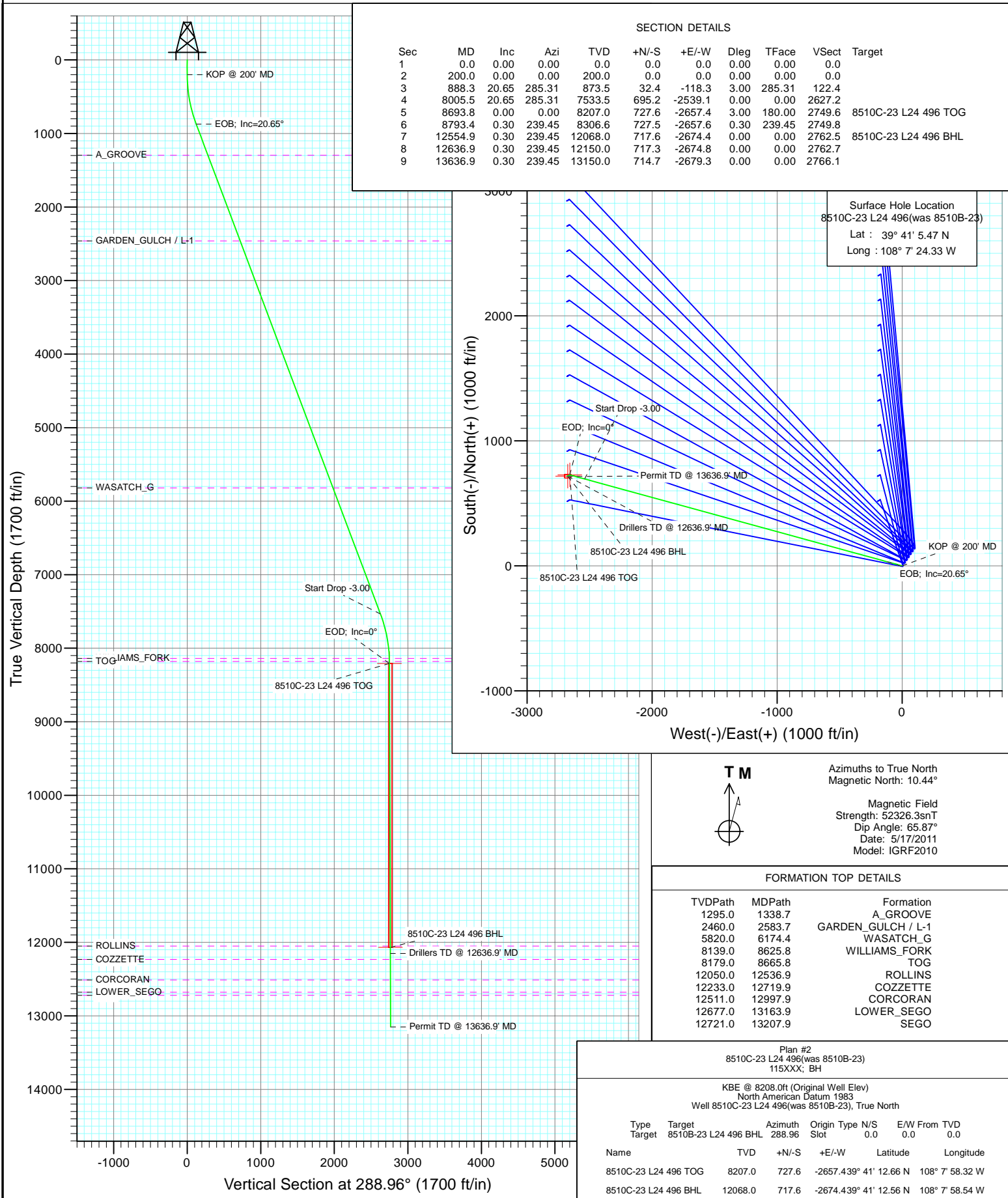


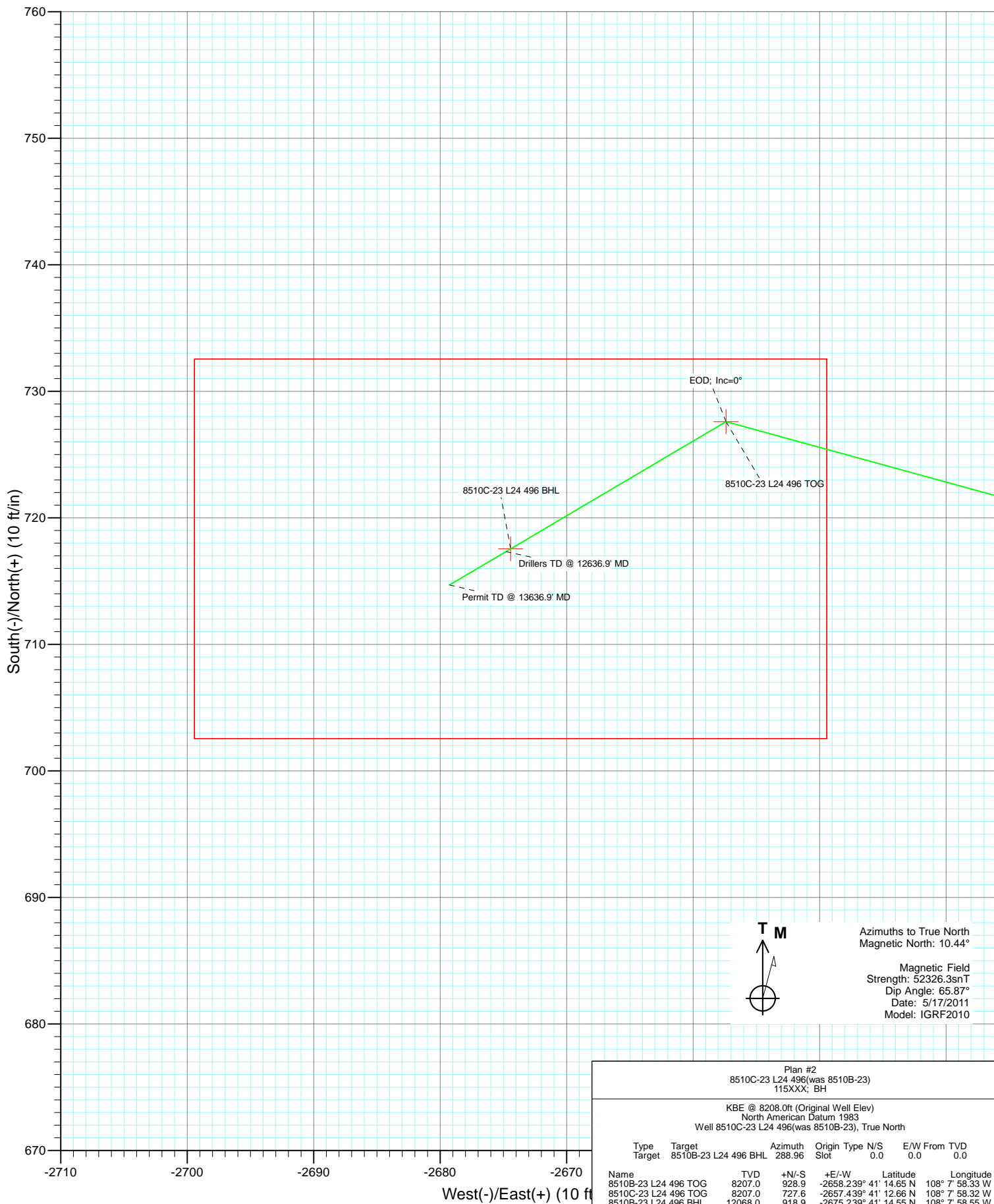


Project: Story Gulch  
Site: L24 496  
Well: 8510C-23 L24 496(was 8510B-23)  
Wellbore: DD  
Design: Plan #2





Project: Story Gulch  
 Site: L24 496  
 Well: 8510C-23 L24 496(was 8510B-23)  
 Wellbore: DD  
 Design: Plan #2



Azimuths to True North  
 Magnetic North: 10.44°  
 Magnetic Field  
 Strength: 52326.3snT  
 Dip Angle: 65.87°  
 Date: 5/17/2011  
 Model: IGRF2010

Plan #2 8510C-23 L24 496(was 8510B-23) 115XXX; BH							
KBE @ 8208.0ft (Original Well Elev) North American Datum 1983 Well 8510C-23 L24 496(was 8510B-23), True North							
Type	Target	Target	Azimuth	Origin	Type	N/S	E/W From
Target	8510B-23 L24 496 BHL		288.96	Slot		0.0	0.0
		TVD					
Name	8510B-23 L24 496 TOG	8207.0	928.9	+N/-S	-2658.239° 41'	14.65 N	108° 7' 58.33 W
	8510C-23 L24 496 TOG	8207.0	727.6	+E/-W	-2657.439° 41'	12.66 N	108° 7' 58.32 W
	8510B-23 L24 496 BHL	12068.0	918.9		-2675.239° 41'	14.55 N	108° 7' 58.55 W
	8510C-23 L24 496 BHL	12068.0	717.6		-2674.439° 41'	12.66 N	108° 7' 58.54 W

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well 8510C-23 L24 496(was 8510B-23)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Site:</b>	L24 496	<b>North Reference:</b>	True
<b>Well:</b>	8510C-23 L24 496(was 8510B-23)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #2		

<b>Project</b>	Story Gulch		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	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	8510C-23 L24 496(was 8510B-23)					
Well Position	+N/-S	0.0 ft	Northing:	1,684,999.99 ft	Latitude:	39° 41' 5.47 N
	+E/-W	0.0 ft	Easting:	2,261,761.85 ft	Longitude:	108° 7' 24.33 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,193.0 ft

<b>Wellbore</b>	DD				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	5/17/2011	10.44	65.87	52,326

<b>Design</b>	Plan #2			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	288.96

<b>Plan Sections</b>										
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	
888.3	20.65	285.31	873.5	32.4	-118.3	3.00	3.00	0.00	285.31	
8,005.5	20.65	285.31	7,533.5	695.2	-2,539.1	0.00	0.00	0.00	0.00	
8,693.8	0.00	0.00	8,207.0	727.6	-2,657.4	3.00	-3.00	0.00	180.00	8510C-23 L24 496 TC
8,793.4	0.30	239.45	8,306.6	727.5	-2,657.6	0.30	0.30	-121.04	239.45	
12,554.9	0.30	239.45	12,068.0	717.6	-2,674.4	0.00	0.00	0.00	0.00	8510C-23 L24 496 B+
12,636.9	0.30	239.45	12,150.0	717.3	-2,674.8	0.00	0.00	0.00	0.00	
13,636.9	0.30	239.45	13,150.0	714.7	-2,679.3	0.00	0.00	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well 8510C-23 L24 496(was 8510B-23)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Site:</b>	L24 496	<b>North Reference:</b>	True
<b>Well:</b>	8510C-23 L24 496(was 8510B-23)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #2		

### 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	285.31	300.0	0.7	-2.5	2.6	3.00	3.00	
400.0	6.00	285.31	399.6	2.8	-10.1	10.4	3.00	3.00	
500.0	9.00	285.31	498.8	6.2	-22.7	23.5	3.00	3.00	
600.0	12.00	285.31	597.1	11.0	-40.3	41.7	3.00	3.00	
700.0	15.00	285.31	694.3	17.2	-62.8	64.9	3.00	3.00	
800.0	18.00	285.31	790.2	24.7	-90.2	93.3	3.00	3.00	
888.3	20.65	285.31	873.5	32.4	-118.3	122.4	3.00	3.00	EOB; Inc=20.65°
900.0	20.65	285.31	884.4	33.5	-122.3	126.6	0.00	0.00	
1,000.0	20.65	285.31	978.0	42.8	-156.3	161.8	0.00	0.00	
1,100.0	20.65	285.31	1,071.6	52.1	-190.3	196.9	0.00	0.00	
1,200.0	20.65	285.31	1,165.2	61.4	-224.4	232.1	0.00	0.00	
1,300.0	20.65	285.31	1,258.7	70.7	-258.4	267.3	0.00	0.00	
1,338.7	20.65	285.31	1,295.0	74.3	-271.5	281.0	0.00	0.00	A_GROOVE
1,400.0	20.65	285.31	1,352.3	80.1	-292.4	302.5	0.00	0.00	
1,500.0	20.65	285.31	1,445.9	89.4	-326.4	337.7	0.00	0.00	
1,600.0	20.65	285.31	1,539.5	98.7	-360.4	372.9	0.00	0.00	
1,700.0	20.65	285.31	1,633.1	108.0	-394.4	408.1	0.00	0.00	
1,800.0	20.65	285.31	1,726.6	117.3	-428.4	443.3	0.00	0.00	
1,900.0	20.65	285.31	1,820.2	126.6	-462.4	478.5	0.00	0.00	
2,000.0	20.65	285.31	1,913.8	135.9	-496.5	513.7	0.00	0.00	
2,100.0	20.65	285.31	2,007.4	145.2	-530.5	548.9	0.00	0.00	
2,200.0	20.65	285.31	2,100.9	154.6	-564.5	584.1	0.00	0.00	
2,300.0	20.65	285.31	2,194.5	163.9	-598.5	619.3	0.00	0.00	
2,400.0	20.65	285.31	2,288.1	173.2	-632.5	654.5	0.00	0.00	
2,500.0	20.65	285.31	2,381.7	182.5	-666.5	689.6	0.00	0.00	
2,583.7	20.65	285.31	2,460.0	190.3	-695.0	719.1	0.00	0.00	GARDEN_GULCH / L-1
2,600.0	20.65	285.31	2,475.2	191.8	-700.5	724.8	0.00	0.00	
2,700.0	20.65	285.31	2,568.8	201.1	-734.5	760.0	0.00	0.00	
2,800.0	20.65	285.31	2,662.4	210.4	-768.5	795.2	0.00	0.00	
2,900.0	20.65	285.31	2,756.0	219.7	-802.6	830.4	0.00	0.00	
3,000.0	20.65	285.31	2,849.5	229.1	-836.6	865.6	0.00	0.00	
3,100.0	20.65	285.31	2,943.1	238.4	-870.6	900.8	0.00	0.00	
3,200.0	20.65	285.31	3,036.7	247.7	-904.6	936.0	0.00	0.00	
3,300.0	20.65	285.31	3,130.3	257.0	-938.6	971.2	0.00	0.00	
3,400.0	20.65	285.31	3,223.8	266.3	-972.6	1,006.4	0.00	0.00	
3,500.0	20.65	285.31	3,317.4	275.6	-1,006.6	1,041.6	0.00	0.00	
3,600.0	20.65	285.31	3,411.0	284.9	-1,040.6	1,076.8	0.00	0.00	
3,700.0	20.65	285.31	3,504.6	294.2	-1,074.7	1,112.0	0.00	0.00	
3,800.0	20.65	285.31	3,598.1	303.6	-1,108.7	1,147.2	0.00	0.00	
3,900.0	20.65	285.31	3,691.7	312.9	-1,142.7	1,182.3	0.00	0.00	
4,000.0	20.65	285.31	3,785.3	322.2	-1,176.7	1,217.5	0.00	0.00	
4,100.0	20.65	285.31	3,878.9	331.5	-1,210.7	1,252.7	0.00	0.00	
4,200.0	20.65	285.31	3,972.4	340.8	-1,244.7	1,287.9	0.00	0.00	
4,300.0	20.65	285.31	4,066.0	350.1	-1,278.7	1,323.1	0.00	0.00	
4,400.0	20.65	285.31	4,159.6	359.4	-1,312.7	1,358.3	0.00	0.00	
4,500.0	20.65	285.31	4,253.2	368.7	-1,346.8	1,393.5	0.00	0.00	
4,600.0	20.65	285.31	4,346.8	378.1	-1,380.8	1,428.7	0.00	0.00	
4,700.0	20.65	285.31	4,440.3	387.4	-1,414.8	1,463.9	0.00	0.00	
4,800.0	20.65	285.31	4,533.9	396.7	-1,448.8	1,499.1	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well 8510C-23 L24 496(was 8510B-23)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Site:</b>	L24 496	<b>North Reference:</b>	True
<b>Well:</b>	8510C-23 L24 496(was 8510B-23)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #2		

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	20.65	285.31	4,627.5	406.0	-1,482.8	1,534.3	0.00	0.00	
5,000.0	20.65	285.31	4,721.1	415.3	-1,516.8	1,569.5	0.00	0.00	
5,100.0	20.65	285.31	4,814.6	424.6	-1,550.8	1,604.7	0.00	0.00	
5,200.0	20.65	285.31	4,908.2	433.9	-1,584.8	1,639.8	0.00	0.00	
5,300.0	20.65	285.31	5,001.8	443.2	-1,618.9	1,675.0	0.00	0.00	
5,400.0	20.65	285.31	5,095.4	452.6	-1,652.9	1,710.2	0.00	0.00	
5,500.0	20.65	285.31	5,188.9	461.9	-1,686.9	1,745.4	0.00	0.00	
5,600.0	20.65	285.31	5,282.5	471.2	-1,720.9	1,780.6	0.00	0.00	
5,700.0	20.65	285.31	5,376.1	480.5	-1,754.9	1,815.8	0.00	0.00	
5,800.0	20.65	285.31	5,469.7	489.8	-1,788.9	1,851.0	0.00	0.00	
5,900.0	20.65	285.31	5,563.2	499.1	-1,822.9	1,886.2	0.00	0.00	
6,000.0	20.65	285.31	5,656.8	508.4	-1,856.9	1,921.4	0.00	0.00	
6,100.0	20.65	285.31	5,750.4	517.7	-1,891.0	1,956.6	0.00	0.00	
6,174.4	20.65	285.31	5,820.0	524.7	-1,916.3	1,982.8	0.00	0.00	WASATCH_G
6,200.0	20.65	285.31	5,844.0	527.1	-1,925.0	1,991.8	0.00	0.00	
6,300.0	20.65	285.31	5,937.5	536.4	-1,959.0	2,027.0	0.00	0.00	
6,400.0	20.65	285.31	6,031.1	545.7	-1,993.0	2,062.2	0.00	0.00	
6,500.0	20.65	285.31	6,124.7	555.0	-2,027.0	2,097.4	0.00	0.00	
6,600.0	20.65	285.31	6,218.3	564.3	-2,061.0	2,132.5	0.00	0.00	
6,700.0	20.65	285.31	6,311.8	573.6	-2,095.0	2,167.7	0.00	0.00	
6,800.0	20.65	285.31	6,405.4	582.9	-2,129.0	2,202.9	0.00	0.00	
6,900.0	20.65	285.31	6,499.0	592.2	-2,163.0	2,238.1	0.00	0.00	
7,000.0	20.65	285.31	6,592.6	601.6	-2,197.1	2,273.3	0.00	0.00	
7,100.0	20.65	285.31	6,686.1	610.9	-2,231.1	2,308.5	0.00	0.00	
7,200.0	20.65	285.31	6,779.7	620.2	-2,265.1	2,343.7	0.00	0.00	
7,300.0	20.65	285.31	6,873.3	629.5	-2,299.1	2,378.9	0.00	0.00	
7,400.0	20.65	285.31	6,966.9	638.8	-2,333.1	2,414.1	0.00	0.00	
7,500.0	20.65	285.31	7,060.5	648.1	-2,367.1	2,449.3	0.00	0.00	
7,600.0	20.65	285.31	7,154.0	657.4	-2,401.1	2,484.5	0.00	0.00	
7,700.0	20.65	285.31	7,247.6	666.7	-2,435.1	2,519.7	0.00	0.00	
7,800.0	20.65	285.31	7,341.2	676.1	-2,469.2	2,554.9	0.00	0.00	
7,900.0	20.65	285.31	7,434.8	685.4	-2,503.2	2,590.1	0.00	0.00	
8,000.0	20.65	285.31	7,528.3	694.7	-2,537.2	2,625.2	0.00	0.00	
8,005.5	20.65	285.31	7,533.5	695.2	-2,539.1	2,627.2	0.00	0.00	Start Drop -3.00
8,100.0	17.81	285.31	7,622.7	703.4	-2,569.1	2,658.2	3.00	-3.00	
8,200.0	14.81	285.31	7,718.7	710.8	-2,596.2	2,686.3	3.00	-3.00	
8,300.0	11.81	285.31	7,816.0	716.9	-2,618.4	2,709.3	3.00	-3.00	
8,400.0	8.81	285.31	7,914.3	721.6	-2,635.6	2,727.1	3.00	-3.00	
8,500.0	5.81	285.31	8,013.5	725.0	-2,647.9	2,739.8	3.00	-3.00	
8,600.0	2.81	285.31	8,113.2	727.0	-2,655.2	2,747.3	3.00	-3.00	
8,625.8	2.04	285.31	8,139.0	727.3	-2,656.2	2,748.4	3.00	-3.00	WILLIAMS_FORK
8,665.8	0.84	285.31	8,179.0	727.5	-2,657.2	2,749.4	3.00	-3.00	TOG
8,693.8	0.00	0.00	8,207.0	727.6	-2,657.4	2,749.6	3.00	-3.00	EOD; Inc=0° - 8510B-23 L24 496 TOG - 8510C
8,700.0	0.02	239.45	8,213.2	727.6	-2,657.4	2,749.6	0.30	0.30	
8,793.4	0.30	239.45	8,306.6	727.5	-2,657.6	2,749.8	0.30	0.30	
8,800.0	0.30	239.45	8,313.2	727.5	-2,657.7	2,749.8	0.00	0.00	
8,900.0	0.30	239.45	8,413.2	727.2	-2,658.1	2,750.2	0.00	0.00	
9,000.0	0.30	239.45	8,513.2	726.9	-2,658.5	2,750.5	0.00	0.00	
9,100.0	0.30	239.45	8,613.2	726.7	-2,659.0	2,750.8	0.00	0.00	
9,200.0	0.30	239.45	8,713.2	726.4	-2,659.4	2,751.2	0.00	0.00	
9,300.0	0.30	239.45	8,813.2	726.1	-2,659.9	2,751.5	0.00	0.00	
9,400.0	0.30	239.45	8,913.2	725.9	-2,660.3	2,751.8	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well 8510C-23 L24 496(was 8510B-23)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Site:</b>	L24 496	<b>North Reference:</b>	True
<b>Well:</b>	8510C-23 L24 496(was 8510B-23)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #2		

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
9,500.0	0.30	239.45	9,013.2	725.6	-2,660.8	2,752.2	0.00	0.00	
9,600.0	0.30	239.45	9,113.2	725.3	-2,661.2	2,752.5	0.00	0.00	
9,700.0	0.30	239.45	9,213.2	725.1	-2,661.7	2,752.9	0.00	0.00	
9,800.0	0.30	239.45	9,313.2	724.8	-2,662.1	2,753.2	0.00	0.00	
9,900.0	0.30	239.45	9,413.2	724.6	-2,662.6	2,753.5	0.00	0.00	
10,000.0	0.30	239.45	9,513.2	724.3	-2,663.0	2,753.9	0.00	0.00	
10,100.0	0.30	239.45	9,613.2	724.0	-2,663.5	2,754.2	0.00	0.00	
10,200.0	0.30	239.45	9,713.2	723.8	-2,663.9	2,754.5	0.00	0.00	
10,300.0	0.30	239.45	9,813.2	723.5	-2,664.4	2,754.9	0.00	0.00	
10,400.0	0.30	239.45	9,913.2	723.2	-2,664.8	2,755.2	0.00	0.00	
10,500.0	0.30	239.45	10,013.2	723.0	-2,665.2	2,755.6	0.00	0.00	
10,600.0	0.30	239.45	10,113.1	722.7	-2,665.7	2,755.9	0.00	0.00	
10,700.0	0.30	239.45	10,213.1	722.4	-2,666.1	2,756.2	0.00	0.00	
10,800.0	0.30	239.45	10,313.1	722.2	-2,666.6	2,756.6	0.00	0.00	
10,900.0	0.30	239.45	10,413.1	721.9	-2,667.0	2,756.9	0.00	0.00	
11,000.0	0.30	239.45	10,513.1	721.7	-2,667.5	2,757.2	0.00	0.00	
11,100.0	0.30	239.45	10,613.1	721.4	-2,667.9	2,757.6	0.00	0.00	
11,200.0	0.30	239.45	10,713.1	721.1	-2,668.4	2,757.9	0.00	0.00	
11,300.0	0.30	239.45	10,813.1	720.9	-2,668.8	2,758.2	0.00	0.00	
11,400.0	0.30	239.45	10,913.1	720.6	-2,669.3	2,758.6	0.00	0.00	
11,500.0	0.30	239.45	11,013.1	720.3	-2,669.7	2,758.9	0.00	0.00	
11,600.0	0.30	239.45	11,113.1	720.1	-2,670.2	2,759.3	0.00	0.00	
11,700.0	0.30	239.45	11,213.1	719.8	-2,670.6	2,759.6	0.00	0.00	
11,800.0	0.30	239.45	11,313.1	719.5	-2,671.1	2,759.9	0.00	0.00	
11,900.0	0.30	239.45	11,413.1	719.3	-2,671.5	2,760.3	0.00	0.00	
12,000.0	0.30	239.45	11,513.1	719.0	-2,671.9	2,760.6	0.00	0.00	
12,100.0	0.30	239.45	11,613.1	718.8	-2,672.4	2,760.9	0.00	0.00	
12,200.0	0.30	239.45	11,713.1	718.5	-2,672.8	2,761.3	0.00	0.00	
12,300.0	0.30	239.45	11,813.1	718.2	-2,673.3	2,761.6	0.00	0.00	
12,400.0	0.30	239.45	11,913.1	718.0	-2,673.7	2,761.9	0.00	0.00	
12,500.0	0.30	239.45	12,013.1	717.7	-2,674.2	2,762.3	0.00	0.00	
12,536.9	0.30	239.45	12,050.0	717.6	-2,674.3	2,762.4	0.00	0.00	ROLLINS
12,554.3	0.30	239.45	12,067.5	717.6	-2,674.4	2,762.5	0.00	0.00	8510B-23 L24 496 BHL
12,554.9	0.30	239.45	12,068.0	717.6	-2,674.4	2,762.5	0.00	0.00	8510C-23 L24 496 BHL
12,600.0	0.30	239.45	12,113.1	717.4	-2,674.6	2,762.6	0.00	0.00	
12,636.9	0.30	239.45	12,150.0	717.3	-2,674.8	2,762.7	0.00	0.00	Drillers TD @ 12636.9' MD
12,700.0	0.30	239.45	12,213.1	717.2	-2,675.1	2,763.0	0.00	0.00	
12,719.9	0.30	239.45	12,233.0	717.1	-2,675.2	2,763.0	0.00	0.00	COZZETTE
12,800.0	0.30	239.45	12,313.1	716.9	-2,675.5	2,763.3	0.00	0.00	
12,900.0	0.30	239.45	12,413.1	716.6	-2,676.0	2,763.6	0.00	0.00	
12,997.9	0.30	239.45	12,511.0	716.4	-2,676.4	2,764.0	0.00	0.00	CORCORAN
13,000.0	0.30	239.45	12,513.1	716.4	-2,676.4	2,764.0	0.00	0.00	
13,100.0	0.30	239.45	12,613.1	716.1	-2,676.9	2,764.3	0.00	0.00	
13,163.9	0.30	239.45	12,677.0	715.9	-2,677.1	2,764.5	0.00	0.00	LOWER_SEGO
13,200.0	0.30	239.45	12,713.1	715.9	-2,677.3	2,764.6	0.00	0.00	
13,207.9	0.30	239.45	12,721.0	715.8	-2,677.3	2,764.7	0.00	0.00	SEGO
13,300.0	0.30	239.45	12,813.1	715.6	-2,677.8	2,765.0	0.00	0.00	
13,400.0	0.30	239.45	12,913.1	715.3	-2,678.2	2,765.3	0.00	0.00	
13,500.0	0.30	239.45	13,013.1	715.1	-2,678.6	2,765.7	0.00	0.00	
13,600.0	0.30	239.45	13,113.1	714.8	-2,679.1	2,766.0	0.00	0.00	
13,636.9	0.30	239.45	13,150.0	714.7	-2,679.3	2,766.1	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well 8510C-23 L24 496(was 8510B-23)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Site:</b>	L24 496	<b>North Reference:</b>	True
<b>Well:</b>	8510C-23 L24 496(was 8510B-23)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #2		

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)		
8510B-23 L24 496 BHL	0.00	0.00	12,068.0	918.9	-2,675.2	1,685,995.75	2,259,114.32	39° 41' 14.55 N	108° 7' 58.55 W
- plan misses target center by 201.4ft at 12554.3ft MD (12067.5 TVD, 717.6 N, -2674.4 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									
8510B-23 L24 496 TOG	0.00	0.00	8,207.0	928.9	-2,658.2	1,686,005.26	2,259,131.62	39° 41' 14.65 N	108° 7' 58.33 W
- plan misses target center by 201.3ft at 8693.8ft MD (8207.0 TVD, 727.6 N, -2657.4 E)									
- Point									
8510C-23 L24 496 TOG	0.00	0.00	8,207.0	727.6	-2,657.4	1,685,804.01	2,259,126.57	39° 41' 12.66 N	108° 7' 58.32 W
- plan hits target center									
- Point									
8510C-23 L24 496 BHL	0.00	0.00	12,068.0	717.6	-2,674.4	1,685,794.46	2,259,109.26	39° 41' 12.56 N	108° 7' 58.54 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)			(°)	(°)	
1,338.7	1,295.0	A_GROOVE				
2,583.7	2,460.0	GARDEN_GULCH / L-1				
6,174.4	5,820.0	WASATCH_G				
8,625.8	8,139.0	WILLIAMS_FORK				
8,665.8	8,179.0	TOG				
12,536.9	12,050.0	ROLLINS				
12,719.9	12,233.0	COZZETTE				
12,997.9	12,511.0	CORCORAN				
13,163.9	12,677.0	LOWER_SEGO				
13,207.9	12,721.0	SEGO				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	Comment	
200.0	200.0	0.0	0.0	KOP @ 200' MD	
888.3	873.5	32.4	-118.3	EOB; Inc=20.65°	
8,005.5	7,533.5	695.2	-2,539.1	Start Drop -3.00	
8,693.8	8,207.0	727.6	-2,657.4	EOD; Inc=0°	
12,636.9	12,150.0	717.3	-2,674.8	Drillers TD @ 12636.9' MD	
13,636.9	13,150.0	714.7	-2,679.3	Permit TD @ 13636.9' MD	