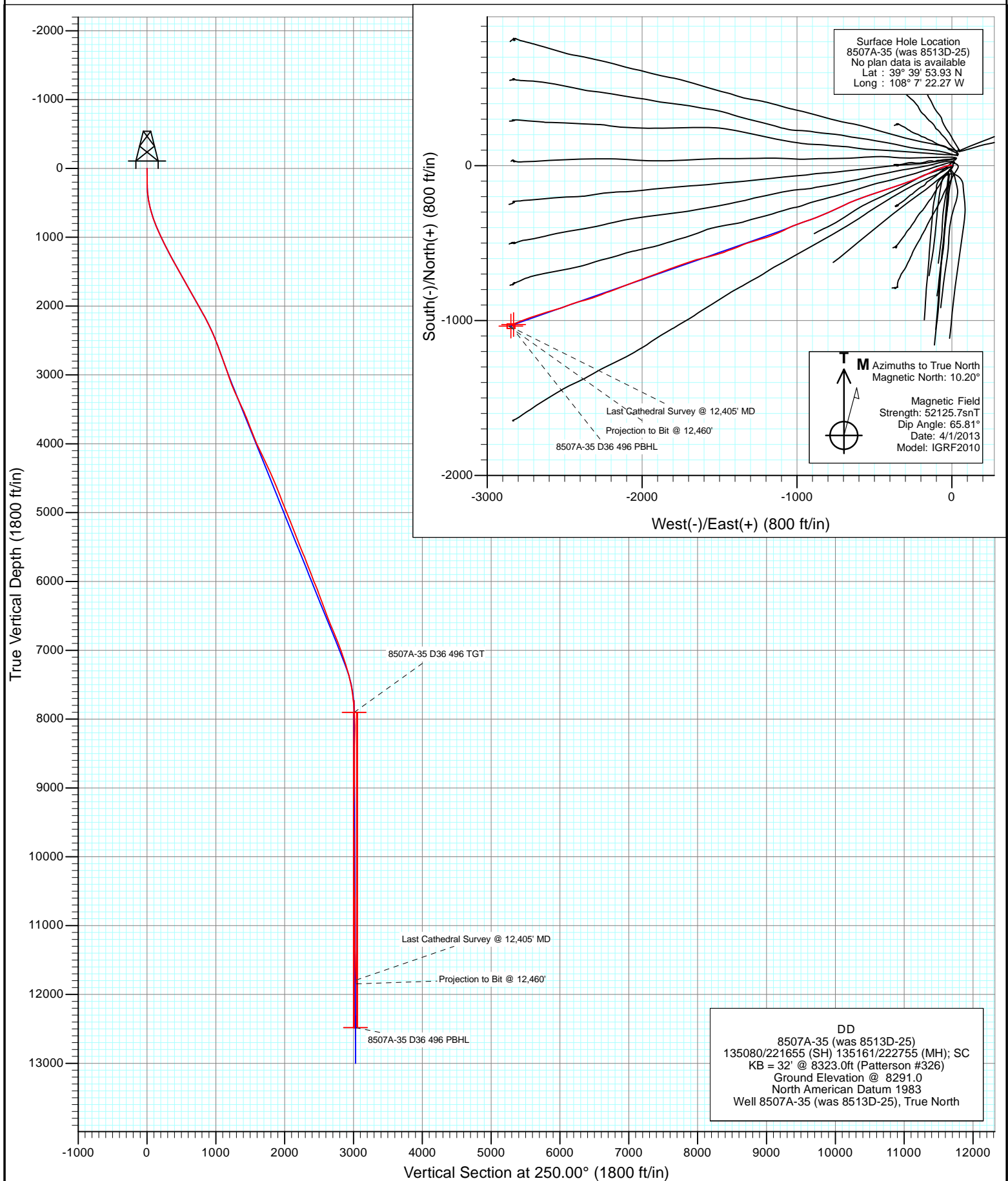


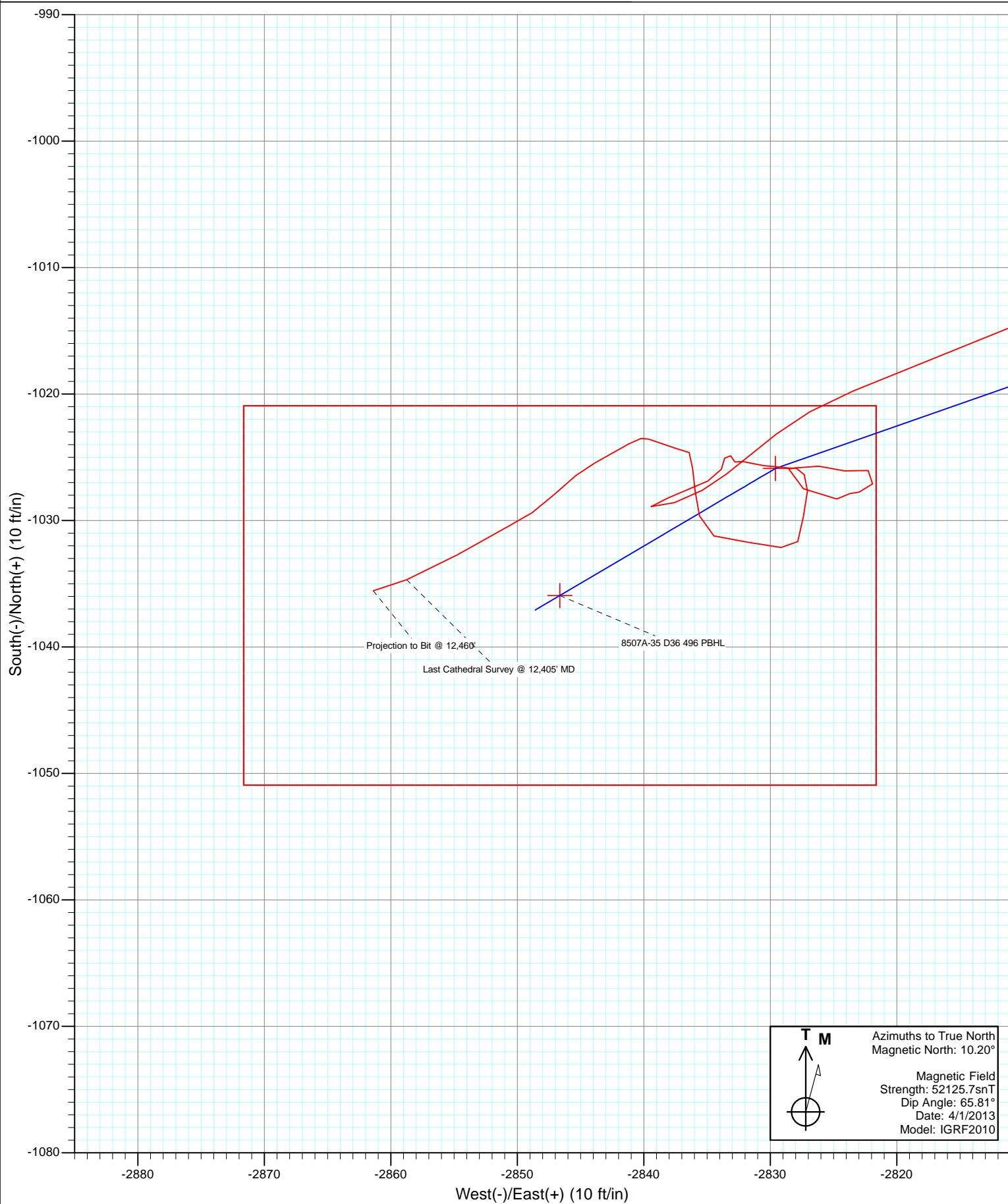


Project: Story Gulch
Site: S36-T4S-R96W (D36 496)
Well: 8507A-35 (was 8513D-25)
Wellbore: DD
Design: FINAL





Project: Story Gulch
Site: S36-T4S-R96W (D36 496)
Well: 8507A-35 (was 8513D-25)
Wellbore: DD
Design: FINAL



Cathedral Energy Services

Survey Report

| | | | |
|------------------|----------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well 8507A-35 (was 8513D-25) |
| Project: | Story Gulch | TVD Reference: | KB = 32' @ 8323.0ft (Patterson #326) |
| Site: | S36-T4S-R96W (D36 496) | MD Reference: | KB = 32' @ 8323.0ft (Patterson #326) |
| Well: | 8507A-35 (was 8513D-25) | 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 | | S36-T4S-R96W (D36 496) | | | |
| Site Position: | | Northing: | 1,590,537.44 ft | Latitude: | 39° 25' 42.24 N |
| From: | Lat/Long | Easting: | 2,297,786.47 ft | Longitude: | 107° 59' 10.64 W |
| Position Uncertainty: | 0.0 ft | Slot Radius: | 13.200 in | Grid Convergence: | -1.57 ° |

| | | | | | | |
|----------------------|-------------------------|--------|---------------------|-----------------|---------------|-----------------|
| Well | 8507A-35 (was 8513D-25) | | | | | |
| Well Position | +N/-S | 0.0 ft | Northing: | 1,677,759.66 ft | Latitude: | 39° 39' 53.93 N |
| | +E/-W | 0.0 ft | Easting: | 2,261,713.87 ft | Longitude: | 108° 7' 22.27 W |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: | ft | Ground Level: | 8,291.0 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | DD | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 4/1/2013 | 10.20 | 65.81 | 52,126 |

| | | | | | |
|--------------------------|-------------------------|-------------------|-------------------|----------------------|-----|
| Design | DD | | | | |
| Audit Notes: | | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) | +N/-S (ft) | +E/-W (ft) | Direction (°) | |
| | 0.0 | 0.0 | 0.0 | 250.00 | |

| | | | | | |
|-----------------------|----------------|--------------------------|------------------|--------------------|--|
| Survey Program | Date | 4/15/2013 | | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description | |
| 167.0 | 12,460.0 | Survey #1 (DD) | 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 | | |
| 167.0 | 1.00 | 293.20 | 167.0 | 0.6 | -1.3 | 1.1 | 0.60 | 0.60 | | |
| 213.0 | 1.80 | 297.00 | 213.0 | 1.1 | -2.4 | 1.8 | 1.75 | 1.74 | | |
| 243.0 | 2.50 | 296.70 | 243.0 | 1.6 | -3.4 | 2.6 | 2.33 | 2.33 | | |
| 274.0 | 3.20 | 285.30 | 273.9 | 2.1 | -4.8 | 3.8 | 2.89 | 2.26 | | |
| 304.0 | 4.00 | 277.70 | 303.9 | 2.5 | -6.6 | 5.4 | 3.10 | 2.67 | | |
| 335.0 | 4.90 | 277.30 | 334.8 | 2.8 | -9.0 | 7.5 | 2.90 | 2.90 | | |
| 366.0 | 5.80 | 267.80 | 365.6 | 2.9 | -11.9 | 10.2 | 4.06 | 2.90 | | |
| 396.0 | 6.70 | 259.70 | 395.5 | 2.5 | -15.1 | 13.4 | 4.19 | 3.00 | | |
| 426.0 | 7.90 | 257.00 | 425.2 | 1.7 | -18.9 | 17.1 | 4.16 | 4.00 | | |
| 456.0 | 8.70 | 255.80 | 454.9 | 0.7 | -23.1 | 21.4 | 2.73 | 2.67 | | |
| 486.0 | 10.20 | 253.10 | 484.5 | -0.6 | -27.8 | 26.4 | 5.21 | 5.00 | | |
| 517.0 | 11.60 | 248.40 | 514.9 | -2.6 | -33.3 | 32.2 | 5.35 | 4.52 | | |

Cathedral Energy Services

Survey Report

| | | | |
|------------------|----------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well 8507A-35 (was 8513D-25) |
| Project: | Story Gulch | TVD Reference: | KB = 32' @ 8323.0ft (Patterson #326) |
| Site: | S36-T4S-R96W (D36 496) | MD Reference: | KB = 32' @ 8323.0ft (Patterson #326) |
| Well: | 8507A-35 (was 8513D-25) | 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 |
| 611.0 | 15.80 | 255.40 | 606.2 | -9.3 | -54.5 | 54.4 | 4.80 | 4.47 | |
| 703.0 | 17.70 | 248.90 | 694.3 | -17.5 | -79.7 | 80.9 | 2.90 | 2.07 | |
| 794.0 | 20.70 | 244.50 | 780.3 | -29.4 | -107.1 | 110.7 | 3.66 | 3.30 | |
| 886.0 | 23.30 | 244.20 | 865.6 | -44.3 | -138.2 | 145.0 | 2.83 | 2.83 | |
| 977.0 | 24.80 | 245.50 | 948.7 | -60.0 | -171.8 | 181.9 | 1.75 | 1.65 | |
| 1,068.0 | 26.30 | 246.60 | 1,030.8 | -76.0 | -207.6 | 221.1 | 1.73 | 1.65 | |
| 1,160.0 | 26.20 | 249.00 | 1,113.3 | -91.3 | -245.3 | 261.7 | 1.16 | -0.11 | |
| 1,251.0 | 27.20 | 249.60 | 1,194.6 | -105.8 | -283.6 | 302.6 | 1.14 | 1.10 | |
| 1,343.0 | 27.70 | 250.60 | 1,276.2 | -120.2 | -323.4 | 345.0 | 0.74 | 0.54 | |
| 1,435.0 | 29.00 | 251.90 | 1,357.2 | -134.2 | -364.8 | 388.7 | 1.56 | 1.41 | |
| 1,526.0 | 30.20 | 251.00 | 1,436.3 | -148.6 | -407.4 | 433.6 | 1.41 | 1.32 | |
| 1,617.0 | 29.00 | 251.60 | 1,515.4 | -163.0 | -450.0 | 478.6 | 1.36 | -1.32 | |
| 1,709.0 | 29.10 | 250.90 | 1,595.9 | -177.3 | -492.3 | 523.2 | 0.39 | 0.11 | |
| 1,800.0 | 29.40 | 250.60 | 1,675.2 | -192.0 | -534.3 | 567.7 | 0.37 | 0.33 | |
| 1,891.0 | 29.50 | 251.00 | 1,754.5 | -206.7 | -576.5 | 612.4 | 0.24 | 0.11 | |
| 1,983.0 | 29.50 | 248.90 | 1,834.6 | -222.2 | -619.1 | 657.7 | 1.12 | 0.00 | |
| 2,074.0 | 29.10 | 246.30 | 1,913.9 | -239.2 | -660.2 | 702.2 | 1.47 | -0.44 | |
| 2,165.0 | 29.40 | 244.70 | 1,993.3 | -257.6 | -700.7 | 746.5 | 0.92 | 0.33 | |
| 2,257.0 | 29.80 | 245.00 | 2,073.3 | -276.9 | -741.8 | 791.8 | 0.46 | 0.43 | |
| 2,349.0 | 28.60 | 246.20 | 2,153.6 | -295.5 | -782.7 | 836.5 | 1.45 | -1.30 | |
| 2,440.0 | 26.80 | 246.70 | 2,234.2 | -312.4 | -821.5 | 878.8 | 1.99 | -1.98 | |
| 2,532.0 | 25.40 | 246.70 | 2,316.8 | -328.4 | -858.6 | 919.2 | 1.52 | -1.52 | |
| 2,623.0 | 23.40 | 250.40 | 2,399.7 | -342.2 | -893.6 | 956.7 | 2.77 | -2.20 | |
| 2,715.0 | 21.90 | 252.20 | 2,484.6 | -353.6 | -927.1 | 992.1 | 1.80 | -1.63 | |
| 2,806.0 | 20.90 | 250.30 | 2,569.3 | -364.2 | -958.6 | 1,025.3 | 1.34 | -1.10 | |
| 2,898.0 | 20.10 | 249.50 | 2,655.5 | -375.3 | -988.8 | 1,057.6 | 0.92 | -0.87 | |
| 3,025.0 | 19.70 | 247.70 | 2,774.9 | -391.1 | -1,029.1 | 1,100.8 | 0.58 | -0.31 | |
| 3,169.0 | 20.30 | 241.90 | 2,910.2 | -412.0 | -1,073.6 | 1,149.8 | 1.44 | 0.42 | |
| 3,260.0 | 18.50 | 245.30 | 2,996.1 | -425.5 | -1,100.6 | 1,179.8 | 2.33 | -1.98 | |
| 3,352.0 | 19.20 | 247.50 | 3,083.1 | -437.4 | -1,127.9 | 1,209.4 | 1.08 | 0.76 | |
| 3,443.0 | 22.10 | 248.00 | 3,168.3 | -449.5 | -1,157.6 | 1,241.5 | 3.19 | 3.19 | |
| 3,535.0 | 24.20 | 252.10 | 3,252.9 | -461.8 | -1,191.6 | 1,277.6 | 2.88 | 2.28 | |
| 3,626.0 | 25.50 | 254.90 | 3,335.5 | -472.7 | -1,228.2 | 1,315.8 | 1.93 | 1.43 | |
| 3,718.0 | 25.10 | 252.30 | 3,418.6 | -483.7 | -1,265.9 | 1,355.0 | 1.28 | -0.43 | |
| 3,809.0 | 24.40 | 253.40 | 3,501.3 | -495.0 | -1,302.3 | 1,393.1 | 0.92 | -0.77 | |
| 3,901.0 | 22.60 | 249.60 | 3,585.6 | -506.6 | -1,337.1 | 1,429.7 | 2.56 | -1.96 | |
| 3,992.0 | 21.50 | 245.00 | 3,670.0 | -519.7 | -1,368.6 | 1,463.8 | 2.25 | -1.21 | |
| 4,084.0 | 21.40 | 250.20 | 3,755.6 | -532.5 | -1,399.7 | 1,497.4 | 2.07 | -0.11 | |
| 4,176.0 | 20.30 | 251.10 | 3,841.6 | -543.4 | -1,430.6 | 1,530.2 | 1.25 | -1.20 | |
| 4,266.0 | 21.90 | 246.80 | 3,925.6 | -555.1 | -1,460.8 | 1,562.5 | 2.47 | 1.78 | |
| 4,357.0 | 24.60 | 254.40 | 4,009.2 | -566.8 | -1,494.6 | 1,598.4 | 4.43 | 2.97 | |
| 4,449.0 | 26.00 | 252.90 | 4,092.4 | -577.9 | -1,532.4 | 1,637.6 | 1.67 | 1.52 | |
| 4,541.0 | 26.30 | 256.80 | 4,175.0 | -588.5 | -1,571.5 | 1,678.0 | 1.90 | 0.33 | |
| 4,632.0 | 25.00 | 257.80 | 4,257.0 | -597.2 | -1,609.9 | 1,717.1 | 1.51 | -1.43 | |
| 4,723.0 | 25.50 | 253.40 | 4,339.3 | -606.8 | -1,647.5 | 1,755.7 | 2.13 | 0.55 | |
| 4,815.0 | 23.60 | 250.60 | 4,423.0 | -618.6 | -1,683.8 | 1,793.9 | 2.42 | -2.07 | |
| 4,906.0 | 23.20 | 251.10 | 4,506.5 | -630.5 | -1,718.0 | 1,830.0 | 0.49 | -0.44 | |
| 4,998.0 | 23.30 | 250.80 | 4,591.0 | -642.3 | -1,752.3 | 1,866.3 | 0.17 | 0.11 | |
| 5,089.0 | 21.60 | 249.80 | 4,675.1 | -654.0 | -1,785.0 | 1,901.1 | 1.91 | -1.87 | |
| 5,181.0 | 21.10 | 253.10 | 4,760.8 | -664.7 | -1,816.8 | 1,934.5 | 1.41 | -0.54 | |
| 5,272.0 | 21.80 | 246.60 | 4,845.5 | -676.2 | -1,847.9 | 1,967.8 | 2.72 | 0.77 | |
| 5,364.0 | 21.30 | 250.70 | 4,931.1 | -688.5 | -1,879.4 | 2,001.5 | 1.72 | -0.54 | |
| 5,455.0 | 22.20 | 250.10 | 5,015.6 | -699.8 | -1,911.2 | 2,035.2 | 1.02 | 0.99 | |

Cathedral Energy Services

Survey Report

| | | | |
|------------------|----------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well 8507A-35 (was 8513D-25) |
| Project: | Story Gulch | TVD Reference: | KB = 32' @ 8323.0ft (Patterson #326) |
| Site: | S36-T4S-R96W (D36 496) | MD Reference: | KB = 32' @ 8323.0ft (Patterson #326) |
| Well: | 8507A-35 (was 8513D-25) | 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 |
| 5,547.0 | 21.70 | 248.60 | 5,101.0 | -711.9 | -1,943.3 | 2,069.6 | 0.82 | -0.54 | |
| 5,638.0 | 22.50 | 249.60 | 5,185.3 | -724.1 | -1,975.3 | 2,103.9 | 0.97 | 0.88 | |
| 5,730.0 | 21.90 | 250.30 | 5,270.4 | -736.0 | -2,008.0 | 2,138.6 | 0.71 | -0.65 | |
| 5,821.0 | 20.20 | 251.20 | 5,355.4 | -746.8 | -2,038.8 | 2,171.3 | 1.90 | -1.87 | |
| 5,912.0 | 21.80 | 248.20 | 5,440.3 | -758.2 | -2,069.4 | 2,203.9 | 2.12 | 1.76 | |
| 6,004.0 | 22.10 | 246.80 | 5,525.6 | -771.3 | -2,101.2 | 2,238.2 | 0.66 | 0.33 | |
| 6,096.0 | 22.90 | 250.80 | 5,610.6 | -784.0 | -2,134.0 | 2,273.4 | 1.88 | 0.87 | |
| 6,187.0 | 21.00 | 246.50 | 5,695.1 | -796.3 | -2,165.6 | 2,307.4 | 2.73 | -2.09 | |
| 6,280.0 | 22.10 | 251.60 | 5,781.6 | -808.5 | -2,197.5 | 2,341.5 | 2.33 | 1.18 | |
| 6,370.0 | 20.10 | 250.30 | 5,865.5 | -819.1 | -2,228.2 | 2,373.9 | 2.28 | -2.22 | |
| 6,462.0 | 21.10 | 246.30 | 5,951.6 | -831.1 | -2,258.2 | 2,406.3 | 1.88 | 1.09 | |
| 6,553.0 | 22.50 | 250.30 | 6,036.1 | -843.5 | -2,289.6 | 2,440.0 | 2.24 | 1.54 | |
| 6,644.0 | 22.10 | 252.20 | 6,120.3 | -854.6 | -2,322.3 | 2,474.5 | 0.91 | -0.44 | |
| 6,736.0 | 20.70 | 253.10 | 6,206.0 | -864.6 | -2,354.3 | 2,508.1 | 1.56 | -1.52 | |
| 6,827.0 | 19.80 | 257.00 | 6,291.4 | -872.8 | -2,384.7 | 2,539.4 | 1.78 | -0.99 | |
| 6,919.0 | 19.30 | 254.00 | 6,378.1 | -880.5 | -2,414.5 | 2,570.1 | 1.22 | -0.54 | |
| 7,010.0 | 21.40 | 251.40 | 6,463.4 | -889.9 | -2,444.7 | 2,601.7 | 2.51 | 2.31 | |
| 7,101.0 | 22.10 | 248.20 | 6,547.9 | -901.6 | -2,476.4 | 2,635.4 | 1.51 | 0.77 | |
| 7,193.0 | 21.90 | 249.90 | 6,633.2 | -913.9 | -2,508.5 | 2,669.8 | 0.73 | -0.22 | |
| 7,284.0 | 22.90 | 254.00 | 6,717.3 | -924.6 | -2,541.5 | 2,704.5 | 2.04 | 1.10 | |
| 7,376.0 | 22.10 | 255.20 | 6,802.3 | -934.0 | -2,575.4 | 2,739.6 | 1.00 | -0.87 | |
| 7,467.0 | 21.30 | 251.60 | 6,886.9 | -943.6 | -2,607.7 | 2,773.1 | 1.71 | -0.88 | |
| 7,559.0 | 20.30 | 251.40 | 6,972.9 | -953.9 | -2,638.7 | 2,805.8 | 1.09 | -1.09 | |
| 7,651.0 | 19.70 | 252.50 | 7,059.3 | -963.7 | -2,668.6 | 2,837.2 | 0.77 | -0.65 | |
| 7,743.0 | 18.10 | 252.30 | 7,146.4 | -972.7 | -2,697.0 | 2,867.0 | 1.74 | -1.74 | |
| 7,834.0 | 17.90 | 250.80 | 7,232.9 | -981.6 | -2,723.7 | 2,895.1 | 0.55 | -0.22 | |
| 7,926.0 | 14.80 | 250.10 | 7,321.2 | -990.2 | -2,748.1 | 2,921.0 | 3.38 | -3.37 | |
| 8,017.0 | 13.80 | 249.10 | 7,409.4 | -998.1 | -2,769.1 | 2,943.5 | 1.13 | -1.10 | |
| 8,108.0 | 11.60 | 248.50 | 7,498.1 | -1,005.3 | -2,787.8 | 2,963.5 | 2.42 | -2.42 | |
| 8,200.0 | 8.70 | 247.30 | 7,588.7 | -1,011.4 | -2,802.8 | 2,979.7 | 3.16 | -3.15 | |
| 8,292.0 | 7.10 | 248.30 | 7,679.8 | -1,016.1 | -2,814.5 | 2,992.3 | 1.75 | -1.74 | |
| 8,383.0 | 5.10 | 247.40 | 7,770.3 | -1,019.8 | -2,823.5 | 3,002.0 | 2.20 | -2.20 | |
| 8,475.0 | 3.60 | 231.20 | 7,862.0 | -1,023.2 | -2,829.5 | 3,008.8 | 2.09 | -1.63 | |
| 8,566.0 | 2.80 | 231.30 | 7,952.9 | -1,026.3 | -2,833.5 | 3,013.6 | 0.88 | -0.88 | |
| 8,658.0 | 3.10 | 250.20 | 8,044.8 | -1,028.6 | -2,837.6 | 3,018.2 | 1.10 | 0.33 | |
| 8,750.0 | 0.90 | 41.80 | 8,136.7 | -1,028.9 | -2,839.4 | 3,020.1 | 4.26 | -2.39 | |
| 8,841.0 | 1.10 | 80.80 | 8,227.7 | -1,028.2 | -2,838.1 | 3,018.6 | 0.76 | 0.22 | |
| 9,024.0 | 1.10 | 53.00 | 8,410.7 | -1,026.9 | -2,834.9 | 3,015.2 | 0.29 | 0.00 | |
| 9,115.0 | 0.70 | 42.60 | 8,501.7 | -1,025.9 | -2,833.9 | 3,013.9 | 0.47 | -0.44 | |
| 9,206.0 | 0.60 | 346.60 | 8,592.7 | -1,025.1 | -2,833.6 | 3,013.3 | 0.68 | -0.11 | |
| 9,298.0 | 0.80 | 115.50 | 8,684.7 | -1,024.9 | -2,833.1 | 3,012.8 | 1.38 | 0.22 | |
| 9,390.0 | 0.40 | 227.50 | 8,776.7 | -1,025.4 | -2,832.8 | 3,012.7 | 1.11 | -0.43 | |
| 9,481.0 | 1.10 | 72.90 | 8,867.7 | -1,025.3 | -2,832.2 | 3,012.1 | 1.62 | 0.77 | |
| 9,570.0 | 1.30 | 124.50 | 8,956.7 | -1,025.7 | -2,830.5 | 3,010.6 | 1.19 | 0.22 | |
| 9,664.0 | 1.70 | 73.90 | 9,050.6 | -1,025.9 | -2,828.3 | 3,008.6 | 1.42 | 0.43 | |
| 9,756.0 | 1.10 | 103.80 | 9,142.6 | -1,025.7 | -2,826.2 | 3,006.5 | 1.01 | -0.65 | |
| 9,847.0 | 1.50 | 97.90 | 9,233.6 | -1,026.1 | -2,824.1 | 3,004.7 | 0.46 | 0.44 | |
| 9,938.0 | 0.90 | 74.60 | 9,324.6 | -1,026.0 | -2,822.3 | 3,003.0 | 0.84 | -0.66 | |
| 10,122.0 | 1.10 | 216.00 | 9,508.6 | -1,027.1 | -2,821.9 | 3,003.0 | 1.03 | 0.11 | |
| 10,213.0 | 0.70 | 274.50 | 9,599.6 | -1,027.8 | -2,823.0 | 3,004.2 | 1.04 | -0.44 | |
| 10,304.0 | 1.70 | 244.50 | 9,690.5 | -1,028.3 | -2,824.7 | 3,006.1 | 1.26 | 1.10 | |
| 10,395.0 | 2.50 | 314.40 | 9,781.5 | -1,027.5 | -2,827.4 | 3,008.3 | 2.74 | 0.88 | |
| 10,487.0 | 0.40 | 57.70 | 9,873.5 | -1,025.9 | -2,828.5 | 3,008.8 | 2.85 | -2.28 | |

Cathedral Energy Services

Survey Report

| | | | |
|------------------|----------------------------|-------------------------------------|--------------------------------------|
| Company: | EnCana Oil & Gas (USA) Inc | Local Co-ordinate Reference: | Well 8507A-35 (was 8513D-25) |
| Project: | Story Gulch | TVD Reference: | KB = 32' @ 8323.0ft (Patterson #326) |
| Site: | S36-T4S-R96W (D36 496) | MD Reference: | KB = 32' @ 8323.0ft (Patterson #326) |
| Well: | 8507A-35 (was 8513D-25) | 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 |
| 10,579.0 | 0.40 | 110.10 | 9,965.5 | -1,025.8 | -2,828.0 | 3,008.3 | 0.38 | 0.00 | |
| 10,670.0 | 0.70 | 138.40 | 10,056.4 | -1,026.4 | -2,827.3 | 3,007.8 | 0.44 | 0.33 | |
| 10,762.0 | 1.10 | 187.90 | 10,148.4 | -1,027.7 | -2,827.1 | 3,008.0 | 0.91 | 0.43 | |
| 10,853.0 | 1.50 | 190.20 | 10,239.4 | -1,029.7 | -2,827.4 | 3,009.0 | 0.44 | 0.44 | |
| 10,945.0 | 1.00 | 196.60 | 10,331.4 | -1,031.7 | -2,827.8 | 3,010.1 | 0.56 | -0.54 | |
| 11,037.0 | 1.40 | 285.40 | 10,423.4 | -1,032.1 | -2,829.1 | 3,011.5 | 1.85 | 0.43 | |
| 11,128.0 | 2.00 | 274.30 | 10,514.3 | -1,031.7 | -2,831.8 | 3,013.9 | 0.75 | 0.66 | |
| 11,220.0 | 1.40 | 289.80 | 10,606.3 | -1,031.2 | -2,834.5 | 3,016.2 | 0.82 | -0.65 | |
| 11,312.0 | 1.50 | 355.80 | 10,698.3 | -1,029.6 | -2,835.6 | 3,016.7 | 1.72 | 0.11 | |
| 11,403.0 | 1.00 | 341.20 | 10,789.3 | -1,027.7 | -2,835.9 | 3,016.4 | 0.65 | -0.55 | |
| 11,495.0 | 1.30 | 3.60 | 10,881.2 | -1,025.9 | -2,836.1 | 3,016.0 | 0.58 | 0.33 | |
| 11,587.0 | 0.50 | 304.00 | 10,973.2 | -1,024.6 | -2,836.4 | 3,015.8 | 1.23 | -0.87 | |
| 11,678.0 | 0.90 | 277.70 | 11,064.2 | -1,024.3 | -2,837.4 | 3,016.7 | 0.55 | 0.44 | |
| 11,861.0 | 0.60 | 306.20 | 11,247.2 | -1,023.6 | -2,839.6 | 3,018.5 | 0.26 | -0.16 | |
| 11,953.0 | 1.70 | 239.70 | 11,339.2 | -1,024.0 | -2,841.2 | 3,020.1 | 1.70 | 1.20 | |
| 12,045.0 | 2.10 | 241.50 | 11,431.1 | -1,025.4 | -2,843.9 | 3,023.1 | 0.44 | 0.43 | |
| 12,136.0 | 3.00 | 225.80 | 11,522.0 | -1,027.9 | -2,847.0 | 3,026.9 | 1.24 | 0.99 | |
| 12,228.0 | 2.70 | 245.70 | 11,613.9 | -1,030.5 | -2,850.7 | 3,031.3 | 1.12 | -0.33 | |
| 12,319.0 | 3.10 | 236.50 | 11,704.8 | -1,032.7 | -2,854.7 | 3,035.8 | 0.67 | 0.44 | |
| 12,405.0 | 2.90 | 251.70 | 11,790.7 | -1,034.7 | -2,858.7 | 3,040.2 | 0.95 | -0.23 | Last Cathedral Survey @ 12,405' MD |
| 12,460.0 | 2.90 | 251.70 | 11,845.6 | -1,035.6 | -2,861.4 | 3,043.0 | 0.00 | 0.00 | Projection to Bit @ 12,460' |

| Targets | | | | | | | | | |
|---|---------------|--------------|----------|------------|------------|---------------|--------------|-----------------|-----------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
| 8507A-35 D36 496 PBH - hit/miss target - Shape | 0.00 | 0.00 | 12,482.0 | -1,035.9 | -2,846.6 | 1,676,806.34 | 2,258,838.52 | 39° 39' 43.69 N | 108° 7' 58.67 W |
| - actual wellpath misses target center by 636.6ft at 12460.0ft MD (11845.6 TVD, -1035.6 N, -2861.4 E) | | | | | | | | | |
| - Rectangle (sides W30.0 H50.0 D0.0) | | | | | | | | | |
| 8507A-35 D36 496 TGT - actual wellpath misses target center by 2.2ft at 8515.0ft MD (7902.0 TVD, -1024.7 N, -2831.4 E) | 0.00 | 0.00 | 7,902.0 | -1,025.9 | -2,829.6 | 1,676,815.89 | 2,258,855.84 | 39° 39' 43.79 N | 108° 7' 58.45 W |
| - Point | | | | | | | | | |

| Design Annotations | | | | |
|---------------------|---------------------|-------------------|------------|------------------------------------|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment |
| | | +N/-S (ft) | +E/-W (ft) | |
| 12,405.0 | 11,790.7 | -1,034.7 | -2,858.7 | Last Cathedral Survey @ 12,405' MD |
| 12,460.0 | 11,845.6 | -1,035.6 | -2,861.4 | Projection to Bit @ 12,460' |

Checked By: _____ Approved By: _____ Date: _____