29.60                  | 29.567                    |         |
| 7,300.0  | 7,168.8             | 7,525.7             | 7,397.9             | 26.3            | 16.8        | -111.23               | 329.2                             | 444.3      | 859.4                | 830.6                 | 28.87                  | 29.767                    |         |
| 7,400.0  | 7,254.2             | 7,537.2             | 7,404.4             | 26.8            | 16.8        | -106.25               | 319.7                             | 444.8      | 852.7                | 824.0                 | 28.72                  | 29.686                    |         |
| 7,414.1  | 7,265.6             | 7,536.8             | 7,404.1             | 26.8            | 16.8        | -105.60               | 320.0                             | 444.8      | 852.6                | 823.8                 | 28.72                  | 29.682                    |         |
| 7,500.0  | 7,330.1             | 7,527.2             | 7,398.8             | 27.3            | 16.8        | -101.63               | 327.9                             | 444.4      | 856.4                | 827.8                 | 28.64                  | 29.905                    |         |
| 7,600.0  | 7,394.0             | 7,505.5             | 7,386.1             | 27.9            | 16.9        | -96.69                | 345.6                             | 443.4      | 870.0                | 841.6                 | 28.45                  | 30.576                    |         |
| 7,700.0  | 7,444.1             | 7,476.7             | 7,368.4             | 28.6            | 17.0        | -91.39                | 368.2                             | 442.0      | 891.7                | 863.5                 | 28.17                  | 31.656                    |         |
| 7,800.0  | 7,478.8             | 7,450.0             | 7,350.9             | 29.4            | 17.1        | -86.29                | 388.3                             | 440.6      | 919.1                | 891.3                 | 27.76                  | 33.112                    |         |
| 7,900.0  | 7,497.2             | 7,400.0             | 7,315.7             | 30.1            | 17.2        | -80.25                | 423.8                             | 437.9      | 949.9                | 922.4                 | 27.53                  | 34.499                    |         |
| 8,000.0  | 7,500.0             | 7,369.2             | 7,292.6             | 31.0            | 17.3        | -76.98                | 444.0                             | 436.1      | 982.5                | 955.3                 | 27.20                  | 36.122                    |         |
| 8,100.0  | 7,500.0             | 7,335.7             | 7,266.2             | 31.9            | 17.4        | -75.43                | 464.6                             | 434.0      | 1,020.7              | 993.8                 | 26.91                  | 37.927                    |         |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-7H-E168 - HZ - Plan #4 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        |                   | 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 |                           |         |
| 0.0  | 0.0                 | 0.0                 | 0.0                 | 0.0             | 0.0         | -89.30                | 0.7                               | -60.2      | 60.2                 |                       |                        |                   |                           |         |
| 100.0  | 100.0               | 100.0               | 100.0               | 0.2             | 0.2         | -89.30                | 0.7                               | -60.2      | 60.2                 | 59.9                  | 0.30                   | 198.160           | CC, ES                    |         |
| 200.0  | 200.0               | 200.0               | 200.0               | 0.3             | 0.3         | -89.30                | 0.7                               | -60.2      | 60.2                 | 59.5                  | 0.65                   | 92.192            |                           |         |
| 300.0  | 300.0               | 300.0               | 300.0               | 0.5             | 0.5         | -89.30                | 0.7                               | -60.2      | 60.2                 | 59.2                  | 1.00                   | 60.069            |                           |         |
| 400.0  | 400.0               | 400.0               | 400.0               | 0.7             | 0.7         | -171.72               | 0.7                               | -60.2      | 61.0                 | 59.7                  | 1.35                   | 45.186            |                           |         |
| 500.0  | 500.0               | 500.0               | 500.0               | 0.9             | 0.8         | -172.05               | 0.7                               | -60.2      | 63.6                 | 61.9                  | 1.70                   | 37.432            |                           |         |
| 600.0  | 599.9               | 599.9               | 599.9               | 1.0             | 1.0         | -172.56               | 0.7                               | -60.2      | 68.0                 | 65.9                  | 2.05                   | 33.165            |                           |         |
| 700.0  | 699.7               | 699.7               | 699.7               | 1.2             | 1.2         | -173.16               | 0.7                               | -60.2      | 74.0                 | 71.6                  | 2.40                   | 30.864            |                           |         |
| 800.0  | 799.4               | 799.4               | 799.4               | 1.4             | 1.4         | -173.81               | 0.7                               | -60.2      | 81.8                 | 79.1                  | 2.75                   | 29.783            |                           |         |
| 900.0  | 898.9               | 898.9               | 898.9               | 1.7             | 1.5         | -174.45               | 0.7                               | -60.2      | 91.3                 | 88.2                  | 3.10                   | 29.510            |                           |         |
| 1,000.0  | 998.3               | 998.3               | 998.3               | 1.9             | 1.7         | -175.05               | 0.7                               | -60.2      | 102.6                | 99.2                  | 3.44                   | 29.801            |                           |         |
| 1,100.0  | 1,097.4             | 1,099.0             | 1,099.0             | 2.2             | 1.9         | -175.36               | 1.3                               | -59.5      | 114.9                | 111.1                 | 3.79                   | 30.290            |                           |         |
| 1,200.0  | 1,196.3             | 1,200.0             | 1,199.9             | 2.5             | 2.1         | -175.20               | 2.9                               | -57.4      | 127.6                | 123.4                 | 4.15                   | 30.760            |                           |         |
| 1,300.0  | 1,294.9             | 1,301.0             | 1,300.9             | 2.8             | 2.3         | -174.71               | 5.7                               | -54.0      | 140.5                | 136.0                 | 4.50                   | 31.209            |                           |         |
| 1,400.0  | 1,393.3             | 1,402.2             | 1,401.9             | 3.2             | 2.4         | -173.96               | 9.5                               | -49.1      | 153.8                | 148.9                 | 4.86                   | 31.631            |                           |         |
| 1,500.0  | 1,491.3             | 1,503.5             | 1,502.9             | 3.5             | 2.6         | -173.02               | 14.5                              | -42.9      | 167.1                | 161.9                 | 5.23                   | 31.972            |                           |         |
| 1,600.0  | 1,589.3             | 1,605.2             | 1,604.0             | 3.9             | 2.9         | -171.87               | 20.7                              | -35.2      | 179.3                | 173.7                 | 5.60                   | 32.003            |                           |         |
| 1,700.0  | 1,687.3             | 1,707.0             | 1,705.2             | 4.3             | 3.1         | -170.52               | 27.9                              | -26.1      | 190.3                | 184.3                 | 6.00                   | 31.736            |                           |         |
| 1,800.0  | 1,785.3             | 1,809.0             | 1,806.3             | 4.6             | 3.3         | -168.98               | 36.3                              | -15.6      | 199.9                | 193.5                 | 6.41                   | 31.209            |                           |         |
| 1,900.0  | 1,883.3             | 1,911.2             | 1,907.3             | 5.0             | 3.6         | -167.23               | 45.8                              | -3.7       | 208.5                | 201.6                 | 6.84                   | 30.458            |                           |         |
| 2,000.0  | 1,981.3             | 2,010.8             | 2,005.7             | 5.4             | 3.9         | -165.49               | 55.7                              | 8.7        | 216.5                | 209.2                 | 7.30                   | 29.644            |                           |         |
| 2,100.0  | 2,079.3             | 2,110.2             | 2,103.9             | 5.8             | 4.2         | -163.87               | 65.6                              | 21.1       | 224.6                | 216.9                 | 7.78                   | 28.884            |                           |         |
| 2,200.0  | 2,177.3             | 2,209.7             | 2,202.1             | 6.2             | 4.4         | -162.37               | 75.5                              | 33.5       | 233.0                | 224.7                 | 8.27                   | 28.173            |                           |         |
| 2,300.0  | 2,275.4             | 2,309.2             | 2,300.3             | 6.6             | 4.7         | -160.97               | 85.4                              | 45.8       | 241.5                | 232.7                 | 8.78                   | 27.509            |                           |         |
| 2,400.0  | 2,373.4             | 2,408.6             | 2,398.5             | 6.9             | 5.0         | -159.67               | 95.2                              | 58.2       | 250.1                | 240.8                 | 9.30                   | 26.891            |                           |         |
| 2,500.0  | 2,471.4             | 2,508.1             | 2,496.7             | 7.3             | 5.3         | -158.45               | 105.1                             | 70.6       | 258.9                | 249.0                 | 9.84                   | 26.316            |                           |         |
| 2,600.0  | 2,569.4             | 2,607.6             | 2,594.9             | 7.7             | 5.6         | -157.32               | 115.0                             | 82.9       | 267.7                | 257.4                 | 10.38                  | 25.782            |                           |         |
| 2,700.0  | 2,667.4             | 2,707.1             | 2,693.1             | 8.1             | 5.9         | -156.25               | 124.9                             | 95.3       | 276.7                | 265.8                 | 10.94                  | 25.287            |                           |         |
| 2,800.0  | 2,765.4             | 2,806.5             | 2,791.3             | 8.5             | 6.2         | -155.26               | 134.7                             | 107.7      | 285.7                | 274.2                 | 11.51                  | 24.827            |                           |         |
| 2,900.0  | 2,863.4             | 2,906.0             | 2,889.5             | 8.9             | 6.6         | -154.32               | 144.6                             | 120.1      | 294.9                | 282.8                 | 12.08                  | 24.401            |                           |         |
| 3,000.0  | 2,961.4             | 3,005.5             | 2,987.7             | 9.3             | 6.9         | -153.44               | 154.5                             | 132.4      | 304.1                | 291.4                 | 12.67                  | 24.004            |                           |         |
| 3,100.0  | 3,059.4             | 3,104.9             | 3,085.9             | 9.7             | 7.2         | -152.62               | 164.4                             | 144.8      | 313.3                | 300.1                 | 13.26                  | 23.636            |                           |         |
| 3,200.0  | 3,157.4             | 3,204.4             | 3,184.1             | 10.1            | 7.5         | -151.84               | 174.2                             | 157.2      | 322.7                | 308.8                 | 13.85                  | 23.294            |                           |         |
| 3,300.0  | 3,255.4             | 3,303.9             | 3,282.3             | 10.4            | 7.8         | -151.10               | 184.1                             | 169.5      | 332.1                | 317.6                 | 14.45                  | 22.975            |                           |         |
| 3,400.0  | 3,353.4             | 3,403.3             | 3,380.5             | 10.8            | 8.1         | -150.41               | 194.0                             | 181.9      | 341.5                | 326.4                 | 15.06                  | 22.678            |                           |         |
| 3,500.0  | 3,451.4             | 3,502.8             | 3,478.7             | 11.2            | 8.5         | -149.75               | 203.9                             | 194.3      | 351.0                | 335.3                 | 15.67                  | 22.401            |                           |         |
| 3,600.0  | 3,549.4             | 3,602.3             | 3,576.9             | 11.6            | 8.8         | -149.13               | 213.8                             | 206.7      | 360.5                | 344.2                 | 16.28                  | 22.142            |                           |         |
| 3,700.0  | 3,647.4             | 3,701.8             | 3,675.1             | 12.0            | 9.1         | -148.54               | 223.6                             | 219.0      | 370.1                | 353.2                 | 16.90                  | 21.899            |                           |         |
| 3,800.0  | 3,745.5             | 3,801.2             | 3,773.3             | 12.4            | 9.4         | -147.98               | 233.5                             | 231.4      | 379.7                | 362.2                 | 17.52                  | 21.672            |                           |         |
| 3,900.0  | 3,843.5             | 3,900.7             | 3,871.5             | 12.8            | 9.7         | -147.44               | 243.4                             | 243.8      | 389.3                | 371.2                 | 18.14                  | 21.460            |                           |         |
| 4,000.0  | 3,941.5             | 4,000.2             | 3,969.7             | 13.2            | 10.0        | -146.94               | 253.3                             | 256.2      | 399.0                | 380.2                 | 18.77                  | 21.260            |                           |         |
| 4,100.0  | 4,039.5             | 4,099.6             | 4,067.9             | 13.6            | 10.4        | -146.45               | 263.1                             | 268.5      | 408.7                | 389.3                 | 19.40                  | 21.072            |                           |         |
| 4,200.0  | 4,137.5             | 4,199.1             | 4,166.1             | 14.0            | 10.7        | -145.99               | 273.0                             | 280.9      | 418.4                | 398.4                 | 20.03                  | 20.895            |                           |         |
| 4,300.0  | 4,235.5             | 4,298.6             | 4,264.3             | 14.4            | 11.0        | -145.55               | 282.9                             | 293.3      | 428.2                | 407.5                 | 20.66                  | 20.728            |                           |         |
| 4,400.0  | 4,333.5             | 4,398.0             | 4,362.5             | 14.8            | 11.3        | -145.13               | 292.8                             | 305.6      | 438.0                | 416.7                 | 21.29                  | 20.570            |                           |         |
| 4,500.0  | 4,431.5             | 4,497.5             | 4,460.7             | 15.2            | 11.7        | -144.73               | 302.6                             | 318.0      | 447.8                | 425.8                 | 21.93                  | 20.422            |                           |         |
| 4,600.0  | 4,529.5             | 4,597.0             | 4,558.9             | 15.5            | 12.0        | -144.34               | 312.5                             | 330.4      | 457.6                | 435.0                 | 22.56                  | 20.281            |                           |         |
| 4,700.0  | 4,627.5             | 4,696.5             | 4,657.1             | 15.9            | 12.3        | -143.97               | 322.4                             | 342.8      | 467.4                | 444.2                 | 23.20                  | 20.147            |                           |         |
| 4,800.0  | 4,725.5             | 4,795.9             | 4,755.3             | 16.3            | 12.6        | -143.62               | 332.3                             | 355.1      | 477.3                | 453.4                 | 23.84                  | 20.021            |                           |         |
| 4,900.0  | 4,823.5             | 4,895.4             | 4,853.5             | 16.7            | 13.0        | -143.28               | 342.1                             | 367.5      | 487.1                | 462.7                 | 24.48                  | 19.901            |                           |         |
| 5,000.0  | 4,921.5             | 4,994.9             | 4,951.7             | 17.1            | 13.3        | -142.96               | 352.0                             | 379.9      | 497.0                | 471.9                 | 25.12                  | 19.787            |                           |         |
| 5,100.0  | 5,019.5             | 5,094.3             | 5,049.9             | 17.5            | 13.6        | -142.64               | 361.9                             | 392.2      | 506.9                | 481.2                 | 25.76                  | 19.678            |                           |         |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-7H-E168 - HZ - Plan #4 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       | 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 |         |
| 5,200.0  | 5,117.5             | 5,193.8             | 5,148.1             | 17.9            | 13.9        | -142.34               | 371.8                             | 404.6      | 516.9                | 490.5                 | 26.40                     | 19.575            |         |
| 5,300.0  | 5,215.6             | 5,293.3             | 5,246.3             | 18.3            | 14.3        | -142.05               | 381.7                             | 417.0      | 526.8                | 499.8                 | 27.05                     | 19.476            |         |
| 5,400.0  | 5,313.6             | 5,392.8             | 5,344.5             | 18.7            | 14.6        | -141.77               | 391.5                             | 429.4      | 536.8                | 509.1                 | 27.69                     | 19.382            |         |
| 5,500.0  | 5,411.6             | 5,492.2             | 5,442.7             | 19.1            | 14.9        | -141.50               | 401.4                             | 441.7      | 546.7                | 518.4                 | 28.34                     | 19.293            |         |
| 5,600.0  | 5,509.6             | 5,591.7             | 5,541.0             | 19.5            | 15.2        | -141.24               | 411.3                             | 454.1      | 556.7                | 527.7                 | 28.98                     | 19.207            |         |
| 5,700.0  | 5,607.6             | 5,691.2             | 5,639.2             | 19.9            | 15.6        | -140.99               | 421.2                             | 466.5      | 566.7                | 537.0                 | 29.63                     | 19.125            |         |
| 5,800.0  | 5,705.6             | 5,790.6             | 5,737.4             | 20.3            | 15.9        | -140.75               | 431.0                             | 478.8      | 576.7                | 546.4                 | 30.28                     | 19.046            |         |
| 5,900.0  | 5,803.6             | 5,890.1             | 5,835.6             | 20.7            | 16.2        | -140.52               | 440.9                             | 491.2      | 586.7                | 555.7                 | 30.92                     | 18.971            |         |
| 6,000.0  | 5,901.6             | 5,989.6             | 5,933.8             | 21.1            | 16.5        | -140.29               | 450.8                             | 503.6      | 596.7                | 565.1                 | 31.57                     | 18.899            |         |
| 6,100.0  | 5,999.6             | 6,089.0             | 6,032.0             | 21.4            | 16.9        | -140.08               | 460.7                             | 516.0      | 606.7                | 574.5                 | 32.22                     | 18.830            |         |
| 6,200.0  | 6,097.6             | 6,188.5             | 6,130.2             | 21.8            | 17.2        | -139.87               | 470.5                             | 528.3      | 616.7                | 583.9                 | 32.87                     | 18.763            |         |
| 6,300.0  | 6,195.6             | 6,288.0             | 6,228.4             | 22.2            | 17.5        | -139.66               | 480.4                             | 540.7      | 626.8                | 593.3                 | 33.52                     | 18.700            |         |
| 6,400.0  | 6,293.6             | 6,387.5             | 6,326.6             | 22.6            | 17.8        | -139.46               | 490.3                             | 553.1      | 636.8                | 602.6                 | 34.17                     | 18.638            |         |
| 6,500.0  | 6,391.6             | 6,486.9             | 6,424.8             | 23.0            | 18.2        | -139.27               | 500.2                             | 565.4      | 646.9                | 612.0                 | 34.82                     | 18.579            |         |
| 6,600.0  | 6,489.6             | 6,586.4             | 6,523.0             | 23.4            | 18.5        | -139.09               | 510.0                             | 577.8      | 656.9                | 621.5                 | 35.47                     | 18.522            |         |
| 6,700.0  | 6,587.6             | 6,685.9             | 6,621.2             | 23.8            | 18.8        | -138.91               | 519.9                             | 590.2      | 667.0                | 630.9                 | 36.12                     | 18.467            |         |
| 6,800.0  | 6,685.7             | 6,785.3             | 6,719.4             | 24.2            | 19.1        | -138.73               | 529.8                             | 602.6      | 677.1                | 640.3                 | 36.77                     | 18.415            |         |
| 6,900.0  | 6,783.7             | 6,884.8             | 6,817.6             | 24.6            | 19.5        | -138.56               | 539.7                             | 614.9      | 687.1                | 649.7                 | 37.42                     | 18.364            |         |
| 7,000.0  | 6,881.7             | 6,984.3             | 6,915.8             | 25.0            | 19.8        | -138.40               | 549.6                             | 627.3      | 697.2                | 659.2                 | 38.07                     | 18.314            |         |
| 7,100.0  | 6,979.6             | 7,083.8             | 7,014.0             | 25.4            | 20.1        | -125.95               | 559.4                             | 639.7      | 707.0                | 668.3                 | 38.72                     | 18.258            |         |
| 7,200.0  | 7,076.3             | 7,183.2             | 7,112.2             | 25.8            | 20.4        | -95.85                | 569.3                             | 652.1      | 709.7                | 670.4                 | 39.31                     | 18.054 SF         |         |
| 7,300.0  | 7,168.8             | 7,271.4             | 7,391.8             | 26.3            | 20.8        | -94.53                | 530.5                             | 692.0      | 690.9                | 653.6                 | 37.27                     | 18.539            |         |
| 7,400.0  | 7,254.2             | 7,360.3             | 7,505.7             | 26.8            | 20.7        | -101.36               | 467.0                             | 711.5      | 656.0                | 621.9                 | 34.08                     | 19.249            |         |
| 7,500.0  | 7,330.1             | 7,444.9             | 7,538.0             | 27.3            | 20.6        | -104.50               | 441.9                             | 717.6      | 627.2                | 594.8                 | 32.48                     | 19.311            |         |
| 7,600.0  | 7,394.0             | 7,647.8             | 7,540.3             | 27.9            | 20.6        | -104.12               | 440.0                             | 718.0      | 612.4                | 581.0                 | 31.40                     | 19.503            |         |
| 7,642.5  | 7,417.1             | 7,642.8             | 7,536.5             | 28.2            | 20.6        | -103.15               | 443.2                             | 717.3      | 611.0                | 580.0                 | 30.97                     | 19.731            |         |
| 7,700.0  | 7,444.1             | 7,632.2             | 7,528.3             | 28.6            | 20.6        | -101.23               | 449.8                             | 715.8      | 613.6                | 583.3                 | 30.30                     | 20.249            |         |
| 7,800.0  | 7,478.8             | 7,606.5             | 7,508.1             | 29.4            | 20.6        | -96.51                | 465.3                             | 712.0      | 629.6                | 600.4                 | 29.15                     | 21.601            |         |
| 7,900.0  | 7,497.2             | 7,574.6             | 7,482.2             | 30.1            | 20.7        | -90.57                | 483.1                             | 707.3      | 657.5                | 629.3                 | 28.11                     | 23.391            |         |
| 8,000.0  | 7,500.0             | 7,539.8             | 7,452.7             | 31.0            | 20.7        | -85.72                | 500.9                             | 702.1      | 693.9                | 666.6                 | 27.34                     | 25.379            |         |
| 8,100.0  | 7,500.0             | 7,510.0             | 7,426.6             | 31.9            | 20.8        | -83.42                | 514.7                             | 697.7      | 739.5                | 712.6                 | 26.88                     | 27.512            |         |
| 8,200.0  | 7,500.0             | 7,485.4             | 7,404.6             | 32.9            | 20.8        | -81.52                | 525.0                             | 694.0      | 793.6                | 766.8                 | 26.75                     | 29.671            |         |
| 8,300.0  | 7,500.0             | 7,464.9             | 7,385.9             | 33.9            | 20.8        | -79.94                | 532.9                             | 691.0      | 854.9                | 828.0                 | 26.90                     | 31.779            |         |
| 8,400.0  | 7,500.0             | 7,450.0             | 7,372.2             | 35.0            | 20.8        | -78.79                | 538.2                             | 688.8      | 922.3                | 895.0                 | 27.29                     | 33.793            |         |
| 8,500.0  | 7,500.0             | 7,432.6             | 7,355.9             | 36.2            | 20.8        | -77.46                | 543.9                             | 686.3      | 994.6                | 966.8                 | 27.76                     | 35.825            |         |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #3 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        | 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         |  |         |
| 0.0  | 0.0                 | 0.0                 | 0.0                 | 0.0             | 0.0         | -89.20                | 0.7                               | -52.6      | 52.6                 |                       |                        |                           |  |         |
| 100.0  | 100.0               | 100.0               | 100.0               | 0.2             | 0.2         | -89.20                | 0.7                               | -52.6      | 52.6                 | 52.3                  | 0.30                   | 173.278                   |  |         |
| 200.0  | 200.0               | 200.0               | 200.0               | 0.3             | 0.3         | -89.20                | 0.7                               | -52.6      | 52.6                 | 52.0                  | 0.65                   | 80.616                    |  |         |
| 300.0  | 300.0               | 300.0               | 300.0               | 0.5             | 0.5         | -89.20                | 0.7                               | -52.6      | 52.6                 | 51.6                  | 1.00                   | 52.527 CC                 |  |         |
| 400.0  | 400.0               | 400.8               | 400.8               | 0.7             | 0.7         | -171.24               | 1.1                               | -51.8      | 52.7                 | 51.3                  | 1.35                   | 38.957                    |  |         |
| 500.0  | 500.0               | 501.7               | 501.6               | 0.9             | 0.9         | -170.47               | 2.2                               | -49.4      | 52.9                 | 51.2                  | 1.70                   | 31.040                    |  |         |
| 600.0  | 599.9               | 602.5               | 602.4               | 1.0             | 1.0         | -169.20               | 3.9                               | -45.3      | 53.2                 | 51.2                  | 2.06                   | 25.879 ES                 |  |         |
| 700.0  | 699.7               | 703.3               | 703.0               | 1.2             | 1.2         | -167.45               | 6.4                               | -39.6      | 53.7                 | 51.3                  | 2.41                   | 22.270                    |  |         |
| 800.0  | 799.4               | 804.1               | 803.5               | 1.4             | 1.5         | -165.26               | 9.6                               | -32.3      | 54.5                 | 51.7                  | 2.78                   | 19.619                    |  |         |
| 900.0  | 898.9               | 904.9               | 903.8               | 1.7             | 1.7         | -162.66               | 13.5                              | -23.4      | 55.5                 | 52.3                  | 3.15                   | 17.598                    |  |         |
| 1,000.0  | 998.3               | 1,005.7             | 1,003.9             | 1.9             | 1.9         | -159.72               | 18.1                              | -12.9      | 56.8                 | 53.3                  | 3.55                   | 16.007                    |  |         |
| 1,100.0  | 1,097.4             | 1,106.4             | 1,103.8             | 2.2             | 2.2         | -156.51               | 23.4                              | -0.7       | 58.6                 | 54.6                  | 3.98                   | 14.719                    |  |         |
| 1,200.0  | 1,196.3             | 1,207.1             | 1,203.3             | 2.5             | 2.5         | -153.10               | 29.5                              | 13.0       | 60.7                 | 56.3                  | 4.45                   | 13.649                    |  |         |
| 1,300.0  | 1,294.9             | 1,307.8             | 1,302.6             | 2.8             | 2.8         | -149.59               | 36.2                              | 28.4       | 63.3                 | 58.4                  | 4.97                   | 12.741                    |  |         |
| 1,400.0  | 1,393.3             | 1,408.4             | 1,401.5             | 3.2             | 3.2         | -146.04               | 43.6                              | 45.3       | 66.5                 | 60.9                  | 5.56                   | 11.960                    |  |         |
| 1,500.0  | 1,491.3             | 1,508.9             | 1,500.0             | 3.5             | 3.6         | -142.44               | 51.7                              | 63.8       | 70.0                 | 63.8                  | 6.22                   | 11.260                    |  |         |
| 1,600.0  | 1,589.3             | 1,608.8             | 1,597.7             | 3.9             | 3.9         | -138.90               | 59.9                              | 82.7       | 73.6                 | 66.6                  | 6.93                   | 10.620                    |  |         |
| 1,700.0  | 1,687.3             | 1,708.6             | 1,695.3             | 4.3             | 4.3         | -135.69               | 68.2                              | 101.6      | 77.4                 | 69.7                  | 7.67                   | 10.088                    |  |         |
| 1,800.0  | 1,785.3             | 1,808.4             | 1,793.0             | 4.6             | 4.7         | -132.80               | 76.5                              | 120.6      | 81.4                 | 73.0                  | 8.44                   | 9.648                     |  |         |
| 1,900.0  | 1,883.3             | 1,908.3             | 1,890.7             | 5.0             | 5.1         | -130.18               | 84.8                              | 139.5      | 85.6                 | 76.4                  | 9.22                   | 9.283                     |  |         |
| 2,000.0  | 1,981.3             | 2,008.1             | 1,988.4             | 5.4             | 5.5         | -127.82               | 93.1                              | 158.4      | 90.0                 | 80.0                  | 10.02                  | 8.980                     |  |         |
| 2,100.0  | 2,079.3             | 2,108.0             | 2,086.0             | 5.8             | 5.9         | -125.68               | 101.4                             | 177.4      | 94.5                 | 83.7                  | 10.83                  | 8.727                     |  |         |
| 2,200.0  | 2,177.3             | 2,207.8             | 2,183.7             | 6.2             | 6.3         | -123.73               | 109.6                             | 196.3      | 99.1                 | 87.5                  | 11.64                  | 8.515                     |  |         |
| 2,300.0  | 2,275.4             | 2,307.6             | 2,281.4             | 6.6             | 6.7         | -121.96               | 117.9                             | 215.2      | 103.9                | 91.4                  | 12.46                  | 8.337                     |  |         |
| 2,400.0  | 2,373.4             | 2,407.5             | 2,379.1             | 6.9             | 7.1         | -120.34               | 126.2                             | 234.1      | 108.7                | 95.4                  | 13.28                  | 8.186                     |  |         |
| 2,500.0  | 2,471.4             | 2,507.3             | 2,476.7             | 7.3             | 7.5         | -118.87               | 134.5                             | 253.1      | 113.6                | 99.5                  | 14.10                  | 8.058                     |  |         |
| 2,600.0  | 2,569.4             | 2,607.1             | 2,574.4             | 7.7             | 7.9         | -117.51               | 142.8                             | 272.0      | 118.6                | 103.7                 | 14.92                  | 7.948                     |  |         |
| 2,700.0  | 2,667.4             | 2,707.0             | 2,672.1             | 8.1             | 8.3         | -116.27               | 151.1                             | 290.9      | 123.6                | 107.9                 | 15.74                  | 7.854                     |  |         |
| 2,800.0  | 2,765.4             | 2,806.8             | 2,769.8             | 8.5             | 8.7         | -115.12               | 159.3                             | 309.9      | 128.7                | 112.2                 | 16.56                  | 7.772                     |  |         |
| 2,900.0  | 2,863.4             | 2,906.7             | 2,867.5             | 8.9             | 9.1         | -114.07               | 167.6                             | 328.8      | 133.9                | 116.5                 | 17.38                  | 7.701                     |  |         |
| 3,000.0  | 2,961.4             | 3,006.5             | 2,965.1             | 9.3             | 9.5         | -113.09               | 175.9                             | 347.7      | 139.1                | 120.9                 | 18.20                  | 7.640                     |  |         |
| 3,100.0  | 3,059.4             | 3,106.3             | 3,062.8             | 9.7             | 9.9         | -112.18               | 184.2                             | 366.6      | 144.3                | 125.3                 | 19.02                  | 7.586                     |  |         |
| 3,200.0  | 3,157.4             | 3,206.2             | 3,160.5             | 10.1            | 10.3        | -111.33               | 192.5                             | 385.6      | 149.5                | 129.7                 | 19.83                  | 7.539                     |  |         |
| 3,300.0  | 3,255.4             | 3,306.0             | 3,258.2             | 10.4            | 10.7        | -110.54               | 200.8                             | 404.5      | 154.8                | 134.2                 | 20.65                  | 7.497                     |  |         |
| 3,400.0  | 3,353.4             | 3,405.9             | 3,355.8             | 10.8            | 11.1        | -109.81               | 209.0                             | 423.4      | 160.1                | 138.7                 | 21.46                  | 7.460                     |  |         |
| 3,500.0  | 3,451.4             | 3,505.7             | 3,453.5             | 11.2            | 11.5        | -109.12               | 217.3                             | 442.4      | 165.5                | 143.2                 | 22.28                  | 7.428                     |  |         |
| 3,600.0  | 3,549.4             | 3,605.5             | 3,551.2             | 11.6            | 11.9        | -108.47               | 225.6                             | 461.3      | 170.8                | 147.7                 | 23.09                  | 7.399                     |  |         |
| 3,700.0  | 3,647.4             | 3,705.4             | 3,648.9             | 12.0            | 12.3        | -107.87               | 233.9                             | 480.2      | 176.2                | 152.3                 | 23.90                  | 7.373                     |  |         |
| 3,800.0  | 3,745.5             | 3,805.2             | 3,746.5             | 12.4            | 12.7        | -107.30               | 242.2                             | 499.2      | 181.6                | 156.9                 | 24.71                  | 7.350                     |  |         |
| 3,900.0  | 3,843.5             | 3,905.0             | 3,844.2             | 12.8            | 13.1        | -106.76               | 250.5                             | 518.1      | 187.0                | 161.5                 | 25.51                  | 7.329                     |  |         |
| 4,000.0  | 3,941.5             | 4,004.9             | 3,941.9             | 13.2            | 13.5        | -106.25               | 258.7                             | 537.0      | 192.4                | 166.1                 | 26.32                  | 7.311                     |  |         |
| 4,100.0  | 4,039.5             | 4,104.7             | 4,039.6             | 13.6            | 13.9        | -105.77               | 267.0                             | 555.9      | 197.9                | 170.7                 | 27.13                  | 7.294                     |  |         |
| 4,200.0  | 4,137.5             | 4,204.6             | 4,137.3             | 14.0            | 14.3        | -105.32               | 275.3                             | 574.9      | 203.3                | 175.4                 | 27.93                  | 7.279                     |  |         |
| 4,300.0  | 4,235.5             | 4,304.4             | 4,234.9             | 14.4            | 14.7        | -104.89               | 283.6                             | 593.8      | 208.8                | 180.1                 | 28.74                  | 7.266                     |  |         |
| 4,400.0  | 4,333.5             | 4,404.2             | 4,332.6             | 14.8            | 15.1        | -104.48               | 291.9                             | 612.7      | 214.3                | 184.7                 | 29.54                  | 7.253                     |  |         |
| 4,500.0  | 4,431.5             | 4,504.1             | 4,430.3             | 15.2            | 15.5        | -104.10               | 300.2                             | 631.7      | 219.8                | 189.4                 | 30.35                  | 7.242                     |  |         |
| 4,600.0  | 4,529.5             | 4,603.9             | 4,528.0             | 15.5            | 16.0        | -103.73               | 308.4                             | 650.6      | 225.3                | 194.1                 | 31.15                  | 7.232                     |  |         |
| 4,700.0  | 4,627.5             | 4,703.8             | 4,625.6             | 15.9            | 16.4        | -103.38               | 316.7                             | 669.5      | 230.8                | 198.8                 | 31.95                  | 7.223                     |  |         |
| 4,800.0  | 4,725.5             | 4,803.6             | 4,723.3             | 16.3            | 16.8        | -103.04               | 325.0                             | 688.4      | 236.3                | 203.5                 | 32.75                  | 7.215                     |  |         |
| 4,900.0  | 4,823.5             | 4,903.4             | 4,821.0             | 16.7            | 17.2        | -102.72               | 333.3                             | 707.4      | 241.8                | 208.3                 | 33.55                  | 7.207                     |  |         |
| 5,000.0  | 4,921.5             | 5,003.3             | 4,918.7             | 17.1            | 17.6        | -102.42               | 341.6                             | 726.3      | 247.3                | 213.0                 | 34.35                  | 7.200                     |  |         |
| 5,100.0  | 5,019.5             | 5,103.1             | 5,016.3             | 17.5            | 18.0        | -102.13               | 349.8                             | 745.2      | 252.9                | 217.7                 | 35.15                  | 7.194                     |  |         |

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

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #3 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        |                   | 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 |                           |         |
| 5,200.0  | 5,117.5             | 5,202.9             | 5,114.0             | 17.9            | 18.4        | -101.85               | 358.1                             | 764.2      | 258.4                | 222.5                 | 35.95                  | 7.189             |                           |         |
| 5,300.0  | 5,215.6             | 5,302.8             | 5,211.7             | 18.3            | 18.8        | -101.58               | 366.4                             | 783.1      | 264.0                | 227.2                 | 36.75                  | 7.183             |                           |         |
| 5,400.0  | 5,313.6             | 5,402.6             | 5,309.4             | 18.7            | 19.2        | -101.32               | 374.7                             | 802.0      | 269.5                | 232.0                 | 37.55                  | 7.179             |                           |         |
| 5,500.0  | 5,411.6             | 5,502.5             | 5,407.1             | 19.1            | 19.6        | -101.08               | 383.0                             | 821.0      | 275.1                | 236.8                 | 38.35                  | 7.174             |                           |         |
| 5,600.0  | 5,509.6             | 5,602.3             | 5,504.7             | 19.5            | 20.0        | -100.84               | 391.3                             | 839.9      | 280.7                | 241.5                 | 39.14                  | 7.170             |                           |         |
| 5,700.0  | 5,607.6             | 5,702.1             | 5,602.4             | 19.9            | 20.4        | -100.61               | 399.5                             | 858.8      | 286.2                | 246.3                 | 39.94                  | 7.167             |                           |         |
| 5,800.0  | 5,705.6             | 5,802.0             | 5,700.1             | 20.3            | 20.8        | -100.39               | 407.8                             | 877.7      | 291.8                | 251.1                 | 40.74                  | 7.163             |                           |         |
| 5,900.0  | 5,803.6             | 5,901.8             | 5,797.8             | 20.7            | 21.2        | -100.18               | 416.1                             | 896.7      | 297.4                | 255.9                 | 41.53                  | 7.160             |                           |         |
| 6,000.0  | 5,901.6             | 6,001.7             | 5,895.4             | 21.1            | 21.6        | -99.98                | 424.4                             | 915.6      | 303.0                | 260.6                 | 42.33                  | 7.158             |                           |         |
| 6,100.0  | 5,999.6             | 6,101.5             | 5,993.1             | 21.4            | 22.0        | -99.79                | 432.7                             | 934.5      | 308.6                | 265.4                 | 43.12                  | 7.155             |                           |         |
| 6,200.0  | 6,097.6             | 6,201.3             | 6,090.8             | 21.8            | 22.4        | -99.60                | 441.0                             | 953.5      | 314.1                | 270.2                 | 43.92                  | 7.153             |                           |         |
| 6,300.0  | 6,195.6             | 6,301.2             | 6,188.5             | 22.2            | 22.8        | -99.42                | 449.2                             | 972.4      | 319.7                | 275.0                 | 44.71                  | 7.151             |                           |         |
| 6,400.0  | 6,293.6             | 6,401.0             | 6,286.1             | 22.6            | 23.2        | -99.24                | 457.5                             | 991.3      | 325.3                | 279.8                 | 45.51                  | 7.149             |                           |         |
| 6,500.0  | 6,391.6             | 6,500.8             | 6,383.8             | 23.0            | 23.7        | -99.07                | 465.8                             | 1,010.3    | 330.9                | 284.6                 | 46.30                  | 7.147             |                           |         |
| 6,600.0  | 6,489.6             | 6,600.7             | 6,481.5             | 23.4            | 24.1        | -98.91                | 474.1                             | 1,029.2    | 336.5                | 289.4                 | 47.10                  | 7.145             |                           |         |
| 6,700.0  | 6,587.6             | 6,700.5             | 6,579.2             | 23.8            | 24.5        | -98.75                | 482.4                             | 1,048.1    | 342.1                | 294.2                 | 47.89                  | 7.144             |                           |         |
| 6,800.0  | 6,685.7             | 6,800.4             | 6,676.9             | 24.2            | 24.9        | -98.60                | 490.7                             | 1,067.0    | 347.7                | 299.1                 | 48.69                  | 7.143             |                           |         |
| 6,900.0  | 6,783.7             | 6,900.2             | 6,774.5             | 24.6            | 25.3        | -98.45                | 498.9                             | 1,086.0    | 353.4                | 303.9                 | 49.48                  | 7.141             |                           |         |
| 7,000.0  | 6,881.7             | 7,000.0             | 6,872.2             | 25.0            | 25.7        | -98.30                | 507.2                             | 1,104.9    | 359.0                | 308.7                 | 50.27                  | 7.140             |                           |         |
| 7,100.0  | 6,979.6             | 7,218.6             | 7,084.9             | 25.4            | 26.3        | -87.71                | 490.8                             | 1,146.1    | 350.3                | 301.2                 | 49.19                  | 7.122             |                           |         |
| 7,200.0  | 7,076.3             | 7,399.9             | 7,246.5             | 25.8            | 26.5        | -67.72                | 416.6                             | 1,177.4    | 297.6                | 254.0                 | 43.64                  | 6.820             |                           |         |
| 7,300.0  | 7,168.8             | 7,492.9             | 7,318.4             | 26.3            | 26.5        | -79.17                | 359.4                             | 1,191.4    | 220.6                | 181.1                 | 39.47                  | 5.588             |                           |         |
| 7,400.0  | 7,254.2             | 7,530.9             | 7,345.0             | 26.8            | 26.5        | -100.68               | 332.8                             | 1,196.5    | 142.8                | 106.1                 | 36.70                  | 3.891             |                           |         |
| 7,499.8  | 7,329.9             | 7,538.6             | 7,350.2             | 27.3            | 26.5        | -106.16               | 327.1                             | 1,197.5    | 102.5                | 73.7                  | 28.80                  | 3.560 SF          |                           |         |
| 7,500.0  | 7,330.1             | 7,538.6             | 7,350.2             | 27.3            | 26.5        | -106.15               | 327.2                             | 1,197.5    | 102.5                | 73.7                  | 28.77                  | 3.563             |                           |         |
| 7,600.0  | 7,394.0             | 7,529.2             | 7,343.9             | 27.9            | 26.5        | -94.04                | 334.0                             | 1,196.3    | 142.9                | 116.3                 | 26.60                  | 5.373             |                           |         |
| 7,700.0  | 7,444.1             | 7,509.5             | 7,330.2             | 28.6            | 26.5        | -71.45                | 348.0                             | 1,193.7    | 221.5                | 191.1                 | 30.45                  | 7.274             |                           |         |
| 7,800.0  | 7,478.8             | 7,483.0             | 7,311.2             | 29.4            | 26.5        | -51.03                | 366.0                             | 1,190.0    | 306.6                | 273.3                 | 33.32                  | 9.201             |                           |         |
| 7,900.0  | 7,497.2             | 7,450.0             | 7,286.4             | 30.1            | 26.5        | -38.00                | 387.3                             | 1,185.2    | 389.9                | 354.4                 | 35.44                  | 11.000            |                           |         |
| 8,000.0  | 7,500.0             | 7,418.8             | 7,261.9             | 31.0            | 26.5        | -32.62                | 405.9                             | 1,180.4    | 469.3                | 431.6                 | 37.64                  | 12.467            |                           |         |
| 8,100.0  | 7,500.0             | 7,400.0             | 7,246.6             | 31.9            | 26.5        | -31.53                | 416.5                             | 1,177.5    | 551.0                | 511.1                 | 39.90                  | 13.810            |                           |         |
| 8,200.0  | 7,500.0             | 7,363.8             | 7,216.3             | 32.9            | 26.5        | -29.65                | 435.5                             | 1,171.6    | 635.4                | 594.7                 | 40.66                  | 15.626            |                           |         |
| 8,300.0  | 7,500.0             | 7,350.0             | 7,204.5             | 33.9            | 26.5        | -29.00                | 442.1                             | 1,169.3    | 722.3                | 680.2                 | 42.11                  | 17.154            |                           |         |
| 8,400.0  | 7,500.0             | 7,322.6             | 7,180.5             | 35.0            | 26.4        | -27.82                | 454.6                             | 1,164.6    | 810.9                | 768.2                 | 42.71                  | 18.988            |                           |         |
| 8,500.0  | 7,500.0             | 7,300.0             | 7,160.3             | 36.2            | 26.4        | -26.93                | 463.9                             | 1,160.7    | 901.2                | 857.9                 | 43.31                  | 20.808            |                           |         |
| 8,600.0  | 7,500.0             | 7,300.0             | 7,160.3             | 37.4            | 26.4        | -26.93                | 463.9                             | 1,160.7    | 992.7                | 948.3                 | 44.41                  | 22.354            |                           |         |

# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #3 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        |                   | 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         | -89.53                | 0.4                               | -45.1      | 45.1                 |                       |                        |                   |                    |         |
| 100.0  | 100.0               | 100.0               | 100.0               | 0.2             | 0.2         | -89.53                | 0.4                               | -45.1      | 45.1                 | 44.8                  | 0.30                   | 148.383           |                    |         |
| 109.5  | 109.5               | 109.5               | 109.5               | 0.2             | 0.2         | -89.53                | 0.4                               | -45.1      | 45.1                 | 44.7                  | 0.34                   | 133.800 CC        |                    |         |
| 200.0  | 200.0               | 200.0               | 200.0               | 0.3             | 0.3         | -88.70                | 1.0                               | -45.1      | 45.1                 | 44.4                  | 0.65                   | 68.969 ES         |                    |         |
| 300.0  | 300.0               | 299.8               | 299.7               | 0.5             | 0.5         | -82.19                | 6.2                               | -45.0      | 45.5                 | 44.4                  | 1.02                   | 44.497            |                    |         |
| 400.0  | 400.0               | 400.4               | 400.0               | 0.7             | 0.7         | -155.97               | 13.2                              | -43.9      | 46.6                 | 45.2                  | 1.40                   | 33.231            |                    |         |
| 500.0  | 500.0               | 500.9               | 500.2               | 0.9             | 0.9         | -148.19               | 20.3                              | -40.9      | 48.6                 | 46.8                  | 1.79                   | 27.132            |                    |         |
| 600.0  | 599.9               | 601.5               | 600.4               | 1.0             | 1.2         | -141.31               | 27.5                              | -36.2      | 51.3                 | 49.1                  | 2.19                   | 23.394            |                    |         |
| 700.0  | 699.7               | 702.0               | 700.5               | 1.2             | 1.4         | -135.33               | 34.7                              | -29.8      | 54.6                 | 52.0                  | 2.62                   | 20.863            |                    |         |
| 800.0  | 799.4               | 802.6               | 800.5               | 1.4             | 1.7         | -130.18               | 41.9                              | -21.6      | 58.2                 | 55.1                  | 3.06                   | 18.995            |                    |         |
| 900.0  | 898.9               | 903.2               | 900.3               | 1.7             | 1.9         | -125.76               | 49.2                              | -11.6      | 62.0                 | 58.5                  | 3.54                   | 17.509            |                    |         |
| 1,000.0  | 998.3               | 1,003.7             | 999.9               | 1.9             | 2.2         | -121.96               | 56.5                              | 0.1        | 66.0                 | 62.0                  | 4.06                   | 16.259            |                    |         |
| 1,100.0  | 1,097.4             | 1,104.3             | 1,099.2             | 2.2             | 2.5         | -118.69               | 63.9                              | 13.6       | 70.1                 | 65.5                  | 4.62                   | 15.164            |                    |         |
| 1,200.0  | 1,196.3             | 1,204.8             | 1,198.4             | 2.5             | 2.8         | -115.84               | 71.3                              | 28.8       | 74.2                 | 69.0                  | 5.24                   | 14.178            |                    |         |
| 1,300.0  | 1,294.9             | 1,305.4             | 1,297.2             | 2.8             | 3.2         | -113.36               | 78.7                              | 45.8       | 78.3                 | 72.4                  | 5.90                   | 13.277            |                    |         |
| 1,400.0  | 1,393.3             | 1,405.9             | 1,395.7             | 3.2             | 3.6         | -111.17               | 86.1                              | 64.5       | 82.3                 | 75.7                  | 6.62                   | 12.445            |                    |         |
| 1,500.0  | 1,491.3             | 1,506.5             | 1,493.9             | 3.5             | 4.0         | -109.10               | 93.6                              | 84.9       | 86.2                 | 78.8                  | 7.38                   | 11.679            |                    |         |
| 1,600.0  | 1,589.3             | 1,607.0             | 1,591.6             | 3.9             | 4.4         | -106.30               | 101.1                             | 107.1      | 89.5                 | 81.3                  | 8.18                   | 10.938            |                    |         |
| 1,700.0  | 1,687.3             | 1,706.9             | 1,688.5             | 4.3             | 4.8         | -103.06               | 108.6                             | 130.2      | 92.6                 | 83.6                  | 9.00                   | 10.291            |                    |         |
| 1,800.0  | 1,785.3             | 1,806.7             | 1,785.3             | 4.6             | 5.3         | -100.02               | 116.1                             | 153.4      | 96.0                 | 86.2                  | 9.82                   | 9.780             |                    |         |
| 1,900.0  | 1,883.3             | 1,906.5             | 1,882.1             | 5.0             | 5.7         | -97.19                | 123.6                             | 176.5      | 99.7                 | 89.0                  | 10.63                  | 9.375             |                    |         |
| 2,000.0  | 1,981.3             | 2,006.3             | 1,978.9             | 5.4             | 6.2         | -94.58                | 131.0                             | 199.6      | 103.5                | 92.1                  | 11.43                  | 9.053             |                    |         |
| 2,100.0  | 2,079.3             | 2,106.2             | 2,075.8             | 5.8             | 6.6         | -92.15                | 138.5                             | 222.8      | 107.6                | 95.3                  | 12.23                  | 8.796             |                    |         |
| 2,200.0  | 2,177.3             | 2,206.0             | 2,172.6             | 6.2             | 7.1         | -89.90                | 146.0                             | 245.9      | 111.8                | 98.8                  | 13.02                  | 8.591             |                    |         |
| 2,300.0  | 2,275.4             | 2,305.8             | 2,269.4             | 6.6             | 7.6         | -87.82                | 153.4                             | 269.0      | 116.2                | 102.4                 | 13.79                  | 8.428             |                    |         |
| 2,400.0  | 2,373.4             | 2,405.6             | 2,366.2             | 6.9             | 8.0         | -85.90                | 160.9                             | 292.2      | 120.8                | 106.2                 | 14.55                  | 8.298             |                    |         |
| 2,500.0  | 2,471.4             | 2,505.4             | 2,463.0             | 7.3             | 8.5         | -84.11                | 168.4                             | 315.3      | 125.4                | 110.1                 | 15.31                  | 8.195             |                    |         |
| 2,600.0  | 2,569.4             | 2,605.2             | 2,559.8             | 7.7             | 8.9         | -82.46                | 175.9                             | 338.5      | 130.2                | 114.2                 | 16.05                  | 8.113             |                    |         |
| 2,700.0  | 2,667.4             | 2,705.1             | 2,656.6             | 8.1             | 9.4         | -80.92                | 183.3                             | 361.6      | 135.1                | 118.3                 | 16.78                  | 8.050             |                    |         |
| 2,800.0  | 2,765.4             | 2,804.9             | 2,753.4             | 8.5             | 9.9         | -79.49                | 190.8                             | 384.7      | 140.1                | 122.6                 | 17.51                  | 8.001             |                    |         |
| 2,900.0  | 2,863.4             | 2,904.7             | 2,850.2             | 8.9             | 10.3        | -78.16                | 198.3                             | 407.9      | 145.1                | 126.9                 | 18.22                  | 7.963             |                    |         |
| 3,000.0  | 2,961.4             | 3,004.5             | 2,947.1             | 9.3             | 10.8        | -76.92                | 205.7                             | 431.0      | 150.2                | 131.3                 | 18.93                  | 7.936             |                    |         |
| 3,100.0  | 3,059.4             | 3,104.3             | 3,043.9             | 9.7             | 11.2        | -75.77                | 213.2                             | 454.1      | 155.4                | 135.8                 | 19.63                  | 7.916             |                    |         |
| 3,200.0  | 3,157.4             | 3,204.1             | 3,140.7             | 10.1            | 11.7        | -74.68                | 220.7                             | 477.3      | 160.7                | 140.4                 | 20.33                  | 7.904             |                    |         |
| 3,300.0  | 3,255.4             | 3,304.0             | 3,237.5             | 10.4            | 12.2        | -73.67                | 228.2                             | 500.4      | 166.0                | 145.0                 | 21.02                  | 7.897             |                    |         |
| 3,400.0  | 3,353.4             | 3,403.8             | 3,334.3             | 10.8            | 12.6        | -72.72                | 235.6                             | 523.6      | 171.4                | 149.6                 | 21.71                  | 7.894             |                    |         |
| 3,500.0  | 3,451.4             | 3,503.6             | 3,431.1             | 11.2            | 13.1        | -71.82                | 243.1                             | 546.7      | 176.7                | 154.4                 | 22.39                  | 7.896             |                    |         |
| 3,600.0  | 3,549.4             | 3,603.4             | 3,527.9             | 11.6            | 13.6        | -70.98                | 250.6                             | 569.8      | 182.2                | 159.1                 | 23.06                  | 7.900             |                    |         |
| 3,700.0  | 3,647.4             | 3,703.2             | 3,624.7             | 12.0            | 14.0        | -70.19                | 258.1                             | 593.0      | 187.7                | 163.9                 | 23.73                  | 7.908             |                    |         |
| 3,800.0  | 3,745.5             | 3,803.1             | 3,721.5             | 12.4            | 14.5        | -69.45                | 265.5                             | 616.1      | 193.2                | 168.8                 | 24.40                  | 7.917             |                    |         |
| 3,900.0  | 3,843.5             | 3,902.9             | 3,818.4             | 12.8            | 15.0        | -68.74                | 273.0                             | 639.2      | 198.7                | 173.6                 | 25.06                  | 7.928             |                    |         |
| 4,000.0  | 3,941.5             | 4,002.7             | 3,915.2             | 13.2            | 15.4        | -68.08                | 280.5                             | 662.4      | 204.3                | 178.6                 | 25.72                  | 7.941             |                    |         |
| 4,100.0  | 4,039.5             | 4,102.5             | 4,012.0             | 13.6            | 15.9        | -67.45                | 287.9                             | 685.5      | 209.9                | 183.5                 | 26.38                  | 7.955             |                    |         |
| 4,200.0  | 4,137.5             | 4,202.3             | 4,108.8             | 14.0            | 16.4        | -66.85                | 295.4                             | 708.7      | 215.5                | 188.5                 | 27.04                  | 7.970             |                    |         |
| 4,300.0  | 4,235.5             | 4,302.1             | 4,205.6             | 14.4            | 16.8        | -66.28                | 302.9                             | 731.8      | 221.1                | 193.4                 | 27.69                  | 7.985             |                    |         |
| 4,400.0  | 4,333.5             | 4,402.0             | 4,302.4             | 14.8            | 17.3        | -65.74                | 310.4                             | 754.9      | 226.8                | 198.4                 | 28.34                  | 8.002             |                    |         |
| 4,500.0  | 4,431.5             | 4,501.8             | 4,399.2             | 15.2            | 17.8        | -65.23                | 317.8                             | 778.1      | 232.5                | 203.5                 | 28.99                  | 8.019             |                    |         |
| 4,600.0  | 4,529.5             | 4,601.6             | 4,496.0             | 15.5            | 18.2        | -64.74                | 325.3                             | 801.2      | 238.2                | 208.5                 | 29.64                  | 8.036             |                    |         |
| 4,700.0  | 4,627.5             | 4,701.4             | 4,592.8             | 15.9            | 18.7        | -64.27                | 332.8                             | 824.4      | 243.9                | 213.6                 | 30.28                  | 8.053             |                    |         |
| 4,800.0  | 4,725.5             | 4,801.2             | 4,689.6             | 16.3            | 19.2        | -63.83                | 340.2                             | 847.5      | 249.6                | 218.7                 | 30.93                  | 8.071             |                    |         |
| 4,900.0  | 4,823.5             | 4,901.0             | 4,786.5             | 16.7            | 19.6        | -63.40                | 347.7                             | 870.6      | 255.4                | 223.8                 | 31.57                  | 8.089             |                    |         |
| 5,000.0  | 4,921.5             | 5,000.9             | 4,883.3             | 17.1            | 20.1        | -63.00                | 355.2                             | 893.8      | 261.1                | 228.9                 | 32.21                  | 8.107             |                    |         |

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



# Cathedral Energy Services

## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

| Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #3 |                     |                     |                     |                 |             |                       |                                   |            |                      |                       |                        | 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         |         |
| 5,100.0  | 5,019.5             | 5,100.7             | 4,980.1             | 17.5            | 20.6        | -62.61                | 362.7                             | 916.9      | 266.9                | 234.0                 | 32.85                  | 8.125                     |         |
| 5,200.0  | 5,117.5             | 5,200.5             | 5,076.9             | 17.9            | 21.0        | -62.24                | 370.1                             | 940.0      | 272.7                | 239.2                 | 33.49                  | 8.142                     |         |
| 5,300.0  | 5,215.6             | 5,300.3             | 5,173.7             | 18.3            | 21.5        | -61.88                | 377.6                             | 963.2      | 278.5                | 244.3                 | 34.12                  | 8.160                     |         |
| 5,400.0  | 5,313.6             | 5,400.1             | 5,270.5             | 18.7            | 22.0        | -61.54                | 385.1                             | 986.3      | 284.3                | 249.5                 | 34.76                  | 8.178                     |         |
| 5,500.0  | 5,411.6             | 5,499.9             | 5,367.3             | 19.1            | 22.5        | -61.21                | 392.6                             | 1,009.5    | 290.1                | 254.7                 | 35.39                  | 8.195                     |         |
| 5,600.0  | 5,509.6             | 5,599.8             | 5,464.1             | 19.5            | 22.9        | -60.90                | 400.0                             | 1,032.6    | 295.9                | 259.9                 | 36.03                  | 8.213                     |         |
| 5,700.0  | 5,607.6             | 5,699.6             | 5,560.9             | 19.9            | 23.4        | -60.59                | 407.5                             | 1,055.7    | 301.7                | 265.1                 | 36.66                  | 8.230                     |         |
| 5,800.0  | 5,705.6             | 5,799.4             | 5,657.8             | 20.3            | 23.9        | -60.30                | 415.0                             | 1,078.9    | 307.6                | 270.3                 | 37.29                  | 8.247                     |         |
| 5,900.0  | 5,803.6             | 5,899.2             | 5,754.6             | 20.7            | 24.3        | -60.02                | 422.4                             | 1,102.0    | 313.4                | 275.5                 | 37.93                  | 8.264                     |         |
| 6,000.0  | 5,901.6             | 5,999.0             | 5,851.4             | 21.1            | 24.8        | -59.75                | 429.9                             | 1,125.1    | 319.3                | 280.7                 | 38.56                  | 8.280                     |         |
| 6,100.0  | 5,999.6             | 6,098.9             | 5,948.2             | 21.4            | 25.3        | -59.49                | 437.4                             | 1,148.3    | 325.1                | 285.9                 | 39.19                  | 8.297                     |         |
| 6,200.0  | 6,097.6             | 6,198.7             | 6,045.0             | 21.8            | 25.7        | -59.24                | 444.9                             | 1,171.4    | 331.0                | 291.2                 | 39.82                  | 8.313                     |         |
| 6,300.0  | 6,195.6             | 6,298.5             | 6,141.8             | 22.2            | 26.2        | -59.00                | 452.3                             | 1,194.6    | 336.9                | 296.4                 | 40.44                  | 8.329                     |         |
| 6,400.0  | 6,293.6             | 6,398.3             | 6,238.6             | 22.6            | 26.7        | -58.76                | 459.8                             | 1,217.7    | 342.7                | 301.7                 | 41.07                  | 8.345                     |         |
| 6,500.0  | 6,391.6             | 6,498.1             | 6,335.4             | 23.0            | 27.1        | -58.53                | 467.3                             | 1,240.8    | 348.6                | 306.9                 | 41.70                  | 8.360                     |         |
| 6,600.0  | 6,489.6             | 6,597.9             | 6,432.2             | 23.4            | 27.6        | -58.32                | 474.7                             | 1,264.0    | 354.5                | 312.2                 | 42.33                  | 8.375                     |         |
| 6,700.0  | 6,587.6             | 6,697.8             | 6,529.1             | 23.8            | 28.1        | -58.10                | 482.2                             | 1,287.1    | 360.4                | 317.4                 | 42.95                  | 8.390                     |         |
| 6,800.0  | 6,685.7             | 6,797.6             | 6,625.9             | 24.2            | 28.5        | -57.90                | 489.7                             | 1,310.2    | 366.3                | 322.7                 | 43.58                  | 8.405                     |         |
| 6,900.0  | 6,783.7             | 6,897.4             | 6,722.7             | 24.6            | 29.0        | -57.70                | 497.2                             | 1,333.4    | 372.2                | 328.0                 | 44.21                  | 8.420                     |         |
| 7,000.0  | 6,881.7             | 6,997.2             | 6,819.5             | 25.0            | 29.5        | -57.51                | 504.6                             | 1,356.5    | 378.1                | 333.3                 | 44.83                  | 8.434                     |         |
| 7,100.0  | 6,979.6             | 7,097.0             | 6,916.3             | 25.4            | 29.9        | -45.19                | 512.1                             | 1,379.7    | 383.5                | 338.1                 | 45.43                  | 8.441                     |         |
| 7,200.0  | 7,076.3             | 7,196.5             | 7,012.8             | 25.8            | 30.4        | -13.30                | 519.6                             | 1,402.7    | 377.4                | 331.9                 | 45.55                  | 8.285                     |         |
| 7,300.0  | 7,168.8             | 7,293.0             | 7,106.4             | 26.3            | 30.9        | 3.19                  | 526.8                             | 1,425.1    | 356.2                | 311.3                 | 44.89                  | 7.935                     |         |
| 7,400.0  | 7,254.2             | 7,431.6             | 7,240.9             | 26.8            | 31.4        | 19.93                 | 527.9                             | 1,457.2    | 317.3                | 274.8                 | 42.51                  | 7.464                     |         |
| 7,500.0  | 7,330.1             | 7,537.2             | 7,341.5             | 27.3            | 31.8        | 44.85                 | 507.3                             | 1,481.3    | 257.6                | 221.7                 | 35.91                  | 7.175                     |         |
| 7,600.0  | 7,394.0             | 7,586.6             | 7,386.9             | 27.9            | 31.9        | 66.55                 | 491.2                             | 1,492.1    | 201.5                | 173.9                 | 27.61                  | 7.298                     |         |
| 7,695.5  | 7,442.2             | 7,602.6             | 7,401.3             | 28.6            | 31.9        | 75.27                 | 485.2                             | 1,495.6    | 178.4                | 146.9                 | 31.48                  | 5.668                     |         |
| 7,700.0  | 7,444.1             | 7,602.8             | 7,401.5             | 28.6            | 31.9        | 75.39                 | 485.1                             | 1,495.6    | 178.5                | 146.3                 | 32.13                  | 5.554                     |         |
| 7,800.0  | 7,478.8             | 7,600.0             | 7,399.0             | 29.4            | 31.9        | 72.28                 | 486.2                             | 1,495.0    | 206.4                | 159.3                 | 47.05                  | 4.387 SF                  |         |
| 7,900.0  | 7,497.2             | 7,584.2             | 7,384.8             | 30.1            | 31.9        | 59.97                 | 492.1                             | 1,491.6    | 268.9                | 214.3                 | 54.62                  | 4.923                     |         |
| 8,000.0  | 7,500.0             | 7,562.3             | 7,364.7             | 31.0            | 31.8        | 48.55                 | 499.7                             | 1,486.8    | 345.1                | 287.4                 | 57.76                  | 5.975                     |         |
| 8,100.0  | 7,500.0             | 7,550.0             | 7,353.4             | 31.9            | 31.8        | 45.74                 | 503.5                             | 1,484.1    | 429.2                | 369.7                 | 59.51                  | 7.212                     |         |
| 8,200.0  | 7,500.0             | 7,527.1             | 7,332.1             | 32.9            | 31.7        | 40.87                 | 510.1                             | 1,479.0    | 517.8                | 458.0                 | 59.81                  | 8.657                     |         |
| 8,300.0  | 7,500.0             | 7,513.9             | 7,319.7             | 33.9            | 31.7        | 38.28                 | 513.5                             | 1,476.1    | 609.3                | 549.2                 | 60.15                  | 10.130                    |         |
| 8,400.0  | 7,500.0             | 7,500.0             | 7,306.5             | 35.0            | 31.7        | 35.72                 | 516.7                             | 1,472.9    | 702.8                | 642.5                 | 60.26                  | 11.663                    |         |
| 8,500.0  | 7,500.0             | 7,500.0             | 7,306.5             | 36.2            | 31.7        | 35.72                 | 516.7                             | 1,472.9    | 797.6                | 737.0                 | 60.64                  | 13.154                    |         |
| 8,600.0  | 7,500.0             | 7,500.0             | 7,306.5             | 37.4            | 31.7        | 35.72                 | 516.7                             | 1,472.9    | 893.5                | 832.6                 | 60.88                  | 14.676                    |         |
| 8,700.0  | 7,500.0             | 7,477.8             | 7,285.4             | 38.6            | 31.6        | 31.99                 | 521.3                             | 1,467.9    | 989.6                | 929.0                 | 60.59                  | 16.333                    |         |

# Cathedral Energy Services

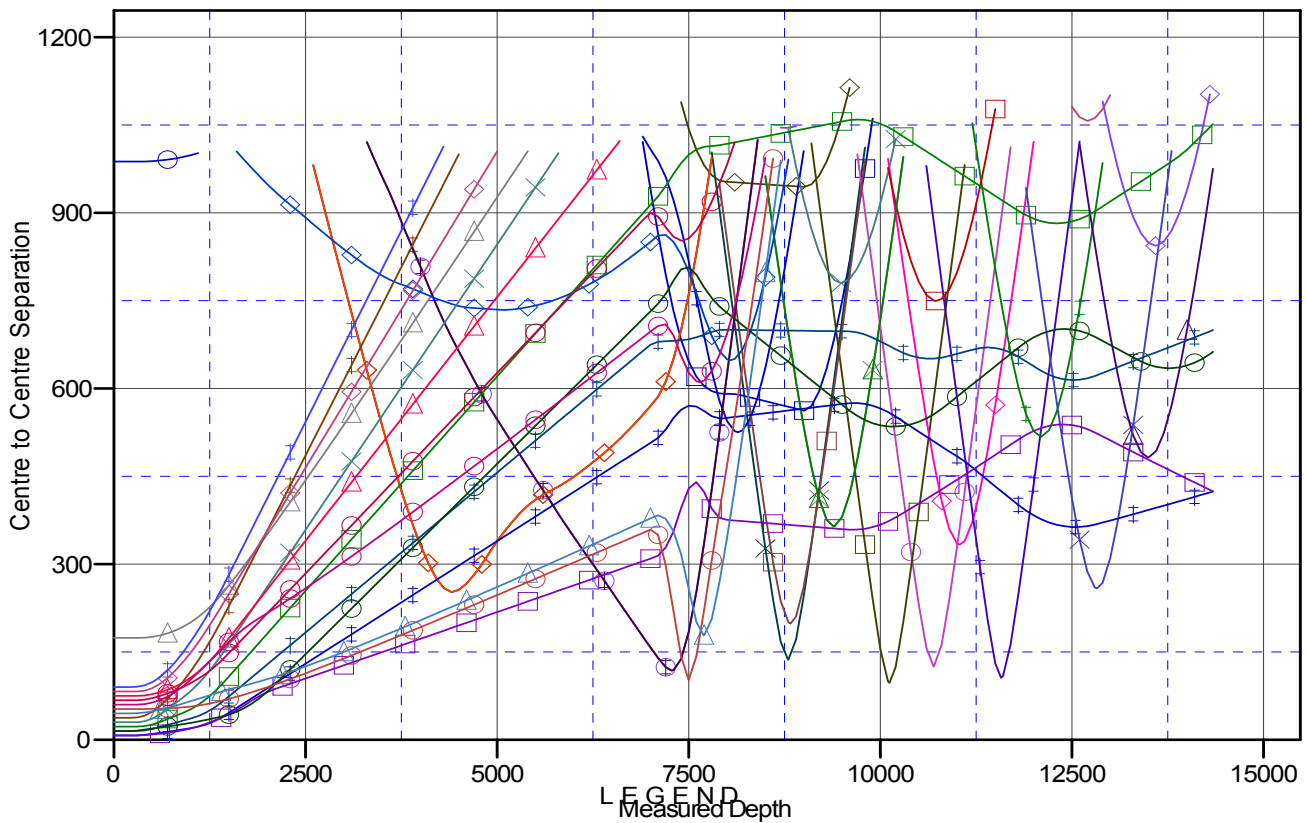
## Anticollision Report

|                           |   |                                     |                               |
|---------------------------|---|-------------------------------------|-------------------------------|
| <b>Company:</b>           | EnCana Oil & Gas (USA) Inc                    | <b>Local Co-ordinate Reference:</b> | Well Woolley-Becky 2F-7H-E168 |
| <b>Project:</b>           | DJ Wattenberg                                 | <b>TVD Reference:</b>               | KB @ 5007.0ft (Unassigned)    |
| <b>Reference Site:</b>    | S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) | <b>MD Reference:</b>                | KB @ 5007.0ft (Unassigned)    |
| <b>Site Error:</b>        | 0.0ft   | <b>North Reference:</b>             | True                          |
| <b>Reference Well:</b>    | Woolley-Becky 2F-7H-E168                      | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Well Error:</b>        | 0.0ft   | <b>Output errors are at</b>         | 2.00 sigma                    |
| <b>Reference Wellbore</b> | Hz  | <b>Database:</b>                    | USA EDM 5000 Multi Users DB   |
| <b>Reference Design:</b>  | Plan #4                                       | <b>Offset TVD Reference:</b>        | Offset Datum                  |

Reference Depths are relative to KB @ 5007.0ft (Unassigned)  
 Offset Depths are relative to Offset Datum  
 Central Meridian is -105.500000 °

Coordinates are relative to: Woolley-Becky 2F-7H-E168  
 Coordinate System is US State Plane 1983, Colorado Northern Zone  
 Grid Convergence at Surface is: 0.29°

### Ladder Plot



|                                 |   |                                     |
|---------------------------------|---|-------------------------------------|
| 8, Hz, Plan#2 V0                | BECKY 4 (EXISTING), MARTINEXP WELL, NO SURVEYS V0     | Woolley-Becky 2C-7H-E168, Hz, Plan# |
| 8, Hz, Plan#2 V0                | BECKY 7-6 (EXISTING), NOBLE WELL, NO SURVEYS V0       | Woolley-Becky 2D-7H-E168, Hz, Plan# |
| NG), ENCANA WELL, NO SURVEYS V0 | BULTHAUP 21-6 (EXISTING), KERR-MCGEE WELL, SURVEYS V0 | Woolley-Becky 2E-7H-E168, Hz, Plan# |
| NG), ENCANA WELL, SURVEYS V0    | BULTHAUP 23-6 (EXISTING), KERR-MCGEE WELL, SURVEYS V0 | Woolley-Becky 2G-7H-E168, Hz, Plan# |
| ING), ENCANA WELL, SURVEYS V0   | Morgan Hills 1A-7H-A168, Hz, Plan#2 V0                | Woolley-Becky 2H-7H-E168, Hz, Plan# |
| ING), ENCANA WELL, SURVEYS V0   | Thomas 7-12 (Existing), Existing, NO SURVEYS V0       | Woolley-Sosa 2A-7H-E168, Hz, Plan#  |
| ING), ENCANA WELL, PLAN ONLY V0 | WOOLLEY 12-7 (EXISTING), ENCANA WELL, NO SURVEYS V0   | Woolley-Sosa 2B-7H-E168, Hz, Plan#  |
| ) Existing, Existing V0         | WOOLLEY 21-7 (EXISTING), ENCANA WELL, GYRO V0         | Woolley-Sosa 2C-7H-E168, Hz, Plan#  |
| :1 V0                           | WOOLLEY 22-7 (EXISTING), ENCANA WELL, SURVEYS V0      | Woolley-Sosa 2D-7H-E168, Hz, Plan#  |
| ,) ENCANA WELL, SURVEYS V0      | WOOLLEY 2-4-7 (EXISTING), ENCANA WELL, SURVEYS V0     | Woolley-Sosa 2E-7H-E168, Hz, Plan#  |
| NG), ENCANA WELL, GYRO V0       | WOOLLEY 4-0-7 (EXISTING), ENCANA WELL, SURVEYS V0     | Woolley-Sosa 2F-7H-E168, Hz, Plan#  |
| NG), ENCANA WELL, PLAN ONLY V0  | WOOLLEY 5-0-7 (EXISTING), ENCANA WELL, GYRO V0        |                                     |

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