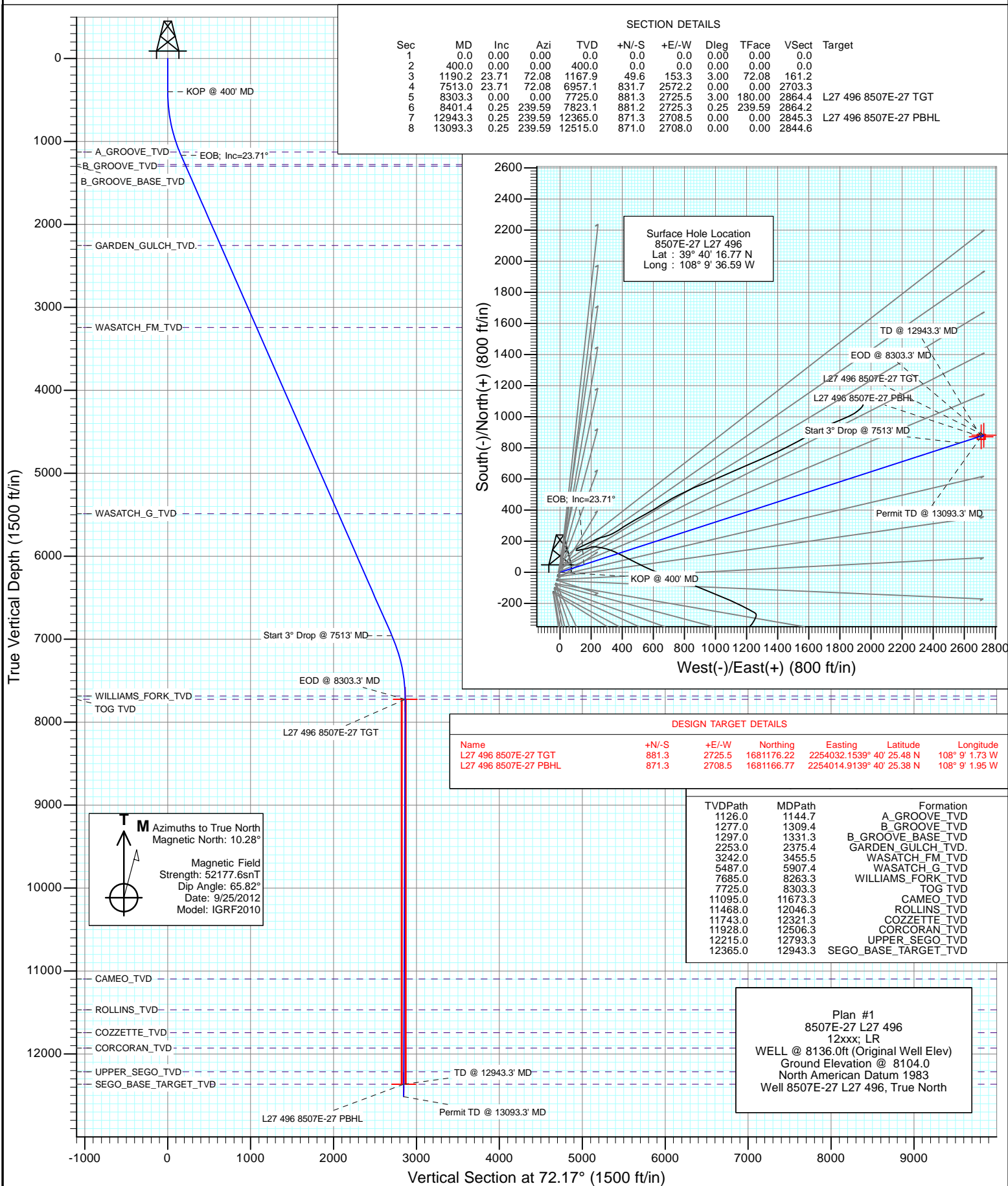


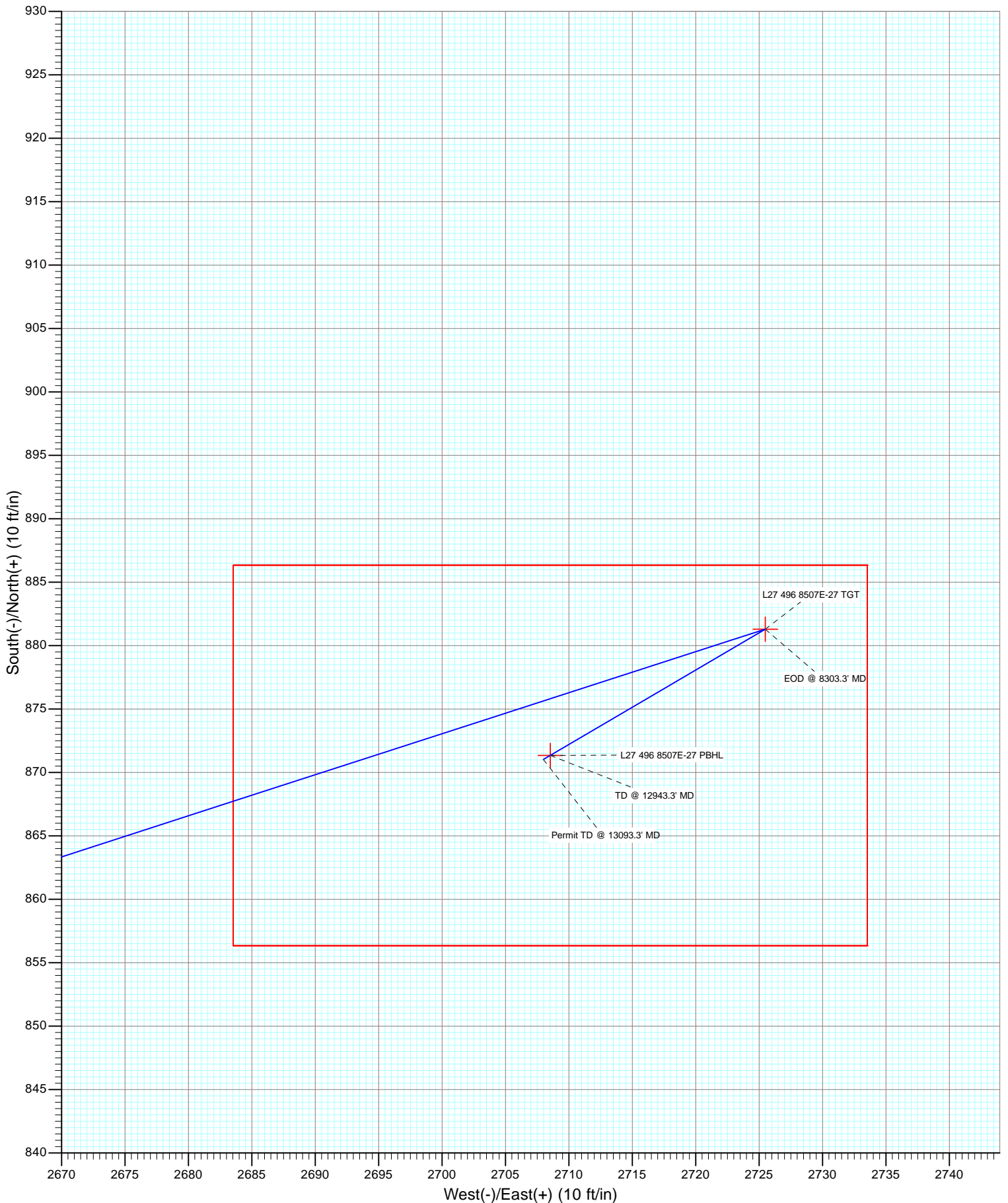


Project: Story Gulch
Site: S27-T4S-R96W (L27 496)
Well: 8507E-27 L27 496
Wellbore: DD
Design: Plan #1





Project: Story Gulch
Site: S27-T4S-R96W (L27 496)
Well: 8507E-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 8507E-27 L27 496 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 8136.0ft (Original Well Elev) |
| Project: | Story Gulch | MD Reference: | WELL @ 8136.0ft (Original Well Elev) |
| Site: | S27-T4S-R96W (L27 496) | North Reference: | True |
| Well: | 8507E-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 | 8507E-27 L27 496 | | | | | |
| Well Position | +N/-S | 0.0 ft | Northing: | 1,680,375.09 ft | Latitude: | 39° 40' 16.77 N |
| | +E/-W | 0.0 ft | Easting: | 2,251,282.02 ft | Longitude: | 108° 9' 36.59 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 (nT) |
| | IGRF2010 | 9/25/2012 | 10.28 | 65.82 | 52,178 |

| | | | | | |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|--|
| Design | Plan #1 | | | | |
| Audit Notes: | | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.0 | |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) | |
| | 0.0 | 0.0 | 0.0 | 72.17 | |

| 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 | |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,190.2 | 23.71 | 72.08 | 1,167.9 | 49.6 | 153.3 | 3.00 | 3.00 | 0.00 | 72.08 | |
| 7,513.0 | 23.71 | 72.08 | 6,957.1 | 831.7 | 2,572.2 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 8,303.3 | 0.00 | 0.00 | 7,725.0 | 881.3 | 2,725.5 | 3.00 | -3.00 | 0.00 | 180.00 | L27 496 8507E-27 TC |
| 8,401.4 | 0.25 | 239.59 | 7,823.1 | 881.2 | 2,725.3 | 0.25 | 0.25 | -122.69 | 239.59 | |
| 12,943.3 | 0.25 | 239.59 | 12,365.0 | 871.3 | 2,708.5 | 0.00 | 0.00 | 0.00 | 0.00 | L27 496 8507E-27 PE |
| 13,093.3 | 0.25 | 239.59 | 12,515.0 | 871.0 | 2,708.0 | 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 8507E-27 L27 496 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 8136.0ft (Original Well Elev) |
| Project: | Story Gulch | MD Reference: | WELL @ 8136.0ft (Original Well Elev) |
| Site: | S27-T4S-R96W (L27 496) | North Reference: | True |
| Well: | 8507E-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 | KOP @ 400' MD |
| 500.0 | 3.00 | 72.08 | 500.0 | 0.8 | 2.5 | 2.6 | 3.00 | 3.00 | |
| 600.0 | 6.00 | 72.08 | 599.6 | 3.2 | 10.0 | 10.5 | 3.00 | 3.00 | |
| 700.0 | 9.00 | 72.08 | 698.8 | 7.2 | 22.4 | 23.5 | 3.00 | 3.00 | |
| 800.0 | 12.00 | 72.08 | 797.1 | 12.8 | 39.7 | 41.7 | 3.00 | 3.00 | |
| 900.0 | 15.00 | 72.08 | 894.3 | 20.0 | 61.9 | 65.1 | 3.00 | 3.00 | |
| 1,000.0 | 18.00 | 72.08 | 990.2 | 28.8 | 88.9 | 93.5 | 3.00 | 3.00 | |
| 1,100.0 | 21.00 | 72.08 | 1,084.4 | 39.0 | 120.7 | 126.9 | 3.00 | 3.00 | |
| 1,144.7 | 22.34 | 72.08 | 1,126.0 | 44.1 | 136.4 | 143.4 | 3.00 | 3.00 | A_GROOVE_TVD |
| 1,190.2 | 23.71 | 72.08 | 1,167.9 | 49.6 | 153.3 | 161.2 | 3.00 | 3.00 | EOB; Inc=23.71° |
| 1,200.0 | 23.71 | 72.08 | 1,176.8 | 50.8 | 157.1 | 165.1 | 0.00 | 0.00 | |
| 1,300.0 | 23.71 | 72.08 | 1,268.4 | 63.2 | 195.3 | 205.3 | 0.00 | 0.00 | |
| 1,309.4 | 23.71 | 72.08 | 1,277.0 | 64.3 | 198.9 | 209.1 | 0.00 | 0.00 | B_GROOVE_TVD |
| 1,331.3 | 23.71 | 72.08 | 1,297.0 | 67.0 | 207.3 | 217.9 | 0.00 | 0.00 | B_GROOVE_BASE_TVD |
| 1,400.0 | 23.71 | 72.08 | 1,359.9 | 75.5 | 233.6 | 245.5 | 0.00 | 0.00 | |
| 1,500.0 | 23.71 | 72.08 | 1,451.5 | 87.9 | 271.9 | 285.7 | 0.00 | 0.00 | |
| 1,600.0 | 23.71 | 72.08 | 1,543.1 | 100.3 | 310.1 | 325.9 | 0.00 | 0.00 | |
| 1,700.0 | 23.71 | 72.08 | 1,634.6 | 112.6 | 348.4 | 366.1 | 0.00 | 0.00 | |
| 1,800.0 | 23.71 | 72.08 | 1,726.2 | 125.0 | 386.6 | 406.3 | 0.00 | 0.00 | |
| 1,900.0 | 23.71 | 72.08 | 1,817.8 | 137.4 | 424.9 | 446.5 | 0.00 | 0.00 | |
| 2,000.0 | 23.71 | 72.08 | 1,909.3 | 149.8 | 463.1 | 486.7 | 0.00 | 0.00 | |
| 2,100.0 | 23.71 | 72.08 | 2,000.9 | 162.1 | 501.4 | 526.9 | 0.00 | 0.00 | |
| 2,200.0 | 23.71 | 72.08 | 2,092.4 | 174.5 | 539.6 | 567.1 | 0.00 | 0.00 | |
| 2,300.0 | 23.71 | 72.08 | 2,184.0 | 186.9 | 577.9 | 607.4 | 0.00 | 0.00 | |
| 2,375.4 | 23.71 | 72.08 | 2,253.0 | 196.2 | 606.7 | 637.7 | 0.00 | 0.00 | GARDEN_GULCH_TVD. |
| 2,400.0 | 23.71 | 72.08 | 2,275.6 | 199.2 | 616.1 | 647.6 | 0.00 | 0.00 | |
| 2,500.0 | 23.71 | 72.08 | 2,367.1 | 211.6 | 654.4 | 687.8 | 0.00 | 0.00 | |
| 2,600.0 | 23.71 | 72.08 | 2,458.7 | 224.0 | 692.7 | 728.0 | 0.00 | 0.00 | |
| 2,700.0 | 23.71 | 72.08 | 2,550.2 | 236.3 | 730.9 | 768.2 | 0.00 | 0.00 | |
| 2,800.0 | 23.71 | 72.08 | 2,641.8 | 248.7 | 769.2 | 808.4 | 0.00 | 0.00 | |
| 2,900.0 | 23.71 | 72.08 | 2,733.4 | 261.1 | 807.4 | 848.6 | 0.00 | 0.00 | |
| 3,000.0 | 23.71 | 72.08 | 2,824.9 | 273.5 | 845.7 | 888.8 | 0.00 | 0.00 | |
| 3,100.0 | 23.71 | 72.08 | 2,916.5 | 285.8 | 883.9 | 929.0 | 0.00 | 0.00 | |
| 3,200.0 | 23.71 | 72.08 | 3,008.1 | 298.2 | 922.2 | 969.2 | 0.00 | 0.00 | |
| 3,300.0 | 23.71 | 72.08 | 3,099.6 | 310.6 | 960.4 | 1,009.4 | 0.00 | 0.00 | |
| 3,400.0 | 23.71 | 72.08 | 3,191.2 | 322.9 | 998.7 | 1,049.6 | 0.00 | 0.00 | |
| 3,455.5 | 23.71 | 72.08 | 3,242.0 | 329.8 | 1,019.9 | 1,071.9 | 0.00 | 0.00 | WASATCH_FM_TVD |
| 3,500.0 | 23.71 | 72.08 | 3,282.7 | 335.3 | 1,037.0 | 1,089.8 | 0.00 | 0.00 | |
| 3,600.0 | 23.71 | 72.08 | 3,374.3 | 347.7 | 1,075.2 | 1,130.0 | 0.00 | 0.00 | |
| 3,700.0 | 23.71 | 72.08 | 3,465.9 | 360.0 | 1,113.5 | 1,170.2 | 0.00 | 0.00 | |
| 3,800.0 | 23.71 | 72.08 | 3,557.4 | 372.4 | 1,151.7 | 1,210.4 | 0.00 | 0.00 | |
| 3,900.0 | 23.71 | 72.08 | 3,649.0 | 384.8 | 1,190.0 | 1,250.6 | 0.00 | 0.00 | |
| 4,000.0 | 23.71 | 72.08 | 3,740.5 | 397.2 | 1,228.2 | 1,290.8 | 0.00 | 0.00 | |
| 4,100.0 | 23.71 | 72.08 | 3,832.1 | 409.5 | 1,266.5 | 1,331.1 | 0.00 | 0.00 | |
| 4,200.0 | 23.71 | 72.08 | 3,923.7 | 421.9 | 1,304.7 | 1,371.3 | 0.00 | 0.00 | |
| 4,300.0 | 23.71 | 72.08 | 4,015.2 | 434.3 | 1,343.0 | 1,411.5 | 0.00 | 0.00 | |
| 4,400.0 | 23.71 | 72.08 | 4,106.8 | 446.6 | 1,381.3 | 1,451.7 | 0.00 | 0.00 | |
| 4,500.0 | 23.71 | 72.08 | 4,198.4 | 459.0 | 1,419.5 | 1,491.9 | 0.00 | 0.00 | |

Cathedral Energy Services

Planning Report

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well 8507E-27 L27 496 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 8136.0ft (Original Well Elev) |
| Project: | Story Gulch | MD Reference: | WELL @ 8136.0ft (Original Well Elev) |
| Site: | S27-T4S-R96W (L27 496) | North Reference: | True |
| Well: | 8507E-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 |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|----------------------------|
| 4,600.0 | 23.71 | 72.08 | 4,289.9 | 471.4 | 1,457.8 | 1,532.1 | 0.00 | 0.00 | |
| 4,700.0 | 23.71 | 72.08 | 4,381.5 | 483.7 | 1,496.0 | 1,572.3 | 0.00 | 0.00 | |
| 4,800.0 | 23.71 | 72.08 | 4,473.0 | 496.1 | 1,534.3 | 1,612.5 | 0.00 | 0.00 | |
| 4,900.0 | 23.71 | 72.08 | 4,564.6 | 508.5 | 1,572.5 | 1,652.7 | 0.00 | 0.00 | |
| 5,000.0 | 23.71 | 72.08 | 4,656.2 | 520.9 | 1,610.8 | 1,692.9 | 0.00 | 0.00 | |
| 5,100.0 | 23.71 | 72.08 | 4,747.7 | 533.2 | 1,649.0 | 1,733.1 | 0.00 | 0.00 | |
| 5,200.0 | 23.71 | 72.08 | 4,839.3 | 545.6 | 1,687.3 | 1,773.3 | 0.00 | 0.00 | |
| 5,300.0 | 23.71 | 72.08 | 4,930.8 | 558.0 | 1,725.6 | 1,813.5 | 0.00 | 0.00 | |
| 5,400.0 | 23.71 | 72.08 | 5,022.4 | 570.3 | 1,763.8 | 1,853.7 | 0.00 | 0.00 | |
| 5,500.0 | 23.71 | 72.08 | 5,114.0 | 582.7 | 1,802.1 | 1,893.9 | 0.00 | 0.00 | |
| 5,600.0 | 23.71 | 72.08 | 5,205.5 | 595.1 | 1,840.3 | 1,934.1 | 0.00 | 0.00 | |
| 5,700.0 | 23.71 | 72.08 | 5,297.1 | 607.4 | 1,878.6 | 1,974.3 | 0.00 | 0.00 | |
| 5,800.0 | 23.71 | 72.08 | 5,388.7 | 619.8 | 1,916.8 | 2,014.5 | 0.00 | 0.00 | |
| 5,900.0 | 23.71 | 72.08 | 5,480.2 | 632.2 | 1,955.1 | 2,054.8 | 0.00 | 0.00 | |
| 5,907.4 | 23.71 | 72.08 | 5,487.0 | 633.1 | 1,957.9 | 2,057.7 | 0.00 | 0.00 | WASATCH_G_TVD |
| 6,000.0 | 23.71 | 72.08 | 5,571.8 | 644.6 | 1,993.3 | 2,095.0 | 0.00 | 0.00 | |
| 6,100.0 | 23.71 | 72.08 | 5,663.3 | 656.9 | 2,031.6 | 2,135.2 | 0.00 | 0.00 | |
| 6,200.0 | 23.71 | 72.08 | 5,754.9 | 669.3 | 2,069.8 | 2,175.4 | 0.00 | 0.00 | |
| 6,300.0 | 23.71 | 72.08 | 5,846.5 | 681.7 | 2,108.1 | 2,215.6 | 0.00 | 0.00 | |
| 6,400.0 | 23.71 | 72.08 | 5,938.0 | 694.0 | 2,146.4 | 2,255.8 | 0.00 | 0.00 | |
| 6,500.0 | 23.71 | 72.08 | 6,029.6 | 706.4 | 2,184.6 | 2,296.0 | 0.00 | 0.00 | |
| 6,600.0 | 23.71 | 72.08 | 6,121.1 | 718.8 | 2,222.9 | 2,336.2 | 0.00 | 0.00 | |
| 6,700.0 | 23.71 | 72.08 | 6,212.7 | 731.1 | 2,261.1 | 2,376.4 | 0.00 | 0.00 | |
| 6,800.0 | 23.71 | 72.08 | 6,304.3 | 743.5 | 2,299.4 | 2,416.6 | 0.00 | 0.00 | |
| 6,900.0 | 23.71 | 72.08 | 6,395.8 | 755.9 | 2,337.6 | 2,456.8 | 0.00 | 0.00 | |
| 7,000.0 | 23.71 | 72.08 | 6,487.4 | 768.3 | 2,375.9 | 2,497.0 | 0.00 | 0.00 | |
| 7,100.0 | 23.71 | 72.08 | 6,579.0 | 780.6 | 2,414.1 | 2,537.2 | 0.00 | 0.00 | |
| 7,200.0 | 23.71 | 72.08 | 6,670.5 | 793.0 | 2,452.4 | 2,577.4 | 0.00 | 0.00 | |
| 7,300.0 | 23.71 | 72.08 | 6,762.1 | 805.4 | 2,490.7 | 2,617.6 | 0.00 | 0.00 | |
| 7,400.0 | 23.71 | 72.08 | 6,853.6 | 817.7 | 2,528.9 | 2,657.8 | 0.00 | 0.00 | |
| 7,500.0 | 23.71 | 72.08 | 6,945.2 | 830.1 | 2,567.2 | 2,698.0 | 0.00 | 0.00 | |
| 7,513.0 | 23.71 | 72.08 | 6,957.1 | 831.7 | 2,572.2 | 2,703.3 | 0.00 | 0.00 | Start 3° Drop @ 7513' MD |
| 7,600.0 | 21.10 | 72.08 | 7,037.5 | 841.9 | 2,603.7 | 2,736.4 | 3.00 | -3.00 | |
| 7,700.0 | 18.10 | 72.08 | 7,131.7 | 852.2 | 2,635.6 | 2,770.0 | 3.00 | -3.00 | |
| 7,800.0 | 15.10 | 72.08 | 7,227.5 | 861.0 | 2,662.8 | 2,798.5 | 3.00 | -3.00 | |
| 7,900.0 | 12.10 | 72.08 | 7,324.7 | 868.3 | 2,685.1 | 2,822.0 | 3.00 | -3.00 | |
| 8,000.0 | 9.10 | 72.08 | 7,423.0 | 873.9 | 2,702.6 | 2,840.4 | 3.00 | -3.00 | |
| 8,100.0 | 6.10 | 72.08 | 7,522.1 | 878.0 | 2,715.2 | 2,853.6 | 3.00 | -3.00 | |
| 8,200.0 | 3.10 | 72.08 | 7,621.8 | 880.4 | 2,722.8 | 2,861.7 | 3.00 | -3.00 | |
| 8,263.3 | 1.20 | 72.08 | 7,685.0 | 881.2 | 2,725.1 | 2,864.0 | 3.00 | -3.00 | WILLIAMS_FORK_TVD |
| 8,300.0 | 0.10 | 72.08 | 7,721.7 | 881.3 | 2,725.5 | 2,864.4 | 3.00 | -3.00 | |
| 8,303.3 | 0.00 | 0.00 | 7,725.0 | 881.3 | 2,725.5 | 2,864.4 | 3.00 | -3.00 | EOD @ 8303.3' MD - TOG TVD |
| 8,400.0 | 0.24 | 239.59 | 7,821.7 | 881.2 | 2,725.3 | 2,864.2 | 0.25 | 0.25 | |
| 8,401.4 | 0.25 | 239.59 | 7,823.1 | 881.2 | 2,725.3 | 2,864.2 | 0.25 | 0.25 | |
| 8,500.0 | 0.25 | 239.59 | 7,921.7 | 881.0 | 2,725.0 | 2,863.8 | 0.00 | 0.00 | |
| 8,600.0 | 0.25 | 239.59 | 8,021.7 | 880.8 | 2,724.6 | 2,863.4 | 0.00 | 0.00 | |
| 8,700.0 | 0.25 | 239.59 | 8,121.7 | 880.5 | 2,724.2 | 2,863.0 | 0.00 | 0.00 | |
| 8,800.0 | 0.25 | 239.59 | 8,221.7 | 880.3 | 2,723.8 | 2,862.6 | 0.00 | 0.00 | |
| 8,900.0 | 0.25 | 239.59 | 8,321.7 | 880.1 | 2,723.5 | 2,862.2 | 0.00 | 0.00 | |
| 9,000.0 | 0.25 | 239.59 | 8,421.7 | 879.9 | 2,723.1 | 2,861.7 | 0.00 | 0.00 | |
| 9,100.0 | 0.25 | 239.59 | 8,521.7 | 879.7 | 2,722.7 | 2,861.3 | 0.00 | 0.00 | |
| 9,200.0 | 0.25 | 239.59 | 8,621.7 | 879.5 | 2,722.4 | 2,860.9 | 0.00 | 0.00 | |

Cathedral Energy Services

Planning Report

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well 8507E-27 L27 496 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 8136.0ft (Original Well Elev) |
| Project: | Story Gulch | MD Reference: | WELL @ 8136.0ft (Original Well Elev) |
| Site: | S27-T4S-R96W (L27 496) | North Reference: | True |
| Well: | 8507E-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 |
| 9,300.0 | 0.25 | 239.59 | 8,721.7 | 879.2 | 2,722.0 | 2,860.5 | 0.00 | 0.00 | |
| 9,400.0 | 0.25 | 239.59 | 8,821.7 | 879.0 | 2,721.6 | 2,860.1 | 0.00 | 0.00 | |
| 9,500.0 | 0.25 | 239.59 | 8,921.7 | 878.8 | 2,721.3 | 2,859.6 | 0.00 | 0.00 | |
| 9,600.0 | 0.25 | 239.59 | 9,021.7 | 878.6 | 2,720.9 | 2,859.2 | 0.00 | 0.00 | |
| 9,700.0 | 0.25 | 239.59 | 9,121.7 | 878.4 | 2,720.5 | 2,858.8 | 0.00 | 0.00 | |
| 9,800.0 | 0.25 | 239.59 | 9,221.7 | 878.2 | 2,720.2 | 2,858.4 | 0.00 | 0.00 | |
| 9,900.0 | 0.25 | 239.59 | 9,321.7 | 877.9 | 2,719.8 | 2,858.0 | 0.00 | 0.00 | |
| 10,000.0 | 0.25 | 239.59 | 9,421.7 | 877.7 | 2,719.4 | 2,857.6 | 0.00 | 0.00 | |
| 10,100.0 | 0.25 | 239.59 | 9,521.7 | 877.5 | 2,719.0 | 2,857.1 | 0.00 | 0.00 | |
| 10,200.0 | 0.25 | 239.59 | 9,621.7 | 877.3 | 2,718.7 | 2,856.7 | 0.00 | 0.00 | |
| 10,300.0 | 0.25 | 239.59 | 9,721.7 | 877.1 | 2,718.3 | 2,856.3 | 0.00 | 0.00 | |
| 10,400.0 | 0.25 | 239.59 | 9,821.7 | 876.9 | 2,717.9 | 2,855.9 | 0.00 | 0.00 | |
| 10,500.0 | 0.25 | 239.59 | 9,921.7 | 876.6 | 2,717.6 | 2,855.5 | 0.00 | 0.00 | |
| 10,600.0 | 0.25 | 239.59 | 10,021.7 | 876.4 | 2,717.2 | 2,855.0 | 0.00 | 0.00 | |
| 10,700.0 | 0.25 | 239.59 | 10,121.7 | 876.2 | 2,716.8 | 2,854.6 | 0.00 | 0.00 | |
| 10,800.0 | 0.25 | 239.59 | 10,221.7 | 876.0 | 2,716.5 | 2,854.2 | 0.00 | 0.00 | |
| 10,900.0 | 0.25 | 239.59 | 10,321.7 | 875.8 | 2,716.1 | 2,853.8 | 0.00 | 0.00 | |
| 11,000.0 | 0.25 | 239.59 | 10,421.7 | 875.6 | 2,715.7 | 2,853.4 | 0.00 | 0.00 | |
| 11,100.0 | 0.25 | 239.59 | 10,521.7 | 875.3 | 2,715.4 | 2,853.0 | 0.00 | 0.00 | |
| 11,200.0 | 0.25 | 239.59 | 10,621.7 | 875.1 | 2,715.0 | 2,852.5 | 0.00 | 0.00 | |
| 11,300.0 | 0.25 | 239.59 | 10,721.7 | 874.9 | 2,714.6 | 2,852.1 | 0.00 | 0.00 | |
| 11,400.0 | 0.25 | 239.59 | 10,821.7 | 874.7 | 2,714.2 | 2,851.7 | 0.00 | 0.00 | |
| 11,500.0 | 0.25 | 239.59 | 10,921.7 | 874.5 | 2,713.9 | 2,851.3 | 0.00 | 0.00 | |
| 11,600.0 | 0.25 | 239.59 | 11,021.7 | 874.3 | 2,713.5 | 2,850.9 | 0.00 | 0.00 | |
| 11,673.3 | 0.25 | 239.59 | 11,095.0 | 874.1 | 2,713.2 | 2,850.6 | 0.00 | 0.00 | CAMEO_TVD |
| 11,700.0 | 0.25 | 239.59 | 11,121.7 | 874.0 | 2,713.1 | 2,850.4 | 0.00 | 0.00 | |
| 11,800.0 | 0.25 | 239.59 | 11,221.7 | 873.8 | 2,712.8 | 2,850.0 | 0.00 | 0.00 | |
| 11,900.0 | 0.25 | 239.59 | 11,321.7 | 873.6 | 2,712.4 | 2,849.6 | 0.00 | 0.00 | |
| 12,000.0 | 0.25 | 239.59 | 11,421.7 | 873.4 | 2,712.0 | 2,849.2 | 0.00 | 0.00 | |
| 12,046.3 | 0.25 | 239.59 | 11,468.0 | 873.3 | 2,711.9 | 2,849.0 | 0.00 | 0.00 | ROLLINS_TVD |
| 12,100.0 | 0.25 | 239.59 | 11,521.7 | 873.2 | 2,711.7 | 2,848.8 | 0.00 | 0.00 | |
| 12,200.0 | 0.25 | 239.59 | 11,621.7 | 873.0 | 2,711.3 | 2,848.4 | 0.00 | 0.00 | |
| 12,300.0 | 0.25 | 239.59 | 11,721.7 | 872.7 | 2,710.9 | 2,847.9 | 0.00 | 0.00 | |
| 12,321.3 | 0.25 | 239.59 | 11,743.0 | 872.7 | 2,710.8 | 2,847.9 | 0.00 | 0.00 | COZZETTE_TVD |
| 12,400.0 | 0.25 | 239.59 | 11,821.7 | 872.5 | 2,710.6 | 2,847.5 | 0.00 | 0.00 | |
| 12,500.0 | 0.25 | 239.59 | 11,921.7 | 872.3 | 2,710.2 | 2,847.1 | 0.00 | 0.00 | |
| 12,506.3 | 0.25 | 239.59 | 11,928.0 | 872.3 | 2,710.2 | 2,847.1 | 0.00 | 0.00 | CORCORAN_TVD |
| 12,600.0 | 0.25 | 239.59 | 12,021.7 | 872.1 | 2,709.8 | 2,846.7 | 0.00 | 0.00 | |
| 12,700.0 | 0.25 | 239.59 | 12,121.7 | 871.9 | 2,709.4 | 2,846.3 | 0.00 | 0.00 | |
| 12,793.3 | 0.25 | 239.59 | 12,215.0 | 871.7 | 2,709.1 | 2,845.9 | 0.00 | 0.00 | UPPER_SEGO_TVD |
| 12,800.0 | 0.25 | 239.59 | 12,221.7 | 871.7 | 2,709.1 | 2,845.9 | 0.00 | 0.00 | |
| 12,900.0 | 0.25 | 239.59 | 12,321.7 | 871.4 | 2,708.7 | 2,845.4 | 0.00 | 0.00 | |
| 12,943.3 | 0.25 | 239.59 | 12,365.0 | 871.3 | 2,708.5 | 2,845.3 | 0.00 | 0.00 | TD @ 12943.3' MD - SEGO_BASE_TARGET_1 |
| 13,000.0 | 0.25 | 239.59 | 12,421.7 | 871.2 | 2,708.3 | 2,845.0 | 0.00 | 0.00 | |
| 13,093.3 | 0.25 | 239.59 | 12,515.0 | 871.0 | 2,708.0 | 2,844.6 | 0.00 | 0.00 | Permit TD @ 13093.3' MD |

Cathedral Energy Services

Planning Report

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well 8507E-27 L27 496 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 8136.0ft (Original Well Elev) |
| Project: | Story Gulch | MD Reference: | WELL @ 8136.0ft (Original Well Elev) |
| Site: | S27-T4S-R96W (L27 496) | North Reference: | True |
| Well: | 8507E-27 L27 496 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | DD | | |
| Design: | Plan #1 | | |

| Targets | | | | | | | | | |
|--------------------------------------|-----------|----------|----------|-------|---------|--------------|--------------|-----------------|----------------|
| Target Name | | | | | | | | | |
| - hit/miss target | Dip Angle | Dip Dir. | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
| - Shape | (°) | (°) | (ft) | (ft) | (ft) | (ft) | (ft) | | |
| L27 496 8507E-27 TGT | 0.00 | 0.00 | 7,725.0 | 881.3 | 2,725.5 | 1,681,176.22 | 2,254,032.15 | 39° 40' 25.48 N | 108° 9' 1.73 W |
| - plan hits target center | | | | | | | | | |
| - Point | | | | | | | | | |
| L27 496 8507E-27 PBHI | 0.00 | 0.00 | 12,365.0 | 871.3 | 2,708.5 | 1,681,166.77 | 2,254,014.91 | 39° 40' 25.38 N | 108° 9' 1.95 W |
| - plan hits target center | | | | | | | | | |
| - Rectangle (sides W30.0 H50.0 D0.0) | | | | | | | | | |

| Formations | | | | | | |
|----------------|----------------|----------------------|-----------|-----|---------------|--|
| Measured Depth | Vertical Depth | Name | Lithology | Dip | Dip Direction | |
| (ft) | (ft) | | | (°) | (°) | |
| 1,144.7 | 1,126.0 | A_GROOVE_TVD | | | | |
| 1,309.4 | 1,277.0 | B_GROOVE_TVD | | | | |
| 1,331.3 | 1,297.0 | B_GROOVE_BASE_TVD | | | | |
| 2,375.4 | 2,253.0 | GARDEN_GULCH_TVD. | | | | |
| 3,455.5 | 3,242.0 | WASATCH_FM_TVD | | | | |
| 5,907.4 | 5,487.0 | WASATCH_G_TVD | | | | |
| 8,263.3 | 7,685.0 | WILLIAMS_FORK_TVD | | | | |
| 8,303.3 | 7,725.0 | TOG TVD | | | | |
| 11,673.3 | 11,095.0 | CAMEO_TVD | | | | |
| 12,046.3 | 11,468.0 | ROLLINS_TVD | | | | |
| 12,321.3 | 11,743.0 | COZZETTE_TVD | | | | |
| 12,506.3 | 11,928.0 | CORCORAN_TVD | | | | |
| 12,793.3 | 12,215.0 | UPPER_SEGO_TVD | | | | |
| 12,943.3 | 12,365.0 | SEGO_BASE_TARGET_TVD | | | | |

| Plan Annotations | | | | |
|------------------|----------------|-------------------|------------|--------------------------|
| Measured Depth | Vertical Depth | Local Coordinates | | |
| (ft) | (ft) | +N/-S (ft) | +E/-W (ft) | Comment |
| 400.0 | 400.0 | 0.0 | 0.0 | KOP @ 400' MD |
| 1,190.2 | 1,167.9 | 49.6 | 153.3 | EOB; Inc=23.71° |
| 7,513.0 | 6,957.1 | 831.7 | 2,572.2 | Start 3° Drop @ 7513' MD |
| 8,303.3 | 7,725.0 | 881.3 | 2,725.5 | EOD @ 8303.3' MD |
| 12,943.3 | 12,365.0 | 881.2 | 2,725.3 | TD @ 12943.3' MD |
| 13,093.3 | 12,515.0 | 871.3 | 2,708.5 | Permit TD @ 13093.3' MD |