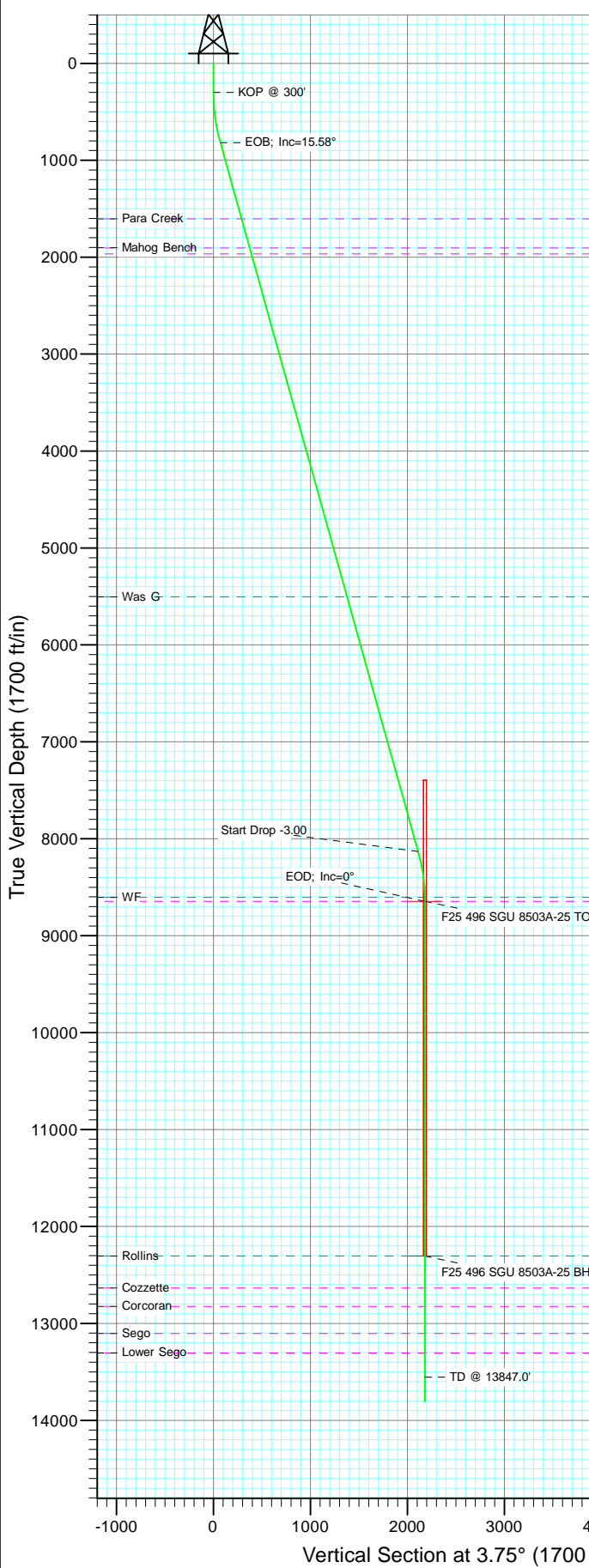


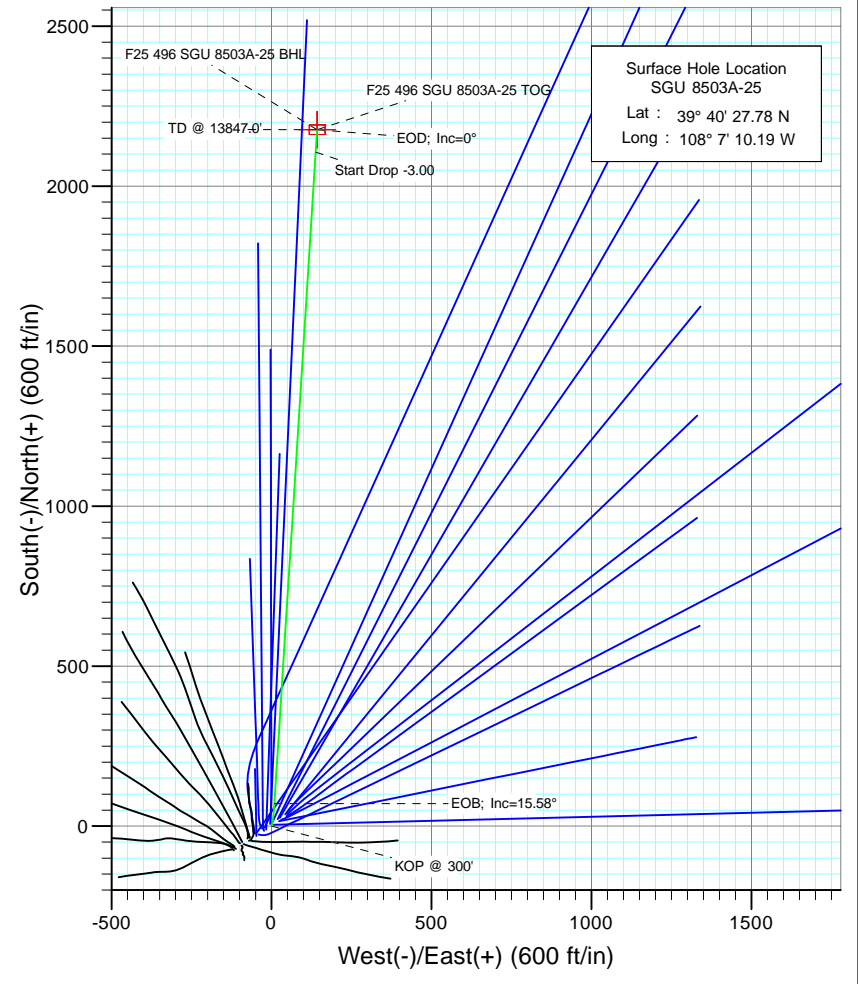


Project: Story Gulch  
 Site: F25 496  
 Well: SGU 8503A-25  
 Wellbore: DD  
 Design: Plan #1



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	300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.0	
3	466.7	5.00	15.00	466.5	7.0	1.9	3.00	15.00	7.1	
4	824.2	15.58	3.63	817.8	70.2	9.0	3.00	-16.53	70.6	
5	8417.5	15.58	3.63	8131.9	2106.0	138.1	0.00	0.00	2110.6	
6	8937.0	0.00	0.00	8645.0	2176.1	142.6	3.00	180.00	2180.8	F25 496 SGU 8503A-25 TOG
7	12597.0	0.00	0.00	12305.0	2176.1	142.6	0.00	0.00	2180.8	F25 496 SGU 8503A-25 BHL
8	13847.0	0.00	0.00	13555.0	2176.1	142.6	0.00	0.00	2180.8	
9	14097.0	0.00	0.00	13805.0	2176.1	142.6	0.00	0.00	2180.8	



Bottom Hole Location  
 SGU 8503A-25  
 Lat : 39 40 49.29 N  
 Long. : 108 7 8.37 W

Azimuths to True North  
 Magnetic North: 10.55°  
 Magnetic Field  
 Strength: 52453.6snT  
 Dip Angle: 65.90°  
 Date: 5/6/2010  
 Model: IGRF200510

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1605.0	1641.5	Para Creek
1905.0	1952.9	Mahog Bench
1965.0	2015.2	Base B
5505.0	5690.3	Was G
8605.0	8897.0	WF
8645.0	8937.0	TOG
12305.0	12597.0	Rollins
12635.0	12927.0	Cozzette
12825.0	13117.0	Corcoran
13105.0	13397.0	Sego
13305.0	13597.0	Lower Sego

DESIGN DETAILS: Plan #1  
 105XXX; BH  
 KBE @ 8320.0ft (Original Well Elev)

Target	Azimuth	Origin	N/S	E/W	From TVD
F25 496 SGU 8503A-25 BHL	3.75	Slot	0.0	0.0	0.0

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well SGU 8503A-25
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8320.0ft (Original Well Elev)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8320.0ft (Original Well Elev)
<b>Site:</b>	F25 496	<b>North Reference:</b>	True
<b>Well:</b>	SGU 8503A-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

<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		

<b>Site</b>	F25 496				
<b>Site Position:</b>		<b>Northing:</b>	1,681,091.06 ft	<b>Latitude:</b>	39° 40' 27.10 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,262,632.54 ft	<b>Longitude:</b>	108° 7' 11.76 W
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b>	-1.65 °

<b>Well</b>	SGU 8503A-25					
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>	1,681,156.43 ft	<b>Latitude:</b>	39° 40' 27.78 N
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	2,262,756.62 ft	<b>Longitude:</b>	108° 7' 10.19 W
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	8,298.0 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</b>
			(°)	(°)	(nT)
	IGRF200510	5/6/2010	10.55	65.90	52,454

<b>Design</b>	Plan #1			
<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)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	3.75

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	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
466.7	5.00	15.00	466.5	7.0	1.9	3.00	3.00	0.00	15.00	
824.2	15.58	3.63	817.8	70.2	9.0	3.00	2.96	-3.18	-16.53	
8,417.5	15.58	3.63	8,131.9	2,106.0	138.1	0.00	0.00	0.00	0.00	
8,937.0	0.00	0.00	8,645.0	2,176.1	142.6	3.00	-3.00	0.00	180.00	F25 496 SGU 8503A-
12,597.0	0.00	0.00	12,305.0	2,176.1	142.6	0.00	0.00	0.00	0.00	F25 496 SGU 8503A-
13,847.0	0.00	0.00	13,555.0	2,176.1	142.6	0.00	0.00	0.00	0.00	
14,097.0	0.00	0.00	13,805.0	2,176.1	142.6	0.00	0.00	0.00	0.00	

# Cathedral Energy Services

## Planning Report

**Database:** EDM 5000.1 US Multi Users DB  
**Company:** EnCana Oil & Gas (USA) Inc  
**Project:** Story Gulch  
**Site:** F25 496  
**Well:** SGU 8503A-25  
**Wellbore:** DD  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well SGU 8503A-25  
**TVD Reference:** KBE @ 8320.0ft (Original Well Elev)  
**MD Reference:** KBE @ 8320.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

### 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	KOP @ 300'
400.0	3.00	15.00	400.0	2.5	0.7	2.6	3.00	3.00	
466.7	5.00	15.00	466.5	7.0	1.9	7.1	3.00	3.00	
500.0	5.97	12.26	499.6	10.1	2.6	10.3	3.00	2.90	
600.0	8.91	7.63	598.8	22.9	4.8	23.1	3.00	2.94	
700.0	11.88	5.30	697.1	40.8	6.7	41.1	3.00	2.97	
800.0	14.86	3.89	794.4	63.8	8.6	64.3	3.00	2.98	
824.2	15.58	3.63	817.8	70.2	9.0	70.6	3.00	2.99	EOB; Inc=15.58°
900.0	15.58	3.63	890.8	90.5	10.3	91.0	0.00	0.00	
1,000.0	15.58	3.63	987.1	117.3	12.0	117.8	0.00	0.00	
1,100.0	15.58	3.63	1,083.4	144.1	13.7	144.7	0.00	0.00	
1,200.0	15.58	3.63	1,179.7	170.9	15.4	171.6	0.00	0.00	
1,300.0	15.58	3.63	1,276.1	197.8	17.1	198.4	0.00	0.00	
1,400.0	15.58	3.63	1,372.4	224.6	18.8	225.3	0.00	0.00	
1,500.0	15.58	3.63	1,468.7	251.4	20.5	252.2	0.00	0.00	
1,600.0	15.58	3.63	1,565.0	278.2	22.2	279.0	0.00	0.00	
1,641.5	15.58	3.63	1,605.0	289.3	22.9	290.2	0.00	0.00	Para Creek
1,700.0	15.58	3.63	1,661.4	305.0	23.9	305.9	0.00	0.00	
1,800.0	15.58	3.63	1,757.7	331.8	25.6	332.8	0.00	0.00	
1,900.0	15.58	3.63	1,854.0	358.6	27.3	359.6	0.00	0.00	
1,952.9	15.58	3.63	1,905.0	372.8	28.2	373.9	0.00	0.00	Mahog Bench
2,000.0	15.58	3.63	1,950.3	385.4	29.0	386.5	0.00	0.00	
2,015.2	15.58	3.63	1,965.0	389.5	29.2	390.6	0.00	0.00	Base B
2,100.0	15.58	3.63	2,046.7	412.2	30.7	413.4	0.00	0.00	
2,200.0	15.58	3.63	2,143.0	439.1	32.4	440.2	0.00	0.00	
2,300.0	15.58	3.63	2,239.3	465.9	34.1	467.1	0.00	0.00	
2,400.0	15.58	3.63	2,335.6	492.7	35.8	494.0	0.00	0.00	
2,500.0	15.58	3.63	2,432.0	519.5	37.5	520.8	0.00	0.00	
2,600.0	15.58	3.63	2,528.3	546.3	39.2	547.7	0.00	0.00	
2,700.0	15.58	3.63	2,624.6	573.1	40.9	574.6	0.00	0.00	
2,800.0	15.58	3.63	2,720.9	599.9	42.6	601.4	0.00	0.00	
2,900.0	15.58	3.63	2,817.3	626.7	44.3	628.3	0.00	0.00	
3,000.0	15.58	3.63	2,913.6	653.5	46.0	655.2	0.00	0.00	
3,100.0	15.58	3.63	3,009.9	680.4	47.7	682.0	0.00	0.00	
3,200.0	15.58	3.63	3,106.2	707.2	49.4	708.9	0.00	0.00	
3,300.0	15.58	3.63	3,202.5	734.0	51.1	735.7	0.00	0.00	
3,400.0	15.58	3.63	3,298.9	760.8	52.8	762.6	0.00	0.00	
3,500.0	15.58	3.63	3,395.2	787.6	54.5	789.5	0.00	0.00	
3,600.0	15.58	3.63	3,491.5	814.4	56.2	816.3	0.00	0.00	
3,700.0	15.58	3.63	3,587.8	841.2	57.9	843.2	0.00	0.00	
3,800.0	15.58	3.63	3,684.2	868.0	59.6	870.1	0.00	0.00	
3,900.0	15.58	3.63	3,780.5	894.8	61.3	896.9	0.00	0.00	
4,000.0	15.58	3.63	3,876.8	921.7	63.0	923.8	0.00	0.00	
4,100.0	15.58	3.63	3,973.1	948.5	64.7	950.7	0.00	0.00	
4,200.0	15.58	3.63	4,069.5	975.3	66.4	977.5	0.00	0.00	
4,300.0	15.58	3.63	4,165.8	1,002.1	68.1	1,004.4	0.00	0.00	
4,400.0	15.58	3.63	4,262.1	1,028.9	69.8	1,031.3	0.00	0.00	
4,500.0	15.58	3.63	4,358.4	1,055.7	71.5	1,058.1	0.00	0.00	
4,600.0	15.58	3.63	4,454.8	1,082.5	73.2	1,085.0	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 SGU 8503A-25
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8320.0ft (Original Well Elev)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8320.0ft (Original Well Elev)
<b>Site:</b>	F25 496	<b>North Reference:</b>	True
<b>Well:</b>	SGU 8503A-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	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
4,700.0	15.58	3.63	4,551.1	1,109.3	74.9	1,111.9	0.00	0.00	
4,800.0	15.58	3.63	4,647.4	1,136.1	76.6	1,138.7	0.00	0.00	
4,900.0	15.58	3.63	4,743.7	1,163.0	78.3	1,165.6	0.00	0.00	
5,000.0	15.58	3.63	4,840.0	1,189.8	80.0	1,192.5	0.00	0.00	
5,100.0	15.58	3.63	4,936.4	1,216.6	81.7	1,219.3	0.00	0.00	
5,200.0	15.58	3.63	5,032.7	1,243.4	83.4	1,246.2	0.00	0.00	
5,300.0	15.58	3.63	5,129.0	1,270.2	85.1	1,273.1	0.00	0.00	
5,400.0	15.58	3.63	5,225.3	1,297.0	86.8	1,299.9	0.00	0.00	
5,500.0	15.58	3.63	5,321.7	1,323.8	88.5	1,326.8	0.00	0.00	
5,600.0	15.58	3.63	5,418.0	1,350.6	90.2	1,353.6	0.00	0.00	
5,690.3	15.58	3.63	5,505.0	1,374.9	91.7	1,377.9	0.00	0.00	Was G
5,700.0	15.58	3.63	5,514.3	1,377.4	91.9	1,380.5	0.00	0.00	
5,800.0	15.58	3.63	5,610.6	1,404.3	93.6	1,407.4	0.00	0.00	
5,900.0	15.58	3.63	5,707.0	1,431.1	95.3	1,434.2	0.00	0.00	
6,000.0	15.58	3.63	5,803.3	1,457.9	97.0	1,461.1	0.00	0.00	
6,100.0	15.58	3.63	5,899.6	1,484.7	98.7	1,488.0	0.00	0.00	
6,200.0	15.58	3.63	5,995.9	1,511.5	100.4	1,514.8	0.00	0.00	
6,300.0	15.58	3.63	6,092.3	1,538.3	102.1	1,541.7	0.00	0.00	
6,400.0	15.58	3.63	6,188.6	1,565.1	103.8	1,568.6	0.00	0.00	
6,500.0	15.58	3.63	6,284.9	1,591.9	105.5	1,595.4	0.00	0.00	
6,600.0	15.58	3.63	6,381.2	1,618.8	107.2	1,622.3	0.00	0.00	
6,700.0	15.58	3.63	6,477.6	1,645.6	108.9	1,649.2	0.00	0.00	
6,800.0	15.58	3.63	6,573.9	1,672.4	110.6	1,676.0	0.00	0.00	
6,900.0	15.58	3.63	6,670.2	1,699.2	112.3	1,702.9	0.00	0.00	
7,000.0	15.58	3.63	6,766.5	1,726.0	114.0	1,729.8	0.00	0.00	
7,100.0	15.58	3.63	6,862.8	1,752.8	115.7	1,756.6	0.00	0.00	
7,200.0	15.58	3.63	6,959.2	1,779.6	117.4	1,783.5	0.00	0.00	
7,300.0	15.58	3.63	7,055.5	1,806.4	119.1	1,810.4	0.00	0.00	
7,400.0	15.58	3.63	7,151.8	1,833.2	120.8	1,837.2	0.00	0.00	
7,500.0	15.58	3.63	7,248.1	1,860.1	122.5	1,864.1	0.00	0.00	
7,600.0	15.58	3.63	7,344.5	1,886.9	124.2	1,890.9	0.00	0.00	
7,700.0	15.58	3.63	7,440.8	1,913.7	125.9	1,917.8	0.00	0.00	
7,800.0	15.58	3.63	7,537.1	1,940.5	127.6	1,944.7	0.00	0.00	
7,900.0	15.58	3.63	7,633.4	1,967.3	129.3	1,971.5	0.00	0.00	
8,000.0	15.58	3.63	7,729.8	1,994.1	131.0	1,998.4	0.00	0.00	
8,100.0	15.58	3.63	7,826.1	2,020.9	132.7	2,025.3	0.00	0.00	
8,200.0	15.58	3.63	7,922.4	2,047.7	134.4	2,052.1	0.00	0.00	
8,300.0	15.58	3.63	8,018.7	2,074.5	136.1	2,079.0	0.00	0.00	
8,400.0	15.58	3.63	8,115.1	2,101.4	137.8	2,105.9	0.00	0.00	
8,417.5	15.58	3.63	8,131.9	2,106.0	138.1	2,110.6	0.00	0.00	Start Drop -3.00
8,500.0	13.11	3.63	8,211.8	2,126.4	139.4	2,131.0	3.00	-3.00	
8,600.0	10.11	3.63	8,309.8	2,146.5	140.7	2,151.1	3.00	-3.00	
8,700.0	7.11	3.63	8,408.6	2,161.5	141.7	2,166.1	3.00	-3.00	
8,800.0	4.11	3.63	8,508.1	2,171.2	142.3	2,175.9	3.00	-3.00	
8,897.0	1.20	3.63	8,605.0	2,175.7	142.6	2,180.4	3.00	-3.00	WF
8,900.0	1.11	3.63	8,608.0	2,175.8	142.6	2,180.4	3.00	-3.00	
8,937.0	0.00	0.00	8,645.0	2,176.1	142.6	2,180.8	3.00	-3.00	EOD; Inc=0° - TOG - F25 496 SGU 8503A-25 T
9,000.0	0.00	0.00	8,708.0	2,176.1	142.6	2,180.8	0.00	0.00	
9,100.0	0.00	0.00	8,808.0	2,176.1	142.6	2,180.8	0.00	0.00	
9,200.0	0.00	0.00	8,908.0	2,176.1	142.6	2,180.8	0.00	0.00	
9,300.0	0.00	0.00	9,008.0	2,176.1	142.6	2,180.8	0.00	0.00	
9,400.0	0.00	0.00	9,108.0	2,176.1	142.6	2,180.8	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 SGU 8503A-25
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8320.0ft (Original Well Elev)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8320.0ft (Original Well Elev)
<b>Site:</b>	F25 496	<b>North Reference:</b>	True
<b>Well:</b>	SGU 8503A-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	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
9,500.0	0.00	0.00	9,208.0	2,176.1	142.6	2,180.8	0.00	0.00	
9,600.0	0.00	0.00	9,308.0	2,176.1	142.6	2,180.8	0.00	0.00	
9,700.0	0.00	0.00	9,408.0	2,176.1	142.6	2,180.8	0.00	0.00	
9,800.0	0.00	0.00	9,508.0	2,176.1	142.6	2,180.8	0.00	0.00	
9,900.0	0.00	0.00	9,608.0	2,176.1	142.6	2,180.8	0.00	0.00	
10,000.0	0.00	0.00	9,708.0	2,176.1	142.6	2,180.8	0.00	0.00	
10,100.0	0.00	0.00	9,808.0	2,176.1	142.6	2,180.8	0.00	0.00	
10,200.0	0.00	0.00	9,908.0	2,176.1	142.6	2,180.8	0.00	0.00	
10,300.0	0.00	0.00	10,008.0	2,176.1	142.6	2,180.8	0.00	0.00	
10,400.0	0.00	0.00	10,108.0	2,176.1	142.6	2,180.8	0.00	0.00	
10,500.0	0.00	0.00	10,208.0	2,176.1	142.6	2,180.8	0.00	0.00	
10,600.0	0.00	0.00	10,308.0	2,176.1	142.6	2,180.8	0.00	0.00	
10,700.0	0.00	0.00	10,408.0	2,176.1	142.6	2,180.8	0.00	0.00	
10,800.0	0.00	0.00	10,508.0	2,176.1	142.6	2,180.8	0.00	0.00	
10,900.0	0.00	0.00	10,608.0	2,176.1	142.6	2,180.8	0.00	0.00	
11,000.0	0.00	0.00	10,708.0	2,176.1	142.6	2,180.8	0.00	0.00	
11,100.0	0.00	0.00	10,808.0	2,176.1	142.6	2,180.8	0.00	0.00	
11,200.0	0.00	0.00	10,908.0	2,176.1	142.6	2,180.8	0.00	0.00	
11,300.0	0.00	0.00	11,008.0	2,176.1	142.6	2,180.8	0.00	0.00	
11,400.0	0.00	0.00	11,108.0	2,176.1	142.6	2,180.8	0.00	0.00	
11,500.0	0.00	0.00	11,208.0	2,176.1	142.6	2,180.8	0.00	0.00	
11,600.0	0.00	0.00	11,308.0	2,176.1	142.6	2,180.8	0.00	0.00	
11,700.0	0.00	0.00	11,408.0	2,176.1	142.6	2,180.8	0.00	0.00	
11,800.0	0.00	0.00	11,508.0	2,176.1	142.6	2,180.8	0.00	0.00	
11,900.0	0.00	0.00	11,608.0	2,176.1	142.6	2,180.8	0.00	0.00	
12,000.0	0.00	0.00	11,708.0	2,176.1	142.6	2,180.8	0.00	0.00	
12,100.0	0.00	0.00	11,808.0	2,176.1	142.6	2,180.8	0.00	0.00	
12,200.0	0.00	0.00	11,908.0	2,176.1	142.6	2,180.8	0.00	0.00	
12,300.0	0.00	0.00	12,008.0	2,176.1	142.6	2,180.8	0.00	0.00	
12,400.0	0.00	0.00	12,108.0	2,176.1	142.6	2,180.8	0.00	0.00	
12,500.0	0.00	0.00	12,208.0	2,176.1	142.6	2,180.8	0.00	0.00	
12,597.0	0.00	0.00	12,305.0	2,176.1	142.6	2,180.8	0.00	0.00	Rollins - F25 496 SGU 8503A-25 BHL
12,600.0	0.00	0.00	12,308.0	2,176.1	142.6	2,180.8	0.00	0.00	
12,700.0	0.00	0.00	12,408.0	2,176.1	142.6	2,180.8	0.00	0.00	
12,800.0	0.00	0.00	12,508.0	2,176.1	142.6	2,180.8	0.00	0.00	
12,900.0	0.00	0.00	12,608.0	2,176.1	142.6	2,180.8	0.00	0.00	
12,927.0	0.00	0.00	12,635.0	2,176.1	142.6	2,180.8	0.00	0.00	Cozzette
13,000.0	0.00	0.00	12,708.0	2,176.1	142.6	2,180.8	0.00	0.00	
13,100.0	0.00	0.00	12,808.0	2,176.1	142.6	2,180.8	0.00	0.00	
13,117.0	0.00	0.00	12,825.0	2,176.1	142.6	2,180.8	0.00	0.00	Corcoran
13,200.0	0.00	0.00	12,908.0	2,176.1	142.6	2,180.8	0.00	0.00	
13,300.0	0.00	0.00	13,008.0	2,176.1	142.6	2,180.8	0.00	0.00	
13,397.0	0.00	0.00	13,105.0	2,176.1	142.6	2,180.8	0.00	0.00	Sego
13,400.0	0.00	0.00	13,108.0	2,176.1	142.6	2,180.8	0.00	0.00	
13,500.0	0.00	0.00	13,208.0	2,176.1	142.6	2,180.8	0.00	0.00	
13,597.0	0.00	0.00	13,305.0	2,176.1	142.6	2,180.8	0.00	0.00	Lower Sego
13,600.0	0.00	0.00	13,308.0	2,176.1	142.6	2,180.8	0.00	0.00	
13,700.0	0.00	0.00	13,408.0	2,176.1	142.6	2,180.8	0.00	0.00	
13,800.0	0.00	0.00	13,508.0	2,176.1	142.6	2,180.8	0.00	0.00	
13,847.0	0.00	0.00	13,555.0	2,176.1	142.6	2,180.8	0.00	0.00	TD @ 13847.0'
13,900.0	0.00	0.00	13,608.0	2,176.1	142.6	2,180.8	0.00	0.00	
14,000.0	0.00	0.00	13,708.0	2,176.1	142.6	2,180.8	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 SGU 8503A-25
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8320.0ft (Original Well Elev)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8320.0ft (Original Well Elev)
<b>Site:</b>	F25 496	<b>North Reference:</b>	True
<b>Well:</b>	SGU 8503A-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	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
14,097.0	0.00	0.00	13,805.0	2,176.1	142.6	2,180.8	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
F25 496 SGU 8503A-25 - plan hits target center - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	12,305.0	2,176.1	142.6	1,683,327.53	2,262,961.88	39° 40' 49.29 N	108° 7' 8.37 W
F25 496 SGU 8503A-25 - plan hits target center - Point	0.00	0.00	8,645.0	2,176.1	142.6	1,683,327.53	2,262,961.88	39° 40' 49.29 N	108° 7' 8.37 W

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,641.5	1,605.0	Para Creek		0.00	
1,952.9	1,905.0	Mahog Bench		0.00	
2,015.2	1,965.0	Base B		0.00	
5,690.3	5,505.0	Was G		0.00	
8,897.0	8,605.0	WF		0.00	
8,937.0	8,645.0	TOG		0.00	
12,597.0	12,305.0	Rollins		0.00	
12,927.0	12,635.0	Cozzette		0.00	
13,117.0	12,825.0	Corcoran		0.00	
13,397.0	13,105.0	Sego		0.00	
13,597.0	13,305.0	Lower Sego		0.00	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
300.0	300.0	0.0	0.0	KOP @ 300'
824.2	817.8	7.0	1.9	EOB; Inc=15.58°
8,417.5	8,131.9	70.2	9.0	Start Drop -3.00
8,937.0	8,645.0	2,106.0	138.1	EOD; Inc=0°
13,847.0	13,555.0	2,176.1	142.6	TD @ 13847.0'
14,097.0	13,805.0	2,176.1	142.6	Permit TD at 14097.0'