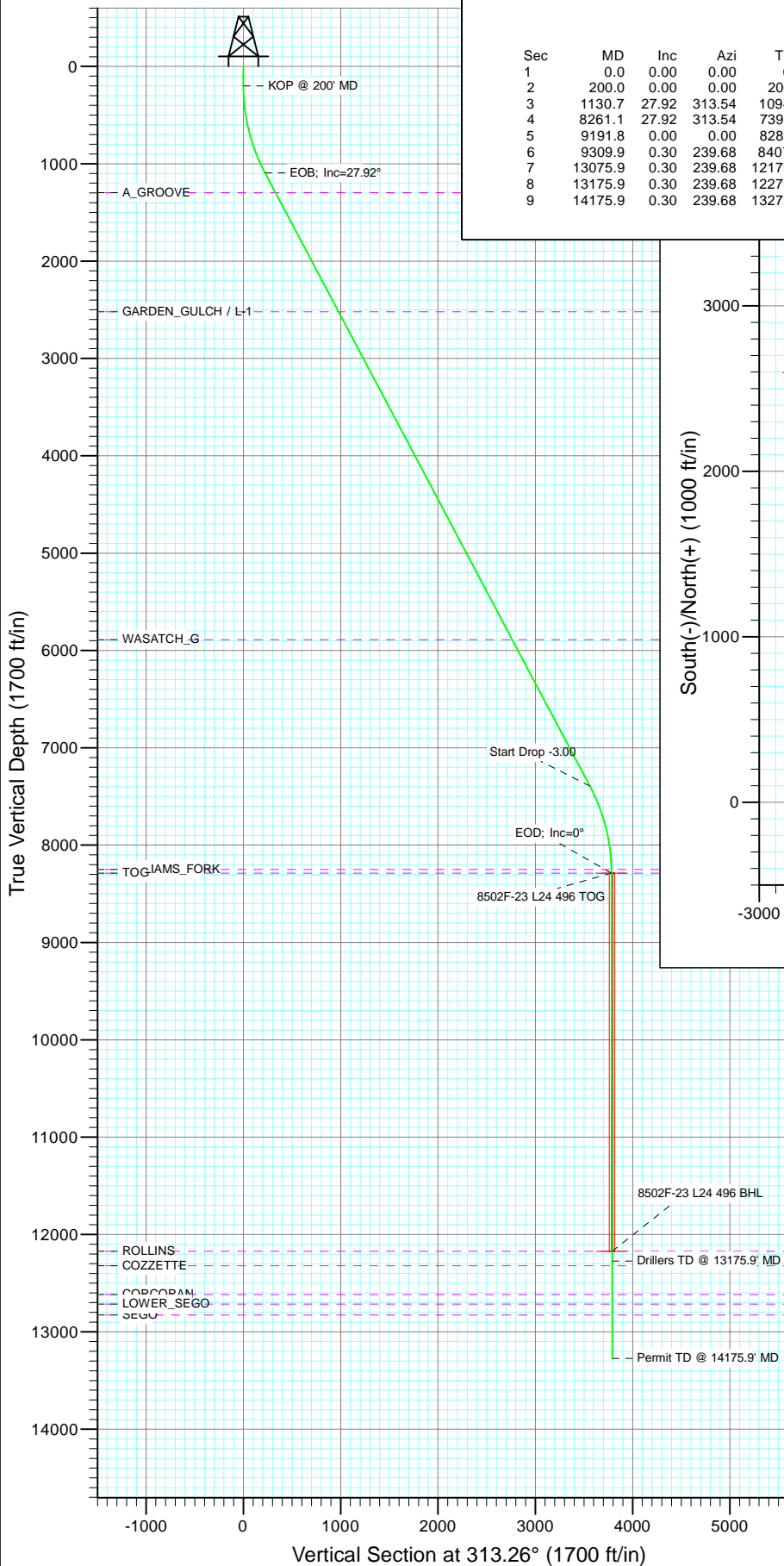
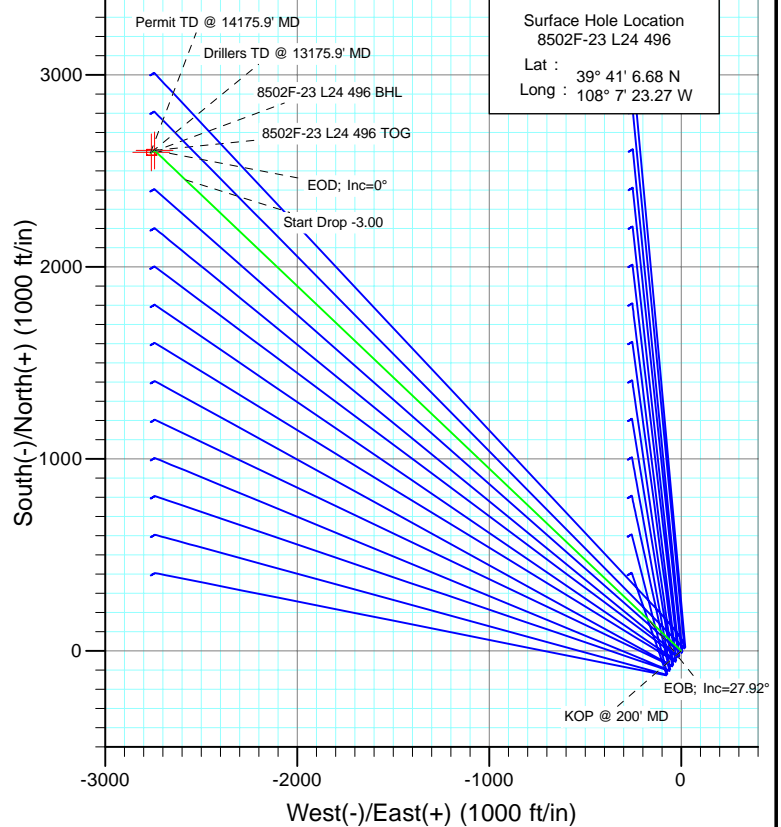




Project: Story Gulch
Site: L24 496
Well: 8502F-23 L24 496
Wellbore: DD
Design: Plan #1



| SECTION DETAILS | | | | | | | | | | |
|-----------------|---------|-------|--------|---------|--------|---------|------|--------|--------|----------------------|
| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | Vsect | Target |
| 1 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 2 | 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 3 | 1130.7 | 27.92 | 313.54 | 1094.3 | 153.2 | -161.1 | 3.00 | 313.54 | 222.3 | |
| 4 | 8261.1 | 27.92 | 313.54 | 7394.7 | 2453.3 | -2581.3 | 0.00 | 0.00 | 3561.1 | |
| 5 | 9191.8 | 0.00 | 0.00 | 8289.0 | 2606.5 | -2742.4 | 3.00 | 180.00 | 3783.4 | 8502F-23 L24 496 TOG |
| 6 | 9309.9 | 0.30 | 239.68 | 8407.1 | 2606.3 | -2742.7 | 0.25 | 239.68 | 3783.5 | |
| 7 | 13075.9 | 0.30 | 239.68 | 12173.0 | 2596.5 | -2759.4 | 0.00 | 0.00 | 3789.0 | 8502F-23 L24 496 BHL |
| 8 | 13175.9 | 0.30 | 239.68 | 12273.0 | 2596.3 | -2759.9 | 0.00 | 0.00 | 3789.1 | |
| 9 | 14175.9 | 0.30 | 239.68 | 13273.0 | 2593.7 | -2764.3 | 0.00 | 0.00 | 3790.6 | |



Azimuths to True North
Magnetic North: 10.44°

Magnetic Field
Strength: 52326.6nT
Dip Angle: 65.87°
Date: 5/17/2011
Model: IGRF2010

FORMATION TOP DETAILS

| TVDPath | MDPath | Formation |
|---------|---------|--------------------|
| 1297.0 | 1360.1 | A_GROOVE |
| 2521.0 | 2745.4 | GARDEN_GULCH / L-1 |
| 5889.0 | 6557.1 | WASATCH_G |
| 8249.0 | 9151.8 | WILLIAMS_FORK |
| 8289.0 | 9191.8 | TOG |
| 12173.0 | 13075.9 | ROLLINS |
| 12320.0 | 13222.9 | COZZETTE |
| 12617.0 | 13519.9 | CORCORAN |
| 12715.0 | 13617.9 | LOWER_SEGO |
| 12828.0 | 13730.9 | SEGO |

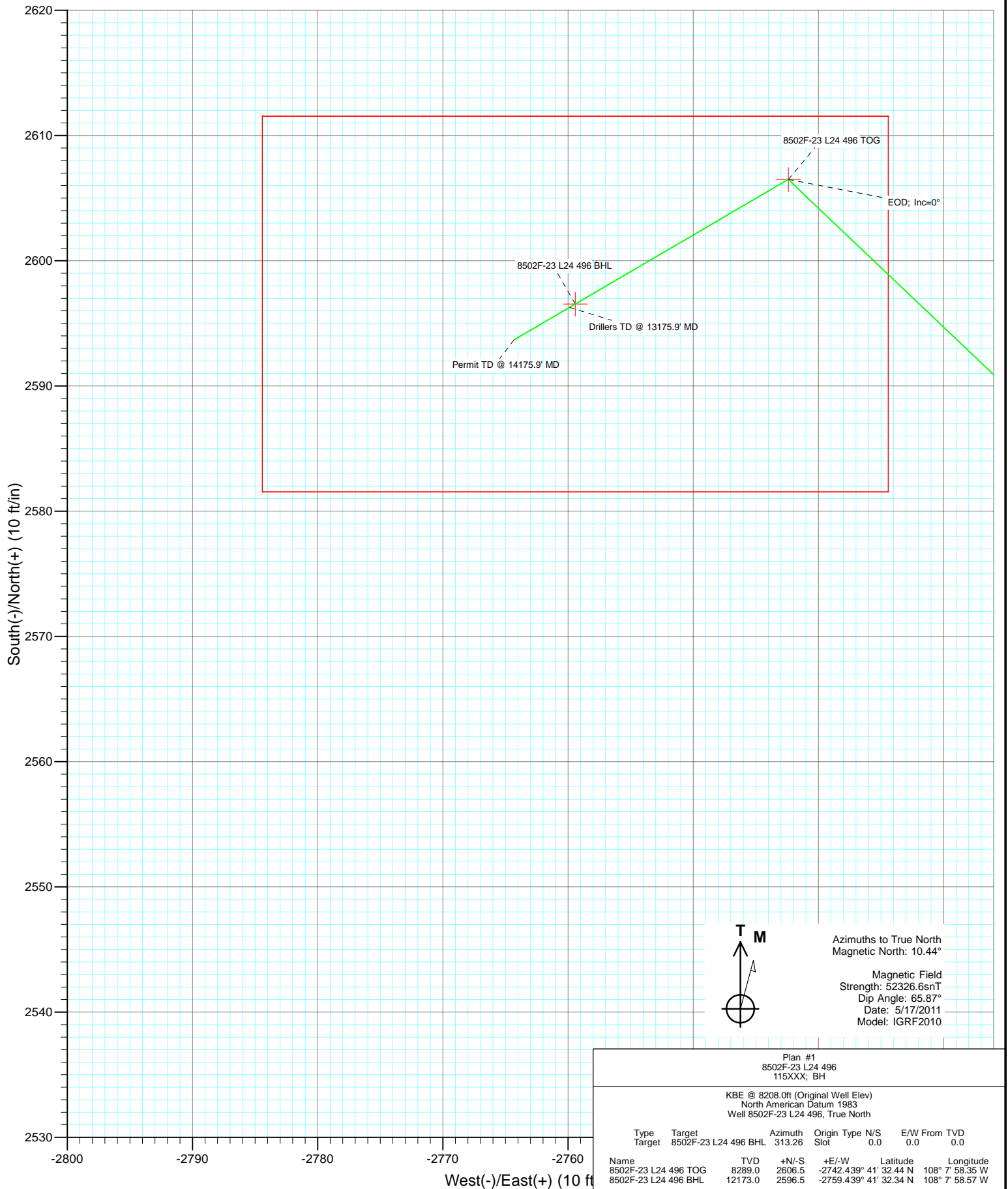
Plan #1
8502F-23 L24 496
115XXX; BH

KBE @ 8208.0ft (Original Well Elev)
North American Datum 1983
Well 8502F-23 L24 496, True North

| Type | Target | Target | Azimuth | Origin | Type | N/S | E/W | From | TVD |
|----------------------|--------|----------------------|---------|--------|------|-----|----------------|----------|-----------------|
| | | 8502F-23 L24 496 BHL | 313.26 | Slot | | 0.0 | 0.0 | | 0.0 |
| Name | | | | | | | | | |
| 8502F-23 L24 496 TOG | | | 8289.0 | +N/-S | | | +E/-W | Latitude | Longitude |
| 8502F-23 L24 496 BHL | | | 12173.0 | 2606.5 | | | -2742.439° 41' | 32.44 N | 108° 7' 58.35 W |
| | | | | 2596.5 | | | -2759.439° 41' | 32.34 N | 108° 7' 58.57 W |



Project: Story Gulch
 Site: L24 496
 Well: 8502F-23 L24 496
 Wellbore: DD
 Design: Plan #1



Cathedral Energy Services

Planning Report

| | | | |
|------------------|------------------------------|-------------------------------------|-------------------------------------|
| Database: | EDM 5000.1 US Multi Users DB | Local Co-ordinate Reference: | Well 8502F-23 L24 496 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | KBE @ 8208.0ft (Original Well Elev) |
| Project: | Story Gulch | MD Reference: | KBE @ 8208.0ft (Original Well Elev) |
| Site: | L24 496 | North Reference: | True |
| Well: | 8502F-23 L24 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 | L24 496 | | | | |
| Site Position: | | Northing: | 1,685,024.52 ft | Latitude: | 39° 41' 5.72 N |
| From: | Lat/Long | Easting: | 2,261,789.15 ft | Longitude: | 108° 7' 23.99 W |
| Position Uncertainty: | 0.0 ft | Slot Radius: | 13.200 in | Grid Convergence: | -1.65 ° |

| | | | | | | |
|----------------------|------------------|--------|---------------------|-----------------|---------------|-----------------|
| Well | 8502F-23 L24 496 | | | | | |
| Well Position | +N/-S | 0.0 ft | Northing: | 1,685,119.98 ft | Latitude: | 39° 41' 6.68 N |
| | +E/-W | 0.0 ft | Easting: | 2,261,848.22 ft | Longitude: | 108° 7' 23.27 W |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: | ft | Ground Level: | 8,193.0 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | DD | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 5/17/2011 | 10.44 | 65.87 | 52,327 |

| | | | | |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|
| 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 | 313.26 |

| 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 | |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,130.7 | 27.92 | 313.54 | 1,094.3 | 153.2 | -161.1 | 3.00 | 3.00 | 0.00 | 313.54 | |
| 8,261.1 | 27.92 | 313.54 | 7,394.7 | 2,453.3 | -2,581.3 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 9,191.8 | 0.00 | 0.00 | 8,289.0 | 2,606.5 | -2,742.4 | 3.00 | -3.00 | 0.00 | 180.00 | 8502F-23 L24 496 TC |
| 9,309.9 | 0.30 | 239.68 | 8,407.1 | 2,606.3 | -2,742.7 | 0.25 | 0.25 | -101.85 | 239.68 | |
| 13,075.9 | 0.30 | 239.68 | 12,173.0 | 2,596.5 | -2,759.4 | 0.00 | 0.00 | 0.00 | 0.00 | 8502F-23 L24 496 B+ |
| 13,175.9 | 0.30 | 239.68 | 12,273.0 | 2,596.3 | -2,759.9 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 14,175.9 | 0.30 | 239.68 | 13,273.0 | 2,593.7 | -2,764.3 | 0.00 | 0.00 | 0.00 | 0.00 | |

Cathedral Energy Services

Planning Report

| | | | |
|------------------|------------------------------|-------------------------------------|-------------------------------------|
| Database: | EDM 5000.1 US Multi Users DB | Local Co-ordinate Reference: | Well 8502F-23 L24 496 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | KBE @ 8208.0ft (Original Well Elev) |
| Project: | Story Gulch | MD Reference: | KBE @ 8208.0ft (Original Well Elev) |
| Site: | L24 496 | North Reference: | True |
| Well: | 8502F-23 L24 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 | KOP @ 200' MD |
| 300.0 | 3.00 | 313.54 | 300.0 | 1.8 | -1.9 | 2.6 | 3.00 | 3.00 | |
| 400.0 | 6.00 | 313.54 | 399.6 | 7.2 | -7.6 | 10.5 | 3.00 | 3.00 | |
| 500.0 | 9.00 | 313.54 | 498.8 | 16.2 | -17.0 | 23.5 | 3.00 | 3.00 | |
| 600.0 | 12.00 | 313.54 | 597.1 | 28.8 | -30.3 | 41.7 | 3.00 | 3.00 | |
| 700.0 | 15.00 | 313.54 | 694.3 | 44.8 | -47.2 | 65.1 | 3.00 | 3.00 | |
| 800.0 | 18.00 | 313.54 | 790.2 | 64.4 | -67.8 | 93.5 | 3.00 | 3.00 | |
| 900.0 | 21.00 | 313.54 | 884.4 | 87.4 | -91.9 | 126.9 | 3.00 | 3.00 | |
| 1,000.0 | 24.00 | 313.54 | 976.8 | 113.8 | -119.7 | 165.1 | 3.00 | 3.00 | |
| 1,100.0 | 27.00 | 313.54 | 1,067.1 | 143.4 | -150.9 | 208.2 | 3.00 | 3.00 | |
| 1,130.7 | 27.92 | 313.54 | 1,094.3 | 153.2 | -161.1 | 222.3 | 3.00 | 3.00 | EOB; Inc=27.92° |
| 1,200.0 | 27.92 | 313.54 | 1,155.5 | 175.5 | -184.7 | 254.8 | 0.00 | 0.00 | |
| 1,300.0 | 27.92 | 313.54 | 1,243.9 | 207.8 | -218.6 | 301.6 | 0.00 | 0.00 | |
| 1,360.1 | 27.92 | 313.54 | 1,297.0 | 227.2 | -239.0 | 329.7 | 0.00 | 0.00 | A_GROOVE |
| 1,400.0 | 27.92 | 313.54 | 1,332.3 | 240.0 | -252.5 | 348.4 | 0.00 | 0.00 | |
| 1,500.0 | 27.92 | 313.54 | 1,420.6 | 272.3 | -286.5 | 395.2 | 0.00 | 0.00 | |
| 1,600.0 | 27.92 | 313.54 | 1,509.0 | 304.5 | -320.4 | 442.1 | 0.00 | 0.00 | |
| 1,700.0 | 27.92 | 313.54 | 1,597.3 | 336.8 | -354.4 | 488.9 | 0.00 | 0.00 | |
| 1,800.0 | 27.92 | 313.54 | 1,685.7 | 369.1 | -388.3 | 535.7 | 0.00 | 0.00 | |
| 1,900.0 | 27.92 | 313.54 | 1,774.0 | 401.3 | -422.3 | 582.5 | 0.00 | 0.00 | |
| 2,000.0 | 27.92 | 313.54 | 1,862.4 | 433.6 | -456.2 | 629.4 | 0.00 | 0.00 | |
| 2,100.0 | 27.92 | 313.54 | 1,950.8 | 465.8 | -490.1 | 676.2 | 0.00 | 0.00 | |
| 2,200.0 | 27.92 | 313.54 | 2,039.1 | 498.1 | -524.1 | 723.0 | 0.00 | 0.00 | |
| 2,300.0 | 27.92 | 313.54 | 2,127.5 | 530.4 | -558.0 | 769.8 | 0.00 | 0.00 | |
| 2,400.0 | 27.92 | 313.54 | 2,215.8 | 562.6 | -592.0 | 816.7 | 0.00 | 0.00 | |
| 2,500.0 | 27.92 | 313.54 | 2,304.2 | 594.9 | -625.9 | 863.5 | 0.00 | 0.00 | |
| 2,600.0 | 27.92 | 313.54 | 2,392.6 | 627.1 | -659.8 | 910.3 | 0.00 | 0.00 | |
| 2,700.0 | 27.92 | 313.54 | 2,480.9 | 659.4 | -693.8 | 957.1 | 0.00 | 0.00 | |
| 2,745.4 | 27.92 | 313.54 | 2,521.0 | 674.0 | -709.2 | 978.4 | 0.00 | 0.00 | GARDEN_GULCH / L-1 |
| 2,800.0 | 27.92 | 313.54 | 2,569.3 | 691.7 | -727.7 | 1,004.0 | 0.00 | 0.00 | |
| 2,900.0 | 27.92 | 313.54 | 2,657.6 | 723.9 | -761.7 | 1,050.8 | 0.00 | 0.00 | |
| 3,000.0 | 27.92 | 313.54 | 2,746.0 | 756.2 | -795.6 | 1,097.6 | 0.00 | 0.00 | |
| 3,100.0 | 27.92 | 313.54 | 2,834.4 | 788.4 | -829.5 | 1,144.4 | 0.00 | 0.00 | |
| 3,200.0 | 27.92 | 313.54 | 2,922.7 | 820.7 | -863.5 | 1,191.3 | 0.00 | 0.00 | |
| 3,300.0 | 27.92 | 313.54 | 3,011.1 | 852.9 | -897.4 | 1,238.1 | 0.00 | 0.00 | |
| 3,400.0 | 27.92 | 313.54 | 3,099.4 | 885.2 | -931.4 | 1,284.9 | 0.00 | 0.00 | |
| 3,500.0 | 27.92 | 313.54 | 3,187.8 | 917.5 | -965.3 | 1,331.7 | 0.00 | 0.00 | |
| 3,600.0 | 27.92 | 313.54 | 3,276.2 | 949.7 | -999.2 | 1,378.6 | 0.00 | 0.00 | |
| 3,700.0 | 27.92 | 313.54 | 3,364.5 | 982.0 | -1,033.2 | 1,425.4 | 0.00 | 0.00 | |
| 3,800.0 | 27.92 | 313.54 | 3,452.9 | 1,014.2 | -1,067.1 | 1,472.2 | 0.00 | 0.00 | |
| 3,900.0 | 27.92 | 313.54 | 3,541.2 | 1,046.5 | -1,101.1 | 1,519.0 | 0.00 | 0.00 | |
| 4,000.0 | 27.92 | 313.54 | 3,629.6 | 1,078.8 | -1,135.0 | 1,565.9 | 0.00 | 0.00 | |
| 4,100.0 | 27.92 | 313.54 | 3,718.0 | 1,111.0 | -1,168.9 | 1,612.7 | 0.00 | 0.00 | |
| 4,200.0 | 27.92 | 313.54 | 3,806.3 | 1,143.3 | -1,202.9 | 1,659.5 | 0.00 | 0.00 | |
| 4,300.0 | 27.92 | 313.54 | 3,894.7 | 1,175.5 | -1,236.8 | 1,706.3 | 0.00 | 0.00 | |
| 4,400.0 | 27.92 | 313.54 | 3,983.0 | 1,207.8 | -1,270.8 | 1,753.2 | 0.00 | 0.00 | |
| 4,500.0 | 27.92 | 313.54 | 4,071.4 | 1,240.1 | -1,304.7 | 1,800.0 | 0.00 | 0.00 | |
| 4,600.0 | 27.92 | 313.54 | 4,159.8 | 1,272.3 | -1,338.6 | 1,846.8 | 0.00 | 0.00 | |
| 4,700.0 | 27.92 | 313.54 | 4,248.1 | 1,304.6 | -1,372.6 | 1,893.6 | 0.00 | 0.00 | |
| 4,800.0 | 27.92 | 313.54 | 4,336.5 | 1,336.8 | -1,406.5 | 1,940.4 | 0.00 | 0.00 | |

Cathedral Energy Services

Planning Report

| | | | |
|------------------|------------------------------|-------------------------------------|-------------------------------------|
| Database: | EDM 5000.1 US Multi Users DB | Local Co-ordinate Reference: | Well 8502F-23 L24 496 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | KBE @ 8208.0ft (Original Well Elev) |
| Project: | Story Gulch | MD Reference: | KBE @ 8208.0ft (Original Well Elev) |
| Site: | L24 496 | North Reference: | True |
| Well: | 8502F-23 L24 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 |
| 4,900.0 | 27.92 | 313.54 | 4,424.8 | 1,369.1 | -1,440.5 | 1,987.3 | 0.00 | 0.00 | |
| 5,000.0 | 27.92 | 313.54 | 4,513.2 | 1,401.3 | -1,474.4 | 2,034.1 | 0.00 | 0.00 | |
| 5,100.0 | 27.92 | 313.54 | 4,601.6 | 1,433.6 | -1,508.4 | 2,080.9 | 0.00 | 0.00 | |
| 5,200.0 | 27.92 | 313.54 | 4,689.9 | 1,465.9 | -1,542.3 | 2,127.7 | 0.00 | 0.00 | |
| 5,300.0 | 27.92 | 313.54 | 4,778.3 | 1,498.1 | -1,576.2 | 2,174.6 | 0.00 | 0.00 | |
| 5,400.0 | 27.92 | 313.54 | 4,866.6 | 1,530.4 | -1,610.2 | 2,221.4 | 0.00 | 0.00 | |
| 5,500.0 | 27.92 | 313.54 | 4,955.0 | 1,562.6 | -1,644.1 | 2,268.2 | 0.00 | 0.00 | |
| 5,600.0 | 27.92 | 313.54 | 5,043.4 | 1,594.9 | -1,678.1 | 2,315.0 | 0.00 | 0.00 | |
| 5,700.0 | 27.92 | 313.54 | 5,131.7 | 1,627.2 | -1,712.0 | 2,361.9 | 0.00 | 0.00 | |
| 5,800.0 | 27.92 | 313.54 | 5,220.1 | 1,659.4 | -1,745.9 | 2,408.7 | 0.00 | 0.00 | |
| 5,900.0 | 27.92 | 313.54 | 5,308.4 | 1,691.7 | -1,779.9 | 2,455.5 | 0.00 | 0.00 | |
| 6,000.0 | 27.92 | 313.54 | 5,396.8 | 1,723.9 | -1,813.8 | 2,502.3 | 0.00 | 0.00 | |
| 6,100.0 | 27.92 | 313.54 | 5,485.1 | 1,756.2 | -1,847.8 | 2,549.2 | 0.00 | 0.00 | |
| 6,200.0 | 27.92 | 313.54 | 5,573.5 | 1,788.5 | -1,881.7 | 2,596.0 | 0.00 | 0.00 | |
| 6,300.0 | 27.92 | 313.54 | 5,661.9 | 1,820.7 | -1,915.6 | 2,642.8 | 0.00 | 0.00 | |
| 6,400.0 | 27.92 | 313.54 | 5,750.2 | 1,853.0 | -1,949.6 | 2,689.6 | 0.00 | 0.00 | |
| 6,500.0 | 27.92 | 313.54 | 5,838.6 | 1,885.2 | -1,983.5 | 2,736.5 | 0.00 | 0.00 | |
| 6,557.1 | 27.92 | 313.54 | 5,889.0 | 1,903.6 | -2,002.9 | 2,763.2 | 0.00 | 0.00 | WASATCH_G |
| 6,600.0 | 27.92 | 313.54 | 5,926.9 | 1,917.5 | -2,017.5 | 2,783.3 | 0.00 | 0.00 | |
| 6,700.0 | 27.92 | 313.54 | 6,015.3 | 1,949.7 | -2,051.4 | 2,830.1 | 0.00 | 0.00 | |
| 6,800.0 | 27.92 | 313.54 | 6,103.7 | 1,982.0 | -2,085.3 | 2,876.9 | 0.00 | 0.00 | |
| 6,900.0 | 27.92 | 313.54 | 6,192.0 | 2,014.3 | -2,119.3 | 2,923.8 | 0.00 | 0.00 | |
| 7,000.0 | 27.92 | 313.54 | 6,280.4 | 2,046.5 | -2,153.2 | 2,970.6 | 0.00 | 0.00 | |
| 7,100.0 | 27.92 | 313.54 | 6,368.7 | 2,078.8 | -2,187.2 | 3,017.4 | 0.00 | 0.00 | |
| 7,200.0 | 27.92 | 313.54 | 6,457.1 | 2,111.0 | -2,221.1 | 3,064.2 | 0.00 | 0.00 | |
| 7,300.0 | 27.92 | 313.54 | 6,545.5 | 2,143.3 | -2,255.0 | 3,111.1 | 0.00 | 0.00 | |
| 7,400.0 | 27.92 | 313.54 | 6,633.8 | 2,175.6 | -2,289.0 | 3,157.9 | 0.00 | 0.00 | |
| 7,500.0 | 27.92 | 313.54 | 6,722.2 | 2,207.8 | -2,322.9 | 3,204.7 | 0.00 | 0.00 | |
| 7,600.0 | 27.92 | 313.54 | 6,810.5 | 2,240.1 | -2,356.9 | 3,251.5 | 0.00 | 0.00 | |
| 7,700.0 | 27.92 | 313.54 | 6,898.9 | 2,272.3 | -2,390.8 | 3,298.4 | 0.00 | 0.00 | |
| 7,800.0 | 27.92 | 313.54 | 6,987.3 | 2,304.6 | -2,424.7 | 3,345.2 | 0.00 | 0.00 | |
| 7,900.0 | 27.92 | 313.54 | 7,075.6 | 2,336.8 | -2,458.7 | 3,392.0 | 0.00 | 0.00 | |
| 8,000.0 | 27.92 | 313.54 | 7,164.0 | 2,369.1 | -2,492.6 | 3,438.8 | 0.00 | 0.00 | |
| 8,100.0 | 27.92 | 313.54 | 7,252.3 | 2,401.4 | -2,526.6 | 3,485.7 | 0.00 | 0.00 | |
| 8,200.0 | 27.92 | 313.54 | 7,340.7 | 2,433.6 | -2,560.5 | 3,532.5 | 0.00 | 0.00 | |
| 8,261.1 | 27.92 | 313.54 | 7,394.7 | 2,453.3 | -2,581.3 | 3,561.1 | 0.00 | 0.00 | Start Drop -3.00 |
| 8,300.0 | 26.75 | 313.54 | 7,429.2 | 2,465.6 | -2,594.2 | 3,579.0 | 3.00 | -3.00 | |
| 8,400.0 | 23.75 | 313.54 | 7,519.7 | 2,495.0 | -2,625.1 | 3,621.6 | 3.00 | -3.00 | |
| 8,500.0 | 20.75 | 313.54 | 7,612.2 | 2,521.1 | -2,652.6 | 3,659.5 | 3.00 | -3.00 | |
| 8,600.0 | 17.75 | 313.54 | 7,706.6 | 2,543.8 | -2,676.5 | 3,692.5 | 3.00 | -3.00 | |
| 8,700.0 | 14.75 | 313.54 | 7,802.6 | 2,563.1 | -2,696.8 | 3,720.4 | 3.00 | -3.00 | |
| 8,800.0 | 11.75 | 313.54 | 7,899.9 | 2,578.9 | -2,713.4 | 3,743.4 | 3.00 | -3.00 | |
| 8,900.0 | 8.75 | 313.54 | 7,998.3 | 2,591.2 | -2,726.3 | 3,761.2 | 3.00 | -3.00 | |
| 9,000.0 | 5.75 | 313.54 | 8,097.5 | 2,599.9 | -2,735.4 | 3,773.8 | 3.00 | -3.00 | |
| 9,100.0 | 2.75 | 313.54 | 8,197.2 | 2,605.0 | -2,740.8 | 3,781.2 | 3.00 | -3.00 | |
| 9,151.8 | 1.20 | 313.54 | 8,249.0 | 2,606.2 | -2,742.1 | 3,783.0 | 3.00 | -3.00 | WILLIAMS_FORK |
| 9,191.8 | 0.00 | 0.00 | 8,289.0 | 2,606.5 | -2,742.4 | 3,783.4 | 3.00 | -3.00 | EOD; Inc=0° - TOG - 8502F-23 L24 496 TOG |
| 9,200.0 | 0.02 | 239.68 | 8,297.2 | 2,606.5 | -2,742.4 | 3,783.4 | 0.25 | 0.25 | |
| 9,300.0 | 0.27 | 239.68 | 8,397.2 | 2,606.4 | -2,742.6 | 3,783.5 | 0.25 | 0.25 | |
| 9,309.9 | 0.30 | 239.68 | 8,407.1 | 2,606.3 | -2,742.7 | 3,783.5 | 0.25 | 0.25 | |
| 9,400.0 | 0.30 | 239.68 | 8,497.2 | 2,606.1 | -2,743.1 | 3,783.6 | 0.00 | 0.00 | |
| 9,500.0 | 0.30 | 239.68 | 8,597.2 | 2,605.9 | -2,743.5 | 3,783.8 | 0.00 | 0.00 | |

Cathedral Energy Services

Planning Report

| | | | |
|------------------|------------------------------|-------------------------------------|-------------------------------------|
| Database: | EDM 5000.1 US Multi Users DB | Local Co-ordinate Reference: | Well 8502F-23 L24 496 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | KBE @ 8208.0ft (Original Well Elev) |
| Project: | Story Gulch | MD Reference: | KBE @ 8208.0ft (Original Well Elev) |
| Site: | L24 496 | North Reference: | True |
| Well: | 8502F-23 L24 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 |
| 9,600.0 | 0.30 | 239.68 | 8,697.2 | 2,605.6 | -2,744.0 | 3,783.9 | 0.00 | 0.00 | |
| 9,700.0 | 0.30 | 239.68 | 8,797.2 | 2,605.3 | -2,744.4 | 3,784.1 | 0.00 | 0.00 | |
| 9,800.0 | 0.30 | 239.68 | 8,897.2 | 2,605.1 | -2,744.8 | 3,784.2 | 0.00 | 0.00 | |
| 9,900.0 | 0.30 | 239.68 | 8,997.2 | 2,604.8 | -2,745.3 | 3,784.4 | 0.00 | 0.00 | |
| 10,000.0 | 0.30 | 239.68 | 9,097.2 | 2,604.6 | -2,745.7 | 3,784.5 | 0.00 | 0.00 | |
| 10,100.0 | 0.30 | 239.68 | 9,197.2 | 2,604.3 | -2,746.2 | 3,784.7 | 0.00 | 0.00 | |
| 10,200.0 | 0.30 | 239.68 | 9,297.2 | 2,604.0 | -2,746.6 | 3,784.8 | 0.00 | 0.00 | |
| 10,300.0 | 0.30 | 239.68 | 9,397.2 | 2,603.8 | -2,747.1 | 3,784.9 | 0.00 | 0.00 | |
| 10,400.0 | 0.30 | 239.68 | 9,497.2 | 2,603.5 | -2,747.5 | 3,785.1 | 0.00 | 0.00 | |
| 10,500.0 | 0.30 | 239.68 | 9,597.2 | 2,603.2 | -2,748.0 | 3,785.2 | 0.00 | 0.00 | |
| 10,600.0 | 0.30 | 239.68 | 9,697.2 | 2,603.0 | -2,748.4 | 3,785.4 | 0.00 | 0.00 | |
| 10,700.0 | 0.30 | 239.68 | 9,797.2 | 2,602.7 | -2,748.8 | 3,785.5 | 0.00 | 0.00 | |
| 10,800.0 | 0.30 | 239.68 | 9,897.2 | 2,602.5 | -2,749.3 | 3,785.7 | 0.00 | 0.00 | |
| 10,900.0 | 0.30 | 239.68 | 9,997.2 | 2,602.2 | -2,749.7 | 3,785.8 | 0.00 | 0.00 | |
| 11,000.0 | 0.30 | 239.68 | 10,097.2 | 2,601.9 | -2,750.2 | 3,786.0 | 0.00 | 0.00 | |
| 11,100.0 | 0.30 | 239.68 | 10,197.2 | 2,601.7 | -2,750.6 | 3,786.1 | 0.00 | 0.00 | |
| 11,200.0 | 0.30 | 239.68 | 10,297.2 | 2,601.4 | -2,751.1 | 3,786.3 | 0.00 | 0.00 | |
| 11,300.0 | 0.30 | 239.68 | 10,397.2 | 2,601.2 | -2,751.5 | 3,786.4 | 0.00 | 0.00 | |
| 11,400.0 | 0.30 | 239.68 | 10,497.2 | 2,600.9 | -2,752.0 | 3,786.5 | 0.00 | 0.00 | |
| 11,500.0 | 0.30 | 239.68 | 10,597.2 | 2,600.6 | -2,752.4 | 3,786.7 | 0.00 | 0.00 | |
| 11,600.0 | 0.30 | 239.68 | 10,697.2 | 2,600.4 | -2,752.9 | 3,786.8 | 0.00 | 0.00 | |
| 11,700.0 | 0.30 | 239.68 | 10,797.2 | 2,600.1 | -2,753.3 | 3,787.0 | 0.00 | 0.00 | |
| 11,800.0 | 0.30 | 239.68 | 10,897.2 | 2,599.9 | -2,753.7 | 3,787.1 | 0.00 | 0.00 | |
| 11,900.0 | 0.30 | 239.68 | 10,997.1 | 2,599.6 | -2,754.2 | 3,787.3 | 0.00 | 0.00 | |
| 12,000.0 | 0.30 | 239.68 | 11,097.1 | 2,599.3 | -2,754.6 | 3,787.4 | 0.00 | 0.00 | |
| 12,100.0 | 0.30 | 239.68 | 11,197.1 | 2,599.1 | -2,755.1 | 3,787.6 | 0.00 | 0.00 | |
| 12,200.0 | 0.30 | 239.68 | 11,297.1 | 2,598.8 | -2,755.5 | 3,787.7 | 0.00 | 0.00 | |
| 12,300.0 | 0.30 | 239.68 | 11,397.1 | 2,598.6 | -2,756.0 | 3,787.9 | 0.00 | 0.00 | |
| 12,400.0 | 0.30 | 239.68 | 11,497.1 | 2,598.3 | -2,756.4 | 3,788.0 | 0.00 | 0.00 | |
| 12,500.0 | 0.30 | 239.68 | 11,597.1 | 2,598.0 | -2,756.9 | 3,788.2 | 0.00 | 0.00 | |
| 12,600.0 | 0.30 | 239.68 | 11,697.1 | 2,597.8 | -2,757.3 | 3,788.3 | 0.00 | 0.00 | |
| 12,700.0 | 0.30 | 239.68 | 11,797.1 | 2,597.5 | -2,757.7 | 3,788.4 | 0.00 | 0.00 | |
| 12,800.0 | 0.30 | 239.68 | 11,897.1 | 2,597.3 | -2,758.2 | 3,788.6 | 0.00 | 0.00 | |
| 12,900.0 | 0.30 | 239.68 | 11,997.1 | 2,597.0 | -2,758.6 | 3,788.7 | 0.00 | 0.00 | |
| 13,000.0 | 0.30 | 239.68 | 12,097.1 | 2,596.7 | -2,759.1 | 3,788.9 | 0.00 | 0.00 | |
| 13,075.9 | 0.30 | 239.68 | 12,173.0 | 2,596.5 | -2,759.4 | 3,789.0 | 0.00 | 0.00 | ROLLINS - 8502F-23 L24 496 BHL |
| 13,100.0 | 0.30 | 239.68 | 12,197.1 | 2,596.5 | -2,759.5 | 3,789.0 | 0.00 | 0.00 | |
| 13,175.9 | 0.30 | 239.68 | 12,273.0 | 2,596.3 | -2,759.9 | 3,789.1 | 0.00 | 0.00 | Drillers TD @ 13175.9' MD |
| 13,200.0 | 0.30 | 239.68 | 12,297.1 | 2,596.2 | -2,760.0 | 3,789.2 | 0.00 | 0.00 | |
| 13,222.9 | 0.30 | 239.68 | 12,320.0 | 2,596.2 | -2,760.1 | 3,789.2 | 0.00 | 0.00 | COZZETTE |
| 13,300.0 | 0.30 | 239.68 | 12,397.1 | 2,596.0 | -2,760.4 | 3,789.3 | 0.00 | 0.00 | |
| 13,400.0 | 0.30 | 239.68 | 12,497.1 | 2,595.7 | -2,760.9 | 3,789.5 | 0.00 | 0.00 | |
| 13,500.0 | 0.30 | 239.68 | 12,597.1 | 2,595.4 | -2,761.3 | 3,789.6 | 0.00 | 0.00 | |
| 13,519.9 | 0.30 | 239.68 | 12,617.0 | 2,595.4 | -2,761.4 | 3,789.6 | 0.00 | 0.00 | CORCORAN |
| 13,600.0 | 0.30 | 239.68 | 12,697.1 | 2,595.2 | -2,761.8 | 3,789.8 | 0.00 | 0.00 | |
| 13,617.9 | 0.30 | 239.68 | 12,715.0 | 2,595.1 | -2,761.8 | 3,789.8 | 0.00 | 0.00 | LOWER_SEGO |
| 13,700.0 | 0.30 | 239.68 | 12,797.1 | 2,594.9 | -2,762.2 | 3,789.9 | 0.00 | 0.00 | |
| 13,730.9 | 0.30 | 239.68 | 12,828.0 | 2,594.8 | -2,762.3 | 3,789.9 | 0.00 | 0.00 | SEGO |
| 13,800.0 | 0.30 | 239.68 | 12,897.1 | 2,594.7 | -2,762.6 | 3,790.0 | 0.00 | 0.00 | |
| 13,900.0 | 0.30 | 239.68 | 12,997.1 | 2,594.4 | -2,763.1 | 3,790.2 | 0.00 | 0.00 | |
| 14,000.0 | 0.30 | 239.68 | 13,097.1 | 2,594.1 | -2,763.5 | 3,790.3 | 0.00 | 0.00 | |
| 14,100.0 | 0.30 | 239.68 | 13,197.1 | 2,593.9 | -2,764.0 | 3,790.5 | 0.00 | 0.00 | |

Cathedral Energy Services

Planning Report

| | | | |
|------------------|------------------------------|-------------------------------------|-------------------------------------|
| Database: | EDM 5000.1 US Multi Users DB | Local Co-ordinate Reference: | Well 8502F-23 L24 496 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | KBE @ 8208.0ft (Original Well Elev) |
| Project: | Story Gulch | MD Reference: | KBE @ 8208.0ft (Original Well Elev) |
| Site: | L24 496 | North Reference: | True |
| Well: | 8502F-23 L24 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 |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|-----------------------|
| 14,175.9 | 0.30 | 239.68 | 13,273.0 | 2,593.7 | -2,764.3 | 3,790.6 | 0.00 | 0.00 | |

Targets

| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
|---|---------------|--------------|----------|------------|------------|---------------|--------------|-----------------|-----------------|
| 8502F-23 L24 496 BHL - plan hits target center - Rectangle (sides W30.0 H50.0 D0.0) | 0.00 | 0.00 | 12,173.0 | 2,596.5 | -2,759.4 | 1,687,795.11 | 2,259,164.92 | 39° 41' 32.34 N | 108° 7' 58.57 W |
| 8502F-23 L24 496 TOG - plan hits target center - Point | 0.00 | 0.00 | 8,289.0 | 2,606.5 | -2,742.4 | 1,687,804.57 | 2,259,182.22 | 39° 41' 32.44 N | 108° 7' 58.35 W |

Formations

| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|---------------------|---------------------|--------------------|-----------|---------|-------------------|
| 1,360.1 | 1,297.0 | A_GROOVE | | | |
| 2,745.4 | 2,521.0 | GARDEN_GULCH / L-1 | | | |
| 6,557.1 | 5,889.0 | WASATCH_G | | | |
| 9,151.8 | 8,249.0 | WILLIAMS_FORK | | | |
| 9,191.8 | 8,289.0 | TOG | | | |
| 13,075.9 | 12,173.0 | ROLLINS | | | |
| 13,222.9 | 12,320.0 | COZZETTE | | | |
| 13,519.9 | 12,617.0 | CORCORAN | | | |
| 13,617.9 | 12,715.0 | LOWER_SEGO | | | |
| 13,730.9 | 12,828.0 | SEGO | | | |

Plan Annotations

| Measured Depth (ft) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Comment |
|---------------------|---------------------|------------|------------|---------------------------|
| 200.0 | 200.0 | 0.0 | 0.0 | KOP @ 200' MD |
| 1,130.7 | 1,094.3 | 153.2 | -161.1 | EOB; Inc=27.92° |
| 8,261.1 | 7,394.7 | 2,453.3 | -2,581.3 | Start Drop -3.00 |
| 9,191.8 | 8,289.0 | 2,606.5 | -2,742.4 | EOD; Inc=0° |
| 13,175.9 | 12,273.0 | 2,596.3 | -2,759.9 | Drillers TD @ 13175.9' MD |
| 14,175.9 | 13,273.0 | 2,593.7 | -2,764.3 | Permit TD @ 14175.9' MD |