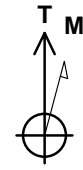
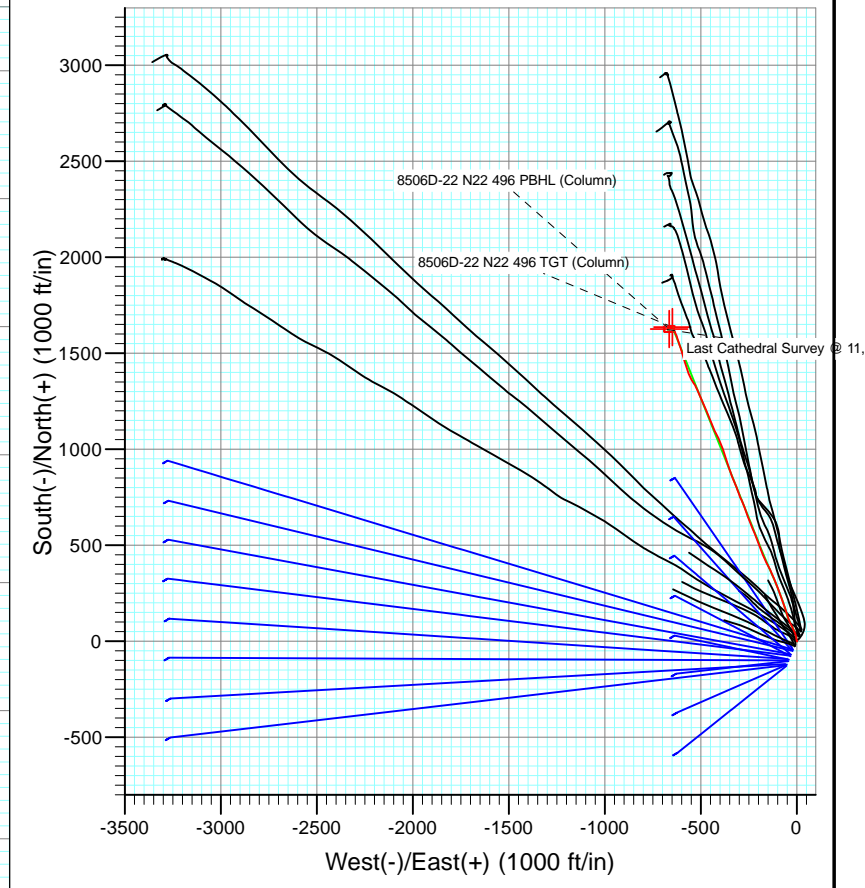
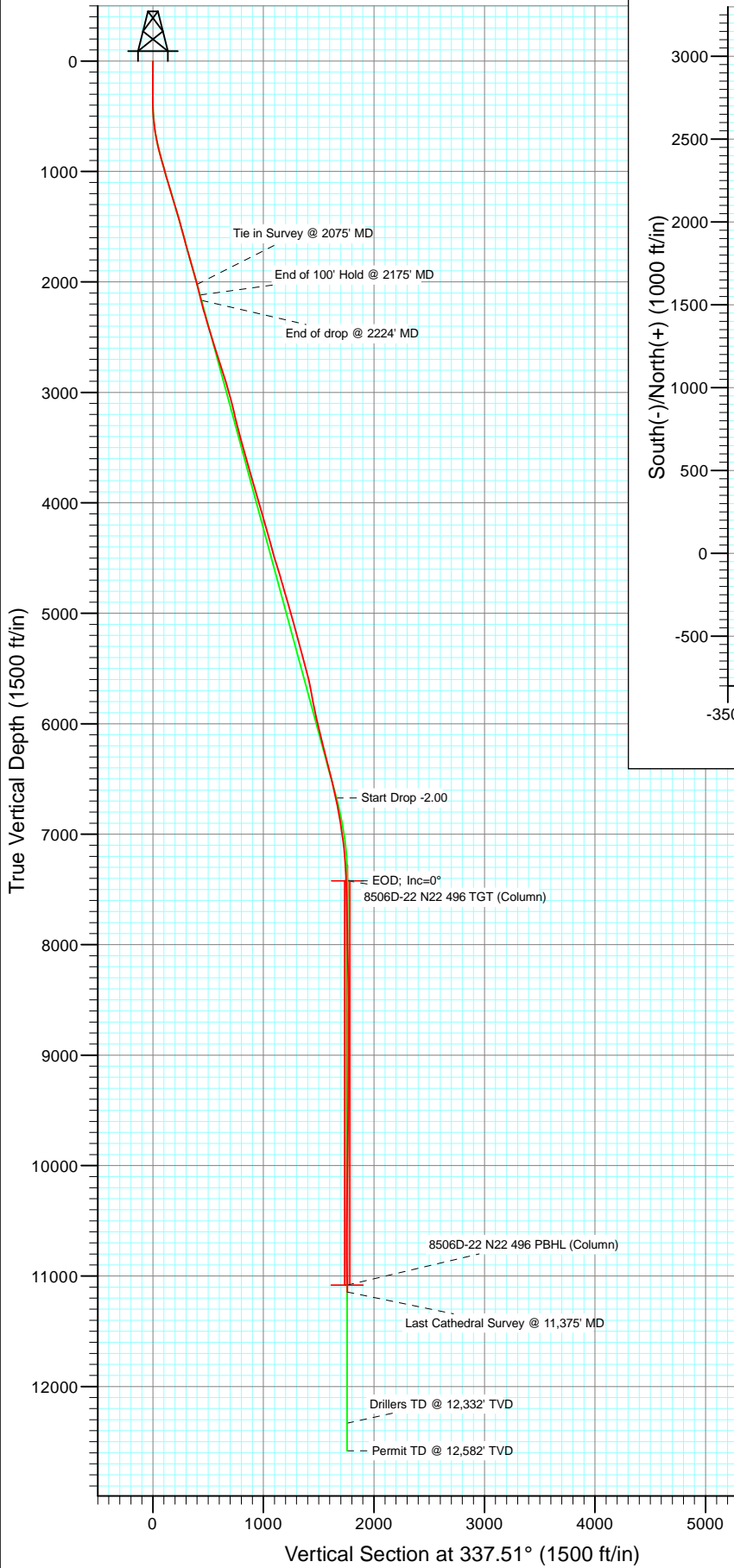




Project: Story Gulch  
 Site: S22-T4S-R96W (N22 496) (Column Pattern)  
 Well: 8506D-22 N22 N22 496  
 Wellbore: DD  
 Design: Final

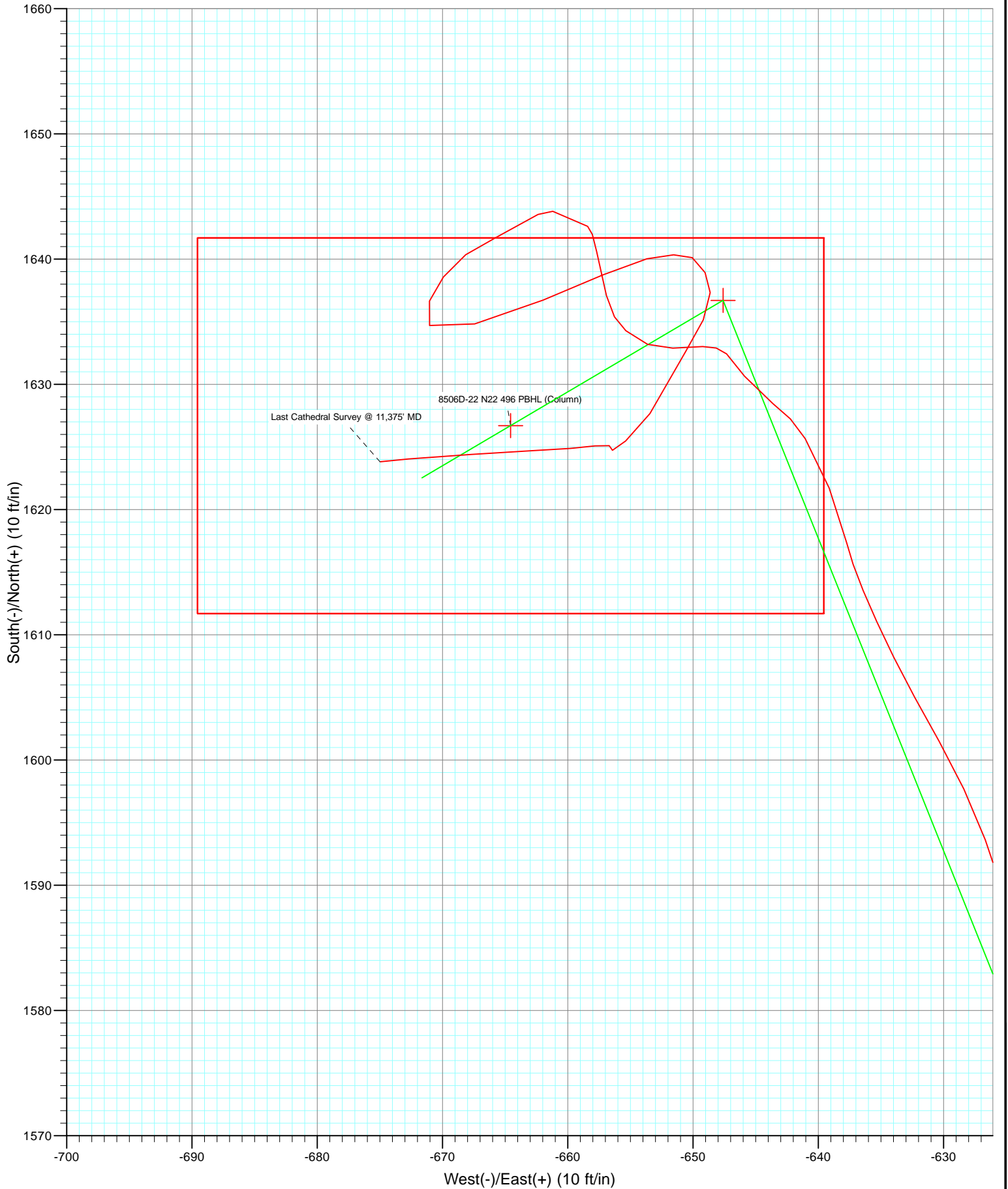


Azimuths to True North  
 Magnetic North: 10.38°  
 Magnetic Field  
 Strength: 52263.6snT  
 Dip Angle: 65.85°  
 Date: 12/30/2011  
 Model: IGRF2010

| Type                           | Target               | Azimuth | Origin | Type            | N/S             | E/W | From | TVD |
|--------------------------------|----------------------|---------|--------|-----------------|-----------------|-----|------|-----|
| User                           | No Target (Freehand) | 337.51  | Slot   |                 | 0.0             | 0.0 |      | 0.0 |
| Name                           | TVD                  | +N/-S   | +E/-W  | Latitude        | Longitude       |     |      |     |
| 8506D-22 N22 496 TGT (Column)  | 7422.0               | 1636.7  | -647.6 | 39° 41' 18.83 N | 108° 9' 33.71 W |     |      |     |
| 8506D-22 N22 496 PBHL (Column) | 1082.0               | 1626.7  | -664.6 | 39° 41' 18.73 N | 108° 9' 33.93 W |     |      |     |



Project: Story Gulch  
Site: S22-T4S-R96W (N22 496) (Column Pattern)  
Well: 8506D-22 N22 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 8506D-22 N22 496 |
| <b>Project:</b> Story Gulch                          | <b>TVD Reference:</b> WELL @ 7602.0ft (Patterson 306)     |
| <b>Site:</b> S22-T4S-R96W (N22 496) (Column Pattern) | <b>MD Reference:</b> WELL @ 7602.0ft (Patterson 306)      |
| <b>Well:</b> 8506D-22 N22 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> S22-T4S-R96W (N22 496) (Column Pattern) |                     |                 |                          |                 |  |
| <b>Site Position:</b>                               | <b>Northing:</b>    | 1,685,048.56 ft | <b>Latitude:</b>         | 39° 41' 3.24 N  |  |
| <b>From:</b> Lat/Long                               | <b>Easting:</b>     | 2,252,316.79 ft | <b>Longitude:</b>        | 108° 9' 25.11 W |  |
| <b>Position Uncertainty:</b> 0.0 ft                 | <b>Slot Radius:</b> | 13.200 in       | <b>Grid Convergence:</b> | -1.68 °         |  |

|                              |              |        |                            |                 |                                   |
|------------------------------|--------------|--------|----------------------------|-----------------|-----------------------------------|
| <b>Well</b> 8506D-22 N22 496 |              |        |                            |                 |                                   |
| <b>Well Position</b>         | <b>+N/-S</b> | 0.0 ft | <b>Northing:</b>           | 1,684,990.34 ft | <b>Latitude:</b> 39° 41' 2.65 N   |
|                              | <b>+E/-W</b> | 0.0 ft | <b>Easting:</b>            | 2,252,289.99 ft | <b>Longitude:</b> 108° 9' 25.43 W |
| <b>Position Uncertainty</b>  |              | 0.0 ft | <b>Wellhead Elevation:</b> | ft              | <b>Ground Level:</b> 7,569.0 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          | 12/30/2011         | 10.38                  | 65.85                | 52,264                     |

|                          |                              |                   |                   |                      |     |
|--------------------------|------------------------------|-------------------|-------------------|----------------------|-----|
| <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               | 337.51               |     |

|                                      |                |                          |                  |                    |  |
|--------------------------------------|----------------|--------------------------|------------------|--------------------|--|
| <b>Survey Program</b> Date 1/12/2012 |                |                          |                  |                    |  |
| <b>From (ft)</b>                     | <b>To (ft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b> |  |
| 239.0                                | 2,075.0        | Survey #1 (DD)           | MWD              | Geolink MWD        |  |
| 2,168.0                              | 11,375.0       | Survey #2 (DD)           | MWD              | Geolink MWD        |  |

| <b>Survey</b>       |                 |             |                     |            |            |                       |                       |                      |                       |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|-----------------------|
| 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 |
| 0.0                 | 0.00            | 0.00        | 0.0                 | 0.0        | 0.0        | 0.0                   | 0.00                  | 0.00                 |                       |
| 100.0               | 0.17            | 140.20      | 100.0               | -0.1       | 0.1        | -0.1                  | 0.17                  | 0.17                 |                       |
| 200.0               | 0.33            | 140.20      | 200.0               | -0.4       | 0.4        | -0.6                  | 0.17                  | 0.17                 |                       |
| 300.0               | 0.39            | 122.22      | 300.0               | -0.9       | 0.8        | -1.2                  | 0.13                  | 0.06                 |                       |
| 400.0               | 1.55            | 359.39      | 400.0               | -0.2       | 1.2        | -0.6                  | 1.79                  | 1.16                 |                       |
| 500.0               | 4.29            | 340.26      | 499.9               | 4.7        | 0.1        | 4.3                   | 2.87                  | 2.74                 |                       |
| 600.0               | 7.52            | 354.82      | 599.3               | 14.6       | -2.0       | 14.3                  | 3.53                  | 3.23                 |                       |
| 700.0               | 10.83           | 343.92      | 698.0               | 30.2       | -5.0       | 29.8                  | 3.73                  | 3.31                 |                       |
| 800.0               | 13.98           | 337.73      | 795.7               | 50.5       | -12.2      | 51.3                  | 3.41                  | 3.15                 |                       |
| 900.0               | 16.18           | 333.78      | 892.1               | 74.5       | -23.2      | 77.7                  | 2.43                  | 2.20                 |                       |
| 1,000.0             | 15.66           | 334.78      | 988.3               | 99.0       | -35.3      | 105.0                 | 0.59                  | -0.52                |                       |
| 1,100.0             | 16.08           | 339.63      | 1,084.6             | 123.9      | -45.8      | 132.0                 | 1.39                  | 0.41                 |                       |

# Cathedral Energy Services

## Survey Report

|                  |   |                                     |                                 |
|------------------|---|-------------------------------------|---------------------------------|
| <b>Company:</b>  | EnCana Oil & Gas (USA) Inc              | <b>Local Co-ordinate Reference:</b> | Well 8506D-22 N22 496           |
| <b>Project:</b>  | Story Gulch                             | <b>TD Reference:</b>                | WELL @ 7602.0ft (Patterson 306) |
| <b>Site:</b>     | S22-T4S-R96W (N22 496) (Column Pattern) | <b>MVD Reference:</b>               | WELL @ 7602.0ft (Patterson 306) |
| <b>Well:</b>     | 8506D-22 N22 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 |
| 1,200.0             | 16.99           | 343.24      | 1,180.4             | 151.2      | -54.7      | 160.7                 | 1.38                  | 0.92                 |                       |
| 1,300.0             | 16.42           | 342.57      | 1,276.0             | 179.1      | -63.1      | 189.6                 | 0.61                  | -0.57                |                       |
| 1,400.0             | 16.43           | 340.86      | 1,372.1             | 205.5      | -71.8      | 217.3                 | 0.48                  | 0.01                 |                       |
| 1,500.0             | 16.25           | 340.18      | 1,468.0             | 232.3      | -81.3      | 245.7                 | 0.26                  | -0.18                |                       |
| 1,600.0             | 14.59           | 338.46      | 1,564.3             | 257.3      | -90.7      | 272.5                 | 1.72                  | -1.66                |                       |
| 1,700.0             | 14.77           | 336.96      | 1,661.1             | 280.5      | -100.3     | 297.5                 | 0.42                  | 0.18                 |                       |
| 1,800.0             | 16.57           | 338.37      | 1,757.4             | 305.5      | -110.5     | 324.6                 | 1.84                  | 1.80                 |                       |
| 1,900.0             | 15.66           | 337.39      | 1,853.5             | 331.2      | -120.9     | 352.3                 | 0.95                  | -0.91                |                       |
| 2,000.0             | 15.46           | 335.81      | 1,949.8             | 355.7      | -131.6     | 379.0                 | 0.47                  | -0.20                |                       |
| 2,100.0             | 15.05           | 334.24      | 2,046.2             | 380.0      | -142.8     | 405.8                 | 0.58                  | -0.41                |                       |
| 2,200.0             | 13.58           | 332.19      | 2,143.2             | 401.4      | -153.8     | 429.7                 | 1.55                  | -1.47                |                       |
| 2,300.0             | 15.25           | 335.74      | 2,240.2             | 423.4      | -164.7     | 454.2                 | 1.88                  | 1.67                 |                       |
| 2,400.0             | 16.59           | 338.73      | 2,336.2             | 449.3      | -175.4     | 482.2                 | 1.58                  | 1.35                 |                       |
| 2,500.0             | 16.18           | 336.91      | 2,432.1             | 475.6      | -185.8     | 510.5                 | 0.66                  | -0.41                |                       |
| 2,600.0             | 17.50           | 338.61      | 2,527.9             | 501.8      | -197.0     | 539.0                 | 1.41                  | 1.32                 |                       |
| 2,700.0             | 17.61           | 340.67      | 2,623.1             | 530.6      | -207.5     | 569.6                 | 0.63                  | 0.11                 |                       |
| 2,800.0             | 18.49           | 337.91      | 2,718.3             | 559.4      | -218.2     | 600.3                 | 1.23                  | 0.88                 |                       |
| 2,900.0             | 18.30           | 337.80      | 2,813.1             | 588.7      | -230.2     | 632.0                 | 0.19                  | -0.19                |                       |
| 3,000.0             | 16.67           | 337.77      | 2,908.5             | 616.6      | -241.6     | 662.1                 | 1.63                  | -1.63                |                       |
| 3,100.0             | 14.20           | 337.15      | 3,004.9             | 640.8      | -251.9     | 688.4                 | 2.48                  | -2.47                |                       |
| 3,200.0             | 14.18           | 342.40      | 3,102.0             | 663.5      | -260.1     | 712.6                 | 1.29                  | -0.02                |                       |
| 3,300.0             | 14.41           | 341.93      | 3,198.7             | 687.9      | -267.4     | 737.9                 | 0.26                  | 0.23                 |                       |
| 3,400.0             | 13.55           | 335.03      | 3,295.9             | 709.6      | -276.2     | 761.3                 | 1.87                  | -0.86                |                       |
| 3,500.0             | 14.64           | 335.32      | 3,392.9             | 731.6      | -286.8     | 785.6                 | 1.09                  | 1.09                 |                       |
| 3,600.0             | 15.48           | 339.27      | 3,489.4             | 755.6      | -296.9     | 811.7                 | 1.32                  | 0.83                 |                       |
| 3,700.0             | 15.99           | 341.19      | 3,585.7             | 781.2      | -305.9     | 838.8                 | 0.73                  | 0.52                 |                       |
| 3,800.0             | 16.85           | 337.95      | 3,681.6             | 807.7      | -315.5     | 867.0                 | 1.25                  | 0.85                 |                       |
| 3,900.0             | 16.17           | 336.56      | 3,777.4             | 834.1      | -326.7     | 895.6                 | 0.78                  | -0.68                |                       |
| 4,000.0             | 16.38           | 338.42      | 3,873.4             | 859.9      | -337.4     | 923.6                 | 0.56                  | 0.21                 |                       |
| 4,100.0             | 15.42           | 339.67      | 3,969.7             | 885.3      | -347.2     | 950.8                 | 1.02                  | -0.96                |                       |
| 4,200.0             | 16.23           | 342.90      | 4,065.8             | 911.4      | -356.0     | 978.2                 | 1.20                  | 0.81                 |                       |
| 4,300.0             | 15.78           | 344.01      | 4,162.0             | 937.6      | -363.6     | 1,005.4               | 0.55                  | -0.46                |                       |
| 4,400.0             | 15.65           | 341.90      | 4,258.1             | 963.9      | -371.6     | 1,032.7               | 0.59                  | -0.13                |                       |
| 4,500.0             | 15.09           | 338.97      | 4,354.7             | 988.5      | -380.3     | 1,058.8               | 0.96                  | -0.56                |                       |
| 4,600.0             | 16.73           | 337.70      | 4,451.0             | 1,013.5    | -390.4     | 1,085.8               | 1.67                  | 1.64                 |                       |
| 4,700.0             | 16.76           | 338.81      | 4,546.5             | 1,041.0    | -401.5     | 1,115.4               | 0.32                  | 0.03                 |                       |
| 4,800.0             | 16.74           | 334.64      | 4,642.3             | 1,067.2    | -412.3     | 1,143.8               | 1.20                  | -0.02                |                       |
| 4,900.0             | 15.87           | 331.67      | 4,738.2             | 1,092.5    | -425.3     | 1,172.1               | 1.20                  | -0.87                |                       |
| 5,000.0             | 17.40           | 337.11      | 4,834.1             | 1,117.9    | -437.7     | 1,200.3               | 2.18                  | 1.53                 |                       |
| 5,100.0             | 15.80           | 340.48      | 4,930.0             | 1,144.6    | -448.0     | 1,228.9               | 1.87                  | -1.60                |                       |
| 5,200.0             | 15.51           | 338.06      | 5,026.2             | 1,170.0    | -457.6     | 1,256.1               | 0.71                  | -0.29                |                       |
| 5,300.0             | 14.09           | 336.55      | 5,123.0             | 1,193.1    | -467.4     | 1,281.1               | 1.48                  | -1.43                |                       |
| 5,400.0             | 15.46           | 336.59      | 5,219.7             | 1,216.5    | -477.4     | 1,306.6               | 1.37                  | 1.37                 |                       |
| 5,500.0             | 15.90           | 335.76      | 5,315.8             | 1,241.7    | -488.6     | 1,334.2               | 0.50                  | 0.44                 |                       |
| 5,600.0             | 14.89           | 336.40      | 5,412.3             | 1,265.8    | -499.4     | 1,360.6               | 1.02                  | -1.01                |                       |
| 5,700.0             | 14.66           | 337.04      | 5,509.0             | 1,289.1    | -509.4     | 1,385.9               | 0.28                  | -0.23                |                       |
| 5,800.0             | 12.89           | 335.76      | 5,606.0             | 1,311.5    | -519.0     | 1,410.3               | 1.80                  | -1.77                |                       |
| 5,900.0             | 11.30           | 331.29      | 5,703.8             | 1,330.0    | -528.1     | 1,430.9               | 1.84                  | -1.59                |                       |
| 6,000.0             | 11.63           | 328.61      | 5,801.9             | 1,347.0    | -538.0     | 1,450.4               | 0.63                  | 0.33                 |                       |
| 6,100.0             | 11.90           | 327.42      | 5,899.8             | 1,364.3    | -548.9     | 1,470.5               | 0.36                  | 0.27                 |                       |
| 6,200.0             | 11.83           | 337.99      | 5,997.6             | 1,382.5    | -558.2     | 1,490.9               | 2.17                  | -0.07                |                       |
| 6,300.0             | 12.58           | 338.80      | 6,095.4             | 1,401.9    | -566.0     | 1,511.8               | 0.77                  | 0.75                 |                       |
| 6,400.0             | 14.93           | 342.48      | 6,192.5             | 1,424.6    | -573.7     | 1,535.7               | 2.50                  | 2.34                 |                       |

# Cathedral Energy Services

## Survey Report

|                  |   |                                     |                                 |
|------------------|---|-------------------------------------|---------------------------------|
| <b>Company:</b>  | EnCana Oil & Gas (USA) Inc              | <b>Local Co-ordinate Reference:</b> | Well 8506D-22 N22 496           |
| <b>Project:</b>  | Story Gulch                             | <b>TVD Reference:</b>               | WELL @ 7602.0ft (Patterson 306) |
| <b>Site:</b>     | S22-T4S-R96W (N22 496) (Column Pattern) | <b>MD Reference:</b>                | WELL @ 7602.0ft (Patterson 306) |
| <b>Well:</b>     | 8506D-22 N22 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          |
| 6,500.0             | 15.55           | 342.37      | 6,288.9             | 1,450.1    | -581.9     | 1,562.4               | 0.62                  | 0.62                 |                                |
| 6,600.0             | 14.50           | 343.81      | 6,385.4             | 1,474.8    | -589.4     | 1,588.1               | 1.11                  | -1.05                |                                |
| 6,700.0             | 13.47           | 344.14      | 6,482.5             | 1,498.1    | -596.0     | 1,612.2               | 1.04                  | -1.04                |                                |
| 6,800.0             | 12.44           | 343.07      | 6,579.9             | 1,519.6    | -602.3     | 1,634.4               | 1.06                  | -1.03                |                                |
| 6,900.0             | 11.38           | 342.11      | 6,677.8             | 1,539.3    | -608.5     | 1,655.0               | 1.07                  | -1.05                |                                |
| 7,000.0             | 10.70           | 340.70      | 6,775.9             | 1,557.4    | -614.5     | 1,674.0               | 0.74                  | -0.69                |                                |
| 7,100.0             | 9.52            | 341.29      | 6,874.4             | 1,574.1    | -620.3     | 1,691.6               | 1.18                  | -1.18                |                                |
| 7,200.0             | 8.81            | 343.28      | 6,973.1             | 1,589.2    | -625.2     | 1,707.4               | 0.78                  | -0.71                |                                |
| 7,300.0             | 7.78            | 330.63      | 7,072.0             | 1,602.4    | -630.9     | 1,721.9               | 2.09                  | -1.03                |                                |
| 7,400.0             | 5.04            | 336.63      | 7,171.4             | 1,612.4    | -635.9     | 1,733.0               | 2.82                  | -2.74                |                                |
| 7,500.0             | 2.90            | 344.03      | 7,271.2             | 1,618.5    | -638.0     | 1,739.5               | 2.20                  | -2.14                |                                |
| 7,600.0             | 2.78            | 335.43      | 7,371.1             | 1,623.2    | -639.8     | 1,744.5               | 0.44                  | -0.11                |                                |
| 7,651.6             | 2.56            | 327.29      | 7,422.6             | 1,625.3    | -640.9     | 1,746.9               | 0.85                  | -0.43                | 8506D-22 N22 496 TGT (Column)  |
| 7,700.0             | 2.41            | 318.47      | 7,471.0             | 1,627.1    | -642.1     | 1,749.0               | 0.85                  | -0.31                |                                |
| 7,800.0             | 1.93            | 315.15      | 7,570.9             | 1,629.6    | -645.1     | 1,752.4               | 0.49                  | -0.48                |                                |
| 7,900.0             | 1.37            | 319.25      | 7,670.8             | 1,631.9    | -646.8     | 1,755.2               | 0.58                  | -0.56                |                                |
| 8,000.0             | 1.34            | 276.44      | 7,770.8             | 1,633.0    | -648.6     | 1,756.9               | 0.99                  | -0.03                |                                |
| 8,100.0             | 1.50            | 267.70      | 7,870.8             | 1,632.9    | -651.2     | 1,757.8               | 0.27                  | 0.16                 |                                |
| 8,200.0             | 1.12            | 290.37      | 7,970.8             | 1,633.1    | -653.5     | 1,758.9               | 0.63                  | -0.38                |                                |
| 8,300.0             | 1.50            | 308.82      | 8,070.7             | 1,634.3    | -655.4     | 1,760.7               | 0.56                  | 0.38                 |                                |
| 8,400.0             | 2.29            | 345.68      | 8,170.7             | 1,637.1    | -656.9     | 1,763.8               | 1.41                  | 0.79                 |                                |
| 8,500.0             | 2.07            | 348.04      | 8,270.6             | 1,640.9    | -657.7     | 1,767.7               | 0.24                  | -0.22                |                                |
| 8,600.0             | 0.60            | 304.98      | 8,370.6             | 1,642.7    | -658.5     | 1,769.7               | 1.68                  | -1.46                |                                |
| 8,700.0             | 0.63            | 295.27      | 8,470.6             | 1,643.2    | -659.5     | 1,770.5               | 0.11                  | 0.03                 |                                |
| 8,800.0             | 0.67            | 286.53      | 8,570.6             | 1,643.6    | -660.5     | 1,771.3               | 0.11                  | 0.04                 |                                |
| 8,900.0             | 0.74            | 259.74      | 8,670.6             | 1,643.8    | -661.7     | 1,771.9               | 0.33                  | 0.07                 |                                |
| 9,000.0             | 1.06            | 240.47      | 8,770.6             | 1,643.1    | -663.1     | 1,771.8               | 0.44                  | 0.33                 |                                |
| 9,100.0             | 1.39            | 242.12      | 8,870.5             | 1,642.1    | -665.0     | 1,771.6               | 0.33                  | 0.33                 |                                |
| 9,200.0             | 1.87            | 239.74      | 8,970.5             | 1,640.8    | -667.4     | 1,771.3               | 0.48                  | 0.48                 |                                |
| 9,300.0             | 1.37            | 211.58      | 9,070.4             | 1,638.9    | -669.8     | 1,770.5               | 0.92                  | -0.50                |                                |
| 9,400.0             | 1.48            | 215.13      | 9,170.4             | 1,636.8    | -670.9     | 1,769.0               | 0.14                  | 0.11                 |                                |
| 9,500.0             | 1.50            | 142.22      | 9,270.4             | 1,634.7    | -671.0     | 1,767.0               | 1.77                  | 0.01                 |                                |
| 9,600.0             | 3.83            | 69.92       | 9,370.3             | 1,635.1    | -666.8     | 1,765.8               | 3.67                  | 2.34                 |                                |
| 9,700.0             | 3.27            | 70.16       | 9,470.1             | 1,637.1    | -661.0     | 1,765.4               | 0.56                  | -0.56                |                                |
| 9,800.0             | 2.71            | 65.85       | 9,569.9             | 1,639.3    | -656.0     | 1,765.6               | 0.61                  | -0.56                |                                |
| 9,900.0             | 1.40            | 82.74       | 9,669.9             | 1,640.1    | -652.8     | 1,765.1               | 1.43                  | -1.31                |                                |
| 10,000.0            | 0.95            | 97.53       | 9,769.9             | 1,640.4    | -650.8     | 1,764.6               | 0.54                  | -0.45                |                                |
| 10,100.0            | 0.97            | 141.23      | 9,869.8             | 1,639.5    | -649.4     | 1,763.2               | 0.72                  | 0.02                 |                                |
| 10,200.0            | 1.05            | 169.15      | 9,969.8             | 1,637.9    | -648.7     | 1,761.5               | 0.49                  | 0.07                 |                                |
| 10,300.0            | 1.60            | 200.02      | 10,069.8            | 1,635.8    | -648.9     | 1,759.6               | 0.88                  | 0.55                 |                                |
| 10,400.0            | 1.80            | 211.98      | 10,169.8            | 1,633.0    | -650.3     | 1,757.6               | 0.41                  | 0.20                 |                                |
| 10,500.0            | 1.80            | 210.20      | 10,269.7            | 1,630.4    | -652.0     | 1,755.8               | 0.06                  | 0.00                 |                                |
| 10,600.0            | 1.80            | 207.16      | 10,369.7            | 1,627.6    | -653.5     | 1,753.8               | 0.10                  | 0.00                 |                                |
| 10,700.0            | 1.71            | 234.79      | 10,469.6            | 1,625.3    | -655.7     | 1,752.5               | 0.84                  | -0.09                |                                |
| 10,800.0            | 0.26            | 27.84       | 10,569.6            | 1,624.8    | -656.3     | 1,752.3               | 1.95                  | -1.45                |                                |
| 10,900.0            | 0.69            | 277.39      | 10,669.6            | 1,625.2    | -657.0     | 1,752.9               | 0.82                  | 0.43                 |                                |
| 11,000.0            | 1.14            | 261.90      | 10,769.6            | 1,625.0    | -658.4     | 1,753.2               | 0.50                  | 0.44                 |                                |
| 11,100.0            | 2.08            | 266.80      | 10,869.5            | 1,624.8    | -661.2     | 1,754.2               | 0.95                  | 0.94                 |                                |
| 11,200.0            | 2.96            | 266.75      | 10,969.4            | 1,624.5    | -665.6     | 1,755.6               | 0.88                  | 0.88                 |                                |
| 11,300.0            | 3.03            | 265.09      | 11,069.3            | 1,624.2    | -671.1     | 1,757.4               | 0.12                  | 0.08                 | 8506D-22 N22 496 PBHL (Column) |

# Cathedral Energy Services

## Survey Report

|  |   |
|--|---|
| <b>Company:</b> EnCana Oil & Gas (USA) Inc           | <b>Local Co-ordinate Reference:</b> Well 8506D-22 N22 496 |
| <b>Project:</b> Story Gulch                          | <b>TVD Reference:</b> WELL @ 7602.0ft (Patterson 306)     |
| <b>Site:</b> S22-T4S-R96W (N22 496) (Column Pattern) | <b>MD Reference:</b> WELL @ 7602.0ft (Patterson 306)      |
| <b>Well:</b> 8506D-22 N22 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              |

| Targets  |           |          |          |         |        |              |              |                 |                 |
|--|-----------|----------|----------|---------|--------|--------------|--------------|-----------------|-----------------|
| Target Name  | Dip Angle | Dip Dir. | TVD      | +N/-S   | +E/-W  | Northing     | Easting      | Latitude        | Longitude       |
| - hit/miss target  | (°)       | (°)      | (ft)     | (ft)    | (ft)   | (ft)         | (ft)         |                 |                 |
| - Shape  |           |          |          |         |        |              |              |                 |                 |
| 8506D-22 N22 496 TGT   | 0.00      | 0.00     | 7,422.0  | 1,636.7 | -647.6 | 1,686,645.29 | 2,251,690.53 | 39° 41' 18.83 N | 108° 9' 33.71 W |
| - actual wellpath misses target center by 13.2ft at 7651.6ft MD (7422.6 TVD, 1625.3 N, -640.9 E)   |           |          |          |         |        |              |              |                 |                 |
| - Point  |           |          |          |         |        |              |              |                 |                 |
| 8506D-22 N22 496 PBH   | 0.00      | 0.00     | 11,082.0 | 1,626.7 | -664.6 | 1,686,635.79 | 2,251,673.28 | 39° 41' 18.73 N | 108° 9' 33.93 W |
| - actual wellpath misses target center by 14.5ft at 11300.0ft MD (11069.3 TVD, 1624.2 N, -671.1 E) |           |          |          |         |        |              |              |                 |                 |
| - Rectangle (sides W30.0 H50.0 D0.0)   |           |          |          |         |        |              |              |                 |                 |

| Design Annotations |                |                   |            |                                    |
|--------------------|----------------|-------------------|------------|------------------------------------|
| Measured Depth     | Vertical Depth | Local Coordinates |            | Comment                            |
| (ft)               | (ft)           | +N/-S (ft)        | +E/-W (ft) |                                    |
| 11,375.0           | 11,144.2       | 1,623.8           | -675.0     | Last Cathedral Survey @ 11,375' MD |

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