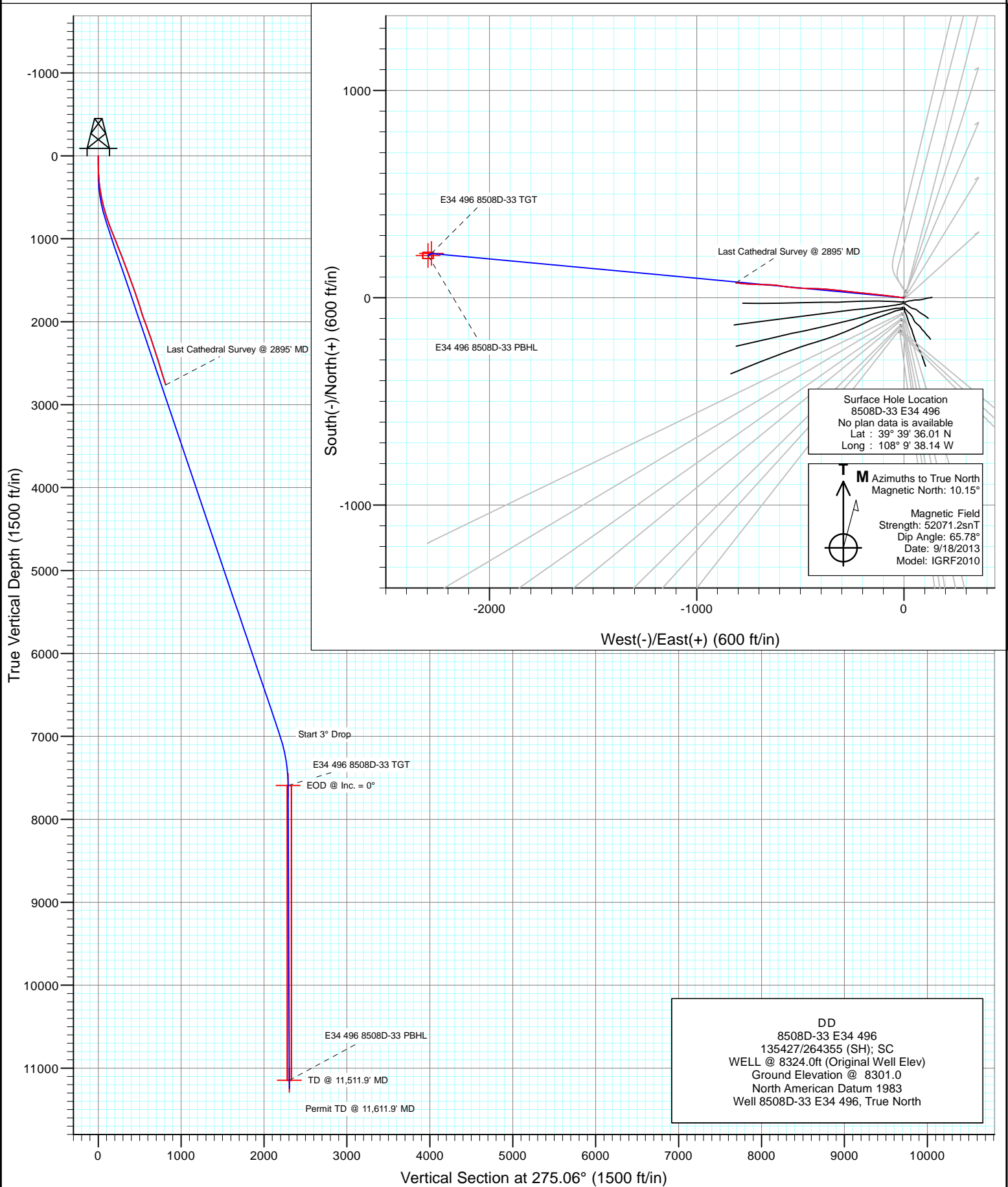




Project: Story Gulch  
Site: E34 496 S33-T4S-R96W  
Well: 8508D-33 E34 496  
Wellbore: DD  
Design: DD





# Cathedral Energy Services

## Survey Report

|                  |                            |                                     |                                      |
|------------------|----------------------------|-------------------------------------|--------------------------------------|
| <b>Company:</b>  | EnCana Oil & Gas (USA) Inc | <b>Local Co-ordinate Reference:</b> | Well 8508D-33 E34 496                |
| <b>Project:</b>  | Story Gulch                | <b>TVD Reference:</b>               | WELL @ 8324.0ft (Original Well Elev) |
| <b>Site:</b>     | E34 496 S33-T4S-R96W       | <b>MD Reference:</b>                | WELL @ 8324.0ft (Original Well Elev) |
| <b>Well:</b>     | 8508D-33 E34 496           | <b>North Reference:</b>             | True                                 |
| <b>Wellbore:</b> | DD                         | <b>Survey Calculation Method:</b>   | Minimum Curvature                    |
| <b>Design:</b>   | DD                         | <b>Database:</b>                    | USA EDM 5000 Multi Users DB          |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | Story Gulch               |                      |                |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      |                |
| <b>Map Zone:</b>   | Colorado Central Zone     |                      |                |

|                              |                      |                     |                 |                                   |
|------------------------------|----------------------|---------------------|-----------------|-----------------------------------|
| <b>Site</b>                  | E34 496 S33-T4S-R96W |                     |                 |                                   |
| <b>Site Position:</b>        |                      | <b>Northing:</b>    | 1,676,257.20 ft | <b>Latitude:</b> 39° 39' 36.02 N  |
| <b>From:</b>                 | Lat/Long             | <b>Easting:</b>     | 2,251,040.13 ft | <b>Longitude:</b> 108° 9' 38.14 W |
| <b>Position Uncertainty:</b> | 0.0 ft               | <b>Slot Radius:</b> | 13.200 in       | <b>Grid Convergence:</b> -1.68 °  |

|                             |                  |        |                            |                 |
|-----------------------------|------------------|--------|----------------------------|-----------------|
| <b>Well</b>                 | 8508D-33 E34 496 |        |                            |                 |
| <b>Well Position</b>        | <b>+N/-S</b>     | 0.0 ft | <b>Northing:</b>           | 1,676,256.62 ft |
|                             | <b>+E/-W</b>     | 0.0 ft | <b>Easting:</b>            | 2,251,040.12 ft |
| <b>Position Uncertainty</b> | 0.0 ft           |        | <b>Wellhead Elevation:</b> | ft              |
|                             |                  |        | <b>Ground Level:</b>       | 8,301.0 ft      |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | DD                |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | IGRF2010          | 9/18/2013          | 10.15                  | 65.78                | 52,071                     |

|                          |                              |                   |                   |                          |
|--------------------------|------------------------------|-------------------|-------------------|--------------------------|
| <b>Design</b>            | DD                           |                   |                   |                          |
| <b>Audit Notes:</b>      |                              |                   |                   |                          |
| <b>Version:</b>          | 1.0                          | <b>Phase:</b>     | ACTUAL            | <b>Tie On Depth:</b> 0.0 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (ft)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b> | <b>Direction (°)</b>     |
|                          | 0.0                          | 0.0               | 0.0               | 275.06                   |

|                       |                |                          |                  |                    |
|-----------------------|----------------|--------------------------|------------------|--------------------|
| <b>Survey Program</b> | <b>Date</b>    | 9/20/2013                |                  |                    |
| <b>From (ft)</b>      | <b>To (ft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b> |
| 237.0                 | 2,895.0        | Survey #1 (DD)           | Geolink MWD      | Geolink MWD        |

|                            |                        |                    |                            |                   |                   |                              |                              |                             |                              |
|----------------------------|------------------------|--------------------|----------------------------|-------------------|-------------------|------------------------------|------------------------------|-----------------------------|------------------------------|
| <b>Survey</b>              |                        |                    |                            |                   |                   |                              |                              |                             |                              |
| <b>Measured Depth (ft)</b> | <b>Inclination (°)</b> | <b>Azimuth (°)</b> | <b>Vertical Depth (ft)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b> | <b>Vertical Section (ft)</b> | <b>Dogleg Rate (°/100ft)</b> | <b>Build Rate (°/100ft)</b> | <b>Formations / Comments</b> |
| 0.0                        | 0.00                   | 0.00               | 0.0                        | 0.0               | 0.0               | 0.0                          | 0.00                         | 0.00                        |                              |
| 237.0                      | 2.90                   | 270.00             | 236.9                      | 0.0               | -6.0              | 6.0                          | 1.22                         | 1.22                        |                              |
| 329.0                      | 6.20                   | 280.90             | 328.6                      | 0.9               | -13.2             | 13.2                         | 3.69                         | 3.59                        |                              |
| 421.0                      | 8.90                   | 279.40             | 419.8                      | 3.0               | -25.1             | 25.3                         | 2.94                         | 2.93                        |                              |
| 512.0                      | 11.30                  | 278.70             | 509.4                      | 5.5               | -40.9             | 41.2                         | 2.64                         | 2.64                        |                              |
| 606.0                      | 14.00                  | 273.70             | 601.1                      | 7.7               | -61.3             | 61.8                         | 3.10                         | 2.87                        |                              |
| 695.0                      | 16.50                  | 276.50             | 686.9                      | 9.8               | -84.6             | 85.2                         | 2.93                         | 2.81                        |                              |
| 789.0                      | 19.50                  | 277.70             | 776.3                      | 13.4              | -113.4            | 114.2                        | 3.22                         | 3.19                        |                              |
| 881.0                      | 21.30                  | 276.10             | 862.6                      | 17.2              | -145.3            | 146.2                        | 2.05                         | 1.96                        |                              |
| 972.0                      | 21.70                  | 276.00             | 947.2                      | 20.8              | -178.4            | 179.6                        | 0.44                         | 0.44                        |                              |
| 1,063.0                    | 21.80                  | 276.20             | 1,031.8                    | 24.3              | -212.0            | 213.3                        | 0.14                         | 0.11                        |                              |
| 1,155.0                    | 21.70                  | 275.40             | 1,117.2                    | 27.8              | -245.9            | 247.4                        | 0.34                         | -0.11                       |                              |
| 1,247.0                    | 21.20                  | 277.10             | 1,202.8                    | 31.4              | -279.3            | 281.0                        | 0.87                         | -0.54                       |                              |



# Cathedral Energy Services

## Survey Report

|                  |                            |                                     |                                      |
|------------------|----------------------------|-------------------------------------|--------------------------------------|
| <b>Company:</b>  | EnCana Oil & Gas (USA) Inc | <b>Local Co-ordinate Reference:</b> | Well 8508D-33 E34 496                |
| <b>Project:</b>  | Story Gulch                | <b>TVD Reference:</b>               | WELL @ 8324.0ft (Original Well Elev) |
| <b>Site:</b>     | E34 496 S33-T4S-R96W       | <b>MD Reference:</b>                | WELL @ 8324.0ft (Original Well Elev) |
| <b>Well:</b>     | 8508D-33 E34 496           | <b>North Reference:</b>             | True                                 |
| <b>Wellbore:</b> | DD                         | <b>Survey Calculation Method:</b>   | Minimum Curvature                    |
| <b>Design:</b>   | DD                         | <b>Database:</b>                    | USA EDM 5000 Multi Users DB          |

| Survey              |                 |             |                     |            |            |                       |                       |                      |                                  |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|----------------------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Formations / Comments            |
| 1,338.0             | 20.50           | 275.10      | 1,287.9             | 34.9       | -311.5     | 313.4                 | 1.10                  | -0.77                |                                  |
| 1,430.0             | 20.70           | 275.70      | 1,374.0             | 37.9       | -343.8     | 345.8                 | 0.32                  | 0.22                 |                                  |
| 1,521.0             | 20.30           | 275.20      | 1,459.2             | 41.0       | -375.5     | 377.6                 | 0.48                  | -0.44                |                                  |
| 1,613.0             | 19.90           | 272.40      | 1,545.6             | 43.1       | -407.0     | 409.2                 | 1.13                  | -0.43                |                                  |
| 1,704.0             | 19.20           | 270.30      | 1,631.4             | 43.8       | -437.5     | 439.6                 | 1.09                  | -0.77                |                                  |
| 1,795.0             | 18.40           | 273.90      | 1,717.5             | 44.9       | -466.7     | 468.9                 | 1.55                  | -0.88                |                                  |
| 1,886.0             | 17.20           | 272.80      | 1,804.2             | 46.5       | -494.5     | 496.7                 | 1.37                  | -1.32                |                                  |
| 1,978.0             | 17.60           | 272.90      | 1,892.0             | 47.9       | -522.0     | 524.2                 | 0.44                  | 0.43                 |                                  |
| 2,070.0             | 20.20           | 278.30      | 1,979.0             | 50.9       | -551.6     | 553.9                 | 3.40                  | 2.83                 |                                  |
| 2,161.0             | 20.20           | 278.80      | 2,064.4             | 55.5       | -582.7     | 585.3                 | 0.19                  | 0.00                 |                                  |
| 2,252.0             | 20.10           | 276.30      | 2,149.8             | 59.6       | -613.8     | 616.6                 | 0.95                  | -0.11                |                                  |
| 2,344.0             | 18.90           | 272.70      | 2,236.6             | 62.1       | -644.3     | 647.3                 | 1.85                  | -1.30                |                                  |
| 2,435.0             | 18.10           | 271.30      | 2,322.9             | 63.1       | -673.2     | 676.1                 | 1.01                  | -0.88                |                                  |
| 2,527.0             | 17.40           | 271.90      | 2,410.5             | 63.9       | -701.2     | 704.1                 | 0.79                  | -0.76                |                                  |
| 2,618.0             | 16.80           | 272.60      | 2,497.5             | 64.9       | -728.0     | 730.9                 | 0.70                  | -0.66                |                                  |
| 2,710.0             | 17.10           | 273.10      | 2,585.5             | 66.3       | -754.8     | 757.7                 | 0.36                  | 0.33                 |                                  |
| 2,801.0             | 18.40           | 276.70      | 2,672.1             | 68.7       | -782.4     | 785.4                 | 1.87                  | 1.43                 |                                  |
| 2,893.0             | 18.00           | 275.80      | 2,759.5             | 71.8       | -811.0     | 814.1                 | 0.53                  | -0.43                |                                  |
| 2,895.0             | 18.00           | 275.80      | 2,761.4             | 71.8       | -811.6     | 814.7                 | 0.00                  | 0.00                 | Last Cathedral Survey @ 2895' MD |

| Targets   |               |              |          |            |            |               |              |                 |                 |
|---|---------------|--------------|----------|------------|------------|---------------|--------------|-----------------|-----------------|
| Target Name   | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude        | Longitude       |
| - hit/miss target   |               |              |          |            |            |               |              |                 |                 |
| - Shape   |               |              |          |            |            |               |              |                 |                 |
| E34 496 8508D-33 TGT  | 0.00          | 0.00         | 7,591.0  | 213.4      | -2,279.4   | 1,676,536.68  | 2,248,767.94 | 39° 39' 38.12 N | 108° 10' 7.29 W |
| - survey misses target center by 5049.7ft at 2895.0ft MD (2761.4 TVD, 71.8 N, -811.6 E) |               |              |          |            |            |               |              |                 |                 |
| - Point   |               |              |          |            |            |               |              |                 |                 |
| E34 496 8508D-33 PBH  | 0.00          | 0.00         | 11,146.0 | 203.4      | -2,296.4   | 1,676,527.15  | 2,248,750.65 | 39° 39' 38.02 N | 108° 10' 7.50 W |
| - survey misses target center by 8516.1ft at 2895.0ft MD (2761.4 TVD, 71.8 N, -811.6 E) |               |              |          |            |            |               |              |                 |                 |
| - Rectangle (sides W30.0 H50.0 D0.0)  |               |              |          |            |            |               |              |                 |                 |

| Survey Annotations  |                     |                   |            |                                  |  |
|---------------------|---------------------|-------------------|------------|----------------------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates |            |                                  |  |
|                     |                     | +N/-S (ft)        | +E/-W (ft) | Comment                          |  |
| 2,895.0             | 2,761.4             | 71.8              | -811.6     | Last Cathedral Survey @ 2895' MD |  |

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