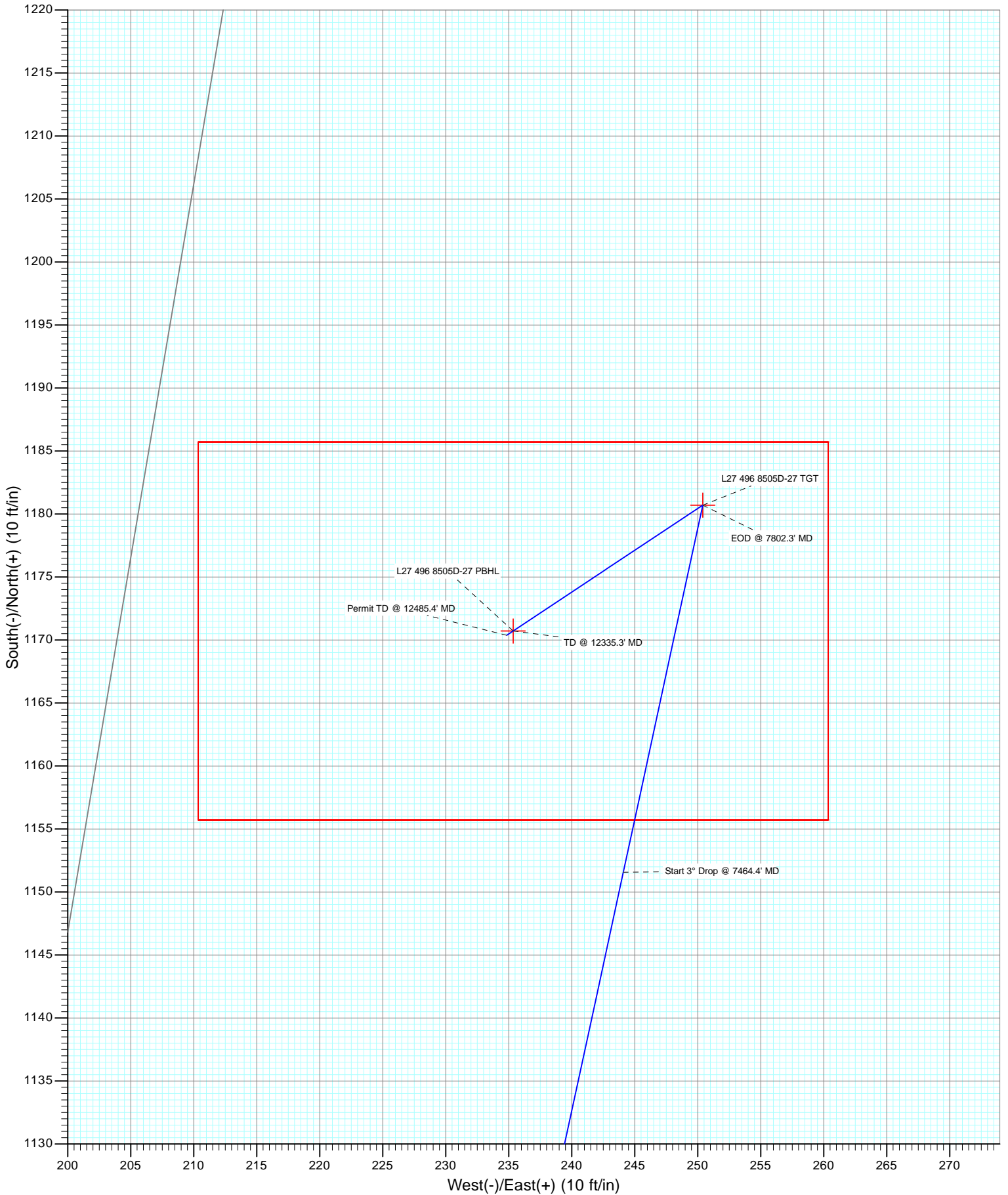




Project: Story Gulch
Site: S27-T4S-R96W (L27 496)
Well: 8505D-27 L27 496
Wellbore: DD
Design: Plan #1



Cathedral Energy Services

Planning Report

| | |
|--|---|
| Database: USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: Well 8505D-27 L27 496 |
| Company: EnCana Oil & Gas (USA) Inc | TVD Reference: Well @ 8136.0ft (Rig) |
| Project: Story Gulch | MD Reference: Well @ 8136.0ft (Rig) |
| Site: S27-T4S-R96W (L27 496) | North Reference: True |
| Well: 8505D-27 L27 496 | Survey Calculation Method: Minimum Curvature |
| Wellbore: DD | |
| Design: Plan #1 | |

| | | |
|---|-------------------------------------|--|
| 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 S27-T4S-R96W (L27 496) | | | | | |
| Site Position: | | Northing: | 1,680,404.44 ft | Latitude: | 39° 40' 17.06 N |
| From: Lat/Long | | Easting: | 2,251,282.88 ft | Longitude: | 108° 9' 36.59 W |
| Position Uncertainty: | 0.0 ft | Slot Radius: | 13.200 in | Grid Convergence: | -1.68 ° |

| | | | | | |
|------------------------------|--------------|--------|----------------------------|-----------------|-----------------------------------|
| Well 8505D-27 L27 496 | | | | | |
| Well Position | +N/-S | 0.0 ft | Northing: | 1,680,377.34 ft | Latitude: 39° 40' 16.79 N |
| | +E/-W | 0.0 ft | Easting: | 2,251,274.26 ft | Longitude: 108° 9' 36.69 W |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: | ft | Ground Level: 8,104.0 ft |

| | | | | | |
|--------------------|-------------------|--------------------|--------------------|------------------|-----------------------|
| Wellbore DD | | | | | |
| Magnetics | Model Name | Sample Date | Declination | Dip Angle | Field Strength |
| | IGRF2010 | 9/24/2012 | (°) 10.28 | (°) 65.82 | (nT) 52,178 |

| | | | | |
|--------------------------|-------------------------|--------------|----------------------|------------------|
| Design Plan #1 | | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) | +N/-S | +E/-W | Direction |
| | (ft) | (ft) | (ft) | (°) |
| | 0.0 | 0.0 | 0.0 | 11.37 |

| 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 |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 766.7 | 5.00 | 354.00 | 766.5 | 7.2 | -0.8 | 3.00 | 3.00 | 0.00 | 354.00 | |
| 953.6 | 10.14 | 12.20 | 951.7 | 31.4 | 1.9 | 3.00 | 2.75 | 9.74 | 34.24 | |
| 7,464.4 | 10.14 | 12.20 | 7,360.8 | 1,151.6 | 244.1 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 7,802.3 | 0.00 | 0.00 | 7,697.0 | 1,180.7 | 250.4 | 3.00 | -3.00 | 0.00 | 180.00 | L27 496 8505D-27 TC |
| 7,894.6 | 0.23 | 236.42 | 7,789.3 | 1,180.6 | 250.2 | 0.25 | 0.25 | -133.95 | 236.42 | |
| 12,335.3 | 0.23 | 236.42 | 12,230.0 | 1,170.7 | 235.4 | 0.00 | 0.00 | 0.00 | 0.00 | L27 496 8505D-27 PE |
| 12,485.3 | 0.23 | 236.42 | 12,380.0 | 1,170.4 | 234.8 | 0.00 | 0.00 | 0.00 | 0.00 | |

Cathedral Energy Services

Planning Report

| | | | |
|------------------|-----------------------------|-------------------------------------|-----------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well 8505D-27 L27 496 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | Well @ 8136.0ft (Rig) |
| Project: | Story Gulch | MD Reference: | Well @ 8136.0ft (Rig) |
| Site: | S27-T4S-R96W (L27 496) | North Reference: | True |
| Well: | 8505D-27 L27 496 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | DD | | |
| Design: | Plan #1 | | |

Planned Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Comments / Formations |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|----------------------------|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 100.0 | 0.00 | 0.00 | 100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 500.0 | 0.00 | 0.00 | 500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | KOP @ 600' MD |
| 700.0 | 3.00 | 354.00 | 700.0 | 2.6 | -0.3 | 2.5 | 3.00 | 3.00 | |
| 766.7 | 5.00 | 354.00 | 766.5 | 7.2 | -0.8 | 6.9 | 3.00 | 3.00 | End Nudge; Inc=5° Azm=350° |
| 800.0 | 5.85 | 359.53 | 799.6 | 10.4 | -0.9 | 10.0 | 3.00 | 2.56 | |
| 900.0 | 8.61 | 9.21 | 898.8 | 22.9 | 0.2 | 22.5 | 3.00 | 2.75 | |
| 953.6 | 10.14 | 12.20 | 951.7 | 31.4 | 1.9 | 31.2 | 3.00 | 2.86 | EOB; Inc=10.14° |
| 1,000.0 | 10.14 | 12.20 | 997.4 | 39.4 | 3.6 | 39.3 | 0.00 | 0.00 | |
| 1,100.0 | 10.14 | 12.20 | 1,095.8 | 56.6 | 7.3 | 56.9 | 0.00 | 0.00 | |
| 1,129.6 | 10.14 | 12.20 | 1,125.0 | 61.7 | 8.4 | 62.2 | 0.00 | 0.00 | A_GROOVE_TVD |
| 1,200.0 | 10.14 | 12.20 | 1,194.3 | 73.8 | 11.0 | 74.5 | 0.00 | 0.00 | |
| 1,292.2 | 10.14 | 12.20 | 1,285.0 | 89.7 | 14.5 | 90.8 | 0.00 | 0.00 | B_GROOVE_TVD |
| 1,300.0 | 10.14 | 12.20 | 1,292.7 | 91.0 | 14.8 | 92.1 | 0.00 | 0.00 | |
| 1,314.5 | 10.14 | 12.20 | 1,307.0 | 93.5 | 15.3 | 94.7 | 0.00 | 0.00 | B_GROOVE_BASE_TVD |
| 1,400.0 | 10.14 | 12.20 | 1,391.2 | 108.2 | 18.5 | 109.7 | 0.00 | 0.00 | |
| 1,500.0 | 10.14 | 12.20 | 1,489.6 | 125.4 | 22.2 | 127.3 | 0.00 | 0.00 | |
| 1,600.0 | 10.14 | 12.20 | 1,588.0 | 142.6 | 25.9 | 144.9 | 0.00 | 0.00 | |
| 1,700.0 | 10.14 | 12.20 | 1,686.5 | 159.8 | 29.6 | 162.5 | 0.00 | 0.00 | |
| 1,800.0 | 10.14 | 12.20 | 1,784.9 | 177.0 | 33.4 | 180.1 | 0.00 | 0.00 | |
| 1,900.0 | 10.14 | 12.20 | 1,883.3 | 194.3 | 37.1 | 197.7 | 0.00 | 0.00 | |
| 2,000.0 | 10.14 | 12.20 | 1,981.8 | 211.5 | 40.8 | 215.3 | 0.00 | 0.00 | |
| 2,100.0 | 10.14 | 12.20 | 2,080.2 | 228.7 | 44.5 | 232.9 | 0.00 | 0.00 | |
| 2,200.0 | 10.14 | 12.20 | 2,178.7 | 245.9 | 48.2 | 250.5 | 0.00 | 0.00 | |
| 2,267.4 | 10.14 | 12.20 | 2,245.0 | 257.5 | 50.7 | 262.4 | 0.00 | 0.00 | GARDEN_GULCH_TVD. |
| 2,300.0 | 10.14 | 12.20 | 2,277.1 | 263.1 | 52.0 | 268.1 | 0.00 | 0.00 | |
| 2,400.0 | 10.14 | 12.20 | 2,375.5 | 280.3 | 55.7 | 285.7 | 0.00 | 0.00 | |
| 2,500.0 | 10.14 | 12.20 | 2,474.0 | 297.5 | 59.4 | 303.3 | 0.00 | 0.00 | |
| 2,600.0 | 10.14 | 12.20 | 2,572.4 | 314.7 | 63.1 | 320.9 | 0.00 | 0.00 | |
| 2,700.0 | 10.14 | 12.20 | 2,670.9 | 331.9 | 66.8 | 338.5 | 0.00 | 0.00 | |
| 2,800.0 | 10.14 | 12.20 | 2,769.3 | 349.1 | 70.6 | 356.1 | 0.00 | 0.00 | |
| 2,900.0 | 10.14 | 12.20 | 2,867.7 | 366.3 | 74.3 | 373.7 | 0.00 | 0.00 | |
| 3,000.0 | 10.14 | 12.20 | 2,966.2 | 383.5 | 78.0 | 391.3 | 0.00 | 0.00 | |
| 3,100.0 | 10.14 | 12.20 | 3,064.6 | 400.7 | 81.7 | 408.9 | 0.00 | 0.00 | |
| 3,200.0 | 10.14 | 12.20 | 3,163.0 | 417.9 | 85.4 | 426.5 | 0.00 | 0.00 | |
| 3,270.0 | 10.14 | 12.20 | 3,232.0 | 430.0 | 88.1 | 438.9 | 0.00 | 0.00 | WASATCH_FM_TVD |
| 3,300.0 | 10.14 | 12.20 | 3,261.5 | 435.1 | 89.2 | 444.1 | 0.00 | 0.00 | |
| 3,400.0 | 10.14 | 12.20 | 3,359.9 | 452.3 | 92.9 | 461.7 | 0.00 | 0.00 | |
| 3,500.0 | 10.14 | 12.20 | 3,458.4 | 469.5 | 96.6 | 479.3 | 0.00 | 0.00 | |
| 3,600.0 | 10.14 | 12.20 | 3,556.8 | 486.7 | 100.3 | 496.9 | 0.00 | 0.00 | |
| 3,700.0 | 10.14 | 12.20 | 3,655.2 | 503.9 | 104.0 | 514.5 | 0.00 | 0.00 | |
| 3,800.0 | 10.14 | 12.20 | 3,753.7 | 521.1 | 107.8 | 532.1 | 0.00 | 0.00 | |
| 3,900.0 | 10.14 | 12.20 | 3,852.1 | 538.3 | 111.5 | 549.7 | 0.00 | 0.00 | |
| 4,000.0 | 10.14 | 12.20 | 3,950.6 | 555.5 | 115.2 | 567.4 | 0.00 | 0.00 | |
| 4,100.0 | 10.14 | 12.20 | 4,049.0 | 572.7 | 118.9 | 585.0 | 0.00 | 0.00 | |
| 4,200.0 | 10.14 | 12.20 | 4,147.4 | 589.9 | 122.6 | 602.6 | 0.00 | 0.00 | |
| 4,300.0 | 10.14 | 12.20 | 4,245.9 | 607.2 | 126.4 | 620.2 | 0.00 | 0.00 | |
| 4,400.0 | 10.14 | 12.20 | 4,344.3 | 624.4 | 130.1 | 637.8 | 0.00 | 0.00 | |

Cathedral Energy Services

Planning Report

| | | | |
|------------------|-----------------------------|-------------------------------------|-----------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well 8505D-27 L27 496 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | Well @ 8136.0ft (Rig) |
| Project: | Story Gulch | MD Reference: | Well @ 8136.0ft (Rig) |
| Site: | S27-T4S-R96W (L27 496) | North Reference: | True |
| Well: | 8505D-27 L27 496 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | DD | | |
| Design: | Plan #1 | | |

| 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 |
| 4,500.0 | 10.14 | 12.20 | 4,442.8 | 641.6 | 133.8 | 655.4 | 0.00 | 0.00 | |
| 4,600.0 | 10.14 | 12.20 | 4,541.2 | 658.8 | 137.5 | 673.0 | 0.00 | 0.00 | |
| 4,700.0 | 10.14 | 12.20 | 4,639.6 | 676.0 | 141.3 | 690.6 | 0.00 | 0.00 | |
| 4,800.0 | 10.14 | 12.20 | 4,738.1 | 693.2 | 145.0 | 708.2 | 0.00 | 0.00 | |
| 4,900.0 | 10.14 | 12.20 | 4,836.5 | 710.4 | 148.7 | 725.8 | 0.00 | 0.00 | |
| 5,000.0 | 10.14 | 12.20 | 4,934.9 | 727.6 | 152.4 | 743.4 | 0.00 | 0.00 | |
| 5,100.0 | 10.14 | 12.20 | 5,033.4 | 744.8 | 156.1 | 761.0 | 0.00 | 0.00 | |
| 5,200.0 | 10.14 | 12.20 | 5,131.8 | 762.0 | 159.9 | 778.6 | 0.00 | 0.00 | |
| 5,300.0 | 10.14 | 12.20 | 5,230.3 | 779.2 | 163.6 | 796.2 | 0.00 | 0.00 | |
| 5,400.0 | 10.14 | 12.20 | 5,328.7 | 796.4 | 167.3 | 813.8 | 0.00 | 0.00 | |
| 5,500.0 | 10.14 | 12.20 | 5,427.1 | 813.6 | 171.0 | 831.4 | 0.00 | 0.00 | |
| 5,522.2 | 10.14 | 12.20 | 5,449.0 | 817.4 | 171.8 | 835.3 | 0.00 | 0.00 | WASATCH_G_TVD |
| 5,600.0 | 10.14 | 12.20 | 5,525.6 | 830.8 | 174.7 | 849.0 | 0.00 | 0.00 | |
| 5,700.0 | 10.14 | 12.20 | 5,624.0 | 848.0 | 178.5 | 866.6 | 0.00 | 0.00 | |
| 5,800.0 | 10.14 | 12.20 | 5,722.5 | 865.2 | 182.2 | 884.2 | 0.00 | 0.00 | |
| 5,900.0 | 10.14 | 12.20 | 5,820.9 | 882.4 | 185.9 | 901.8 | 0.00 | 0.00 | |
| 6,000.0 | 10.14 | 12.20 | 5,919.3 | 899.6 | 189.6 | 919.4 | 0.00 | 0.00 | |
| 6,100.0 | 10.14 | 12.20 | 6,017.8 | 916.8 | 193.3 | 937.0 | 0.00 | 0.00 | |
| 6,200.0 | 10.14 | 12.20 | 6,116.2 | 934.0 | 197.1 | 954.6 | 0.00 | 0.00 | |
| 6,300.0 | 10.14 | 12.20 | 6,214.6 | 951.2 | 200.8 | 972.2 | 0.00 | 0.00 | |
| 6,400.0 | 10.14 | 12.20 | 6,313.1 | 968.4 | 204.5 | 989.8 | 0.00 | 0.00 | |
| 6,500.0 | 10.14 | 12.20 | 6,411.5 | 985.6 | 208.2 | 1,007.4 | 0.00 | 0.00 | |
| 6,600.0 | 10.14 | 12.20 | 6,510.0 | 1,002.9 | 211.9 | 1,025.0 | 0.00 | 0.00 | |
| 6,700.0 | 10.14 | 12.20 | 6,608.4 | 1,020.1 | 215.7 | 1,042.6 | 0.00 | 0.00 | |
| 6,800.0 | 10.14 | 12.20 | 6,706.8 | 1,037.3 | 219.4 | 1,060.2 | 0.00 | 0.00 | |
| 6,900.0 | 10.14 | 12.20 | 6,805.3 | 1,054.5 | 223.1 | 1,077.8 | 0.00 | 0.00 | |
| 7,000.0 | 10.14 | 12.20 | 6,903.7 | 1,071.7 | 226.8 | 1,095.4 | 0.00 | 0.00 | |
| 7,100.0 | 10.14 | 12.20 | 7,002.2 | 1,088.9 | 230.5 | 1,113.0 | 0.00 | 0.00 | |
| 7,200.0 | 10.14 | 12.20 | 7,100.6 | 1,106.1 | 234.3 | 1,130.6 | 0.00 | 0.00 | |
| 7,300.0 | 10.14 | 12.20 | 7,199.0 | 1,123.3 | 238.0 | 1,148.2 | 0.00 | 0.00 | |
| 7,400.0 | 10.14 | 12.20 | 7,297.5 | 1,140.5 | 241.7 | 1,165.8 | 0.00 | 0.00 | |
| 7,464.4 | 10.14 | 12.20 | 7,360.9 | 1,151.6 | 244.1 | 1,177.1 | 0.00 | 0.00 | Start 3° Drop @ 7464.4' MD |
| 7,500.0 | 9.07 | 12.20 | 7,396.0 | 1,157.4 | 245.4 | 1,183.0 | 3.00 | -3.00 | |
| 7,600.0 | 6.07 | 12.20 | 7,495.1 | 1,170.2 | 248.1 | 1,196.2 | 3.00 | -3.00 | |
| 7,700.0 | 3.07 | 12.20 | 7,594.8 | 1,178.0 | 249.8 | 1,204.2 | 3.00 | -3.00 | |
| 7,762.3 | 1.20 | 12.20 | 7,657.0 | 1,180.3 | 250.3 | 1,206.5 | 3.00 | -3.00 | WILLIAMS_FORK_TVD |
| 7,800.0 | 0.07 | 12.20 | 7,694.7 | 1,180.7 | 250.4 | 1,206.9 | 3.00 | -3.00 | |
| 7,802.3 | 0.00 | 0.00 | 7,697.0 | 1,180.7 | 250.4 | 1,206.9 | 3.00 | -3.00 | EOD @ 7802.3' MD - TOG TVD |
| 7,894.6 | 0.23 | 236.42 | 7,789.3 | 1,180.6 | 250.2 | 1,206.8 | 0.25 | 0.25 | |
| 7,900.0 | 0.23 | 236.42 | 7,794.7 | 1,180.6 | 250.2 | 1,206.7 | 0.00 | 0.00 | |
| 8,000.0 | 0.23 | 236.42 | 7,894.7 | 1,180.4 | 249.9 | 1,206.5 | 0.00 | 0.00 | |
| 8,100.0 | 0.23 | 236.42 | 7,994.7 | 1,180.1 | 249.6 | 1,206.2 | 0.00 | 0.00 | |
| 8,200.0 | 0.23 | 236.42 | 8,094.7 | 1,179.9 | 249.2 | 1,205.9 | 0.00 | 0.00 | |
| 8,300.0 | 0.23 | 236.42 | 8,194.7 | 1,179.7 | 248.9 | 1,205.6 | 0.00 | 0.00 | |
| 8,400.0 | 0.23 | 236.42 | 8,294.7 | 1,179.5 | 248.6 | 1,205.3 | 0.00 | 0.00 | |
| 8,500.0 | 0.23 | 236.42 | 8,394.7 | 1,179.3 | 248.2 | 1,205.0 | 0.00 | 0.00 | |
| 8,600.0 | 0.23 | 236.42 | 8,494.7 | 1,179.0 | 247.9 | 1,204.8 | 0.00 | 0.00 | |
| 8,700.0 | 0.23 | 236.42 | 8,594.7 | 1,178.8 | 247.5 | 1,204.5 | 0.00 | 0.00 | |
| 8,800.0 | 0.23 | 236.42 | 8,694.7 | 1,178.6 | 247.2 | 1,204.2 | 0.00 | 0.00 | |
| 8,900.0 | 0.23 | 236.42 | 8,794.7 | 1,178.4 | 246.9 | 1,203.9 | 0.00 | 0.00 | |
| 9,000.0 | 0.23 | 236.42 | 8,894.7 | 1,178.1 | 246.5 | 1,203.6 | 0.00 | 0.00 | |
| 9,100.0 | 0.23 | 236.42 | 8,994.7 | 1,177.9 | 246.2 | 1,203.3 | 0.00 | 0.00 | |

Cathedral Energy Services

Planning Report

| | | | |
|------------------|-----------------------------|-------------------------------------|-----------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well 8505D-27 L27 496 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | Well @ 8136.0ft (Rig) |
| Project: | Story Gulch | MD Reference: | Well @ 8136.0ft (Rig) |
| Site: | S27-T4S-R96W (L27 496) | North Reference: | True |
| Well: | 8505D-27 L27 496 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | DD | | |
| Design: | Plan #1 | | |

| Planned Survey | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Comments / Formations |
| 9,200.0 | 0.23 | 236.42 | 9,094.7 | 1,177.7 | 245.9 | 1,203.1 | 0.00 | 0.00 | |
| 9,300.0 | 0.23 | 236.42 | 9,194.7 | 1,177.5 | 245.5 | 1,202.8 | 0.00 | 0.00 | |
| 9,400.0 | 0.23 | 236.42 | 9,294.7 | 1,177.2 | 245.2 | 1,202.5 | 0.00 | 0.00 | |
| 9,500.0 | 0.23 | 236.42 | 9,394.7 | 1,177.0 | 244.9 | 1,202.2 | 0.00 | 0.00 | |
| 9,600.0 | 0.23 | 236.42 | 9,494.7 | 1,176.8 | 244.5 | 1,201.9 | 0.00 | 0.00 | |
| 9,700.0 | 0.23 | 236.42 | 9,594.7 | 1,176.6 | 244.2 | 1,201.6 | 0.00 | 0.00 | |
| 9,800.0 | 0.23 | 236.42 | 9,694.7 | 1,176.4 | 243.9 | 1,201.3 | 0.00 | 0.00 | |
| 9,900.0 | 0.23 | 236.42 | 9,794.7 | 1,176.1 | 243.5 | 1,201.1 | 0.00 | 0.00 | |
| 10,000.0 | 0.23 | 236.42 | 9,894.7 | 1,175.9 | 243.2 | 1,200.8 | 0.00 | 0.00 | |
| 10,100.0 | 0.23 | 236.42 | 9,994.7 | 1,175.7 | 242.8 | 1,200.5 | 0.00 | 0.00 | |
| 10,200.0 | 0.23 | 236.42 | 10,094.7 | 1,175.5 | 242.5 | 1,200.2 | 0.00 | 0.00 | |
| 10,300.0 | 0.23 | 236.42 | 10,194.7 | 1,175.2 | 242.2 | 1,199.9 | 0.00 | 0.00 | |
| 10,400.0 | 0.23 | 236.42 | 10,294.7 | 1,175.0 | 241.8 | 1,199.6 | 0.00 | 0.00 | |
| 10,500.0 | 0.23 | 236.42 | 10,394.7 | 1,174.8 | 241.5 | 1,199.4 | 0.00 | 0.00 | |
| 10,600.0 | 0.23 | 236.42 | 10,494.7 | 1,174.6 | 241.2 | 1,199.1 | 0.00 | 0.00 | |
| 10,700.0 | 0.23 | 236.42 | 10,594.7 | 1,174.4 | 240.8 | 1,198.8 | 0.00 | 0.00 | |
| 10,800.0 | 0.23 | 236.42 | 10,694.7 | 1,174.1 | 240.5 | 1,198.5 | 0.00 | 0.00 | |
| 10,900.0 | 0.23 | 236.42 | 10,794.7 | 1,173.9 | 240.2 | 1,198.2 | 0.00 | 0.00 | |
| 10,992.3 | 0.23 | 236.42 | 10,887.0 | 1,173.7 | 239.9 | 1,198.0 | 0.00 | 0.00 | CAMEO_TVD |
| 11,000.0 | 0.23 | 236.42 | 10,894.7 | 1,173.7 | 239.8 | 1,197.9 | 0.00 | 0.00 | |
| 11,100.0 | 0.23 | 236.42 | 10,994.7 | 1,173.5 | 239.5 | 1,197.6 | 0.00 | 0.00 | |
| 11,200.0 | 0.23 | 236.42 | 11,094.7 | 1,173.2 | 239.2 | 1,197.4 | 0.00 | 0.00 | |
| 11,300.0 | 0.23 | 236.42 | 11,194.7 | 1,173.0 | 238.8 | 1,197.1 | 0.00 | 0.00 | |
| 11,400.0 | 0.23 | 236.42 | 11,294.7 | 1,172.8 | 238.5 | 1,196.8 | 0.00 | 0.00 | |
| 11,444.3 | 0.23 | 236.42 | 11,339.0 | 1,172.7 | 238.3 | 1,196.7 | 0.00 | 0.00 | ROLLINS_TVD |
| 11,500.0 | 0.23 | 236.42 | 11,394.7 | 1,172.6 | 238.2 | 1,196.5 | 0.00 | 0.00 | |
| 11,600.0 | 0.23 | 236.42 | 11,494.7 | 1,172.4 | 237.8 | 1,196.2 | 0.00 | 0.00 | |
| 11,700.0 | 0.23 | 236.42 | 11,594.7 | 1,172.1 | 237.5 | 1,195.9 | 0.00 | 0.00 | |
| 11,704.3 | 0.23 | 236.42 | 11,599.0 | 1,172.1 | 237.5 | 1,195.9 | 0.00 | 0.00 | COZZETTE_TVD |
| 11,800.0 | 0.23 | 236.42 | 11,694.7 | 1,171.9 | 237.1 | 1,195.7 | 0.00 | 0.00 | |
| 11,887.3 | 0.23 | 236.42 | 11,782.0 | 1,171.7 | 236.9 | 1,195.4 | 0.00 | 0.00 | CORCORAN_TVD |
| 11,900.0 | 0.23 | 236.42 | 11,794.7 | 1,171.7 | 236.8 | 1,195.4 | 0.00 | 0.00 | |
| 12,000.0 | 0.23 | 236.42 | 11,894.7 | 1,171.5 | 236.5 | 1,195.1 | 0.00 | 0.00 | |
| 12,100.0 | 0.23 | 236.42 | 11,994.7 | 1,171.2 | 236.1 | 1,194.8 | 0.00 | 0.00 | |
| 12,185.3 | 0.23 | 236.42 | 12,080.0 | 1,171.0 | 235.9 | 1,194.6 | 0.00 | 0.00 | UPPER_SEGO_TVD |
| 12,200.0 | 0.23 | 236.42 | 12,094.7 | 1,171.0 | 235.8 | 1,194.5 | 0.00 | 0.00 | |
| 12,300.0 | 0.23 | 236.42 | 12,194.7 | 1,170.8 | 235.5 | 1,194.2 | 0.00 | 0.00 | |
| 12,335.3 | 0.23 | 236.42 | 12,230.0 | 1,170.7 | 235.4 | 1,194.1 | 0.00 | 0.00 | TD @ 12335.3' MD - SEGO_BASE_TARGET_1 |
| 12,400.0 | 0.23 | 236.42 | 12,294.7 | 1,170.6 | 235.1 | 1,194.0 | 0.00 | 0.00 | |
| 12,485.3 | 0.23 | 236.42 | 12,380.0 | 1,170.4 | 234.8 | 1,193.7 | 0.00 | 0.00 | Permit TD @ 12485.4' MD |

Cathedral Energy Services

Planning Report

| | | | |
|------------------|-----------------------------|-------------------------------------|-----------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well 8505D-27 L27 496 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | Well @ 8136.0ft (Rig) |
| Project: | Story Gulch | MD Reference: | Well @ 8136.0ft (Rig) |
| Site: | S27-T4S-R96W (L27 496) | North Reference: | True |
| Well: | 8505D-27 L27 496 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | DD | | |
| Design: | Plan #1 | | |

| 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 | | | | | | | | | |
| L27 496 8505D-27 PBHI - plan hits target center - Rectangle (sides W30.0 H50.0 D0.0) | 0.00 | 0.00 | 12,230.0 | 1,170.7 | 235.4 | 1,681,540.66 | 2,251,543.79 | 39° 40' 28.36 N | 108° 9' 33.68 W |
| L27 496 8505D-27 TGT - plan hits target center - Point | 0.00 | 0.00 | 7,697.0 | 1,180.7 | 250.4 | 1,681,550.21 | 2,251,559.12 | 39° 40' 28.46 N | 108° 9' 33.49 W |

| Formations | | | | | | |
|----------------|----------------|----------------------|-----------|-----|---------------|--|
| Measured Depth | Vertical Depth | Name | Lithology | Dip | Dip Direction | |
| (ft) | (ft) | | | (°) | (°) | |
| 1,129.6 | 1,125.0 | A_GROOVE_TVD | | | | |
| 1,292.2 | 1,285.0 | B_GROOVE_TVD | | | | |
| 1,314.5 | 1,307.0 | B_GROOVE_BASE_TVD | | | | |
| 2,267.4 | 2,245.0 | GARDEN_GULCH_TVD. | | | | |
| 3,270.0 | 3,232.0 | WASATCH_FM_TVD | | | | |
| 5,522.2 | 5,449.0 | WASATCH_G_TVD | | | | |
| 7,762.3 | 7,657.0 | WILLIAMS_FORK_TVD | | | | |
| 7,802.3 | 7,697.0 | TOG TVD | | | | |
| 10,992.3 | 10,887.0 | CAMEO_TVD | | | | |
| 11,444.3 | 11,339.0 | ROLLINS_TVD | | | | |
| 11,704.3 | 11,599.0 | COZZETTE_TVD | | | | |
| 11,887.3 | 11,782.0 | CORCORAN_TVD | | | | |
| 12,185.3 | 12,080.0 | UPPER_SEGO_TVD | | | | |
| 12,335.3 | 12,230.0 | SEGO_BASE_TARGET_TVD | | | | |

| Plan Annotations | | | | | |
|------------------|----------------|-------------------|-------|----------------------------|--|
| Measured Depth | Vertical Depth | Local Coordinates | | Comment | |
| (ft) | (ft) | +N/-S | +E/-W | | |
| | | (ft) | (ft) | | |
| 600.0 | 600.0 | 0.0 | 0.0 | KOP @ 600' MD | |
| 766.7 | 766.5 | 7.2 | -0.8 | End Nudge; Inc=5° Azm=350° | |
| 953.6 | 951.7 | 31.4 | 1.9 | EOB; Inc=10.14° | |
| 7,464.4 | 7,360.9 | 1,151.6 | 244.1 | Start 3° Drop @ 7464.4' MD | |
| 7,802.3 | 7,697.0 | 1,180.7 | 250.4 | EOD @ 7802.3' MD | |
| 12,335.3 | 12,230.0 | 1,170.7 | 235.4 | TD @ 12335.3' MD | |
| 12,485.3 | 12,380.0 | 1,170.4 | 234.8 | Permit TD @ 12485.4' MD | |