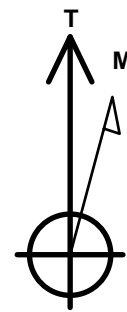
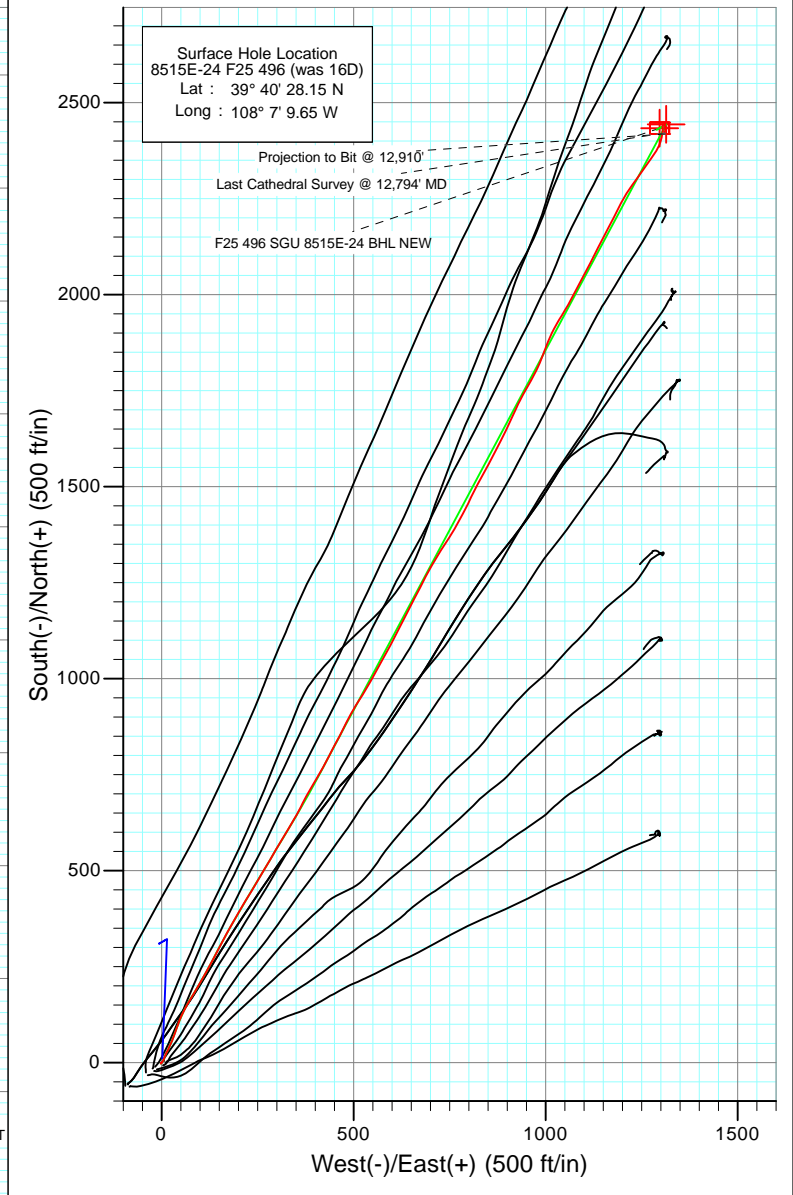
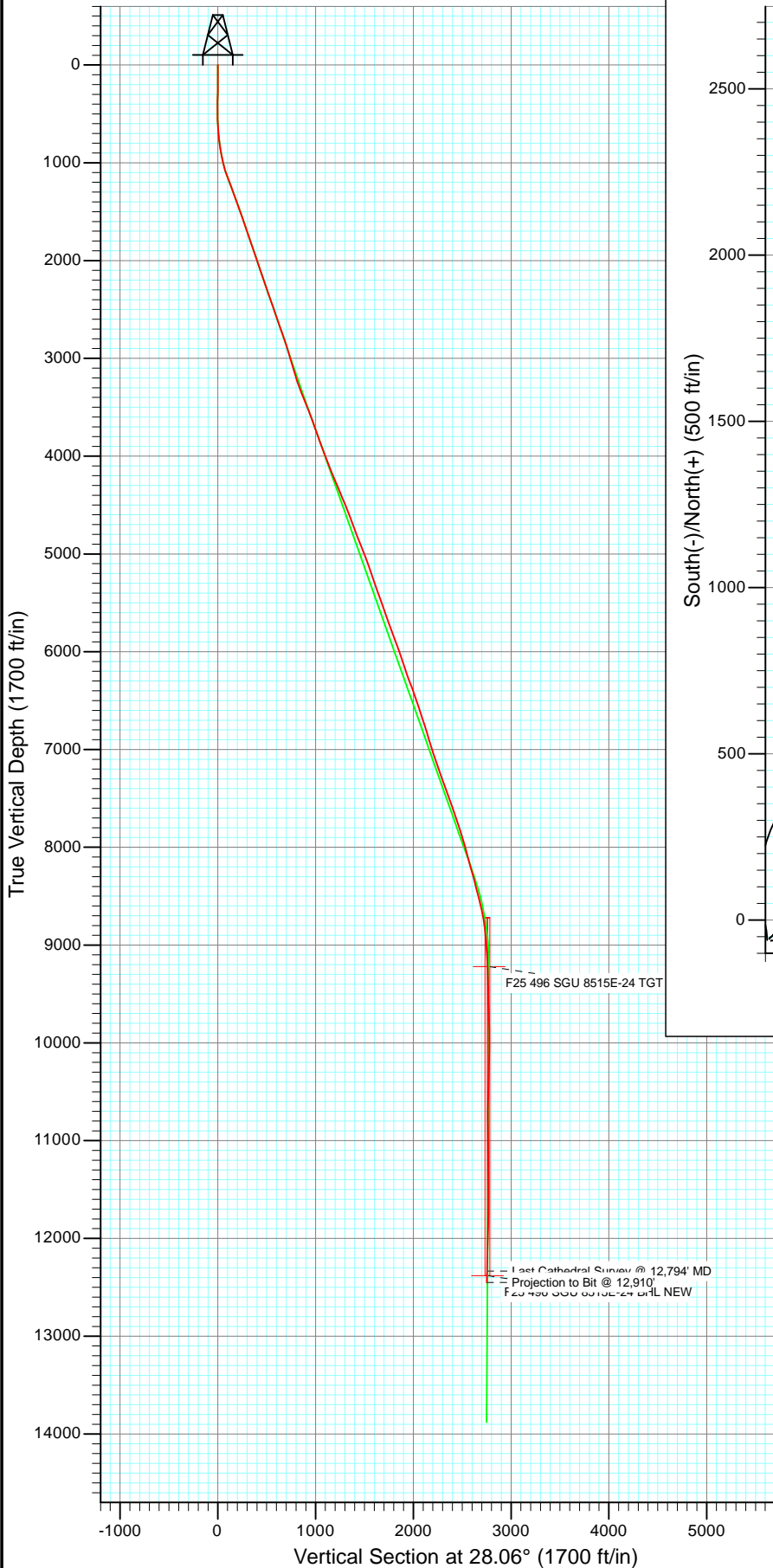




Project: Story Gulch
 Site: F25 496
 Well: 8515E-24 F25 496 (was 16D)
 Wellbore: DD
 Design: FINAL



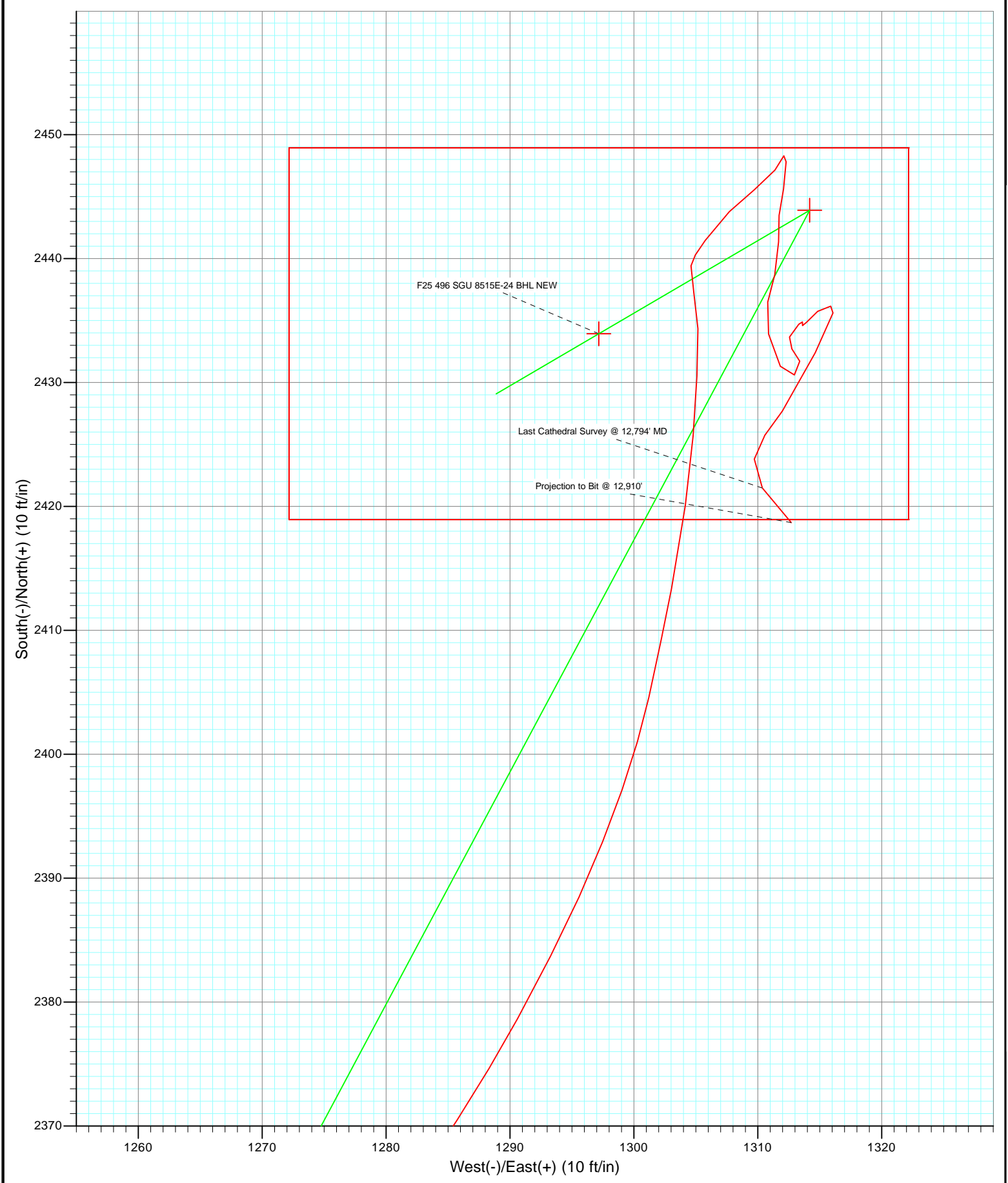
Azimuths to True North
 Magnetic North: 10.42°

Magnetic Field
 Strength: 52302.1snT
 Dip Angle: 65.86°
 Date: 7/22/2011
 Model: IGRF2010

| DD 8515E-24 F25 496 (was 16D) | | | | | | | |
|--|------------------------------|---------|---------|--------|-----------------|-----------------|----------|
| KBE @ 8320.0ft (Patterson 396) North American Datum 1983 Well 8515E-24 F25 496 (was 16D), True North | | | | | | | |
| Type | Target | TVD | Azimuth | Origin | Type | N/S | E/W |
| Target | F25 496 SGU 8515E-24 BHL NEW | 28.06 | 28.06 | Slot | Slot | 0.0 | 0.0 |
| Name | Target | TVD | +N/-S | +E/-W | Latitude | Longitude | From TVD |
| F25 496 SGU 8515E-24 TGT NEW | | 9220.0 | 2443.9 | 1314.2 | 39° 40' 52.30 N | 108° 6' 52.84 W | 0.0 |
| F25 496 SGU 8515E-24 BHL NEW | | 12380.0 | 2433.9 | 1297.2 | 39° 40' 52.20 N | 108° 6' 53.06 W | 0.0 |



Project: Story Gulch
Site: F25 496
Well: 8515E-24 F25 496 (was 16D)
Wellbore: DD
Design: FINAL



Cathedral Energy Services

Survey Report

| | |
|--|---|
| Company: EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: Well 8515E-24 F25 496 (was 16D) |
| Project: Story Gulch | TVD Reference: KBE @ 8320.0ft (Patterson 306) |
| Site: F25 496 | MD Reference: KBE @ 8320.0ft (Patterson 306) |
| Well: 8515E-24 F25 496 (was 16D) | North Reference: True |
| Wellbore: DD | Survey Calculation Method: Minimum Curvature |
| Design: DD | Database: USA EDM 5000 Multi Users DB |

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

| | | | | | |
|-------------------------------------|----------------------------------|-----------------------------------|--|--|--|
| Site F25 496 | | | | | |
| Site Position: | Northing: 1,681,091.06 ft | Latitude: 39° 40' 27.10 N | | | |
| From: Lat/Long | Easting: 2,262,632.54 ft | Longitude: 108° 7' 11.76 W | | | |
| Position Uncertainty: 0.0 ft | Slot Radius: 13.200 in | Grid Convergence: -1.65 ° | | | |

| | | | | | |
|--|---------------------|----------------------------------|----------------------------------|--|--|
| Well 8515E-24 F25 496 (was 16D) | | | | | |
| Well Position | +N/-S 0.0 ft | Northing: 1,681,192.06 ft | Latitude: 39° 40' 28.15 N | | |
| | +E/-W 0.0 ft | Easting: 2,262,800.42 ft | Longitude: 108° 7' 9.65 W | | |
| Position Uncertainty | 0.0 ft | Wellhead Elevation: ft | Ground Level: 8,298.0 ft | | |

| | | | | | |
|--------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore DD | | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 7/22/2011 | 10.42 | 65.86 | 52,302 |

| | | | | | |
|--------------------------|------------------------------|--------------------------|-------------------|----------------------|--|
| Design DD | | | | | |
| Audit Notes: | | | | | |
| Version: 1.0 | Phase: ACTUAL | Tie On Depth: 0.0 | | | |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) | |
| | 0.0 | 0.0 | 0.0 | 28.06 | |

| | | |
|-----------------------|----------------|--------------------------|
| Survey Program | | Date 8/2/2011 |
| From (ft) | To (ft) | Survey (Wellbore) |
| 190.0 | 2,990.0 | Survey #1 (DD) |
| 3,092.0 | 12,910.0 | Survey #2 (DD) |
| | | Tool Name |
| | | MWD |
| | | MWD |
| | | Description |
| | | Geolink MWD |
| | | Geolink MWD |

| 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 |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 190.0 | 0.50 | 208.60 | 190.0 | -0.7 | -0.4 | -0.8 | 0.26 | 0.26 | |
| 221.0 | 0.40 | 259.20 | 221.0 | -0.9 | -0.6 | -1.0 | 1.27 | -0.32 | |
| 251.0 | 0.60 | 252.40 | 251.0 | -0.9 | -0.8 | -1.2 | 0.69 | 0.67 | |
| 282.0 | 0.40 | 219.00 | 282.0 | -1.1 | -1.0 | -1.4 | 1.11 | -0.65 | |
| 313.0 | 0.60 | 242.90 | 313.0 | -1.2 | -1.3 | -1.7 | 0.92 | 0.65 | |
| 344.0 | 0.70 | 212.70 | 344.0 | -1.5 | -1.5 | -2.0 | 1.14 | 0.32 | |
| 374.0 | 0.80 | 234.40 | 374.0 | -1.7 | -1.8 | -2.4 | 1.00 | 0.33 | |
| 436.0 | 0.50 | 209.40 | 436.0 | -2.2 | -2.3 | -3.0 | 0.66 | -0.48 | |
| 497.0 | 0.20 | 63.00 | 497.0 | -2.4 | -2.3 | -3.2 | 1.11 | -0.49 | |
| 559.0 | 2.20 | 44.70 | 559.0 | -1.5 | -1.4 | -2.0 | 3.24 | 3.23 | |
| 620.0 | 3.40 | 38.90 | 619.9 | 0.7 | 0.6 | 0.9 | 2.02 | 1.97 | |

Cathedral Energy Services

Survey Report

| | | | |
|------------------|----------------------------|-------------------------------------|---------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well 8515E-24 F25 496 (was 16D) |
| Project: | Story Gulch | TD Reference: | KBE @ 8320.0ft (Patterson 306) |
| Site: | F25 496 | MVD Reference: | KBE @ 8320.0ft (Patterson 306) |
| Well: | 8515E-24 F25 496 (was 16D) | North Reference: | True |
| Wellbore: | DD | Survey Calculation Method: | Minimum Curvature |
| Design: | DD | Database: | 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 |
| 682.0 | 4.70 | 35.40 | 681.7 | 4.2 | 3.2 | 5.3 | 2.13 | 2.10 | |
| 774.0 | 6.60 | 22.80 | 773.3 | 12.2 | 7.5 | 14.3 | 2.45 | 2.07 | |
| 869.0 | 9.00 | 22.70 | 867.4 | 24.1 | 12.4 | 27.1 | 2.53 | 2.53 | |
| 964.0 | 12.30 | 26.40 | 960.8 | 40.0 | 19.8 | 44.6 | 3.55 | 3.47 | |
| 1,060.0 | 16.10 | 21.50 | 1,053.8 | 61.5 | 29.2 | 68.1 | 4.15 | 3.96 | |
| 1,155.0 | 19.70 | 18.20 | 1,144.2 | 89.0 | 39.1 | 96.9 | 3.94 | 3.79 | |
| 1,250.0 | 21.50 | 23.70 | 1,233.1 | 120.2 | 51.1 | 130.1 | 2.78 | 1.89 | |
| 1,345.0 | 21.30 | 30.30 | 1,321.6 | 151.0 | 66.8 | 164.7 | 2.54 | -0.21 | |
| 1,441.0 | 20.20 | 30.70 | 1,411.4 | 180.3 | 84.0 | 198.7 | 1.16 | -1.15 | |
| 1,536.0 | 19.60 | 30.20 | 1,500.7 | 208.2 | 100.4 | 231.0 | 0.66 | -0.63 | |
| 1,631.0 | 18.40 | 28.70 | 1,590.5 | 235.1 | 115.6 | 261.9 | 1.36 | -1.26 | |
| 1,725.0 | 19.00 | 28.50 | 1,679.6 | 261.6 | 130.1 | 292.0 | 0.64 | 0.64 | |
| 1,820.0 | 18.60 | 28.10 | 1,769.5 | 288.5 | 144.6 | 322.6 | 0.44 | -0.42 | |
| 1,915.0 | 19.60 | 27.10 | 1,859.3 | 316.1 | 159.0 | 353.7 | 1.11 | 1.05 | |
| 2,010.0 | 18.10 | 30.20 | 1,949.2 | 343.0 | 173.7 | 384.4 | 1.90 | -1.58 | |
| 2,106.0 | 18.40 | 28.90 | 2,040.3 | 369.2 | 188.5 | 414.5 | 0.53 | 0.31 | |
| 2,201.0 | 18.60 | 29.40 | 2,130.4 | 395.5 | 203.2 | 444.6 | 0.27 | 0.21 | |
| 2,296.0 | 19.10 | 31.30 | 2,220.3 | 422.0 | 218.7 | 475.3 | 0.83 | 0.53 | |
| 2,391.0 | 19.60 | 31.90 | 2,310.0 | 448.8 | 235.2 | 506.7 | 0.57 | 0.53 | |
| 2,486.0 | 20.00 | 31.00 | 2,399.3 | 476.3 | 252.0 | 538.8 | 0.53 | 0.42 | |
| 2,576.0 | 18.90 | 30.20 | 2,484.2 | 502.0 | 267.2 | 568.7 | 1.26 | -1.22 | |
| 2,672.0 | 18.50 | 30.20 | 2,575.1 | 528.6 | 282.7 | 599.5 | 0.42 | -0.42 | |
| 2,767.0 | 19.20 | 30.00 | 2,665.0 | 555.2 | 298.1 | 630.2 | 0.74 | 0.74 | |
| 2,862.0 | 19.50 | 31.20 | 2,754.7 | 582.3 | 314.1 | 661.6 | 0.52 | 0.32 | |
| 2,960.0 | 18.20 | 31.30 | 2,875.8 | 617.6 | 335.6 | 702.9 | 1.02 | -1.02 | |
| 3,092.0 | 16.00 | 28.50 | 2,973.3 | 643.6 | 350.6 | 732.9 | 2.30 | -2.16 | |
| 3,183.0 | 16.90 | 27.70 | 3,060.6 | 666.3 | 362.7 | 758.6 | 1.02 | 0.99 | |
| 3,275.0 | 16.30 | 26.90 | 3,148.7 | 689.7 | 374.8 | 784.9 | 0.70 | -0.65 | |
| 3,366.0 | 19.20 | 31.00 | 3,235.4 | 713.9 | 388.2 | 812.6 | 3.47 | 3.19 | |
| 3,458.0 | 20.70 | 30.30 | 3,321.9 | 740.9 | 404.2 | 844.0 | 1.65 | 1.63 | |
| 3,549.0 | 21.70 | 29.70 | 3,406.7 | 769.4 | 420.7 | 876.9 | 1.12 | 1.10 | |
| 3,641.0 | 21.80 | 26.90 | 3,492.2 | 799.4 | 436.8 | 911.0 | 1.13 | 0.11 | |
| 3,732.0 | 21.50 | 28.10 | 3,576.8 | 829.2 | 452.3 | 944.5 | 0.59 | -0.33 | |
| 3,824.0 | 20.30 | 26.50 | 3,662.7 | 858.4 | 467.4 | 977.3 | 1.44 | -1.30 | |
| 3,916.0 | 18.40 | 26.90 | 3,749.5 | 885.6 | 481.1 | 1,007.8 | 2.07 | -2.07 | |
| 4,007.0 | 19.70 | 29.20 | 3,835.5 | 911.8 | 495.1 | 1,037.5 | 1.65 | 1.43 | |
| 4,099.0 | 21.30 | 33.50 | 3,921.7 | 939.3 | 511.9 | 1,069.7 | 2.39 | 1.74 | |
| 4,190.0 | 20.30 | 30.20 | 4,006.8 | 966.7 | 528.9 | 1,101.9 | 1.69 | -1.10 | |
| 4,282.0 | 21.70 | 29.40 | 4,092.6 | 995.3 | 545.3 | 1,134.8 | 1.55 | 1.52 | |
| 4,374.0 | 23.40 | 29.30 | 4,177.6 | 1,026.1 | 562.6 | 1,170.1 | 1.85 | 1.85 | |
| 4,465.0 | 21.70 | 28.50 | 4,261.7 | 1,056.6 | 579.5 | 1,205.0 | 1.90 | -1.87 | |
| 4,557.0 | 22.70 | 28.30 | 4,346.8 | 1,087.2 | 596.0 | 1,239.8 | 1.09 | 1.09 | |
| 4,648.0 | 23.00 | 27.00 | 4,430.7 | 1,118.5 | 612.4 | 1,275.1 | 0.65 | 0.33 | |
| 4,740.0 | 21.50 | 27.20 | 4,515.8 | 1,149.5 | 628.3 | 1,309.9 | 1.63 | -1.63 | |
| 4,831.0 | 22.20 | 26.90 | 4,600.3 | 1,179.7 | 643.7 | 1,343.8 | 0.78 | 0.77 | |
| 4,923.0 | 19.90 | 27.60 | 4,686.2 | 1,209.1 | 658.8 | 1,376.8 | 2.51 | -2.50 | |
| 5,014.0 | 20.50 | 27.00 | 4,771.6 | 1,237.0 | 673.2 | 1,408.2 | 0.70 | 0.66 | |
| 5,106.0 | 21.90 | 27.40 | 4,857.3 | 1,266.6 | 688.4 | 1,441.5 | 1.53 | 1.52 | |
| 5,197.0 | 22.00 | 29.80 | 4,941.7 | 1,296.4 | 704.7 | 1,475.5 | 0.99 | 0.11 | |
| 5,289.0 | 20.20 | 32.20 | 5,027.6 | 1,324.8 | 721.7 | 1,508.6 | 2.17 | -1.96 | |
| 5,380.0 | 19.50 | 33.00 | 5,113.2 | 1,350.9 | 738.4 | 1,539.4 | 0.83 | -0.77 | |
| 5,472.0 | 18.80 | 32.20 | 5,200.1 | 1,376.3 | 754.6 | 1,569.5 | 0.81 | -0.76 | |
| 5,563.0 | 19.30 | 29.20 | 5,286.1 | 1,401.8 | 769.8 | 1,599.1 | 1.21 | 0.55 | |

Cathedral Energy Services

Survey Report

| | | | |
|------------------|----------------------------|-------------------------------------|---------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well 8515E-24 F25 496 (was 16D) |
| Project: | Story Gulch | TVD Reference: | KBE @ 8320.0ft (Patterson 306) |
| Site: | F25 496 | MD Reference: | KBE @ 8320.0ft (Patterson 306) |
| Well: | 8515E-24 F25 496 (was 16D) | North Reference: | True |
| Wellbore: | DD | Survey Calculation Method: | Minimum Curvature |
| Design: | DD | Database: | 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 |
| 5,655.0 | 19.70 | 27.00 | 5,372.8 | 1,428.9 | 784.2 | 1,629.8 | 0.91 | 0.43 | |
| 5,746.0 | 19.30 | 27.00 | 5,458.6 | 1,456.0 | 798.0 | 1,660.2 | 0.44 | -0.44 | |
| 5,838.0 | 19.80 | 26.10 | 5,545.3 | 1,483.5 | 811.8 | 1,691.0 | 0.63 | 0.54 | |
| 5,930.0 | 19.90 | 26.60 | 5,631.8 | 1,511.5 | 825.6 | 1,722.2 | 0.21 | 0.11 | |
| 6,021.0 | 19.80 | 29.00 | 5,717.4 | 1,538.8 | 840.1 | 1,753.1 | 0.90 | -0.11 | |
| 6,113.0 | 19.30 | 29.80 | 5,804.1 | 1,565.6 | 855.2 | 1,783.9 | 0.62 | -0.54 | |
| 6,204.0 | 20.40 | 26.70 | 5,889.7 | 1,592.9 | 869.8 | 1,814.8 | 1.67 | 1.21 | |
| 6,296.0 | 20.30 | 26.30 | 5,976.0 | 1,621.5 | 884.0 | 1,846.7 | 0.19 | -0.11 | |
| 6,387.0 | 19.00 | 26.20 | 6,061.7 | 1,648.9 | 897.6 | 1,877.3 | 1.43 | -1.43 | |
| 6,479.0 | 18.60 | 24.60 | 6,148.8 | 1,675.7 | 910.3 | 1,906.9 | 0.71 | -0.43 | |
| 6,570.0 | 18.90 | 24.80 | 6,234.9 | 1,702.3 | 922.5 | 1,936.1 | 0.34 | 0.33 | |
| 6,662.0 | 20.50 | 28.00 | 6,321.5 | 1,730.0 | 936.3 | 1,967.1 | 2.10 | 1.74 | |
| 6,753.0 | 20.30 | 29.20 | 6,406.8 | 1,757.9 | 951.5 | 1,998.9 | 0.51 | -0.22 | |
| 6,845.0 | 19.30 | 29.80 | 6,493.4 | 1,785.0 | 966.9 | 2,030.0 | 1.11 | -1.09 | |
| 6,936.0 | 17.30 | 24.00 | 6,579.8 | 1,810.4 | 979.8 | 2,058.5 | 2.97 | -2.20 | |
| 7,028.0 | 18.90 | 21.30 | 6,667.2 | 1,836.8 | 990.8 | 2,087.0 | 1.96 | 1.74 | |
| 7,120.0 | 18.10 | 20.50 | 6,754.5 | 1,864.1 | 1,001.2 | 2,116.0 | 0.91 | -0.87 | |
| 7,211.0 | 16.00 | 23.90 | 6,841.5 | 1,888.8 | 1,011.3 | 2,142.5 | 2.55 | -2.31 | |
| 7,302.0 | 15.80 | 27.30 | 6,929.0 | 1,911.3 | 1,022.0 | 2,167.4 | 1.05 | -0.22 | |
| 7,394.0 | 18.30 | 32.20 | 7,017.0 | 1,934.6 | 1,035.5 | 2,194.3 | 3.13 | 2.72 | |
| 7,486.0 | 19.40 | 30.50 | 7,104.0 | 1,960.0 | 1,050.9 | 2,224.0 | 1.34 | 1.20 | |
| 7,577.0 | 21.10 | 28.10 | 7,189.4 | 1,987.5 | 1,066.3 | 2,255.5 | 2.08 | 1.87 | |
| 7,668.0 | 20.00 | 28.00 | 7,274.6 | 2,015.7 | 1,081.3 | 2,287.4 | 1.21 | -1.21 | |
| 7,760.0 | 19.40 | 28.10 | 7,361.2 | 2,043.1 | 1,095.9 | 2,318.4 | 0.65 | -0.65 | |
| 7,852.0 | 19.40 | 27.10 | 7,448.0 | 2,070.1 | 1,110.1 | 2,349.0 | 0.36 | 0.00 | |
| 7,943.0 | 18.70 | 26.90 | 7,534.0 | 2,096.6 | 1,123.6 | 2,378.7 | 0.77 | -0.77 | |
| 8,035.0 | 19.10 | 27.60 | 7,621.1 | 2,123.1 | 1,137.2 | 2,408.5 | 0.50 | 0.43 | |
| 8,126.0 | 18.50 | 26.80 | 7,707.2 | 2,149.2 | 1,150.6 | 2,437.8 | 0.72 | -0.66 | |
| 8,218.0 | 18.70 | 28.10 | 7,794.4 | 2,175.2 | 1,164.1 | 2,467.1 | 0.50 | 0.22 | |
| 8,309.0 | 17.60 | 27.30 | 7,880.9 | 2,200.3 | 1,177.3 | 2,495.5 | 1.24 | -1.21 | |
| 8,401.0 | 16.00 | 26.90 | 7,968.9 | 2,224.0 | 1,189.4 | 2,522.1 | 1.74 | -1.74 | |
| 8,492.0 | 14.90 | 26.90 | 8,056.6 | 2,245.6 | 1,200.4 | 2,546.3 | 1.21 | -1.21 | |
| 8,584.0 | 14.60 | 33.70 | 8,145.6 | 2,265.8 | 1,212.2 | 2,569.7 | 1.91 | -0.33 | |
| 8,675.0 | 16.00 | 35.50 | 8,233.4 | 2,285.5 | 1,225.8 | 2,593.5 | 1.62 | 1.54 | |
| 8,767.0 | 15.50 | 34.90 | 8,321.9 | 2,305.9 | 1,240.2 | 2,618.3 | 0.57 | -0.54 | |
| 8,950.0 | 13.90 | 35.60 | 8,498.9 | 2,343.9 | 1,267.0 | 2,664.4 | 0.88 | -0.87 | |
| 9,041.0 | 14.00 | 35.60 | 8,587.3 | 2,361.7 | 1,279.8 | 2,686.1 | 0.11 | 0.11 | |
| 9,133.0 | 11.30 | 28.80 | 8,677.0 | 2,378.7 | 1,290.6 | 2,706.2 | 3.35 | -2.93 | |
| 9,224.0 | 8.80 | 21.70 | 8,766.6 | 2,392.9 | 1,297.5 | 2,722.0 | 3.06 | -2.75 | |
| 9,316.0 | 6.50 | 12.40 | 8,857.8 | 2,404.6 | 1,301.2 | 2,734.0 | 2.83 | -2.50 | |
| 9,408.0 | 4.70 | 11.00 | 8,949.4 | 2,413.4 | 1,303.0 | 2,742.6 | 1.96 | -1.96 | |
| 9,500.0 | 3.80 | 7.40 | 9,041.1 | 2,420.1 | 1,304.2 | 2,749.1 | 1.02 | -0.98 | |
| 9,592.0 | 3.30 | 5.30 | 9,132.9 | 2,425.7 | 1,304.8 | 2,754.4 | 0.56 | -0.54 | |
| 9,682.0 | 2.80 | 1.70 | 9,222.8 | 2,430.5 | 1,305.1 | 2,758.7 | 0.59 | -0.56 | |
| 9,773.0 | 2.00 | 0.50 | 9,313.7 | 2,434.3 | 1,305.2 | 2,762.1 | 0.88 | -0.88 | |
| 9,865.0 | 1.80 | 345.80 | 9,405.7 | 2,437.3 | 1,304.8 | 2,764.6 | 0.57 | -0.22 | |
| 9,956.0 | 0.90 | 10.20 | 9,496.6 | 2,439.4 | 1,304.6 | 2,766.4 | 1.15 | -0.99 | |
| 10,048.0 | 2.10 | 37.40 | 9,588.6 | 2,441.5 | 1,305.8 | 2,768.7 | 1.48 | 1.30 | |
| 10,139.0 | 1.70 | 43.30 | 9,679.6 | 2,443.8 | 1,307.7 | 2,771.7 | 0.49 | -0.44 | |
| 10,231.0 | 1.70 | 54.10 | 9,771.5 | 2,445.6 | 1,309.7 | 2,774.2 | 0.35 | 0.00 | |
| 10,322.0 | 1.20 | 35.60 | 9,862.5 | 2,447.1 | 1,311.4 | 2,776.4 | 0.75 | -0.55 | |
| 10,414.0 | 0.50 | 21.90 | 9,954.5 | 2,448.3 | 1,312.1 | 2,777.7 | 0.79 | -0.76 | |
| 10,501.0 | 1.10 | 177.00 | 10,041.4 | 2,447.8 | 1,312.3 | 2,777.4 | 1.80 | 0.69 | |

Cathedral Energy Services

Survey Report

| | |
|--|---|
| Company: EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: Well 8515E-24 F25 496 (was 16D) |
| Project: Story Gulch | TVD Reference: KBE @ 8320.0ft (Patterson 306) |
| Site: F25 496 | MD Reference: KBE @ 8320.0ft (Patterson 306) |
| Well: 8515E-24 F25 496 (was 16D) | North Reference: True |
| Wellbore: DD | Survey Calculation Method: Minimum Curvature |
| Design: DD | Database: 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 |
| 10,592.0 | 1.70 | 190.80 | 10,132.4 | 2,445.6 | 1,312.1 | 2,775.3 | 0.75 | 0.66 | |
| 10,684.0 | 1.00 | 187.30 | 10,224.4 | 2,443.5 | 1,311.7 | 2,773.3 | 0.77 | -0.76 | |
| 10,775.0 | 1.70 | 177.60 | 10,315.4 | 2,441.3 | 1,311.7 | 2,771.4 | 0.81 | 0.77 | |
| 10,872.0 | 1.50 | 196.80 | 10,412.3 | 2,438.7 | 1,311.4 | 2,768.9 | 0.59 | -0.21 | |
| 10,962.0 | 1.40 | 192.20 | 10,502.3 | 2,436.5 | 1,310.8 | 2,766.7 | 0.17 | -0.11 | |
| 11,053.0 | 1.90 | 168.20 | 10,593.3 | 2,433.9 | 1,310.9 | 2,764.5 | 0.93 | 0.55 | |
| 11,145.0 | 1.60 | 150.20 | 10,685.3 | 2,431.3 | 1,311.8 | 2,762.6 | 0.68 | -0.33 | |
| 11,237.0 | 0.80 | 50.50 | 10,777.2 | 2,430.6 | 1,313.0 | 2,762.5 | 2.07 | -0.87 | |
| 11,328.0 | 0.90 | 355.70 | 10,868.2 | 2,431.7 | 1,313.4 | 2,763.7 | 0.87 | 0.11 | |
| 11,420.0 | 0.80 | 294.70 | 10,960.2 | 2,432.7 | 1,312.8 | 2,764.3 | 0.94 | -0.11 | |
| 11,511.0 | 1.00 | 29.10 | 11,051.2 | 2,433.7 | 1,312.6 | 2,765.0 | 1.46 | 0.22 | |
| 11,603.0 | 0.60 | 47.30 | 11,143.2 | 2,434.7 | 1,313.3 | 2,766.3 | 0.51 | -0.43 | |
| 11,695.0 | 0.20 | 202.60 | 11,235.2 | 2,434.9 | 1,313.6 | 2,766.6 | 0.85 | -0.43 | |
| 11,786.0 | 0.20 | 151.50 | 11,326.2 | 2,434.6 | 1,313.6 | 2,766.3 | 0.19 | 0.00 | |
| 11,878.0 | 0.60 | 30.80 | 11,418.2 | 2,434.9 | 1,313.9 | 2,766.7 | 0.79 | 0.43 | |
| 11,970.0 | 1.00 | 55.20 | 11,510.2 | 2,435.7 | 1,314.8 | 2,767.9 | 0.56 | 0.43 | |
| 12,061.0 | 0.50 | 94.70 | 11,601.2 | 2,436.2 | 1,315.9 | 2,768.8 | 0.76 | -0.55 | |
| 12,153.0 | 0.70 | 203.30 | 11,693.2 | 2,435.6 | 1,316.1 | 2,768.4 | 1.07 | 0.22 | |
| 12,336.0 | 1.50 | 204.40 | 11,876.2 | 2,432.4 | 1,314.6 | 2,764.9 | 0.44 | 0.44 | |
| 12,519.0 | 1.90 | 213.30 | 12,059.1 | 2,427.7 | 1,312.0 | 2,759.5 | 0.26 | 0.22 | |
| 12,611.0 | 1.10 | 220.90 | 12,151.0 | 2,425.7 | 1,310.6 | 2,757.1 | 0.89 | -0.87 | |
| 12,703.0 | 1.60 | 192.20 | 12,243.0 | 2,423.8 | 1,309.7 | 2,755.0 | 0.90 | 0.54 | |
| 12,794.0 | 1.80 | 140.11 | 12,334.0 | 2,421.5 | 1,310.4 | 2,753.2 | 1.65 | 0.22 | Last Cathedral Survey @ 12,794' MD |
| 12,910.0 | 1.80 | 140.10 | 12,449.9 | 2,418.7 | 1,312.7 | 2,751.9 | 0.00 | 0.00 | Projection to Bit @ 12,910' |

| Targets | | | | | | | | | |
|--|---------------|--------------|----------|------------|------------|---------------|--------------|-----------------|-----------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
| F25 496 SGU 8515E-24 - hit/miss target - Shape | 0.00 | 0.00 | 12,380.0 | 2,433.9 | 1,297.2 | 1,683,587.59 | 2,264,167.22 | 39° 40' 52.20 N | 108° 6' 53.06 W |
| - actual wellpath misses target center by 49.5ft at 12794.0ft MD (12334.0 TVD, 2421.5 N, 1310.4 E) | | | | | | | | | |
| - Rectangle (sides W30.0 H50.0 D0.0) | | | | | | | | | |
| F25 496 SGU 8515E-24 - actual wellpath misses target center by 16.3ft at 9680.0ft MD (9220.7 TVD, 2430.4 N, 1305.1 E) | 0.00 | 0.00 | 9,220.0 | 2,443.9 | 1,314.2 | 1,683,597.06 | 2,264,184.53 | 39° 40' 52.30 N | 108° 6' 52.84 W |
| - Point | | | | | | | | | |

| Design Annotations | | | | |
|---------------------|---------------------|-------------------|------------|------------------------------------|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment |
| | | +N/-S (ft) | +E/-W (ft) | |
| 12,794.0 | 12,334.0 | 2,421.5 | 1,310.4 | Last Cathedral Survey @ 12,794' MD |
| 12,910.0 | 12,449.9 | 2,418.7 | 1,312.7 | Projection to Bit @ 12,910' |

Checked By: _____ Approved By: _____ Date: _____