



Planning Report

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well 8509E-33 E34 496 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 8324.0ft (Original Well Elev) |
| Project: | Story Gulch | MD Reference: | WELL @ 8324.0ft (Original Well Elev) |
| Site: | S33-T4S-R96W (E34 496) | North Reference: | True |
| Well: | 8509E-33 E34 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 | | S33-T4S-R96W (E34 496) | | | |
|-----------------------|----------|------------------------|-----------------|-------------------|------------------|
| Site Position: | | Northing: | 1,676,257.20 ft | Latitude: | 39° 39' 36.020 N |
| From: | Lat/Long | Easting: | 2,251,040.13 ft | Longitude: | 108° 9' 38.140 W |
| Position Uncertainty: | 0.0 ft | Slot Radius: | 13.200 in | Grid Convergence: | -1.68 ° |

| | | | | | | |
|----------------------|------------------|--------|---------------------|-----------------|---------------|------------------|
| Well | 8509E-33 E34 496 | | | | | |
| Well Position | +N/-S | 0.0 ft | Northing: | 1,676,154.44 ft | Latitude: | 39° 39' 35.000 N |
| | +E/-W | 0.0 ft | Easting: | 2,251,023.04 ft | Longitude: | 108° 9' 38.320 W |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: | ft | Ground Level: | 8,301.0 ft |

| | | | | | |
|------------------|-------------------|--------------------|----------------------------|--------------------------|--------------------------------|
| Wellbore | DD | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 6/19/2012 | 10.32 | 65.82 | 52,197 |

| | | | | |
|--------------------------|----------------------------------|-----------------------|-----------------------|--------------------------|
| 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 | 234.87 |

| 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 | |
| 250.0 | 0.00 | 0.00 | 250.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,035.3 | 23.56 | 234.86 | 1,013.4 | -91.6 | -130.2 | 3.00 | 3.00 | 0.00 | 234.86 | |
| 7,183.0 | 23.56 | 234.86 | 6,648.6 | -1,506.1 | -2,139.4 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 7,968.3 | 0.00 | 0.00 | 7,412.0 | -1,597.7 | -2,269.6 | 3.00 | -3.00 | 0.00 | 180.00 | E34 496 8509E-33 TC |
| 8,013.0 | 0.22 | 236.29 | 7,456.7 | -1,597.7 | -2,269.7 | 0.50 | 0.50 | -276.75 | 236.29 | |
| 12,602.3 | 0.22 | 236.29 | 12,046.0 | -1,607.7 | -2,284.6 | 0.00 | 0.00 | 0.00 | 0.00 | E34 496 8509E-33 PE |
| 12,752.3 | 0.22 | 236.29 | 12,196.0 | -1,608.0 | -2,285.1 | 0.00 | 0.00 | 0.00 | 0.00 | |

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| Project: | Story Gulch | MD Reference: | WELL @ 8324.0ft (Original Well Elev) |
| Site: | S33-T4S-R96W (E34 496) | North Reference: | True |
| Well: | 8509E-33 E34 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 | |
| 250.0 | 0.00 | 0.00 | 250.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | KOP @ 250' |
| 300.0 | 1.50 | 234.86 | 300.0 | -0.4 | -0.5 | 0.7 | 3.00 | 3.00 | |
| 400.0 | 4.50 | 234.86 | 399.8 | -3.4 | -4.8 | 5.9 | 3.00 | 3.00 | |
| 500.0 | 7.50 | 234.86 | 499.3 | -9.4 | -13.4 | 16.3 | 3.00 | 3.00 | |
| 600.0 | 10.50 | 234.86 | 598.0 | -18.4 | -26.2 | 32.0 | 3.00 | 3.00 | |
| 700.0 | 13.50 | 234.86 | 695.8 | -30.4 | -43.2 | 52.8 | 3.00 | 3.00 | |
| 800.0 | 16.50 | 234.86 | 792.4 | -45.3 | -64.3 | 78.6 | 3.00 | 3.00 | |
| 900.0 | 19.50 | 234.86 | 887.5 | -63.1 | -89.6 | 109.5 | 3.00 | 3.00 | |
| 1,000.0 | 22.50 | 234.86 | 980.9 | -83.7 | -118.9 | 145.4 | 3.00 | 3.00 | |
| 1,035.3 | 23.56 | 234.86 | 1,013.4 | -91.6 | -130.2 | 159.2 | 3.00 | 3.00 | EOB; Inc=23.56° |
| 1,100.0 | 23.56 | 234.86 | 1,072.7 | -106.5 | -151.3 | 185.0 | 0.00 | 0.00 | |
| 1,192.0 | 23.56 | 234.86 | 1,157.0 | -127.7 | -181.4 | 221.8 | 0.00 | 0.00 | A_GROOVE_TVD |
| 1,200.0 | 23.56 | 234.86 | 1,164.3 | -129.5 | -184.0 | 225.0 | 0.00 | 0.00 | |
| 1,300.0 | 23.56 | 234.86 | 1,256.0 | -152.5 | -216.7 | 265.0 | 0.00 | 0.00 | |
| 1,363.3 | 23.56 | 234.86 | 1,314.0 | -167.1 | -237.4 | 290.3 | 0.00 | 0.00 | B_GROOVE_TVD |
| 1,398.2 | 23.56 | 234.86 | 1,346.0 | -175.1 | -248.8 | 304.2 | 0.00 | 0.00 | B_GROOVE_BASE_TVD |
| 1,400.0 | 23.56 | 234.86 | 1,347.7 | -175.5 | -249.4 | 305.0 | 0.00 | 0.00 | |
| 1,500.0 | 23.56 | 234.86 | 1,439.3 | -198.5 | -282.0 | 344.9 | 0.00 | 0.00 | |
| 1,600.0 | 23.56 | 234.86 | 1,531.0 | -221.6 | -314.7 | 384.9 | 0.00 | 0.00 | |
| 1,700.0 | 23.56 | 234.86 | 1,622.7 | -244.6 | -347.4 | 424.9 | 0.00 | 0.00 | |
| 1,800.0 | 23.56 | 234.86 | 1,714.3 | -267.6 | -380.1 | 464.8 | 0.00 | 0.00 | |
| 1,900.0 | 23.56 | 234.86 | 1,806.0 | -290.6 | -412.8 | 504.8 | 0.00 | 0.00 | |
| 2,000.0 | 23.56 | 234.86 | 1,897.6 | -313.6 | -445.5 | 544.8 | 0.00 | 0.00 | |
| 2,100.0 | 23.56 | 234.86 | 1,989.3 | -336.6 | -478.1 | 584.7 | 0.00 | 0.00 | |
| 2,200.0 | 23.56 | 234.86 | 2,081.0 | -359.6 | -510.8 | 624.7 | 0.00 | 0.00 | |
| 2,300.0 | 23.56 | 234.86 | 2,172.6 | -382.6 | -543.5 | 664.7 | 0.00 | 0.00 | |
| 2,348.4 | 23.56 | 234.86 | 2,217.0 | -393.7 | -559.3 | 684.0 | 0.00 | 0.00 | GARDEN_GULCH_TVD |
| 2,400.0 | 23.56 | 234.86 | 2,264.3 | -405.6 | -576.2 | 704.6 | 0.00 | 0.00 | |
| 2,500.0 | 23.56 | 234.86 | 2,356.0 | -428.6 | -608.9 | 744.6 | 0.00 | 0.00 | |
| 2,600.0 | 23.56 | 234.86 | 2,447.6 | -451.6 | -641.6 | 784.6 | 0.00 | 0.00 | |
| 2,700.0 | 23.56 | 234.86 | 2,539.3 | -474.6 | -674.2 | 824.6 | 0.00 | 0.00 | |
| 2,800.0 | 23.56 | 234.86 | 2,631.0 | -497.6 | -706.9 | 864.5 | 0.00 | 0.00 | |
| 2,900.0 | 23.56 | 234.86 | 2,722.6 | -520.7 | -739.6 | 904.5 | 0.00 | 0.00 | |
| 3,000.0 | 23.56 | 234.86 | 2,814.3 | -543.7 | -772.3 | 944.5 | 0.00 | 0.00 | |
| 3,100.0 | 23.56 | 234.86 | 2,906.0 | -566.7 | -805.0 | 984.4 | 0.00 | 0.00 | |
| 3,200.0 | 23.56 | 234.86 | 2,997.6 | -589.7 | -837.7 | 1,024.4 | 0.00 | 0.00 | |
| 3,300.0 | 23.56 | 234.86 | 3,089.3 | -612.7 | -870.3 | 1,064.4 | 0.00 | 0.00 | |
| 3,400.0 | 23.56 | 234.86 | 3,181.0 | -635.7 | -903.0 | 1,104.3 | 0.00 | 0.00 | |
| 3,469.9 | 23.56 | 234.86 | 3,245.0 | -651.8 | -925.9 | 1,132.3 | 0.00 | 0.00 | WASATCH_FM_TVD |
| 3,500.0 | 23.56 | 234.86 | 3,272.6 | -658.7 | -935.7 | 1,144.3 | 0.00 | 0.00 | |
| 3,600.0 | 23.56 | 234.86 | 3,364.3 | -681.7 | -968.4 | 1,184.3 | 0.00 | 0.00 | |
| 3,700.0 | 23.56 | 234.86 | 3,456.0 | -704.7 | -1,001.1 | 1,224.2 | 0.00 | 0.00 | |
| 3,800.0 | 23.56 | 234.86 | 3,547.6 | -727.7 | -1,033.8 | 1,264.2 | 0.00 | 0.00 | |
| 3,900.0 | 23.56 | 234.86 | 3,639.3 | -750.7 | -1,066.4 | 1,304.2 | 0.00 | 0.00 | |
| 4,000.0 | 23.56 | 234.86 | 3,730.9 | -773.7 | -1,099.1 | 1,344.2 | 0.00 | 0.00 | |
| 4,100.0 | 23.56 | 234.86 | 3,822.6 | -796.7 | -1,131.8 | 1,384.1 | 0.00 | 0.00 | |
| 4,200.0 | 23.56 | 234.86 | 3,914.3 | -819.8 | -1,164.5 | 1,424.1 | 0.00 | 0.00 | |
| 4,300.0 | 23.56 | 234.86 | 4,005.9 | -842.8 | -1,197.2 | 1,464.1 | 0.00 | 0.00 | |
| 4,400.0 | 23.56 | 234.86 | 4,097.6 | -865.8 | -1,229.9 | 1,504.0 | 0.00 | 0.00 | |

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| Project: | Story Gulch | MD Reference: | WELL @ 8324.0ft (Original Well Elev) |
| Site: | S33-T4S-R96W (E34 496) | North Reference: | True |
| Well: | 8509E-33 E34 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 | 23.56 | 234.86 | 4,189.3 | -888.8 | -1,262.5 | 1,544.0 | 0.00 | 0.00 | |
| 4,600.0 | 23.56 | 234.86 | 4,280.9 | -911.8 | -1,295.2 | 1,584.0 | 0.00 | 0.00 | |
| 4,700.0 | 23.56 | 234.86 | 4,372.6 | -934.8 | -1,327.9 | 1,623.9 | 0.00 | 0.00 | |
| 4,800.0 | 23.56 | 234.86 | 4,464.3 | -957.8 | -1,360.6 | 1,663.9 | 0.00 | 0.00 | |
| 4,900.0 | 23.56 | 234.86 | 4,555.9 | -980.8 | -1,393.3 | 1,703.9 | 0.00 | 0.00 | |
| 5,000.0 | 23.56 | 234.86 | 4,647.6 | -1,003.8 | -1,426.0 | 1,743.8 | 0.00 | 0.00 | |
| 5,100.0 | 23.56 | 234.86 | 4,739.3 | -1,026.8 | -1,458.6 | 1,783.8 | 0.00 | 0.00 | |
| 5,200.0 | 23.56 | 234.86 | 4,830.9 | -1,049.8 | -1,491.3 | 1,823.8 | 0.00 | 0.00 | |
| 5,300.0 | 23.56 | 234.86 | 4,922.6 | -1,072.8 | -1,524.0 | 1,863.8 | 0.00 | 0.00 | |
| 5,400.0 | 23.56 | 234.86 | 5,014.3 | -1,095.8 | -1,556.7 | 1,903.7 | 0.00 | 0.00 | |
| 5,500.0 | 23.56 | 234.86 | 5,105.9 | -1,118.9 | -1,589.4 | 1,943.7 | 0.00 | 0.00 | |
| 5,600.0 | 23.56 | 234.86 | 5,197.6 | -1,141.9 | -1,622.1 | 1,983.7 | 0.00 | 0.00 | |
| 5,700.0 | 23.56 | 234.86 | 5,289.3 | -1,164.9 | -1,654.7 | 2,023.6 | 0.00 | 0.00 | |
| 5,747.7 | 23.56 | 234.86 | 5,333.0 | -1,175.8 | -1,670.3 | 2,042.7 | 0.00 | 0.00 | WASATCH_G_TVD |
| 5,800.0 | 23.56 | 234.86 | 5,380.9 | -1,187.9 | -1,687.4 | 2,063.6 | 0.00 | 0.00 | |
| 5,900.0 | 23.56 | 234.86 | 5,472.6 | -1,210.9 | -1,720.1 | 2,103.6 | 0.00 | 0.00 | |
| 6,000.0 | 23.56 | 234.86 | 5,564.2 | -1,233.9 | -1,752.8 | 2,143.5 | 0.00 | 0.00 | |
| 6,100.0 | 23.56 | 234.86 | 5,655.9 | -1,256.9 | -1,785.5 | 2,183.5 | 0.00 | 0.00 | |
| 6,200.0 | 23.56 | 234.86 | 5,747.6 | -1,279.9 | -1,818.2 | 2,223.5 | 0.00 | 0.00 | |
| 6,300.0 | 23.56 | 234.86 | 5,839.2 | -1,302.9 | -1,850.8 | 2,263.4 | 0.00 | 0.00 | |
| 6,400.0 | 23.56 | 234.86 | 5,930.9 | -1,325.9 | -1,883.5 | 2,303.4 | 0.00 | 0.00 | |
| 6,500.0 | 23.56 | 234.86 | 6,022.6 | -1,348.9 | -1,916.2 | 2,343.4 | 0.00 | 0.00 | |
| 6,600.0 | 23.56 | 234.86 | 6,114.2 | -1,371.9 | -1,948.9 | 2,383.4 | 0.00 | 0.00 | |
| 6,700.0 | 23.56 | 234.86 | 6,205.9 | -1,394.9 | -1,981.6 | 2,423.3 | 0.00 | 0.00 | |
| 6,800.0 | 23.56 | 234.86 | 6,297.6 | -1,417.9 | -2,014.3 | 2,463.3 | 0.00 | 0.00 | |
| 6,900.0 | 23.56 | 234.86 | 6,389.2 | -1,441.0 | -2,046.9 | 2,503.3 | 0.00 | 0.00 | |
| 7,000.0 | 23.56 | 234.86 | 6,480.9 | -1,464.0 | -2,079.6 | 2,543.2 | 0.00 | 0.00 | |
| 7,100.0 | 23.56 | 234.86 | 6,572.6 | -1,487.0 | -2,112.3 | 2,583.2 | 0.00 | 0.00 | |
| 7,183.0 | 23.56 | 234.86 | 6,648.6 | -1,506.1 | -2,139.4 | 2,616.4 | 0.00 | 0.00 | Start Drop -3.00 |
| 7,200.0 | 23.05 | 234.86 | 6,664.3 | -1,509.9 | -2,144.9 | 2,623.1 | 3.00 | -3.00 | |
| 7,300.0 | 20.05 | 234.86 | 6,757.3 | -1,531.1 | -2,175.0 | 2,659.8 | 3.00 | -3.00 | |
| 7,400.0 | 17.05 | 234.86 | 6,852.1 | -1,549.4 | -2,201.0 | 2,691.6 | 3.00 | -3.00 | |
| 7,500.0 | 14.05 | 234.86 | 6,948.4 | -1,564.8 | -2,222.9 | 2,718.4 | 3.00 | -3.00 | |
| 7,600.0 | 11.05 | 234.86 | 7,046.0 | -1,577.3 | -2,240.7 | 2,740.2 | 3.00 | -3.00 | |
| 7,700.0 | 8.05 | 234.86 | 7,144.6 | -1,586.9 | -2,254.2 | 2,756.7 | 3.00 | -3.00 | |
| 7,800.0 | 5.05 | 234.86 | 7,243.9 | -1,593.4 | -2,263.5 | 2,768.1 | 3.00 | -3.00 | |
| 7,900.0 | 2.05 | 234.86 | 7,343.7 | -1,597.0 | -2,268.6 | 2,774.3 | 3.00 | -3.00 | |
| 7,968.3 | 0.00 | 0.00 | 7,412.0 | -1,597.7 | -2,269.6 | 2,775.6 | 3.00 | -3.00 | EOD; Inc=0° - WILLIAMS_FORK_TVD - E34 496 |
| 8,000.0 | 0.16 | 236.29 | 7,443.7 | -1,597.7 | -2,269.6 | 2,775.6 | 0.50 | 0.50 | |
| 8,013.0 | 0.22 | 236.29 | 7,456.7 | -1,597.7 | -2,269.7 | 2,775.6 | 0.50 | 0.50 | |
| 8,100.0 | 0.22 | 236.29 | 7,543.7 | -1,597.9 | -2,270.0 | 2,776.0 | 0.00 | 0.00 | |
| 8,200.0 | 0.22 | 236.29 | 7,643.7 | -1,598.2 | -2,270.3 | 2,776.4 | 0.00 | 0.00 | |
| 8,300.0 | 0.22 | 236.29 | 7,743.7 | -1,598.4 | -2,270.6 | 2,776.8 | 0.00 | 0.00 | |
| 8,400.0 | 0.22 | 236.29 | 7,843.7 | -1,598.6 | -2,270.9 | 2,777.2 | 0.00 | 0.00 | |
| 8,500.0 | 0.22 | 236.29 | 7,943.7 | -1,598.8 | -2,271.3 | 2,777.5 | 0.00 | 0.00 | |
| 8,600.0 | 0.22 | 236.29 | 8,043.7 | -1,599.0 | -2,271.6 | 2,777.9 | 0.00 | 0.00 | |
| 8,700.0 | 0.22 | 236.29 | 8,143.7 | -1,599.2 | -2,271.9 | 2,778.3 | 0.00 | 0.00 | |
| 8,800.0 | 0.22 | 236.29 | 8,243.7 | -1,599.5 | -2,272.2 | 2,778.7 | 0.00 | 0.00 | |
| 8,900.0 | 0.22 | 236.29 | 8,343.7 | -1,599.7 | -2,272.6 | 2,779.1 | 0.00 | 0.00 | |
| 9,000.0 | 0.22 | 236.29 | 8,443.7 | -1,599.9 | -2,272.9 | 2,779.5 | 0.00 | 0.00 | |
| 9,100.0 | 0.22 | 236.29 | 8,543.7 | -1,600.1 | -2,273.2 | 2,779.9 | 0.00 | 0.00 | |
| 9,200.0 | 0.22 | 236.29 | 8,643.7 | -1,600.3 | -2,273.5 | 2,780.3 | 0.00 | 0.00 | |

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| Project: | Story Gulch | MD Reference: | WELL @ 8324.0ft (Original Well Elev) |
| Site: | S33-T4S-R96W (E34 496) | North Reference: | True |
| Well: | 8509E-33 E34 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 | 0.22 | 236.29 | 8,743.7 | -1,600.5 | -2,273.8 | 2,780.7 | 0.00 | 0.00 | |
| 9,400.0 | 0.22 | 236.29 | 8,843.7 | -1,600.8 | -2,274.2 | 2,781.1 | 0.00 | 0.00 | |
| 9,500.0 | 0.22 | 236.29 | 8,943.7 | -1,601.0 | -2,274.5 | 2,781.4 | 0.00 | 0.00 | |
| 9,600.0 | 0.22 | 236.29 | 9,043.7 | -1,601.2 | -2,274.8 | 2,781.8 | 0.00 | 0.00 | |
| 9,700.0 | 0.22 | 236.29 | 9,143.7 | -1,601.4 | -2,275.1 | 2,782.2 | 0.00 | 0.00 | |
| 9,800.0 | 0.22 | 236.29 | 9,243.7 | -1,601.6 | -2,275.5 | 2,782.6 | 0.00 | 0.00 | |
| 9,900.0 | 0.22 | 236.29 | 9,343.7 | -1,601.8 | -2,275.8 | 2,783.0 | 0.00 | 0.00 | |
| 10,000.0 | 0.22 | 236.29 | 9,443.7 | -1,602.1 | -2,276.1 | 2,783.4 | 0.00 | 0.00 | |
| 10,100.0 | 0.22 | 236.29 | 9,543.7 | -1,602.3 | -2,276.4 | 2,783.8 | 0.00 | 0.00 | |
| 10,200.0 | 0.22 | 236.29 | 9,643.7 | -1,602.5 | -2,276.8 | 2,784.2 | 0.00 | 0.00 | |
| 10,300.0 | 0.22 | 236.29 | 9,743.7 | -1,602.7 | -2,277.1 | 2,784.6 | 0.00 | 0.00 | |
| 10,400.0 | 0.22 | 236.29 | 9,843.7 | -1,602.9 | -2,277.4 | 2,785.0 | 0.00 | 0.00 | |
| 10,500.0 | 0.22 | 236.29 | 9,943.7 | -1,603.1 | -2,277.7 | 2,785.3 | 0.00 | 0.00 | |
| 10,600.0 | 0.22 | 236.29 | 10,043.7 | -1,603.3 | -2,278.1 | 2,785.7 | 0.00 | 0.00 | |
| 10,700.0 | 0.22 | 236.29 | 10,143.7 | -1,603.6 | -2,278.4 | 2,786.1 | 0.00 | 0.00 | |
| 10,800.0 | 0.22 | 236.29 | 10,243.7 | -1,603.8 | -2,278.7 | 2,786.5 | 0.00 | 0.00 | |
| 10,900.0 | 0.22 | 236.29 | 10,343.7 | -1,604.0 | -2,279.0 | 2,786.9 | 0.00 | 0.00 | |
| 11,000.0 | 0.22 | 236.29 | 10,443.7 | -1,604.2 | -2,279.4 | 2,787.3 | 0.00 | 0.00 | |
| 11,093.3 | 0.22 | 236.29 | 10,537.0 | -1,604.4 | -2,279.7 | 2,787.7 | 0.00 | 0.00 | CAMEO_TVD |
| 11,100.0 | 0.22 | 236.29 | 10,543.7 | -1,604.4 | -2,279.7 | 2,787.7 | 0.00 | 0.00 | |
| 11,200.0 | 0.22 | 236.29 | 10,643.7 | -1,604.6 | -2,280.0 | 2,788.1 | 0.00 | 0.00 | |
| 11,300.0 | 0.22 | 236.29 | 10,743.7 | -1,604.9 | -2,280.3 | 2,788.5 | 0.00 | 0.00 | |
| 11,400.0 | 0.22 | 236.29 | 10,843.7 | -1,605.1 | -2,280.7 | 2,788.9 | 0.00 | 0.00 | |
| 11,500.0 | 0.22 | 236.29 | 10,943.7 | -1,605.3 | -2,281.0 | 2,789.2 | 0.00 | 0.00 | |
| 11,561.3 | 0.22 | 236.29 | 11,005.0 | -1,605.4 | -2,281.2 | 2,789.5 | 0.00 | 0.00 | ROLLINS_TVD |
| 11,600.0 | 0.22 | 236.29 | 11,043.7 | -1,605.5 | -2,281.3 | 2,789.6 | 0.00 | 0.00 | |
| 11,700.0 | 0.22 | 236.29 | 11,143.7 | -1,605.7 | -2,281.6 | 2,790.0 | 0.00 | 0.00 | |
| 11,800.0 | 0.22 | 236.29 | 11,243.7 | -1,605.9 | -2,282.0 | 2,790.4 | 0.00 | 0.00 | |
| 11,814.3 | 0.22 | 236.29 | 11,258.0 | -1,606.0 | -2,282.0 | 2,790.5 | 0.00 | 0.00 | COZZETTE_TVD |
| 11,900.0 | 0.22 | 236.29 | 11,343.7 | -1,606.2 | -2,282.3 | 2,790.8 | 0.00 | 0.00 | |
| 11,999.3 | 0.22 | 236.29 | 11,443.0 | -1,606.4 | -2,282.6 | 2,791.2 | 0.00 | 0.00 | CORCORAN_TVD |
| 12,000.0 | 0.22 | 236.29 | 11,443.7 | -1,606.4 | -2,282.6 | 2,791.2 | 0.00 | 0.00 | |
| 12,100.0 | 0.22 | 236.29 | 11,543.7 | -1,606.6 | -2,282.9 | 2,791.6 | 0.00 | 0.00 | |
| 12,200.0 | 0.22 | 236.29 | 11,643.7 | -1,606.8 | -2,283.3 | 2,792.0 | 0.00 | 0.00 | |
| 12,300.0 | 0.22 | 236.29 | 11,743.7 | -1,607.0 | -2,283.6 | 2,792.4 | 0.00 | 0.00 | |
| 12,302.3 | 0.22 | 236.29 | 11,746.0 | -1,607.0 | -2,283.6 | 2,792.4 | 0.00 | 0.00 | UPPER_SEGO_TVD |
| 12,400.0 | 0.22 | 236.29 | 11,843.7 | -1,607.2 | -2,283.9 | 2,792.8 | 0.00 | 0.00 | |
| 12,452.3 | 0.22 | 236.29 | 11,896.0 | -1,607.4 | -2,284.1 | 2,793.0 | 0.00 | 0.00 | SEGO_BASE_TARGET_TVD |
| 12,500.0 | 0.22 | 236.29 | 11,943.7 | -1,607.5 | -2,284.2 | 2,793.1 | 0.00 | 0.00 | |
| 12,600.0 | 0.22 | 236.29 | 12,043.7 | -1,607.7 | -2,284.6 | 2,793.5 | 0.00 | 0.00 | |
| 12,602.3 | 0.22 | 236.29 | 12,046.0 | -1,607.7 | -2,284.6 | 2,793.5 | 0.00 | 0.00 | Drillers TD @ 12,602' MD - E34 496 8509E-33 I |
| 12,700.0 | 0.22 | 236.29 | 12,143.7 | -1,607.9 | -2,284.9 | 2,793.9 | 0.00 | 0.00 | |
| 12,752.3 | 0.22 | 236.29 | 12,196.0 | -1,608.0 | -2,285.1 | 2,794.1 | 0.00 | 0.00 | Permit TD @ 12,752' MD |

Planning Report

| | | | |
|------------------|-----------------------------|-------------------------------------|--------------------------------------|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well 8509E-33 E34 496 |
| Company: | EnCana Oil & Gas (USA) Inc | TVD Reference: | WELL @ 8324.0ft (Original Well Elev) |
| Project: | Story Gulch | MD Reference: | WELL @ 8324.0ft (Original Well Elev) |
| Site: | S33-T4S-R96W (E34 496) | North Reference: | True |
| Well: | 8509E-33 E34 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) | | |
| E34 496 8509E-33 TGT | 0.00 | 0.00 | 7,412.0 | -1,597.7 | -2,269.6 | 1,674,623.88 | 2,248,707.63 | 39° 39' 19.209 N | 108° 10' 7.339 W |
| - plan hits target center | | | | | | | | | |
| - Point | | | | | | | | | |
| E34 496 8509E-33 PBH | 0.00 | 0.00 | 12,046.0 | -1,607.7 | -2,284.6 | 1,674,614.34 | 2,248,692.38 | 39° 39' 19.110 N | 108° 10' 7.530 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) | | | (°) | (°) | |
| 1,192.0 | 1,157.0 | A_GROOVE_TVD | | | | |
| 1,363.3 | 1,314.0 | B_GROOVE_TVD | | | | |
| 1,398.2 | 1,346.0 | B_GROOVE_BASE_TVD | | | | |
| 2,348.4 | 2,217.0 | GARDEN_GULCH_TVD | | | | |
| 3,469.9 | 3,245.0 | WASATCH_FM_TVD | | | | |
| 5,747.7 | 5,333.0 | WASATCH_G_TVD | | | | |
| 7,968.3 | 7,412.0 | WILLIAMS_FORK_TVD | | | | |
| 11,093.3 | 10,537.0 | CAMEO_TVD | | | | |
| 11,561.3 | 11,005.0 | ROLLINS_TVD | | | | |
| 11,814.3 | 11,258.0 | COZZETTE_TVD | | | | |
| 11,999.3 | 11,443.0 | CORCORAN_TVD | | | | |
| 12,302.3 | 11,746.0 | UPPER_SEGO_TVD | | | | |
| 12,452.3 | 11,896.0 | SEGO_BASE_TARGET_TVD | | | | |

| Plan Annotations | | | | |
|------------------|----------------|-------------------|------------|--------------------------|
| Measured Depth | Vertical Depth | Local Coordinates | | Comment |
| (ft) | (ft) | +N/-S (ft) | +E/-W (ft) | |
| 250.0 | 250.0 | 0.0 | 0.0 | KOP @ 250' |
| 1,035.3 | 1,013.4 | -91.6 | -130.2 | EOB; Inc=23.56° |
| 7,183.0 | 6,648.6 | -1,506.1 | -2,139.4 | Start Drop -3.00 |
| 7,968.3 | 7,412.0 | -1,597.7 | -2,269.6 | EOD; Inc=0° |
| 12,602.3 | 12,046.0 | -1,597.7 | -2,269.7 | Drillers TD @ 12,602' MD |
| 12,752.3 | 12,196.0 | -1,607.7 | -2,284.6 | Permit TD @ 12,752' MD |