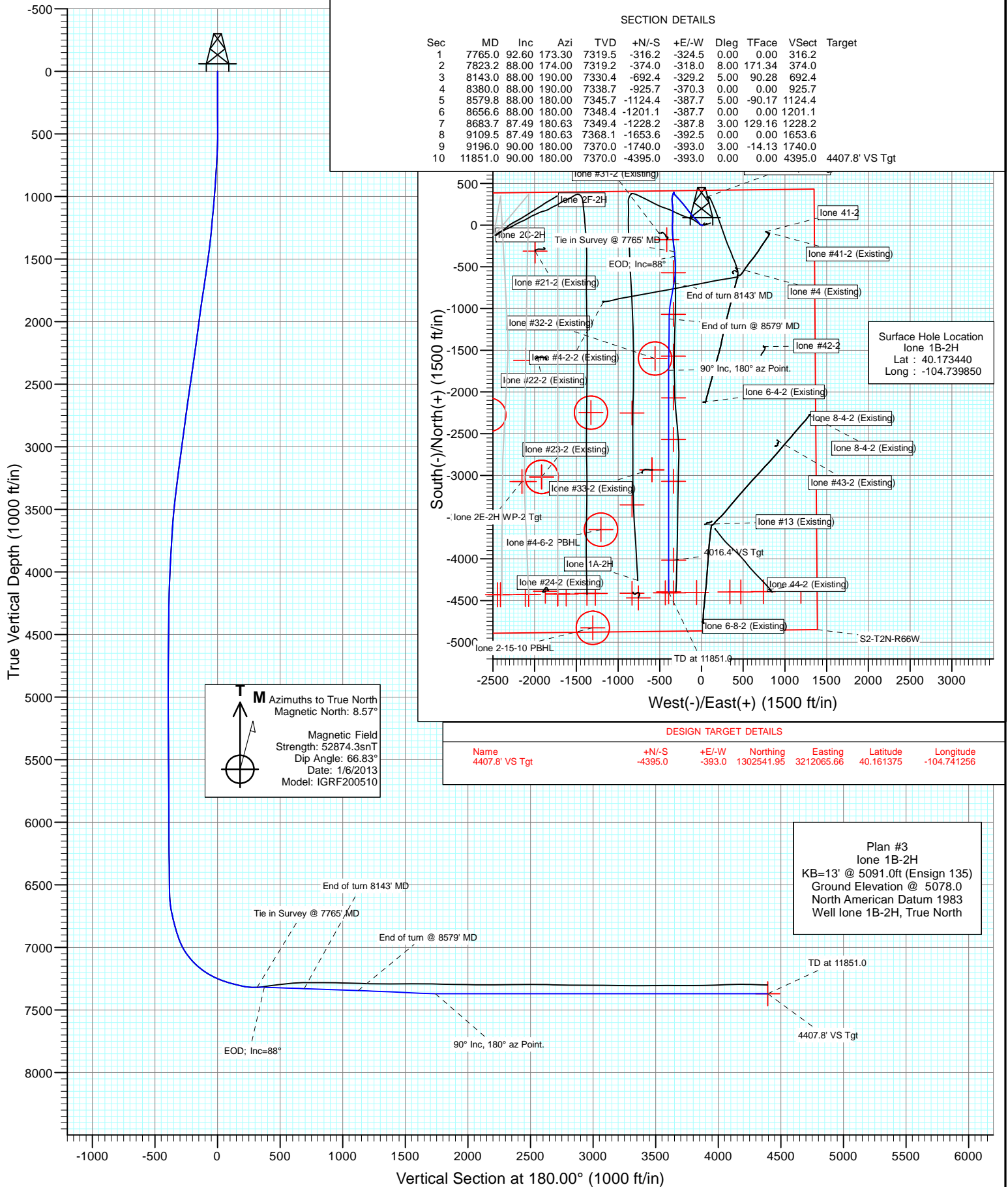


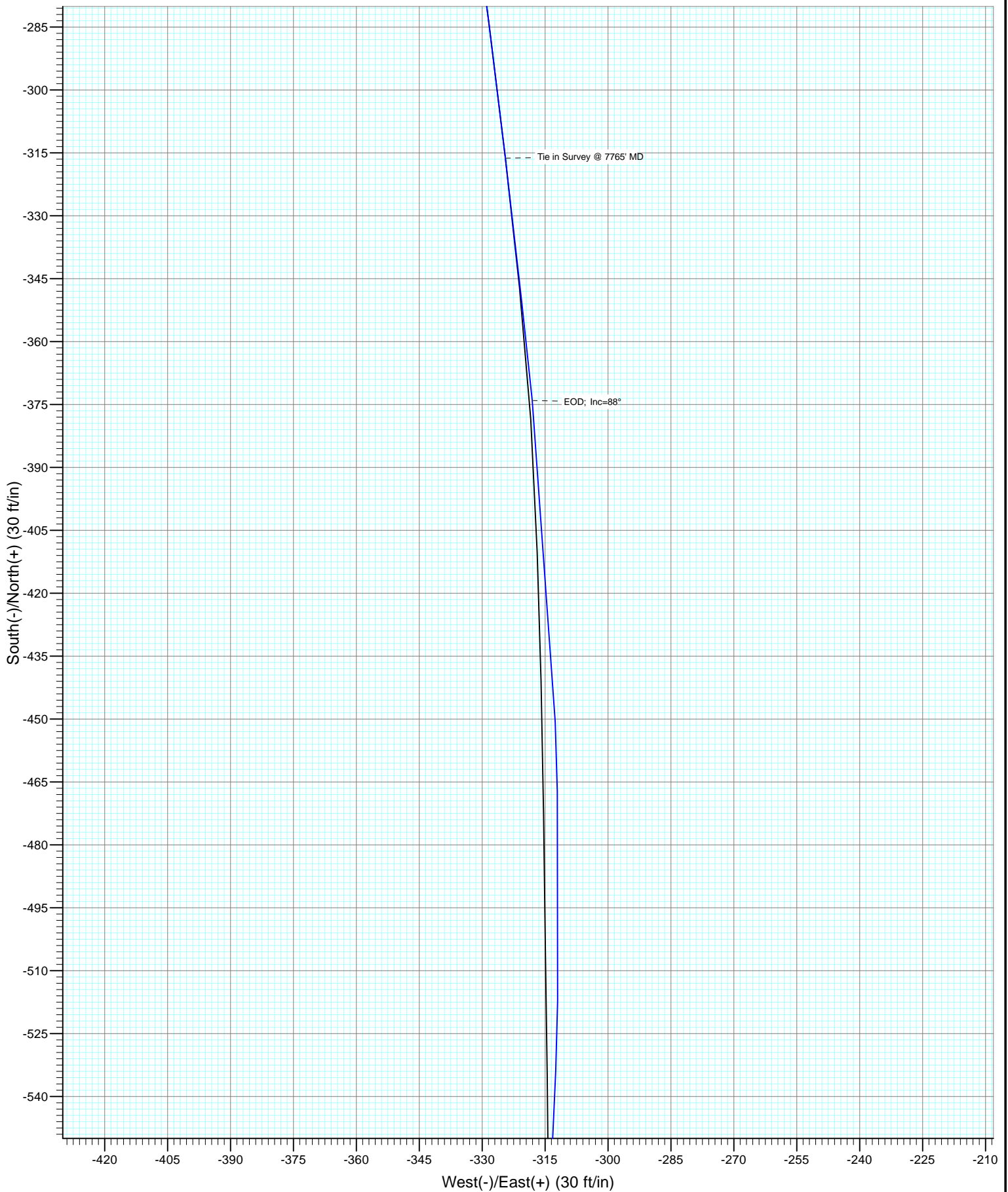


Project: DJ Wattenberg
Site: NWN S2-T2N-R66W (lone)
Well: lone 1B-2H
Wellbore: Stk 1
Design: Plan #3





Project: DJ Wattenberg
Site: NWE S2-T2N-R66W (Ione)
Well: Ione 1B-2H
Wellbore: Stk 1
Design: Plan #3



Cathedral Energy Services

Planning Report

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well lone 1B-2H |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Project: | DJ Wattenberg | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site: | NWNE S2-T2N-R66W (lone) | North Reference: | True |
| Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Stk 1 | | |
| Design: | Plan #3 | | |

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

| Site | | NWNE S2-T2N-R66W (lone) | | | |
|-----------------------|----------|-------------------------|-----------------|-------------------|-------------|
| Site Position: | | Northing: | 1,306,798.50 ft | Latitude: | 40.173110 |
| From: | Lat/Long | Easting: | 3,209,901.52 ft | Longitude: | -104.748870 |
| Position Uncertainty: | 0.0 ft | Slot Radius: | 13.200 in | Grid Convergence: | 0.49 ° |

| | | | | | | |
|----------------------|------------|--------|---------------------|-----------------|---------------|-------------|
| Well | lone 1B-2H | | | | | |
| Well Position | +N/-S | 0.0 ft | Northing: | 1,306,940.16 ft | Latitude: | 40.173440 |
| | +E/-W | 0.0 ft | Easting: | 3,212,420.97 ft | Longitude: | -104.739850 |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: | ft | Ground Level: | 5,078.0 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Stk 1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF200510 | 1/6/2013 | 8.57 | 66.83 | 52,874 |

| | | | | | |
|--------------------------|------------------------------|-------------------|-------------------|----------------------|---------|
| Design | Plan #3 | | | | |
| Audit Notes: | | | | | |
| Version: | Phase: | PLAN | | Tie On Depth: | 7,765.0 |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) | |
| | 0.0 | 0.0 | 0.0 | 180.00 | |

| Plan Sections | | | | | | | | | | |
|----------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|----------------------|---------------------|---------|----------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target |
| 7,765.0 | 92.60 | 173.30 | 7,319.5 | -316.2 | -324.5 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 7,823.2 | 88.00 | 174.00 | 7,319.2 | -374.0 | -318.0 | 8.00 | -7.91 | 1.20 | 171.34 | |
| 8,143.0 | 88.00 | 190.00 | 7,330.4 | -692.4 | -329.2 | 5.00 | 0.00 | 5.00 | 90.28 | |
| 8,380.0 | 88.00 | 190.00 | 7,338.7 | -925.7 | -370.3 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 8,579.8 | 88.00 | 180.00 | 7,345.7 | -1,124.4 | -387.7 | 5.00 | 0.00 | -5.00 | -90.17 | |
| 8,656.6 | 88.00 | 180.00 | 7,348.4 | -1,201.1 | -387.7 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 8,683.7 | 87.49 | 180.63 | 7,349.4 | -1,228.2 | -387.8 | 3.00 | -1.89 | 2.33 | 129.16 | |
| 9,109.5 | 87.49 | 180.63 | 7,368.1 | -1,653.6 | -392.5 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 9,196.0 | 90.00 | 180.00 | 7,370.0 | -1,740.0 | -393.0 | 3.00 | 2.91 | -0.73 | -14.13 | |
| 11,851.0 | 90.00 | 180.00 | 7,370.0 | -4,395.0 | -393.0 | 0.00 | 0.00 | 0.00 | 0.00 | 4407.8' VS Tgt |

Cathedral Energy Services

Planning Report

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well lone 1B-2H |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Project: | DJ Wattenberg | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site: | NWNE S2-T2N-R66W (lone) | North Reference: | True |
| Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Stk 1 | | |
| Design: | Plan #3 | | |

| 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 |
| 7,765.0 | 92.60 | 173.30 | 7,319.5 | -316.2 | -324.5 | 316.2 | 0.00 | 0.00 | Tie in Survey @ 7765' MD |
| 7,800.0 | 89.83 | 173.72 | 7,318.7 | -351.0 | -320.5 | 351.0 | 8.00 | -7.91 | |
| 7,823.2 | 88.00 | 174.00 | 7,319.2 | -374.0 | -318.0 | 374.0 | 8.00 | -7.91 | EOD; Inc=88° |
| 7,900.0 | 87.99 | 177.84 | 7,321.9 | -450.6 | -312.6 | 450.6 | 5.00 | -0.02 | |
| 8,000.0 | 87.98 | 182.85 | 7,325.4 | -550.5 | -313.2 | 550.5 | 5.00 | -0.01 | |
| 8,023.6 | 87.98 | 184.03 | 7,326.2 | -574.0 | -314.6 | 574.0 | 5.00 | 0.00 | 570.3 VS Tgt |
| 8,100.0 | 87.99 | 187.85 | 7,328.9 | -650.0 | -322.5 | 650.0 | 5.00 | 0.01 | |
| 8,143.0 | 88.00 | 190.00 | 7,330.4 | -692.4 | -329.2 | 692.4 | 5.00 | 0.02 | End of turn 8143' MD |
| 8,200.0 | 88.00 | 190.00 | 7,332.4 | -748.5 | -339.1 | 748.5 | 0.00 | 0.00 | |
| 8,300.0 | 88.00 | 190.00 | 7,335.9 | -847.0 | -356.4 | 847.0 | 0.00 | 0.00 | |
| 8,380.0 | 88.00 | 190.00 | 7,338.7 | -925.7 | -370.3 | 925.7 | 0.00 | 0.00 | |
| 8,400.0 | 88.00 | 189.00 | 7,339.4 | -945.4 | -373.6 | 945.4 | 5.00 | -0.01 | |
| 8,500.0 | 87.99 | 183.99 | 7,342.9 | -1,044.7 | -384.9 | 1,044.7 | 5.00 | 0.00 | |
| 8,526.1 | 87.99 | 182.69 | 7,343.8 | -1,070.8 | -386.4 | 1,070.8 | 5.00 | 0.01 | 1070.3' VS Tgt |
| 8,579.8 | 88.00 | 180.00 | 7,345.7 | -1,124.4 | -387.7 | 1,124.4 | 5.00 | 0.01 | End of turn @ 8579' MD |
| 8,600.0 | 88.00 | 180.00 | 7,346.4 | -1,144.6 | -387.7 | 1,144.6 | 0.01 | 0.00 | |
| 8,656.6 | 88.00 | 180.00 | 7,348.4 | -1,201.1 | -387.7 | 1,201.1 | 0.00 | 0.00 | |
| 8,683.7 | 87.49 | 180.63 | 7,349.4 | -1,228.2 | -387.8 | 1,228.2 | 3.00 | -1.89 | |
| 8,700.0 | 87.49 | 180.63 | 7,350.1 | -1,244.5 | -388.0 | 1,244.5 | 0.00 | 0.00 | |
| 8,800.0 | 87.49 | 180.63 | 7,354.5 | -1,344.4 | -389.1 | 1,344.4 | 0.00 | 0.00 | |
| 8,900.0 | 87.49 | 180.63 | 7,358.9 | -1,444.3 | -390.2 | 1,444.3 | 0.00 | 0.00 | |
| 9,000.0 | 87.49 | 180.63 | 7,363.3 | -1,544.2 | -391.3 | 1,544.2 | 0.00 | 0.00 | |
| 9,100.0 | 87.49 | 180.63 | 7,367.7 | -1,644.1 | -392.4 | 1,644.1 | 0.00 | 0.00 | |
| 9,109.5 | 87.49 | 180.63 | 7,368.1 | -1,653.6 | -392.5 | 1,653.6 | 0.00 | 0.00 | |
| 9,196.0 | 90.00 | 180.00 | 7,370.0 | -1,740.0 | -393.0 | 1,740.0 | 3.00 | 2.91 | 90° Inc, 180° az Point. |
| 9,200.0 | 90.00 | 180.00 | 7,370.0 | -1,744.0 | -393.0 | 1,744.0 | 0.00 | 0.00 | |
| 9,300.0 | 90.00 | 180.00 | 7,370.0 | -1,844.0 | -393.0 | 1,844.0 | 0.00 | 0.00 | |
| 9,400.0 | 90.00 | 180.00 | 7,370.0 | -1,944.0 | -393.0 | 1,944.0 | 0.00 | 0.00 | |
| 9,500.0 | 90.00 | 180.00 | 7,370.0 | -2,044.0 | -393.0 | 2,044.0 | 0.00 | 0.00 | |
| 9,600.0 | 90.00 | 180.00 | 7,370.0 | -2,144.0 | -393.0 | 2,144.0 | 0.00 | 0.00 | |
| 9,700.0 | 90.00 | 180.00 | 7,370.0 | -2,244.0 | -393.0 | 2,244.0 | 0.00 | 0.00 | |
| 9,800.0 | 90.00 | 180.00 | 7,370.0 | -2,344.0 | -393.0 | 2,344.0 | 0.00 | 0.00 | |
| 9,900.0 | 90.00 | 180.00 | 7,370.0 | -2,444.0 | -393.0 | 2,444.0 | 0.00 | 0.00 | |
| 10,000.0 | 90.00 | 180.00 | 7,370.0 | -2,544.0 | -393.0 | 2,544.0 | 0.00 | 0.00 | |
| 10,100.0 | 90.00 | 180.00 | 7,370.0 | -2,644.0 | -393.0 | 2,644.0 | 0.00 | 0.00 | |
| 10,200.0 | 90.00 | 180.00 | 7,370.0 | -2,744.0 | -393.0 | 2,744.0 | 0.00 | 0.00 | |
| 10,300.0 | 90.00 | 180.00 | 7,370.0 | -2,844.0 | -393.0 | 2,844.0 | 0.00 | 0.00 | |
| 10,400.0 | 90.00 | 180.00 | 7,370.0 | -2,944.0 | -393.0 | 2,944.0 | 0.00 | 0.00 | |
| 10,500.0 | 90.00 | 180.00 | 7,370.0 | -3,044.0 | -393.0 | 3,044.0 | 0.00 | 0.00 | |
| 10,526.2 | 90.00 | 180.00 | 7,370.0 | -3,070.3 | -393.0 | 3,070.3 | 0.00 | 0.00 | 3070.3' VS Tgt |
| 10,600.0 | 90.00 | 180.00 | 7,370.0 | -3,144.0 | -393.0 | 3,144.0 | 0.00 | 0.00 | |
| 10,700.0 | 90.00 | 180.00 | 7,370.0 | -3,244.0 | -393.0 | 3,244.0 | 0.00 | 0.00 | |
| 10,800.0 | 90.00 | 180.00 | 7,370.0 | -3,344.0 | -393.0 | 3,344.0 | 0.00 | 0.00 | |
| 10,900.0 | 90.00 | 180.00 | 7,370.0 | -3,444.0 | -393.0 | 3,444.0 | 0.00 | 0.00 | |
| 11,000.0 | 90.00 | 180.00 | 7,370.0 | -3,544.0 | -393.0 | 3,544.0 | 0.00 | 0.00 | |
| 11,100.0 | 90.00 | 180.00 | 7,370.0 | -3,644.0 | -393.0 | 3,644.0 | 0.00 | 0.00 | |
| 11,200.0 | 90.00 | 180.00 | 7,370.0 | -3,744.0 | -393.0 | 3,744.0 | 0.00 | 0.00 | |
| 11,300.0 | 90.00 | 180.00 | 7,370.0 | -3,844.0 | -393.0 | 3,844.0 | 0.00 | 0.00 | |
| 11,400.0 | 90.00 | 180.00 | 7,370.0 | -3,944.0 | -393.0 | 3,944.0 | 0.00 | 0.00 | |
| 11,472.4 | 90.00 | 180.00 | 7,370.0 | -4,016.4 | -393.0 | 4,016.4 | 0.00 | 0.00 | 4016.4' VS Tgt |
| 11,500.0 | 90.00 | 180.00 | 7,370.0 | -4,044.0 | -393.0 | 4,044.0 | 0.00 | 0.00 | |
| 11,600.0 | 90.00 | 180.00 | 7,370.0 | -4,144.0 | -393.0 | 4,144.0 | 0.00 | 0.00 | |

Cathedral Energy Services

Planning Report

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well lone 1B-2H |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Project: | DJ Wattenberg | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site: | NWNE S2-T2N-R66W (lone) | North Reference: | True |
| Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Stk 1 | | |
| Design: | Plan #3 | | |

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 |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|--------------------------------|
| 11,700.0 | 90.00 | 180.00 | 7,370.0 | -4,244.0 | -393.0 | 4,244.0 | 0.00 | 0.00 | |
| 11,800.0 | 90.00 | 180.00 | 7,370.0 | -4,344.0 | -393.0 | 4,344.0 | 0.00 | 0.00 | |
| 11,851.0 | 90.00 | 180.00 | 7,370.0 | -4,395.0 | -393.0 | 4,395.0 | 0.00 | 0.00 | TD at 11851.0 - 4407.8' VS Tgt |

Targets

| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
|--|---------------|--------------|----------|------------|------------|---------------|--------------|-----------|-------------|
| 4016.4' VS Tgt - plan misses target center by 60.6ft at 11472.4ft MD (7370.0 TVD, -4016.4 N, -393.0 E) - Point | 0.00 | 0.00 | 7,358.1 | -4,016.4 | -333.6 | 1,302,921.01 | 3,212,121.86 | 40.162414 | -104.741043 |
| 570.3 VS Tgt - plan misses target center by 53.7ft at 8022.8ft MD (7326.2 TVD, -573.3 N, -314.5 E) - Point | 0.00 | 0.00 | 7,375.0 | -570.3 | -336.7 | 1,306,367.04 | 3,212,089.22 | 40.171874 | -104.741055 |
| 1070.3' VS Tgt - plan misses target center by 81.4ft at 8525.0ft MD (7343.8 TVD, -1069.6 N, -386.4 E) - Point | 0.00 | 0.00 | 7,407.9 | -1,070.3 | -336.2 | 1,305,867.06 | 3,212,093.95 | 40.170502 | -104.741053 |
| 3070.3' VS Tgt - plan misses target center by 59.9ft at 10526.2ft MD (7370.0 TVD, -3070.3 N, -393.0 E) - Point | 0.00 | 0.00 | 7,357.7 | -3,070.3 | -334.4 | 1,303,867.15 | 3,212,112.90 | 40.165012 | -104.741047 |
| 4407.8' VS Tgt - plan hits target center - Point | 0.00 | 0.00 | 7,370.0 | -4,395.0 | -393.0 | 1,302,541.95 | 3,212,065.66 | 40.161375 | -104.741256 |

Plan Annotations

| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment |
|---------------------|---------------------|-------------------|------------|--------------------------|
| | | +N/-S (ft) | +E/-W (ft) | |
| 7,765.0 | 7,319.5 | -316.2 | -324.5 | Tie in Survey @ 7765' MD |
| 7,823.2 | 7,319.2 | -374.0 | -318.0 | EOD; Inc=88° |
| 8,143.0 | 7,330.4 | -692.4 | -329.2 | End of turn 8143' MD |
| 8,579.8 | 7,345.7 | -925.7 | -370.3 | End of turn @ 8579' MD |
| 9,196.0 | 7,370.0 | -1,124.4 | -387.7 | 90° Inc, 180° az Point. |
| 11,851.0 | 7,370.0 | -1,201.1 | -387.7 | TD at 11851.0 |

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

NWNE S2-T2N-R66W (lone)

lone 1B-2H

Stk 1

Plan #3

Anticollision Report

06 January, 2013

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

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

| | | |
|----------------------------|----------------|--------------------------|
| Survey Tool Program | Date | 1/6/2013 |
| From (ft) | To (ft) | Survey (Wellbore) |
| 169.0 | 7,765.0 | Survey #1 (HZ) |
| 7,765.0 | 11,851.0 | Plan #3 (Stk 1) |
| | | Tool Name |
| | | MWD |
| | | Description |
| | | Geolink MWD |
| | | MWD |
| | | Geolink MWD |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

Summary

| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
|--|--|-------------------------------------|--|---|----------------------|--------------|
| Offset Well - Wellbore - Design | | | | | | |
| NWNE S2-T2N-R66W (lone) | | | | | | |
| lone #11-2 (Existing) - DD - DD | | | | | | Out of range |
| lone #12 (Existing) - DD - Plan #1 | | | | | | Out of range |
| lone #12-2B (Existing) - DD - DD | | | | | | Out of range |
| lone #13 (Existing) - HZ - HZ | 11,042.4 | 7,355.4 | 434.9 | 362.7 | 6.024 | CC, ES |
| lone #13 (Existing) - HZ - HZ | 11,100.0 | 7,355.4 | 438.7 | 365.5 | 5.994 | SF |
| lone #13-2 (Existing) - DD - Plan #1 | | | | | | Out of range |
| lone #13-2B (Existing) - DD - DD | | | | | | Out of range |
| lone #21-2 (Existing) - DD - DD | | | | | | Out of range |
| lone #22-2 (Existing) - DD - DD | | | | | | Out of range |
| lone #23-2 (Existing) - DD - Plan #1 | | | | | | Out of range |
| lone #24-2 (Existing) - DD - DD | | | | | | Out of range |
| lone #3 (Existing) - DD - DD | | | | | | Out of range |
| lone #31-2 (Existing) - DD - DD | 7,530.2 | 7,286.7 | 156.7 | 137.1 | 7.986 | CC, ES, SF |
| lone #32-2 (Existing) - DD - Plan #1 | 9,056.9 | 7,370.8 | 164.5 | 119.2 | 3.632 | CC, ES, SF |
| lone #33-2 (Existing) - DD - DD | 10,424.7 | 7,354.7 | 321.2 | 259.6 | 5.214 | CC, ES, SF |
| lone #34-2 (Existing) - DD - DD | 11,851.4 | 7,349.4 | 426.7 | 340.5 | 4.951 | CC, ES, SF |
| lone #4 (Existing) - DD - DD | | | | | | Out of range |
| lone #41-2 (Existing) - Existing - Existing | | | | | | Out of range |
| lone #42-2 - DD - DD | | | | | | Out of range |
| lone #4-2-2 (Existing) - Existing - Existing | | | | | | Out of range |
| lone #43-2 (Existing) - Existing - Existing | | | | | | Out of range |
| lone #4-6-2 (Existing) - Existing - Existing | 11,051.4 | 7,343.0 | 499.2 | 420.5 | 6.340 | CC, ES, SF |
| lone #6-0-2 (Existing) - Existing - Existing | 6,006.9 | 6,091.2 | 421.3 | 390.7 | 13.750 | CC |
| lone #6-0-2 (Existing) - Existing - Existing | 6,100.0 | 6,183.3 | 421.4 | 390.5 | 13.649 | ES |
| lone #6-0-2 (Existing) - Existing - Existing | 7,100.0 | 7,177.1 | 440.1 | 405.5 | 12.730 | SF |
| lone 1A-2H - HZ - HZ | 0.0 | 0.0 | 8.4 | | | |
| lone 1A-2H - HZ - HZ | 300.0 | 299.9 | 9.1 | 8.1 | 9.115 | ES |
| lone 1A-2H - HZ - HZ | 11,714.5 | 11,870.0 | 393.5 | 247.2 | 2.689 | SF |
| lone 1B-2H - HZ - HZ | 7,800.0 | 7,799.9 | 2.1 | 1.8 | 9.924 | CC, ES |
| lone 1B-2H - HZ - HZ | 11,851.4 | 11,848.0 | 111.4 | 8.8 | 1.086 | Level 2, SF |
| lone 1C-2H - HZ - HZ | 0.0 | 0.0 | 11.2 | | | |
| lone 1C-2H - HZ - HZ | 200.0 | 200.0 | 11.5 | 10.9 | 17.653 | ES |
| lone 1C-2H - HZ - HZ | 500.0 | 499.8 | 16.9 | 15.2 | 9.907 | SF |
| lone 1D-2H - HZ - HZ | 0.0 | 0.0 | 19.6 | | | |
| lone 1D-2H - HZ - HZ | 200.0 | 200.0 | 19.7 | 19.0 | 30.132 | ES |
| lone 1D-2H - HZ - HZ | 600.0 | 599.5 | 28.0 | 26.0 | 13.635 | SF |
| lone 1E-2H - HZ - HZ | 0.0 | 0.0 | 30.7 | | | |
| lone 1E-2H - HZ - HZ | 200.0 | 199.9 | 31.0 | 30.3 | 47.454 | ES |
| lone 1E-2H - HZ - HZ | 600.0 | 598.3 | 43.8 | 41.7 | 21.381 | SF |
| lone 1F-2H - HZ - HZ | 0.0 | 0.0 | 39.1 | | | |
| lone 1F-2H - HZ - HZ | 100.0 | 100.0 | 39.2 | 38.8 | 126.359 | ES |
| lone 1F-2H - HZ - HZ | 500.0 | 495.9 | 56.6 | 54.9 | 33.359 | SF |
| lone 2A-2H - HZ - Plan #2 | | | | | | Out of range |
| lone 2B-2H - HZ - Plan #2 | | | | | | Out of range |
| lone 2C-2H - HZ - Plan #3 | | | | | | Out of range |
| lone 2D-2H - HZ - Plan #3 | | | | | | Out of range |
| lone 2E-2H - HZ - Plan #2 | | | | | | Out of range |
| lone 2F-2H - HZ - HZ | | | | | | Out of range |
| lone 2F-2H - HZ - Plan #2 | | | | | | Out of range |
| lone 2G-2H - HZ - HZ | | | | | | Out of range |
| lone 6-4-2 (Existing) - Existing - Existing | 9,576.1 | 7,678.2 | 430.1 | 359.7 | 6.105 | CC, ES |
| lone 6-4-2 (Existing) - Existing - Existing | 9,600.0 | 7,678.1 | 430.8 | 359.9 | 6.081 | SF |
| lone 6-8-2 (Existing) - Existing - Existing | | | | | | Out of range |

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

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Summary | | | | | | |
|---|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|--------------|
| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
| Offset Well - Wellbore - Design | | | | | | |
| NWNE S2-T2N-R66W (lone) | | | | | | |
| lone 8-4-2 (Existing) - Existing - Existing | | | | | | Out of range |
| NWSW S2-T2N-R66W (lone) | | | | | | |
| lone 33-2 - Wellbore #1 - Wellbore #1 | 10,389.1 | 7,325.0 | 200.8 | 139.8 | 3.292 | CC, ES |
| lone 33-2 - Wellbore #1 - Wellbore #1 | 10,400.0 | 7,325.0 | 201.0 | 139.9 | 3.287 | SF |
| lone 41-2 - DD - DD | | | | | | Out of range |
| lone 6-4-2 (Existing) - Existing - Existing | 9,576.1 | 7,678.2 | 430.1 | 359.7 | 6.105 | CC, ES |
| lone 6-4-2 (Existing) - Existing - Existing | 9,600.0 | 7,678.1 | 430.8 | 359.9 | 6.081 | SF |
| lone 6-8-2 (Existing) - Existing - Existing | | | | | | Out of range |
| lone 8-4-2 (Existing) - Existing - Existing | | | | | | Out of range |
| S2-T2N-R67W (Echevarria) | | | | | | |
| lone 44-2 (Existing) - DD - DD | | | | | | Out of range |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Offset Design NWNE S2-T2N-R66W (lone) - lone #13 (Existing) - HZ - HZ | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|------------------------|------------------------|------------------------|-------------------|----------------|--------------------------|---|---------------|-------------------------|--------------------------|---------------------------|-------------------|---------------------------|--------|
| Survey Program: 100-Gyro | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | Warning | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | | |
| 10,800.0 | 7,370.0 | 7,355.4 | 7,354.7 | 62.0 | 6.5 | -91.02 | -3,586.4 | 41.8 | 497.9 | 429.8 | 68.03 | 7.318 | | |
| 10,900.0 | 7,370.0 | 7,355.4 | 7,354.7 | 63.7 | 6.5 | -91.02 | -3,586.4 | 41.8 | 457.6 | 387.8 | 69.74 | 6.561 | | |
| 11,000.0 | 7,370.0 | 7,355.4 | 7,354.7 | 65.4 | 6.5 | -91.02 | -3,586.4 | 41.8 | 436.9 | 365.5 | 71.46 | 6.114 | | |
| 11,042.4 | 7,370.0 | 7,355.4 | 7,354.7 | 66.2 | 6.5 | -91.02 | -3,586.4 | 41.8 | 434.9 | 362.7 | 72.19 | 6.024 CC, ES | | |
| 11,100.0 | 7,370.0 | 7,355.4 | 7,354.7 | 67.1 | 6.5 | -91.02 | -3,586.4 | 41.8 | 438.7 | 365.5 | 73.18 | 5.994 SF | | |
| 11,200.0 | 7,370.0 | 7,355.4 | 7,354.7 | 68.8 | 6.5 | -91.02 | -3,586.4 | 41.8 | 462.5 | 387.6 | 74.90 | 6.175 | | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Offset Design NWNE S2-T2N-R66W (lone) - lone #31-2 (Existing) - DD - DD | | | | | | | | | | | | | Offset Site Error: 0.0 ft | |
|---|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------|------------|-----------------|------------------|-------------------|------------|---------------------------|---------|
| Survey Program: 100-Gyro | | | | | | | | | | | | | 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 | 5.0 | 5.0 | 0.0 | 0.0 | -112.68 | -173.8 | -415.8 | 450.7 | | | | | |
| 100.0 | 100.0 | 105.9 | 105.9 | 0.2 | 0.1 | -112.63 | -173.4 | -415.9 | 450.6 | 450.3 | 0.23 | 1,948.700 | | |
| 200.0 | 200.0 | 207.1 | 207.1 | 0.3 | 0.2 | 7.76 | -172.6 | -415.8 | 450.2 | 449.7 | 0.49 | 910.516 | | |
| 300.0 | 300.0 | 305.8 | 305.8 | 0.5 | 0.3 | 16.95 | -172.0 | -415.7 | 449.2 | 448.5 | 0.76 | 594.890 | | |
| 400.0 | 400.0 | 406.0 | 406.0 | 0.7 | 0.3 | 4.10 | -171.4 | -415.7 | 447.7 | 446.7 | 1.02 | 440.079 | | |
| 500.0 | 500.0 | 507.0 | 507.0 | 0.9 | 0.4 | -32.50 | -170.6 | -415.7 | 445.2 | 443.9 | 1.28 | 347.618 | | |
| 600.0 | 599.9 | 609.0 | 609.0 | 1.0 | 0.5 | -58.11 | -169.9 | -415.3 | 441.7 | 440.2 | 1.55 | 285.437 | | |
| 700.0 | 699.7 | 714.1 | 714.1 | 1.2 | 0.6 | -63.73 | -168.8 | -413.9 | 437.3 | 435.4 | 1.83 | 239.065 | | |
| 800.0 | 799.3 | 816.8 | 816.7 | 1.4 | 0.7 | -69.98 | -167.1 | -411.8 | 431.3 | 429.2 | 2.12 | 203.309 | | |
| 900.0 | 898.9 | 916.3 | 916.2 | 1.7 | 0.8 | -78.74 | -165.2 | -409.5 | 425.9 | 423.5 | 2.42 | 175.759 | | |
| 1,000.0 | 998.4 | 1,013.8 | 1,013.6 | 1.9 | 0.9 | -83.04 | -163.7 | -407.4 | 421.8 | 419.1 | 2.73 | 154.301 | | |
| 1,100.0 | 1,097.9 | 1,112.6 | 1,112.5 | 2.1 | 1.0 | -86.99 | -161.9 | -405.7 | 417.5 | 414.4 | 3.05 | 136.772 | | |
| 1,200.0 | 1,197.3 | 1,210.3 | 1,210.1 | 2.4 | 1.1 | -84.28 | -159.9 | -404.5 | 414.6 | 411.2 | 3.39 | 122.454 | | |
| 1,300.0 | 1,296.5 | 1,310.1 | 1,309.8 | 2.6 | 1.1 | -78.99 | -158.2 | -403.2 | 410.7 | 407.0 | 3.74 | 109.716 | | |
| 1,400.0 | 1,395.4 | 1,407.7 | 1,407.5 | 2.9 | 1.2 | -77.05 | -156.6 | -401.9 | 405.5 | 401.4 | 4.13 | 98.171 | | |
| 1,500.0 | 1,493.9 | 1,503.5 | 1,503.2 | 3.3 | 1.3 | -79.88 | -155.1 | -401.4 | 400.5 | 396.0 | 4.55 | 88.064 | | |
| 1,600.0 | 1,592.0 | 1,600.3 | 1,600.1 | 3.6 | 1.4 | -83.91 | -153.7 | -401.3 | 396.7 | 391.7 | 4.99 | 79.446 | | |
| 1,700.0 | 1,689.9 | 1,699.6 | 1,699.4 | 4.0 | 1.5 | -89.70 | -152.5 | -401.0 | 394.6 | 389.1 | 5.45 | 72.416 | | |
| 1,771.8 | 1,760.3 | 1,769.6 | 1,769.4 | 4.2 | 1.5 | -92.82 | -151.6 | -400.8 | 394.1 | 388.4 | 5.77 | 68.310 | | |
| 1,800.0 | 1,788.0 | 1,797.2 | 1,796.9 | 4.3 | 1.6 | -94.07 | -151.2 | -400.8 | 394.3 | 388.4 | 5.90 | 66.882 | | |
| 1,900.0 | 1,886.2 | 1,894.6 | 1,894.3 | 4.7 | 1.7 | -95.33 | -149.8 | -401.0 | 395.0 | 388.7 | 6.32 | 62.509 | | |
| 2,000.0 | 1,984.8 | 1,990.0 | 1,989.7 | 5.0 | 1.7 | -97.53 | -148.6 | -401.7 | 396.5 | 389.7 | 6.72 | 58.963 | | |
| 2,100.0 | 2,083.5 | 2,090.4 | 2,090.0 | 5.3 | 1.8 | -99.13 | -147.4 | -402.9 | 398.8 | 391.7 | 7.13 | 55.911 | | |
| 2,200.0 | 2,182.0 | 2,186.9 | 2,186.6 | 5.7 | 1.9 | -105.60 | -146.4 | -403.8 | 402.1 | 394.6 | 7.53 | 53.400 | | |
| 2,300.0 | 2,280.5 | 2,287.9 | 2,287.6 | 6.0 | 2.0 | -106.07 | -145.7 | -404.5 | 407.0 | 399.1 | 7.94 | 51.266 | | |
| 2,400.0 | 2,378.8 | 2,386.0 | 2,385.7 | 6.4 | 2.1 | -108.27 | -144.6 | -405.2 | 411.9 | 403.6 | 8.34 | 49.403 | | |
| 2,500.0 | 2,477.2 | 2,485.5 | 2,485.2 | 6.7 | 2.2 | -111.43 | -143.3 | -406.3 | 417.5 | 408.8 | 8.72 | 47.882 | | |
| 2,600.0 | 2,575.6 | 2,581.7 | 2,581.3 | 7.1 | 2.3 | -115.83 | -142.0 | -407.5 | 424.3 | 415.2 | 9.09 | 46.672 | | |
| 2,700.0 | 2,674.1 | 2,678.2 | 2,677.8 | 7.4 | 2.3 | -113.46 | -141.3 | -408.9 | 431.6 | 422.2 | 9.45 | 45.688 | | |
| 2,800.0 | 2,772.7 | 2,775.1 | 2,774.7 | 7.8 | 2.4 | -114.55 | -141.2 | -410.3 | 438.9 | 429.1 | 9.79 | 44.815 | | |
| 2,900.0 | 2,871.4 | 2,871.5 | 2,871.1 | 8.1 | 2.5 | -116.37 | -141.4 | -411.9 | 446.9 | 436.8 | 10.14 | 44.092 | | |
| 3,000.0 | 2,969.8 | 2,970.6 | 2,970.2 | 8.4 | 2.6 | -117.08 | -141.9 | -413.8 | 456.1 | 445.7 | 10.49 | 43.493 | | |
| 3,100.0 | 3,068.1 | 3,068.4 | 3,068.0 | 8.8 | 2.7 | -115.37 | -142.2 | -415.7 | 465.3 | 454.4 | 10.84 | 42.920 | | |
| 3,200.0 | 3,166.4 | 3,167.8 | 3,167.4 | 9.2 | 2.8 | -116.52 | -142.6 | -417.7 | 474.6 | 463.4 | 11.18 | 42.445 | | |
| 3,300.0 | 3,264.7 | 3,267.6 | 3,267.1 | 9.5 | 2.9 | -119.44 | -142.7 | -419.8 | 483.8 | 472.3 | 11.50 | 42.084 | | |
| 3,400.0 | 3,363.4 | 3,367.4 | 3,366.9 | 9.8 | 2.9 | -122.43 | -142.4 | -422.3 | 492.6 | 480.8 | 11.79 | 41.765 | | |
| 5,300.0 | 5,259.9 | 5,269.2 | 5,267.3 | 12.9 | 4.7 | 14.11 | -89.7 | -462.8 | 499.8 | 483.4 | 16.45 | 30.388 | | |
| 5,400.0 | 5,359.9 | 5,366.5 | 5,364.6 | 13.0 | 4.8 | 3.07 | -88.7 | -466.0 | 498.9 | 482.2 | 16.69 | 29.884 | | |
| 5,500.0 | 5,459.9 | 5,463.6 | 5,461.6 | 13.1 | 4.8 | 0.63 | -88.1 | -469.0 | 498.3 | 481.3 | 16.94 | 29.417 | | |
| 5,520.0 | 5,479.9 | 5,482.9 | 5,481.0 | 13.1 | 4.9 | -1.46 | -88.1 | -469.5 | 498.3 | 481.3 | 16.99 | 29.332 | | |
| 5,600.0 | 5,559.9 | 5,562.0 | 5,560.0 | 13.2 | 4.9 | -11.36 | -88.3 | -471.5 | 498.4 | 481.3 | 17.18 | 29.013 | | |
| 5,700.0 | 5,659.9 | 5,662.4 | 5,660.4 | 13.4 | 5.0 | -14.34 | -88.7 | -473.6 | 498.7 | 481.3 | 17.42 | 28.631 | | |
| 5,800.0 | 5,759.9 | 5,762.9 | 5,760.9 | 13.5 | 5.1 | -11.56 | -89.2 | -474.9 | 498.9 | 481.2 | 17.65 | 28.258 | | |
| 5,900.0 | 5,859.9 | 5,860.9 | 5,858.9 | 13.6 | 5.2 | 6.52 | -89.8 | -476.1 | 499.2 | 481.4 | 17.89 | 27.912 | | |
| 6,700.0 | 6,659.4 | 6,668.0 | 6,665.9 | 14.7 | 5.9 | 2.91 | -97.2 | -486.6 | 495.3 | 475.6 | 19.71 | 25.133 | | |
| 6,800.0 | 6,757.7 | 6,764.5 | 6,762.3 | 14.7 | 6.0 | -0.17 | -96.1 | -489.2 | 477.0 | 457.2 | 19.77 | 24.131 | | |
| 6,900.0 | 6,854.2 | 6,860.0 | 6,857.7 | 14.7 | 6.1 | 8.42 | -95.5 | -492.1 | 451.1 | 431.2 | 19.89 | 22.681 | | |
| 7,000.0 | 6,949.1 | 6,954.4 | 6,952.1 | 14.6 | 6.1 | 22.91 | -94.8 | -495.3 | 421.3 | 401.3 | 19.98 | 21.080 | | |
| 7,100.0 | 7,037.7 | 7,041.1 | 7,038.8 | 14.5 | 6.2 | 34.22 | -94.3 | -498.2 | 380.5 | 360.8 | 19.63 | 19.383 | | |
| 7,200.0 | 7,115.7 | 7,118.5 | 7,116.1 | 14.3 | 6.3 | 38.07 | -94.4 | -500.4 | 327.9 | 308.7 | 19.16 | 17.108 | | |
| 7,300.0 | 7,182.1 | 7,186.9 | 7,184.5 | 14.2 | 6.3 | 49.27 | -94.4 | -501.9 | 265.0 | 246.3 | 18.78 | 14.117 | | |
| 7,400.0 | 7,233.8 | 7,238.5 | 7,236.0 | 14.3 | 6.4 | 67.04 | -94.3 | -502.9 | 201.5 | 182.4 | 19.04 | 10.583 | | |

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

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Offset Design NWNE S2-T2N-R66W (lone) - lone #31-2 (Existing) - DD - DD | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|------------------------|------------------------|------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|---------------------------|---------|
| Survey Program: 100-Gyro | | | | | | | | | | | | 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 |
| 7,500.0 | 7,272.4 | 7,277.4 | 7,274.9 | 14.5 | 6.4 | 85.52 | -94.4 | -503.5 | 159.6 | 140.1 | 19.50 | 8.183 | |
| 7,530.2 | 7,281.5 | 7,286.7 | 7,284.2 | 14.6 | 6.4 | 89.14 | -94.5 | -503.6 | 156.7 | 137.1 | 19.63 | 7.986 CC, ES, SF | |
| 7,600.0 | 7,299.9 | 7,305.8 | 7,303.3 | 14.8 | 6.4 | 95.81 | -94.6 | -503.9 | 171.4 | 151.6 | 19.84 | 8.640 | |
| 7,700.0 | 7,318.0 | 7,325.1 | 7,322.6 | 15.3 | 6.5 | 96.47 | -94.8 | -504.1 | 232.6 | 212.3 | 20.33 | 11.441 | |
| 7,800.0 | 7,318.7 | 7,326.8 | 7,324.3 | 16.0 | 6.5 | 90.52 | -94.9 | -504.2 | 315.2 | 294.0 | 21.18 | 14.880 | |
| 7,900.0 | 7,321.9 | 7,331.1 | 7,328.6 | 16.9 | 6.5 | 94.66 | -94.9 | -504.2 | 404.1 | 381.8 | 22.27 | 18.143 | |
| 8,000.0 | 7,325.4 | 7,336.0 | 7,333.5 | 18.0 | 6.5 | 95.05 | -95.0 | -504.3 | 494.0 | 470.4 | 23.62 | 20.913 | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Offset Design NWNE S2-T2N-R66W (lone) - lone #32-2 (Existing) - 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 (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 | | |
| 8,600.0 | 7,346.4 | 7,351.4 | 7,351.4 | 26.2 | 12.8 | 84.63 | -1,599.2 | -556.4 | 484.9 | 447.0 | 37.93 | 12.786 | | |
| 8,700.0 | 7,350.1 | 7,355.1 | 7,355.1 | 27.6 | 12.8 | 84.57 | -1,599.2 | -556.4 | 392.7 | 353.2 | 39.50 | 9.941 | | |
| 8,800.0 | 7,354.5 | 7,359.5 | 7,359.5 | 29.1 | 12.8 | 86.08 | -1,599.2 | -556.4 | 304.8 | 263.7 | 41.12 | 7.414 | | |
| 8,900.0 | 7,358.9 | 7,363.9 | 7,363.9 | 30.7 | 12.8 | 87.61 | -1,599.2 | -556.4 | 227.2 | 184.5 | 42.74 | 5.316 | | |
| 9,000.0 | 7,363.3 | 7,368.3 | 7,368.3 | 32.2 | 12.8 | 89.13 | -1,599.2 | -556.4 | 174.0 | 129.7 | 44.36 | 3.922 | | |
| 9,056.9 | 7,365.8 | 7,370.8 | 7,370.8 | 33.1 | 12.8 | 90.00 | -1,599.2 | -556.4 | 164.5 | 119.2 | 45.29 | 3.632 | CC, ES, SF | |
| 9,100.0 | 7,367.7 | 7,372.7 | 7,372.7 | 33.8 | 12.8 | 90.66 | -1,599.2 | -556.4 | 170.0 | 124.0 | 45.98 | 3.697 | | |
| 9,200.0 | 7,370.0 | 7,375.0 | 7,375.0 | 35.4 | 12.8 | 90.00 | -1,599.2 | -556.4 | 218.4 | 170.8 | 47.54 | 4.593 | | |
| 9,300.0 | 7,370.0 | 7,375.0 | 7,375.0 | 37.0 | 12.8 | 90.00 | -1,599.2 | -556.4 | 294.4 | 245.2 | 49.17 | 5.986 | | |
| 9,400.0 | 7,370.0 | 7,375.0 | 7,375.0 | 38.6 | 12.8 | 90.00 | -1,599.2 | -556.4 | 381.6 | 330.8 | 50.82 | 7.509 | | |
| 9,500.0 | 7,370.0 | 7,375.0 | 7,375.0 | 40.2 | 12.8 | 90.00 | -1,599.2 | -556.4 | 473.9 | 421.4 | 52.47 | 9.032 | | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Offset Design NWNE S2-T2N-R66W (lone) - lone #33-2 (Existing) - DD - DD | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|------------------------|------------------------|------------------------|-------------------|----------------|--------------------------|---|---------------|-------------------------|--------------------------|------------------|------------------|---------------------------|--------|
| Survey Program: 100-Gyro | | | | | | | | | | | | | 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 | | |
| 10,100.0 | 7,370.0 | 7,358.6 | 7,356.5 | 50.2 | 6.5 | 90.27 | -2,968.7 | -714.3 | 456.8 | 400.6 | 56.10 | 8.141 | | |
| 10,200.0 | 7,370.0 | 7,357.4 | 7,355.3 | 51.9 | 6.5 | 90.05 | -2,968.7 | -714.3 | 392.0 | 334.2 | 57.80 | 6.783 | | |
| 10,300.0 | 7,370.0 | 7,356.2 | 7,354.1 | 53.5 | 6.5 | 89.84 | -2,968.7 | -714.2 | 344.6 | 285.1 | 59.50 | 5.792 | | |
| 10,400.0 | 7,370.0 | 7,355.0 | 7,352.9 | 55.2 | 6.5 | 89.63 | -2,968.7 | -714.2 | 322.2 | 261.0 | 61.20 | 5.265 | | |
| 10,424.7 | 7,370.0 | 7,354.7 | 7,352.6 | 55.6 | 6.5 | 89.57 | -2,968.7 | -714.2 | 321.2 | 259.6 | 61.62 | 5.214 CC, ES, SF | | |
| 10,500.0 | 7,370.0 | 7,353.8 | 7,351.7 | 56.9 | 6.5 | 89.41 | -2,968.8 | -714.2 | 330.0 | 267.1 | 62.90 | 5.246 | | |
| 10,600.0 | 7,370.0 | 7,352.6 | 7,350.5 | 58.6 | 6.5 | 89.20 | -2,968.8 | -714.2 | 366.0 | 301.3 | 64.61 | 5.664 | | |
| 10,700.0 | 7,370.0 | 7,351.4 | 7,349.3 | 60.3 | 6.5 | 88.99 | -2,968.8 | -714.2 | 423.1 | 356.7 | 66.31 | 6.380 | | |
| 10,800.0 | 7,370.0 | 7,350.2 | 7,348.2 | 62.0 | 6.5 | 88.78 | -2,968.8 | -714.2 | 494.0 | 426.0 | 68.02 | 7.262 | | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Offset Design NWNE S2-T2N-R66W (lone) - lone #34-2 (Existing) - DD - DD | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------------|--------|-----------------|------------------|------------------------|---------------------------|---------|
| Survey Program: 100-Gyro | | | | | | | | | | | | 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 +N/-S | +E/-W | Between Centres | Between Ellipses | Total Uncertainty Axis | Separation Factor | |
| (ft) | (ft) | (ft) | (ft) | (ft) | (ft) | (°) | (ft) | (ft) | (ft) | (ft) | | | |
| 11,600.0 | 7,370.0 | 7,349.8 | 7,347.7 | 75.7 | 6.5 | 90.22 | -4,403.1 | -819.6 | 499.1 | 417.2 | 81.82 | 6.099 | |
| 11,700.0 | 7,370.0 | 7,349.7 | 7,347.5 | 77.4 | 6.5 | 90.20 | -4,403.1 | -819.6 | 455.3 | 371.7 | 83.55 | 5.449 | |
| 11,800.0 | 7,370.0 | 7,349.5 | 7,347.3 | 79.2 | 6.5 | 90.18 | -4,403.1 | -819.6 | 430.7 | 345.4 | 85.28 | 5.050 | |
| 11,851.4 | 7,370.0 | 7,349.4 | 7,347.3 | 80.0 | 6.5 | 90.17 | -4,403.1 | -819.6 | 426.7 | 340.5 | 86.17 | 4.951 CC, ES, SF | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| | | | | | | | | | | | | | | |
|---|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------------|-------|-----------------|------------------|------------------------|-------------------|---------------------------|--------|
| Offset Design NWNE S2-T2N-R66W (lone) - lone #4-6-2 (Existing) - Existing - Existing | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | |
| Measured Depth | Vertical Depth | Measured Depth | Vertical Depth | Reference | Offset | Highside Toolface | Offset Wellbore Centre +N/-S | +E/-W | Between Centres | Between Ellipses | Total Uncertainty Axis | Separation Factor | Warning | |
| (ft) | (ft) | (ft) | (ft) | (ft) | (ft) | (°) | (ft) | (ft) | (ft) | (ft) | | | | |
| 11,051.4 | 7,370.0 | 7,343.0 | 7,343.0 | 66.3 | 12.8 | -90.00 | -3,595.5 | 106.2 | 499.2 | 420.5 | 78.73 | 6.340 | CC, ES, SF | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Offset Design NWNE S2-T2N-R66W (lone) - lone #6-0-2 (Existing) - Existing - Existing | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------------|---------------------------|---------------------------|-------------------|----------------|-----------------------------|---|---------------|------------------------------|----------------------|---------|-----------|--------------------|--------|
| Survey Program: 123-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | Highside Toolface (°) | Distance | | Total Uncertainty Axis | Separation Factor | Warning | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | | | | | | |
| 3,700.0 | 3,661.1 | 3,845.9 | 3,737.4 | 10.6 | 16.6 | 152.87 | 211.2 | 151.9 | 495.0 | 473.4 | 21.57 | 22.946 | | |
| 3,800.0 | 3,760.7 | 3,950.4 | 3,839.0 | 10.9 | 17.0 | 152.59 | 233.5 | 143.1 | 488.5 | 466.0 | 22.50 | 21.710 | | |
| 3,900.0 | 3,860.4 | 4,044.0 | 3,930.3 | 11.1 | 17.4 | 145.39 | 253.0 | 134.9 | 481.0 | 457.7 | 23.33 | 20.617 | | |
| 4,000.0 | 3,960.2 | 4,133.5 | 4,017.9 | 11.3 | 17.8 | 145.52 | 270.1 | 128.2 | 474.7 | 450.6 | 24.10 | 19.699 | | |
| 4,100.0 | 4,060.0 | 4,227.3 | 4,110.2 | 11.4 | 18.1 | 112.77 | 285.5 | 122.0 | 468.3 | 443.5 | 24.78 | 18.899 | | |
| 4,200.0 | 4,160.0 | 4,328.8 | 4,210.5 | 11.6 | 18.4 | 113.20 | 299.3 | 115.0 | 460.0 | 434.6 | 25.45 | 18.075 | | |
| 4,300.0 | 4,259.9 | 4,427.0 | 4,307.6 | 11.7 | 18.7 | 97.02 | 311.8 | 108.0 | 451.2 | 425.1 | 26.09 | 17.295 | | |
| 4,400.0 | 4,359.9 | 4,513.5 | 4,393.4 | 11.8 | 18.9 | 84.75 | 321.1 | 102.8 | 443.6 | 417.0 | 26.61 | 16.670 | | |
| 4,500.0 | 4,459.9 | 4,600.9 | 4,480.5 | 11.9 | 19.0 | 67.09 | 328.3 | 99.7 | 438.6 | 411.5 | 27.07 | 16.205 | | |
| 4,600.0 | 4,559.9 | 4,693.5 | 4,573.0 | 12.0 | 19.2 | 66.51 | 332.7 | 98.1 | 435.7 | 408.3 | 27.40 | 15.900 | | |
| 4,700.0 | 4,659.9 | 4,791.8 | 4,671.3 | 12.2 | 19.2 | 76.78 | 333.8 | 96.9 | 434.0 | 406.4 | 27.64 | 15.704 | | |
| 4,800.0 | 4,759.9 | 4,892.4 | 4,771.9 | 12.3 | 19.3 | 78.47 | 334.0 | 95.6 | 432.5 | 404.7 | 27.85 | 15.532 | | |
| 4,900.0 | 4,859.9 | 4,992.4 | 4,871.9 | 12.4 | 19.4 | 63.09 | 334.2 | 94.2 | 430.9 | 402.8 | 28.06 | 15.357 | | |
| 5,000.0 | 4,959.9 | 5,091.6 | 4,971.0 | 12.5 | 19.5 | 22.73 | 334.4 | 93.0 | 429.1 | 400.8 | 28.28 | 15.174 | | |
| 5,100.0 | 5,059.9 | 5,191.8 | 5,071.2 | 12.6 | 19.6 | -6.03 | 335.0 | 91.8 | 426.2 | 397.7 | 28.52 | 14.944 | | |
| 5,200.0 | 5,159.9 | 5,290.7 | 5,170.1 | 12.8 | 19.7 | -77.02 | 335.6 | 90.8 | 424.7 | 395.9 | 28.79 | 14.753 | | |
| 5,300.0 | 5,259.9 | 5,390.8 | 5,270.2 | 12.9 | 19.8 | -83.67 | 335.8 | 89.8 | 423.5 | 394.5 | 29.03 | 14.588 | | |
| 5,400.0 | 5,359.9 | 5,490.1 | 5,369.5 | 13.0 | 19.9 | -95.17 | 335.5 | 88.8 | 422.5 | 393.3 | 29.27 | 14.437 | | |
| 5,500.0 | 5,459.9 | 5,588.7 | 5,468.1 | 13.1 | 19.9 | -98.02 | 335.2 | 88.1 | 422.0 | 392.5 | 29.50 | 14.304 | | |
| 5,600.0 | 5,559.9 | 5,688.4 | 5,567.8 | 13.2 | 20.0 | -110.24 | 334.3 | 87.5 | 421.7 | 392.0 | 29.72 | 14.190 | | |
| 5,700.0 | 5,659.9 | 5,788.4 | 5,667.8 | 13.4 | 20.1 | -113.35 | 333.3 | 86.9 | 421.5 | 391.5 | 29.93 | 14.083 | | |
| 5,800.0 | 5,759.9 | 5,887.5 | 5,766.9 | 13.5 | 20.2 | -110.64 | 332.4 | 86.4 | 421.3 | 391.2 | 30.15 | 13.976 | | |
| 5,806.9 | 5,766.8 | 5,894.4 | 5,773.8 | 13.5 | 20.2 | -109.95 | 332.3 | 86.3 | 421.3 | 391.2 | 30.16 | 13.969 | | |
| 5,900.0 | 5,859.9 | 5,986.5 | 5,865.9 | 13.6 | 20.2 | -92.64 | 331.7 | 86.2 | 421.4 | 391.0 | 30.38 | 13.871 | | |
| 6,000.0 | 5,959.9 | 6,084.5 | 5,963.9 | 13.8 | 20.3 | -10.76 | 331.4 | 86.3 | 421.3 | 390.7 | 30.62 | 13.758 | | |
| 6,006.9 | 5,966.7 | 6,091.2 | 5,970.6 | 13.8 | 20.3 | -9.55 | 331.4 | 86.3 | 421.3 | 390.7 | 30.64 | 13.750 CC | | |
| 6,100.0 | 6,059.9 | 6,183.3 | 6,062.7 | 13.9 | 20.4 | 2.44 | 331.5 | 87.0 | 421.4 | 390.5 | 30.87 | 13.649 ES | | |
| 6,200.0 | 6,159.9 | 6,283.1 | 6,162.5 | 14.0 | 20.5 | -67.94 | 330.9 | 87.7 | 421.7 | 390.5 | 31.11 | 13.553 | | |
| 6,300.0 | 6,259.8 | 6,383.8 | 6,263.2 | 14.1 | 20.6 | -89.44 | 329.8 | 88.3 | 422.1 | 390.8 | 31.34 | 13.468 | | |
| 6,400.0 | 6,359.8 | 6,483.6 | 6,362.9 | 14.3 | 20.6 | -153.68 | 328.2 | 88.7 | 423.7 | 392.2 | 31.57 | 13.421 | | |
| 6,500.0 | 6,459.8 | 6,582.4 | 6,461.8 | 14.4 | 20.7 | -156.22 | 326.8 | 89.3 | 427.0 | 395.2 | 31.80 | 13.427 | | |
| 6,600.0 | 6,559.7 | 6,681.7 | 6,561.0 | 14.6 | 20.8 | -129.08 | 325.7 | 90.2 | 430.6 | 398.6 | 32.04 | 13.440 | | |
| 6,700.0 | 6,659.4 | 6,780.5 | 6,659.8 | 14.7 | 20.9 | -97.40 | 324.7 | 91.2 | 434.2 | 401.9 | 32.32 | 13.433 | | |
| 6,800.0 | 6,757.7 | 6,889.2 | 6,768.6 | 14.7 | 21.0 | -103.14 | 324.4 | 91.4 | 437.5 | 404.7 | 32.76 | 13.352 | | |
| 6,900.0 | 6,854.2 | 6,993.4 | 6,872.7 | 14.7 | 21.1 | -99.26 | 326.0 | 89.3 | 441.0 | 407.6 | 33.40 | 13.202 | | |
| 7,000.0 | 6,949.1 | 7,088.2 | 6,967.4 | 14.6 | 21.3 | -91.97 | 327.8 | 86.6 | 441.0 | 407.0 | 34.07 | 12.945 | | |
| 7,089.1 | 7,028.5 | 7,167.9 | 7,047.1 | 14.5 | 21.4 | -93.05 | 329.4 | 84.2 | 439.9 | 405.4 | 34.53 | 12.740 | | |
| 7,100.0 | 7,037.7 | 7,177.1 | 7,056.3 | 14.5 | 21.4 | -93.40 | 329.6 | 83.9 | 440.1 | 405.5 | 34.57 | 12.730 SF | | |
| 7,200.0 | 7,115.7 | 7,254.5 | 7,133.6 | 14.3 | 21.5 | -102.97 | 331.5 | 81.2 | 447.4 | 413.1 | 34.35 | 13.027 | | |
| 7,300.0 | 7,182.1 | 7,325.5 | 7,204.5 | 14.2 | 21.6 | -109.17 | 333.0 | 78.3 | 474.7 | 441.2 | 33.54 | 14.154 | | |

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

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Offset Design NWNE S2-T2N-R66W (lone) - lone 1A-2H - HZ - HZ | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------------|---------------------------|---------------------------|-------------------|----------------|-----------------------------|---|---------------|------------------------------|----------------------|----------|--|--------------------|--------|
| Survey Program: 169-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | Highside Toolface (°) | Distance | | Total Uncertainty Axis | Separation Factor | Warning | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -89.94 | 0.0 | -8.4 | 8.4 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.2 | 0.2 | -90.71 | -0.1 | -8.5 | 8.5 | 0.31 | 27.129 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 28.05 | -0.4 | -8.8 | 8.8 | 0.65 | 13.468 | | | |
| 300.0 | 300.0 | 299.9 | 299.9 | 0.5 | 0.5 | 43.85 | 0.4 | -9.6 | 9.1 | 1.00 | 9.115 ES | | | |
| 400.0 | 400.0 | 399.6 | 399.6 | 0.7 | 0.7 | 42.51 | 1.8 | -12.0 | 10.9 | 1.35 | 8.031 | | | |
| 500.0 | 500.0 | 499.4 | 499.2 | 0.9 | 0.9 | 17.79 | 4.8 | -15.9 | 13.6 | 1.70 | 7.977 | | | |
| 600.0 | 599.9 | 599.1 | 598.7 | 1.0 | 1.1 | -0.22 | 9.4 | -20.7 | 16.1 | 2.05 | 7.841 | | | |
| 700.0 | 699.7 | 698.7 | 697.9 | 1.2 | 1.3 | -3.96 | 15.0 | -27.1 | 18.3 | 2.40 | 7.625 | | | |
| 800.0 | 799.3 | 798.3 | 796.9 | 1.4 | 1.5 | -9.65 | 21.9 | -35.3 | 20.6 | 2.74 | 7.511 | | | |
| 900.0 | 898.9 | 897.9 | 895.8 | 1.7 | 1.8 | -20.54 | 29.6 | -44.7 | 23.9 | 3.10 | 7.732 | | | |
| 1,000.0 | 998.4 | 997.4 | 994.4 | 1.9 | 2.1 | -29.81 | 37.3 | -55.5 | 28.6 | 3.47 | 8.254 | | | |
| 1,100.0 | 1,097.9 | 1,097.2 | 1,093.2 | 2.1 | 2.4 | -36.99 | 44.9 | -67.5 | 33.8 | 3.85 | 8.778 | | | |
| 1,200.0 | 1,197.3 | 1,196.1 | 1,191.0 | 2.4 | 2.7 | -37.75 | 53.2 | -80.2 | 40.2 | 4.28 | 9.394 | | | |
| 1,300.0 | 1,296.5 | 1,295.8 | 1,289.2 | 2.6 | 3.0 | -33.96 | 62.1 | -94.0 | 45.9 | 4.71 | 9.729 | | | |
| 1,400.0 | 1,395.4 | 1,394.5 | 1,386.4 | 2.9 | 3.3 | -34.28 | 70.1 | -109.4 | 50.3 | 5.19 | 9.679 | | | |
| 1,500.0 | 1,493.9 | 1,493.1 | 1,483.2 | 3.3 | 3.7 | -40.33 | 77.6 | -127.1 | 55.2 | 5.77 | 9.558 | | | |
| 1,600.0 | 1,592.0 | 1,592.0 | 1,579.8 | 3.6 | 4.1 | -48.06 | 84.9 | -146.6 | 61.2 | 6.46 | 9.462 | | | |
| 1,700.0 | 1,689.9 | 1,691.6 | 1,677.1 | 4.0 | 4.5 | -57.54 | 91.6 | -166.7 | 68.6 | 7.26 | 9.439 | | | |
| 1,800.0 | 1,788.0 | 1,791.5 | 1,774.8 | 4.3 | 4.9 | -63.93 | 99.4 | -186.6 | 77.2 | 8.06 | 9.581 | | | |
| 1,900.0 | 1,886.2 | 1,891.4 | 1,872.6 | 4.7 | 5.3 | -66.43 | 106.3 | -205.5 | 86.1 | 8.82 | 9.764 | | | |
| 2,000.0 | 1,984.8 | 1,990.4 | 1,969.7 | 5.0 | 5.6 | -68.90 | 112.6 | -224.0 | 95.5 | 9.52 | 10.034 | | | |
| 2,100.0 | 2,083.5 | 2,090.8 | 2,068.0 | 5.3 | 6.0 | -69.97 | 119.1 | -243.1 | 105.5 | 10.22 | 10.324 | | | |
| 2,200.0 | 2,182.0 | 2,190.7 | 2,165.8 | 5.7 | 6.4 | -75.14 | 127.4 | -261.6 | 114.6 | 10.90 | 10.514 | | | |
| 2,300.0 | 2,280.5 | 2,290.0 | 2,262.9 | 6.0 | 6.8 | -73.93 | 136.5 | -280.5 | 124.4 | 11.60 | 10.724 | | | |
| 2,400.0 | 2,378.8 | 2,390.5 | 2,361.1 | 6.4 | 7.2 | -74.81 | 145.5 | -299.3 | 133.4 | 12.32 | 10.830 | | | |
| 2,500.0 | 2,477.2 | 2,490.6 | 2,459.3 | 6.7 | 7.6 | -77.02 | 153.7 | -317.1 | 142.0 | 13.04 | 10.889 | | | |
| 2,600.0 | 2,575.6 | 2,591.1 | 2,557.9 | 7.1 | 8.0 | -80.42 | 162.3 | -334.6 | 150.9 | 13.77 | 10.956 | | | |
| 2,700.0 | 2,674.1 | 2,689.4 | 2,654.4 | 7.4 | 8.4 | -76.84 | 170.8 | -351.8 | 159.7 | 14.47 | 11.035 | | | |
| 2,800.0 | 2,772.7 | 2,789.4 | 2,752.3 | 7.8 | 8.8 | -76.26 | 179.6 | -369.6 | 168.0 | 15.13 | 11.104 | | | |
| 2,900.0 | 2,871.4 | 2,884.5 | 2,845.4 | 8.1 | 9.2 | -76.37 | 187.6 | -387.8 | 177.8 | 15.77 | 11.274 | | | |
| 3,000.0 | 2,969.8 | 2,981.8 | 2,940.4 | 8.4 | 9.6 | -75.75 | 194.6 | -407.6 | 189.0 | 16.46 | 11.478 | | | |
| 3,100.0 | 3,068.1 | 3,077.4 | 3,033.1 | 8.8 | 10.0 | -72.43 | 202.0 | -429.2 | 200.8 | 17.18 | 11.686 | | | |
| 3,200.0 | 3,166.4 | 3,177.9 | 3,130.4 | 9.2 | 10.5 | -71.64 | 210.5 | -452.8 | 212.3 | 17.88 | 11.874 | | | |
| 3,300.0 | 3,264.7 | 3,278.8 | 3,228.4 | 9.5 | 10.9 | -72.90 | 218.3 | -475.7 | 223.7 | 18.56 | 12.054 | | | |
| 3,400.0 | 3,363.4 | 3,383.8 | 3,330.9 | 9.8 | 11.4 | -74.56 | 225.6 | -497.2 | 234.6 | 19.21 | 12.212 | | | |
| 3,500.0 | 3,462.4 | 3,488.9 | 3,433.8 | 10.1 | 11.8 | -75.98 | 235.0 | -516.6 | 243.5 | 19.80 | 12.299 | | | |
| 3,600.0 | 3,561.6 | 3,588.1 | 3,531.0 | 10.4 | 12.2 | -74.47 | 244.5 | -533.9 | 252.3 | 20.27 | 12.450 | | | |
| 3,700.0 | 3,661.1 | 3,686.3 | 3,627.2 | 10.6 | 12.5 | -68.87 | 253.0 | -551.5 | 261.9 | 20.67 | 12.671 | | | |
| 3,800.0 | 3,760.7 | 3,784.9 | 3,723.9 | 10.9 | 12.9 | -66.01 | 261.6 | -569.2 | 271.6 | 21.00 | 12.938 | | | |
| 3,900.0 | 3,860.4 | 3,885.9 | 3,823.0 | 11.1 | 13.3 | -70.21 | 269.7 | -587.3 | 282.3 | 21.30 | 13.257 | | | |
| 4,000.0 | 3,960.2 | 3,984.6 | 3,919.7 | 11.3 | 13.7 | -67.28 | 278.4 | -604.4 | 293.2 | 21.57 | 13.592 | | | |
| 4,100.0 | 4,060.0 | 4,081.7 | 4,014.8 | 11.4 | 14.1 | -97.18 | 287.1 | -622.0 | 306.3 | 21.77 | 14.067 | | | |
| 4,200.0 | 4,160.0 | 4,184.3 | 4,115.2 | 11.6 | 14.5 | -93.47 | 297.8 | -640.7 | 321.4 | 21.88 | 14.687 | | | |
| 4,300.0 | 4,259.9 | 4,274.7 | 4,203.5 | 11.7 | 14.9 | -106.55 | 307.0 | -657.0 | 336.6 | 21.98 | 15.316 | | | |
| 4,400.0 | 4,359.9 | 4,364.1 | 4,290.4 | 11.8 | 15.3 | -115.73 | 316.8 | -675.8 | 353.3 | 21.99 | 16.157 | | | |
| 4,500.0 | 4,459.9 | 4,472.3 | 4,395.8 | 11.9 | 15.8 | -130.59 | 326.6 | -698.5 | 375.0 | 22.01 | 17.032 | | | |
| 4,600.0 | 4,559.9 | 4,581.0 | 4,502.5 | 12.0 | 16.1 | -129.15 | 335.3 | -716.9 | 391.3 | 22.11 | 17.698 | | | |
| 4,700.0 | 4,659.9 | 4,676.0 | 4,595.9 | 12.2 | 16.5 | -117.59 | 343.4 | -732.5 | 407.2 | 22.23 | 18.319 | | | |
| 4,800.0 | 4,759.9 | 4,782.2 | 4,700.5 | 12.3 | 16.9 | -114.83 | 351.3 | -749.3 | 422.6 | 22.36 | 18.901 | | | |
| 4,900.0 | 4,859.9 | 4,877.4 | 4,794.3 | 12.4 | 17.2 | -129.35 | 358.0 | -763.9 | 437.6 | 22.51 | 19.439 | | | |
| 5,000.0 | 4,959.9 | 4,983.4 | 4,898.9 | 12.5 | 17.5 | -168.80 | 365.1 | -779.6 | 452.6 | 22.66 | 19.975 | | | |
| 5,100.0 | 5,059.9 | 5,093.3 | 5,007.7 | 12.6 | 17.8 | 163.25 | 370.8 | -793.2 | 466.4 | 22.84 | 20.424 | | | |

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

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Offset Design NWNE S2-T2N-R66W (lone) - lone 1A-2H - HZ - HZ | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------------|---------------------------|---------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|----------------------|---------|
| Survey Program: 169-MWD | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | Total Uncertainty Axis | Separation Factor | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | | | |
| 5,200.0 | 5,159.9 | 5,202.5 | 5,116.2 | 12.8 | 18.1 | 92.95 | 374.3 | -804.7 | 477.1 | 454.1 | 23.04 | 20.710 | |
| 5,300.0 | 5,259.9 | 5,307.4 | 5,220.8 | 12.9 | 18.3 | 86.73 | 375.9 | -813.5 | 485.4 | 462.1 | 23.26 | 20.865 | |
| 5,400.0 | 5,359.9 | 5,409.8 | 5,322.9 | 13.0 | 18.5 | 75.53 | 376.9 | -821.6 | 493.1 | 469.6 | 23.50 | 20.988 | |
| 5,500.0 | 5,459.9 | 5,517.4 | 5,430.3 | 13.1 | 18.7 | 72.92 | 377.2 | -828.9 | 499.6 | 475.9 | 23.75 | 21.041 | |
| 8,400.0 | 7,339.4 | 8,580.5 | 7,517.3 | 23.3 | 27.0 | 111.32 | -971.5 | -830.2 | 490.8 | 446.1 | 44.69 | 10.981 | |
| 8,500.0 | 7,342.9 | 8,674.9 | 7,515.6 | 24.7 | 28.1 | 111.27 | -1,065.8 | -826.1 | 474.3 | 428.0 | 46.28 | 10.247 | |
| 8,600.0 | 7,346.4 | 8,772.7 | 7,514.1 | 26.2 | 29.4 | 111.03 | -1,163.4 | -822.2 | 466.1 | 418.1 | 48.08 | 9.696 | |
| 8,700.0 | 7,350.1 | 8,868.7 | 7,513.5 | 27.6 | 30.6 | 110.67 | -1,259.4 | -818.6 | 460.8 | 409.6 | 51.20 | 9.000 | |
| 8,800.0 | 7,354.5 | 8,962.7 | 7,512.8 | 29.1 | 31.9 | 110.25 | -1,353.4 | -816.2 | 455.6 | 401.4 | 54.14 | 8.415 | |
| 8,900.0 | 7,358.9 | 9,058.5 | 7,512.8 | 30.7 | 33.2 | 109.86 | -1,449.1 | -814.8 | 451.6 | 394.5 | 57.15 | 7.903 | |
| 9,000.0 | 7,363.3 | 9,156.2 | 7,512.9 | 32.2 | 34.6 | 109.44 | -1,546.9 | -813.8 | 448.2 | 388.0 | 60.24 | 7.440 | |
| 9,100.0 | 7,367.7 | 9,254.3 | 7,513.5 | 33.8 | 36.1 | 109.06 | -1,645.0 | -813.3 | 445.4 | 382.0 | 63.37 | 7.028 | |
| 9,176.3 | 7,369.8 | 9,327.1 | 7,514.0 | 35.0 | 37.2 | 108.94 | -1,717.7 | -813.1 | 444.2 | 378.9 | 65.35 | 6.798 | |
| 9,200.0 | 7,370.0 | 9,348.2 | 7,514.1 | 35.4 | 37.5 | 108.92 | -1,738.9 | -813.3 | 444.3 | 378.4 | 65.93 | 6.739 | |
| 9,300.0 | 7,370.0 | 9,446.8 | 7,514.3 | 37.0 | 39.0 | 108.87 | -1,837.4 | -815.1 | 446.2 | 377.2 | 69.02 | 6.465 | |
| 9,400.0 | 7,370.0 | 9,544.5 | 7,514.7 | 38.6 | 40.5 | 108.88 | -1,935.2 | -816.3 | 447.4 | 375.3 | 72.09 | 6.206 | |
| 9,500.0 | 7,370.0 | 9,641.4 | 7,516.8 | 40.2 | 42.0 | 109.04 | -2,031.9 | -818.3 | 450.1 | 375.0 | 75.10 | 5.993 | |
| 9,600.0 | 7,370.0 | 9,743.7 | 7,519.1 | 41.9 | 43.6 | 109.24 | -2,134.2 | -820.1 | 452.5 | 374.3 | 78.19 | 5.787 | |
| 9,700.0 | 7,370.0 | 9,847.8 | 7,520.5 | 43.5 | 45.3 | 109.35 | -2,238.3 | -821.6 | 454.3 | 372.9 | 81.36 | 5.584 | |
| 9,800.0 | 7,370.0 | 9,947.4 | 7,521.8 | 45.2 | 46.8 | 109.47 | -2,337.9 | -822.4 | 455.5 | 371.0 | 84.46 | 5.393 | |
| 9,900.0 | 7,370.0 | 10,049.7 | 7,523.1 | 46.8 | 48.5 | 109.59 | -2,440.2 | -823.2 | 456.6 | 369.0 | 87.61 | 5.212 | |
| 10,000.0 | 7,370.0 | 10,153.5 | 7,523.6 | 48.5 | 50.2 | 109.64 | -2,544.0 | -823.5 | 457.1 | 366.3 | 90.82 | 5.033 | |
| 10,100.0 | 7,370.0 | 10,259.4 | 7,523.4 | 50.2 | 51.9 | 109.64 | -2,649.8 | -822.8 | 456.4 | 362.3 | 94.10 | 4.850 | |
| 10,200.0 | 7,370.0 | 10,354.0 | 7,523.5 | 51.9 | 53.4 | 109.69 | -2,744.5 | -821.9 | 455.5 | 358.3 | 97.19 | 4.687 | |
| 10,205.7 | 7,370.0 | 10,359.3 | 7,523.5 | 51.9 | 53.5 | 109.69 | -2,749.7 | -821.9 | 455.5 | 358.2 | 97.36 | 4.679 | |
| 10,300.0 | 7,370.0 | 10,450.8 | 7,523.7 | 53.5 | 55.0 | 109.70 | -2,841.3 | -822.3 | 456.0 | 355.7 | 100.33 | 4.545 | |
| 10,400.0 | 7,370.0 | 10,554.0 | 7,523.4 | 55.2 | 56.7 | 109.64 | -2,944.5 | -822.8 | 456.4 | 352.7 | 103.62 | 4.404 | |
| 10,500.0 | 7,370.0 | 10,657.5 | 7,522.9 | 56.9 | 58.4 | 109.60 | -3,048.0 | -822.4 | 455.8 | 348.9 | 106.92 | 4.264 | |
| 10,600.0 | 7,370.0 | 10,767.7 | 7,522.0 | 58.6 | 60.2 | 109.56 | -3,158.1 | -820.6 | 454.0 | 343.7 | 110.33 | 4.115 | |
| 10,700.0 | 7,370.0 | 10,870.0 | 7,519.5 | 60.3 | 61.9 | 109.40 | -3,260.4 | -817.8 | 450.6 | 336.9 | 113.70 | 3.963 | |
| 10,800.0 | 7,370.0 | 10,973.1 | 7,516.1 | 62.0 | 63.6 | 109.12 | -3,363.3 | -814.6 | 446.6 | 329.4 | 117.17 | 3.812 | |
| 10,900.0 | 7,370.0 | 11,075.4 | 7,512.9 | 63.7 | 65.3 | 108.88 | -3,465.5 | -810.8 | 442.1 | 321.5 | 120.61 | 3.665 | |
| 11,000.0 | 7,370.0 | 11,181.9 | 7,509.4 | 65.4 | 67.1 | 108.66 | -3,571.9 | -805.8 | 436.6 | 312.5 | 124.12 | 3.517 | |
| 11,100.0 | 7,370.0 | 11,287.6 | 7,505.3 | 67.1 | 68.8 | 108.43 | -3,677.3 | -799.0 | 429.2 | 301.6 | 127.63 | 3.363 | |
| 11,200.0 | 7,370.0 | 11,384.4 | 7,503.0 | 68.8 | 70.4 | 108.43 | -3,773.8 | -792.0 | 421.6 | 290.8 | 130.85 | 3.222 | |
| 11,300.0 | 7,370.0 | 11,481.3 | 7,502.8 | 70.6 | 72.0 | 108.70 | -3,870.4 | -785.4 | 415.1 | 281.3 | 133.86 | 3.101 | |
| 11,400.0 | 7,370.0 | 11,577.9 | 7,501.7 | 72.3 | 73.7 | 108.82 | -3,966.8 | -779.5 | 408.9 | 271.9 | 136.99 | 2.985 | |
| 11,500.0 | 7,370.0 | 11,673.0 | 7,501.2 | 74.0 | 75.3 | 108.96 | -4,061.8 | -774.8 | 404.1 | 264.0 | 140.06 | 2.885 | |
| 11,600.0 | 7,370.0 | 11,775.3 | 7,502.1 | 75.7 | 77.0 | 109.32 | -4,164.0 | -769.7 | 399.7 | 256.6 | 143.07 | 2.793 | |
| 11,700.0 | 7,370.0 | 11,870.0 | 7,501.4 | 77.4 | 78.6 | 109.51 | -4,258.5 | -763.9 | 393.8 | 247.7 | 146.09 | 2.696 | |
| 11,714.5 | 7,370.0 | 11,870.0 | 7,501.4 | 77.7 | 78.6 | 109.51 | -4,258.5 | -763.9 | 393.5 | 247.2 | 146.33 | 2.689 SF | |
| 11,800.0 | 7,370.0 | 11,870.0 | 7,501.4 | 79.2 | 78.6 | 109.51 | -4,258.5 | -763.9 | 402.7 | 255.0 | 147.72 | 2.726 | |
| 11,851.4 | 7,370.0 | 11,870.0 | 7,501.4 | 80.0 | 78.6 | 109.51 | -4,258.5 | -763.9 | 416.7 | 268.1 | 148.56 | 2.805 | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Offset Design NWNE S2-T2N-R66W (lone) - lone 1B-2H - HZ - HZ | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------|-------------------|--------------------|--------|
| Survey Program: 169-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | Total | | Warning | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Uncertainty Axis | Separation Factor | | |
| 7,765.0 | 7,322.4 | 7,764.8 | 7,319.5 | 0.0 | 0.0 | -3.45 | -316.0 | -324.5 | 2.9 | 2.9 | 0.00 | N/A | | |
| 7,800.0 | 7,318.7 | 7,799.9 | 7,316.7 | 0.4 | 0.4 | 5.16 | -350.8 | -320.7 | 2.1 | 1.8 | 0.21 | 9.924 CC, ES | | |
| 7,900.0 | 7,321.9 | 7,898.6 | 7,303.1 | 1.4 | 1.4 | 9.42 | -448.4 | -315.8 | 19.1 | 18.3 | 0.86 | 22.211 | | |
| 8,000.0 | 7,325.4 | 7,997.3 | 7,291.6 | 2.6 | 2.6 | 2.34 | -546.4 | -314.4 | 34.1 | 32.7 | 1.37 | 24.891 | | |
| 8,100.0 | 7,328.9 | 8,099.7 | 7,283.4 | 3.9 | 3.8 | -11.10 | -648.4 | -313.3 | 46.5 | 44.0 | 2.46 | 18.878 | | |
| 8,200.0 | 7,332.4 | 8,199.9 | 7,282.4 | 5.3 | 5.1 | -27.41 | -748.6 | -312.9 | 56.4 | 51.1 | 5.31 | 10.627 | | |
| 8,300.0 | 7,335.9 | 8,298.0 | 7,282.5 | 6.7 | 6.4 | -39.15 | -846.7 | -312.5 | 69.1 | 60.5 | 8.62 | 8.016 | | |
| 8,400.0 | 7,339.4 | 8,398.2 | 7,283.1 | 8.2 | 7.8 | -47.07 | -947.0 | -312.9 | 82.8 | 70.8 | 11.91 | 6.947 | | |
| 8,500.0 | 7,342.9 | 8,498.7 | 7,285.7 | 9.6 | 9.3 | -51.21 | -1,047.4 | -314.0 | 91.1 | 76.4 | 14.68 | 6.206 | | |
| 8,600.0 | 7,346.4 | 8,599.3 | 7,289.1 | 11.1 | 10.8 | -51.49 | -1,147.9 | -315.6 | 92.1 | 75.3 | 16.83 | 5.475 | | |
| 8,700.0 | 7,350.1 | 8,699.3 | 7,291.4 | 12.5 | 12.3 | -49.81 | -1,247.8 | -318.5 | 91.1 | 72.2 | 18.90 | 4.817 | | |
| 8,702.3 | 7,350.2 | 8,701.6 | 7,291.5 | 12.6 | 12.3 | -49.76 | -1,250.1 | -318.6 | 91.1 | 72.1 | 18.94 | 4.807 | | |
| 8,800.0 | 7,354.5 | 8,798.5 | 7,292.7 | 14.1 | 13.8 | -47.38 | -1,347.0 | -321.9 | 91.4 | 70.8 | 20.57 | 4.443 | | |
| 8,900.0 | 7,358.9 | 8,896.6 | 7,291.9 | 15.6 | 15.4 | -44.16 | -1,445.0 | -325.2 | 93.4 | 71.6 | 21.78 | 4.289 | | |
| 9,000.0 | 7,363.3 | 8,995.8 | 7,291.2 | 17.2 | 16.9 | -42.25 | -1,544.2 | -325.9 | 97.3 | 74.1 | 23.25 | 4.187 | | |
| 9,100.0 | 7,367.7 | 9,096.8 | 7,292.1 | 18.7 | 18.6 | -41.25 | -1,645.2 | -326.2 | 100.6 | 75.5 | 25.01 | 4.021 | | |
| 9,200.0 | 7,370.0 | 9,196.2 | 7,293.4 | 20.3 | 20.2 | -41.06 | -1,744.6 | -326.2 | 101.7 | 74.9 | 26.79 | 3.795 | | |
| 9,240.1 | 7,370.0 | 9,235.8 | 7,294.1 | 21.0 | 20.8 | -41.60 | -1,784.2 | -325.6 | 101.5 | 73.6 | 27.93 | 3.636 | | |
| 9,300.0 | 7,370.0 | 9,295.7 | 7,295.3 | 22.0 | 21.8 | -42.66 | -1,844.0 | -324.1 | 101.6 | 71.8 | 29.81 | 3.408 | | |
| 9,361.7 | 7,370.0 | 9,357.4 | 7,296.5 | 23.0 | 22.8 | -43.62 | -1,905.7 | -323.0 | 101.5 | 69.8 | 31.72 | 3.201 | | |
| 9,400.0 | 7,370.0 | 9,395.2 | 7,297.1 | 23.6 | 23.4 | -44.19 | -1,943.5 | -322.2 | 101.6 | 68.7 | 32.91 | 3.088 | | |
| 9,500.0 | 7,370.0 | 9,494.5 | 7,298.5 | 25.2 | 25.0 | -45.81 | -2,042.8 | -319.4 | 102.6 | 66.5 | 36.18 | 2.837 | | |
| 9,600.0 | 7,370.0 | 9,590.5 | 7,299.6 | 26.9 | 26.6 | -47.87 | -2,138.7 | -315.2 | 105.1 | 65.3 | 39.78 | 2.642 | | |
| 9,700.0 | 7,370.0 | 9,687.2 | 7,298.9 | 28.5 | 28.2 | -50.60 | -2,235.0 | -306.5 | 112.4 | 68.4 | 43.91 | 2.559 | | |
| 9,800.0 | 7,370.0 | 9,787.5 | 7,297.6 | 30.2 | 29.8 | -52.89 | -2,334.9 | -297.3 | 120.4 | 72.4 | 47.94 | 2.511 | | |
| 9,900.0 | 7,370.0 | 9,887.7 | 7,297.8 | 31.9 | 31.5 | -55.47 | -2,434.6 | -288.0 | 127.8 | 75.5 | 52.24 | 2.446 | | |
| 10,000.0 | 7,370.0 | 9,990.9 | 7,297.3 | 33.5 | 33.2 | -57.17 | -2,537.5 | -280.3 | 134.2 | 78.1 | 56.13 | 2.392 | | |
| 10,100.0 | 7,370.0 | 10,092.7 | 7,298.1 | 35.2 | 35.0 | -58.53 | -2,639.2 | -275.6 | 137.8 | 77.9 | 59.85 | 2.302 | | |
| 10,200.0 | 7,370.0 | 10,199.5 | 7,301.2 | 36.9 | 36.8 | -60.46 | -2,745.9 | -271.7 | 139.5 | 75.4 | 64.07 | 2.177 | | |
| 10,300.0 | 7,370.0 | 10,301.2 | 7,302.0 | 38.6 | 38.5 | -60.33 | -2,847.6 | -273.7 | 137.4 | 70.4 | 66.98 | 2.051 | | |
| 10,400.0 | 7,370.0 | 10,400.2 | 7,302.2 | 40.3 | 40.2 | -59.97 | -2,946.5 | -275.8 | 135.4 | 65.7 | 69.68 | 1.943 | | |
| 10,500.0 | 7,370.0 | 10,502.5 | 7,303.5 | 42.0 | 41.9 | -59.83 | -3,048.8 | -278.5 | 132.5 | 59.9 | 72.58 | 1.825 | | |
| 10,600.0 | 7,370.0 | 10,601.2 | 7,304.4 | 43.7 | 43.6 | -59.48 | -3,147.4 | -281.8 | 129.1 | 53.9 | 75.27 | 1.716 | | |
| 10,700.0 | 7,370.0 | 10,698.7 | 7,305.9 | 45.4 | 45.3 | -59.91 | -3,244.9 | -282.4 | 127.8 | 49.3 | 78.52 | 1.627 | | |
| 10,800.0 | 7,370.0 | 10,798.4 | 7,306.6 | 47.1 | 47.0 | -60.10 | -3,344.5 | -282.7 | 127.2 | 45.6 | 81.64 | 1.558 | | |
| 10,900.0 | 7,370.0 | 10,898.1 | 7,306.2 | 48.8 | 48.7 | -59.86 | -3,444.3 | -283.1 | 127.0 | 42.6 | 84.42 | 1.505 | | |
| 11,000.0 | 7,370.0 | 10,999.0 | 7,304.4 | 50.5 | 50.4 | -58.76 | -3,545.1 | -284.8 | 126.5 | 40.1 | 86.45 | 1.463 Level 3 | | |
| 11,100.0 | 7,370.0 | 11,100.8 | 7,304.6 | 52.2 | 52.2 | -58.45 | -3,646.9 | -286.4 | 125.1 | 36.0 | 89.14 | 1.403 Level 3 | | |
| 11,200.0 | 7,370.0 | 11,201.7 | 7,305.7 | 54.0 | 53.9 | -58.21 | -3,747.7 | -289.2 | 122.1 | 30.3 | 91.87 | 1.330 Level 3 | | |
| 11,300.0 | 7,370.0 | 11,299.7 | 7,305.2 | 55.7 | 55.6 | -57.23 | -3,845.7 | -292.4 | 119.7 | 25.9 | 93.79 | 1.276 Level 3 | | |
| 11,380.4 | 7,370.0 | 11,378.5 | 7,303.9 | 57.1 | 57.0 | -56.29 | -3,924.5 | -293.8 | 119.2 | 24.1 | 95.11 | 1.253 Level 3 | | |
| 11,400.0 | 7,370.0 | 11,397.7 | 7,303.3 | 57.4 | 57.3 | -56.00 | -3,943.7 | -294.2 | 119.2 | 23.9 | 95.36 | 1.250 Level 3 | | |
| 11,500.0 | 7,370.0 | 11,496.8 | 7,299.6 | 59.1 | 59.0 | -54.08 | -4,042.8 | -295.9 | 120.0 | 24.0 | 96.01 | 1.249 Level 2 | | |
| 11,600.0 | 7,370.0 | 11,598.9 | 7,296.0 | 60.8 | 60.8 | -52.09 | -4,144.8 | -297.9 | 120.5 | 24.1 | 96.40 | 1.250 Level 3 | | |
| 11,700.0 | 7,370.0 | 11,703.3 | 7,296.6 | 62.6 | 62.6 | -51.59 | -4,249.0 | -300.5 | 118.2 | 19.7 | 98.54 | 1.199 Level 2 | | |
| 11,800.0 | 7,370.0 | 11,803.8 | 7,299.6 | 64.3 | 64.3 | -51.64 | -4,349.4 | -304.1 | 113.6 | 12.2 | 101.34 | 1.121 Level 2 | | |
| 11,849.6 | 7,370.0 | 11,848.0 | 7,300.8 | 65.1 | 65.1 | -51.60 | -4,393.6 | -305.7 | 111.3 | 8.8 | 102.56 | 1.086 Level 2 | | |
| 11,851.4 | 7,370.0 | 11,848.0 | 7,300.8 | 65.2 | 65.1 | -51.60 | -4,393.6 | -305.7 | 111.4 | 8.8 | 102.58 | 1.086 Level 2, SF | | |

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

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Offset Design NWNE S2-T2N-R66W (lone) - lone 1C-2H - HZ - HZ | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|------------------------|------------------------|------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|---------------------------|---------|
| Survey Program: 169-MWD | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | Distance | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 90.04 | 0.0 | 11.2 | 11.2 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.2 | 0.2 | 91.02 | -0.2 | 11.3 | 11.3 | 10.9 | 0.31 | 35.937 | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -146.09 | -0.7 | 11.5 | 11.5 | 10.9 | 0.65 | 17.653 ES | |
| 300.0 | 300.0 | 299.9 | 299.9 | 0.5 | 0.5 | -136.74 | -1.2 | 11.8 | 12.4 | 11.4 | 1.00 | 12.388 | |
| 400.0 | 400.0 | 399.9 | 399.9 | 0.7 | 0.7 | -150.82 | -1.9 | 12.4 | 14.0 | 12.6 | 1.35 | 10.339 | |
| 500.0 | 500.0 | 499.8 | 499.8 | 0.9 | 0.9 | 174.85 | -3.0 | 12.9 | 16.9 | 15.2 | 1.70 | 9.907 SF | |
| 600.0 | 599.9 | 599.6 | 599.5 | 1.0 | 1.0 | 156.75 | -4.5 | 13.9 | 22.0 | 19.9 | 2.05 | 10.724 | |
| 700.0 | 699.7 | 699.3 | 699.3 | 1.2 | 1.2 | 160.40 | -6.2 | 15.0 | 29.4 | 27.0 | 2.40 | 12.261 | |
| 800.0 | 799.3 | 798.9 | 798.9 | 1.4 | 1.4 | 161.44 | -7.7 | 15.7 | 38.6 | 35.8 | 2.74 | 14.057 | |
| 900.0 | 898.9 | 899.1 | 899.0 | 1.7 | 1.6 | 158.67 | -8.5 | 15.9 | 47.8 | 44.7 | 3.09 | 15.459 | |
| 1,000.0 | 998.4 | 998.9 | 998.8 | 1.9 | 1.7 | 159.68 | -8.3 | 15.3 | 56.3 | 52.8 | 3.44 | 16.362 | |
| 1,100.0 | 1,097.9 | 1,003.0 | 1,002.9 | 2.1 | 1.7 | 155.61 | -8.3 | 15.3 | 115.6 | 112.0 | 3.63 | 31.887 | |
| 1,200.0 | 1,197.3 | 1,003.0 | 1,002.9 | 2.4 | 1.7 | 160.19 | -8.3 | 15.3 | 208.8 | 205.0 | 3.80 | 54.924 | |
| 1,300.0 | 1,296.5 | 1,003.0 | 1,002.9 | 2.6 | 1.7 | 169.68 | -8.3 | 15.3 | 306.7 | 302.7 | 3.97 | 77.269 | |
| 1,400.0 | 1,395.4 | 1,003.0 | 1,002.9 | 2.9 | 1.7 | 176.78 | -8.3 | 15.3 | 405.9 | 401.8 | 4.13 | 98.283 | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Offset Design NWNE S2-T2N-R66W (lone) - lone 1D-2H - HZ - HZ | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|------------------------|------------------------|------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|---------------------------|---------|
| Survey Program: 169-MWD | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | Distance | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 90.05 | 0.0 | 19.6 | 19.6 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.2 | 0.2 | 89.75 | 0.1 | 19.6 | 19.6 | 19.3 | 0.31 | 62.575 | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -150.91 | 0.4 | 19.6 | 19.7 | 19.0 | 0.65 | 30.132 ES | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -144.52 | 1.0 | 19.6 | 20.2 | 19.2 | 1.00 | 20.170 | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | -161.94 | 1.9 | 19.5 | 21.4 | 20.0 | 1.35 | 15.798 | |
| 500.0 | 500.0 | 499.9 | 499.9 | 0.9 | 0.9 | 158.42 | 3.2 | 19.6 | 24.0 | 22.3 | 1.70 | 14.071 | |
| 600.0 | 599.9 | 599.5 | 599.5 | 1.0 | 1.0 | 133.84 | 5.3 | 20.0 | 28.0 | 26.0 | 2.06 | 13.635 SF | |
| 700.0 | 699.7 | 698.9 | 698.8 | 1.2 | 1.2 | 131.97 | 8.7 | 21.4 | 34.2 | 31.8 | 2.42 | 14.137 | |
| 800.0 | 799.3 | 797.9 | 797.7 | 1.4 | 1.4 | 130.39 | 12.7 | 24.1 | 42.9 | 40.1 | 2.79 | 15.387 | |
| 900.0 | 898.9 | 896.9 | 896.5 | 1.7 | 1.6 | 126.11 | 17.2 | 28.1 | 52.8 | 49.6 | 3.17 | 16.661 | |
| 1,000.0 | 998.4 | 996.1 | 995.5 | 1.9 | 1.8 | 126.33 | 21.5 | 32.7 | 63.0 | 59.4 | 3.55 | 17.740 | |
| 1,100.0 | 1,097.9 | 1,057.0 | 1,056.3 | 2.1 | 1.9 | 124.79 | 23.9 | 35.7 | 83.6 | 79.8 | 3.87 | 21.634 | |
| 1,200.0 | 1,197.3 | 1,057.0 | 1,056.3 | 2.4 | 1.9 | 128.53 | 23.9 | 35.7 | 162.1 | 158.0 | 4.08 | 39.726 | |
| 1,300.0 | 1,296.5 | 1,057.0 | 1,056.3 | 2.6 | 1.9 | 134.36 | 23.9 | 35.7 | 256.6 | 252.3 | 4.31 | 59.587 | |
| 1,400.0 | 1,395.4 | 1,057.0 | 1,056.3 | 2.9 | 1.9 | 134.74 | 23.9 | 35.7 | 354.6 | 350.0 | 4.56 | 77.685 | |
| 1,500.0 | 1,493.9 | 1,057.0 | 1,056.3 | 3.3 | 1.9 | 126.38 | 23.9 | 35.7 | 453.7 | 448.8 | 4.90 | 92.528 | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Offset Design NWNE S2-T2N-R66W (lone) - lone 1E-2H - HZ - HZ | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|------------------------|------------------------|------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|---------------------------|---------|
| Survey Program: 169-MWD | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | Distance | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 90.05 | 0.0 | 30.7 | 30.7 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.2 | 0.2 | 90.07 | 0.0 | 30.8 | 30.8 | 30.5 | 0.31 | 98.391 | |
| 200.0 | 200.0 | 199.9 | 199.9 | 0.3 | 0.3 | -149.63 | -0.1 | 30.9 | 31.0 | 30.3 | 0.65 | 47.454 ES | |
| 300.0 | 300.0 | 299.9 | 299.9 | 0.5 | 0.5 | -141.37 | 0.1 | 31.2 | 31.7 | 30.7 | 1.00 | 31.682 | |
| 400.0 | 400.0 | 399.7 | 399.7 | 0.7 | 0.7 | -155.88 | 0.2 | 31.6 | 33.3 | 31.9 | 1.35 | 24.637 | |
| 500.0 | 500.0 | 499.1 | 499.1 | 0.9 | 0.9 | 166.23 | 0.8 | 33.1 | 37.1 | 35.4 | 1.70 | 21.861 | |
| 600.0 | 599.9 | 598.3 | 598.2 | 1.0 | 1.0 | 141.82 | 2.2 | 36.1 | 43.8 | 41.7 | 2.05 | 21.381 SF | |
| 700.0 | 699.7 | 696.9 | 696.7 | 1.2 | 1.2 | 138.34 | 5.3 | 40.5 | 53.0 | 50.6 | 2.40 | 22.070 | |
| 800.0 | 799.3 | 795.3 | 794.8 | 1.4 | 1.4 | 134.29 | 9.7 | 46.7 | 65.5 | 62.7 | 2.77 | 23.637 | |
| 900.0 | 898.9 | 893.9 | 893.0 | 1.7 | 1.6 | 127.92 | 14.7 | 53.8 | 78.7 | 75.6 | 3.15 | 24.984 | |
| 1,000.0 | 998.4 | 991.9 | 990.5 | 1.9 | 1.9 | 126.05 | 20.1 | 61.9 | 92.5 | 88.9 | 3.54 | 26.104 | |
| 1,100.0 | 1,097.9 | 998.0 | 996.6 | 2.1 | 1.9 | 122.60 | 20.5 | 62.4 | 142.0 | 138.3 | 3.76 | 37.749 | |
| 1,200.0 | 1,197.3 | 998.0 | 996.6 | 2.4 | 1.9 | 126.22 | 20.5 | 62.4 | 227.4 | 223.4 | 3.98 | 57.135 | |
| 1,300.0 | 1,296.5 | 998.0 | 996.6 | 2.6 | 1.9 | 131.88 | 20.5 | 62.4 | 321.9 | 317.6 | 4.21 | 76.488 | |
| 1,400.0 | 1,395.4 | 998.0 | 996.6 | 2.9 | 1.9 | 132.35 | 20.5 | 62.4 | 419.4 | 415.0 | 4.47 | 93.894 | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Offset Design NWNE S2-T2N-R66W (lone) - lone 1F-2H - HZ - HZ | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|------------------------|------------------------|------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|---------------------|------------|--------------------|--------|
| Survey Program: 138-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 | 89.99 | 0.0 | 39.1 | 39.1 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.2 | 0.2 | 89.81 | 0.1 | 39.2 | 39.2 | 38.8 | 0.31 | 126.359 ES | | |
| 200.0 | 200.0 | 199.5 | 199.5 | 0.3 | 0.3 | -150.39 | 0.5 | 39.6 | 39.7 | 39.0 | 0.65 | 60.848 | | |
| 300.0 | 300.0 | 298.7 | 298.7 | 0.5 | 0.5 | -142.82 | 1.3 | 41.6 | 42.2 | 41.2 | 1.00 | 42.204 | | |
| 400.0 | 400.0 | 397.5 | 397.4 | 0.7 | 0.7 | -158.58 | 3.0 | 45.8 | 47.7 | 46.3 | 1.35 | 35.348 | | |
| 500.0 | 500.0 | 495.9 | 495.6 | 0.9 | 0.9 | 162.65 | 5.5 | 52.1 | 56.6 | 54.9 | 1.70 | 33.359 SF | | |
| 600.0 | 599.9 | 594.1 | 593.4 | 1.0 | 1.1 | 137.44 | 8.4 | 60.3 | 68.7 | 66.7 | 2.04 | 33.603 | | |
| 700.0 | 699.7 | 692.0 | 690.7 | 1.2 | 1.4 | 134.29 | 11.4 | 70.0 | 83.2 | 80.8 | 2.40 | 34.663 | | |
| 800.0 | 799.3 | 789.0 | 787.1 | 1.4 | 1.6 | 130.89 | 15.1 | 80.9 | 100.4 | 97.6 | 2.77 | 36.287 | | |
| 900.0 | 898.9 | 886.9 | 884.1 | 1.7 | 1.9 | 125.09 | 18.9 | 93.0 | 118.6 | 115.4 | 3.15 | 37.675 | | |
| 1,000.0 | 998.4 | 984.8 | 981.1 | 1.9 | 2.2 | 123.69 | 23.0 | 105.2 | 136.5 | 132.9 | 3.54 | 38.571 | | |
| 1,100.0 | 1,097.9 | 1,005.0 | 1,001.2 | 2.1 | 2.2 | 120.75 | 23.9 | 107.8 | 173.8 | 170.0 | 3.79 | 45.921 | | |
| 1,200.0 | 1,197.3 | 1,005.0 | 1,001.2 | 2.4 | 2.2 | 124.48 | 23.9 | 107.8 | 247.6 | 243.6 | 4.00 | 61.850 | | |
| 1,300.0 | 1,296.5 | 1,005.0 | 1,001.2 | 2.6 | 2.2 | 130.51 | 23.9 | 107.8 | 336.1 | 331.8 | 4.23 | 79.468 | | |
| 1,400.0 | 1,395.4 | 1,005.0 | 1,001.2 | 2.9 | 2.2 | 132.17 | 23.9 | 107.8 | 430.4 | 425.9 | 4.48 | 96.168 | | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Offset Design NWNE S2-T2N-R66W (lone) - lone 6-4-2 (Existing) - Existing - Existing | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|------------------------|------------------------|------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|-------------------|---------------------------|--------|
| Survey Program: 963-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | Separation Factor | Warning | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | | | |
| 9,400.0 | 7,370.0 | 7,678.7 | 7,394.7 | 38.6 | 30.4 | -92.09 | -2,120.1 | 36.8 | 464.7 | 397.2 | 67.53 | 6.882 | | |
| 9,500.0 | 7,370.0 | 7,678.4 | 7,394.4 | 40.2 | 30.4 | -92.05 | -2,120.1 | 36.8 | 436.8 | 367.6 | 69.18 | 6.313 | | |
| 9,576.1 | 7,370.0 | 7,678.2 | 7,394.1 | 41.5 | 30.4 | -92.02 | -2,120.1 | 36.8 | 430.1 | 359.7 | 70.45 | 6.105 CC, ES | | |
| 9,600.0 | 7,370.0 | 7,678.1 | 7,394.1 | 41.9 | 30.4 | -92.01 | -2,120.1 | 36.8 | 430.8 | 359.9 | 70.84 | 6.081 SF | | |
| 9,700.0 | 7,370.0 | 7,677.9 | 7,393.8 | 43.5 | 30.4 | -91.97 | -2,120.1 | 36.8 | 447.6 | 375.1 | 72.51 | 6.173 | | |
| 9,800.0 | 7,370.0 | 7,677.6 | 7,393.5 | 45.2 | 30.4 | -91.93 | -2,120.1 | 36.9 | 484.9 | 410.7 | 74.19 | 6.536 | | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Offset Design NSW S2-T2N-R66W (lone) - lone 33-2 - Wellbore #1 - Wellbore #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|
| Survey Program: 8083-Gyro | | | | | | | | | | | | | 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 | | |
| 10,000.0 | 7,370.0 | 7,325.0 | 7,325.0 | 48.5 | 6.4 | 90.00 | -2,933.2 | -593.8 | 437.9 | 383.5 | 54.38 | 8.052 | | |
| 10,100.0 | 7,370.0 | 7,325.0 | 7,325.0 | 50.2 | 6.4 | 90.00 | -2,933.2 | -593.8 | 352.0 | 295.9 | 56.07 | 6.278 | | |
| 10,200.0 | 7,370.0 | 7,325.0 | 7,325.0 | 51.9 | 6.4 | 90.00 | -2,933.2 | -593.8 | 275.8 | 218.1 | 57.76 | 4.775 | | |
| 10,300.0 | 7,370.0 | 7,325.0 | 7,325.0 | 53.5 | 6.4 | 90.00 | -2,933.2 | -593.8 | 219.7 | 160.2 | 59.46 | 3.694 | | |
| 10,389.1 | 7,370.0 | 7,325.0 | 7,325.0 | 55.0 | 6.4 | 90.00 | -2,933.2 | -593.8 | 200.8 | 139.8 | 60.98 | 3.292 CC, ES | | |
| 10,400.0 | 7,370.0 | 7,325.0 | 7,325.0 | 55.2 | 6.4 | 90.00 | -2,933.2 | -593.8 | 201.0 | 139.9 | 61.16 | 3.287 SF | | |
| 10,500.0 | 7,370.0 | 7,325.0 | 7,325.0 | 56.9 | 6.4 | 90.00 | -2,933.2 | -593.8 | 229.3 | 166.5 | 62.87 | 3.648 | | |
| 10,600.0 | 7,370.0 | 7,325.0 | 7,325.0 | 58.6 | 6.4 | 90.00 | -2,933.2 | -593.8 | 291.1 | 226.6 | 64.58 | 4.508 | | |
| 10,700.0 | 7,370.0 | 7,325.0 | 7,325.0 | 60.3 | 6.4 | 90.00 | -2,933.2 | -593.8 | 370.1 | 303.8 | 66.29 | 5.582 | | |
| 10,800.0 | 7,370.0 | 7,325.0 | 7,325.0 | 62.0 | 6.4 | 90.00 | -2,933.2 | -593.8 | 457.3 | 389.3 | 68.00 | 6.725 | | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

| Offset Design NWSW S2-T2N-R66W (lone) - lone 6-4-2 (Existing) - Existing - Existing | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------------|-------|-----------------|------------------|------------------------|---------------------------|---------|
| Survey Program: 963-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 +N/-S | +E/-W | Between Centres | Between Ellipses | Total Uncertainty Axis | Separation Factor | |
| (ft) | (ft) | (ft) | (ft) | (ft) | (ft) | (°) | (ft) | (ft) | (ft) | (ft) | | | |
| 9,400.0 | 7,370.0 | 7,678.7 | 7,394.7 | 38.6 | 30.4 | -92.09 | -2,120.1 | 36.8 | 464.7 | 397.2 | 67.53 | 6.882 | |
| 9,500.0 | 7,370.0 | 7,678.4 | 7,394.4 | 40.2 | 30.4 | -92.05 | -2,120.1 | 36.8 | 436.8 | 367.6 | 69.18 | 6.313 | |
| 9,576.1 | 7,370.0 | 7,678.2 | 7,394.1 | 41.5 | 30.4 | -92.02 | -2,120.1 | 36.8 | 430.1 | 359.7 | 70.45 | 6.105 CC, ES | |
| 9,600.0 | 7,370.0 | 7,678.1 | 7,394.1 | 41.9 | 30.4 | -92.01 | -2,120.1 | 36.8 | 430.8 | 359.9 | 70.84 | 6.081 SF | |
| 9,700.0 | 7,370.0 | 7,677.9 | 7,393.8 | 43.5 | 30.4 | -91.97 | -2,120.1 | 36.8 | 447.6 | 375.1 | 72.51 | 6.173 | |
| 9,800.0 | 7,370.0 | 7,677.6 | 7,393.5 | 45.2 | 30.4 | -91.93 | -2,120.1 | 36.9 | 484.9 | 410.7 | 74.19 | 6.536 | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|----------------------------|-------------------------------------|--------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well lone 1B-2H |
| Project: | DJ Wattenberg | TVD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Reference Site: | NWNE S2-T2N-R66W (lone) | MD Reference: | KB=13' @ 5091.0ft (Ensign 135) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | lone 1B-2H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Stk 1 | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #3 | Offset TVD Reference: | Offset Datum |

Reference Depths are relative to KB=13' @ 5091.0ft (Ensign 135)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: lone 1B-2H
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.49°

