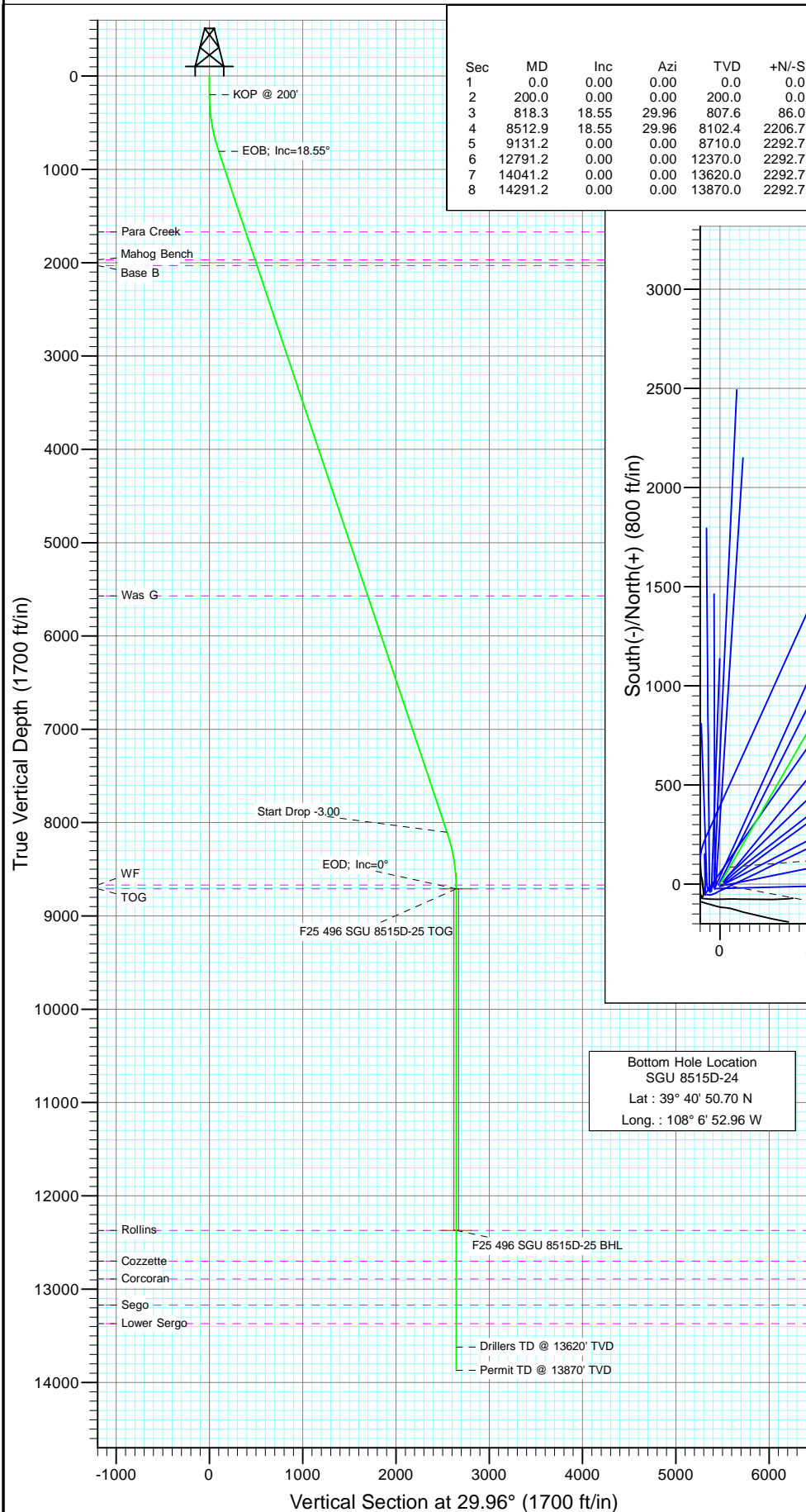
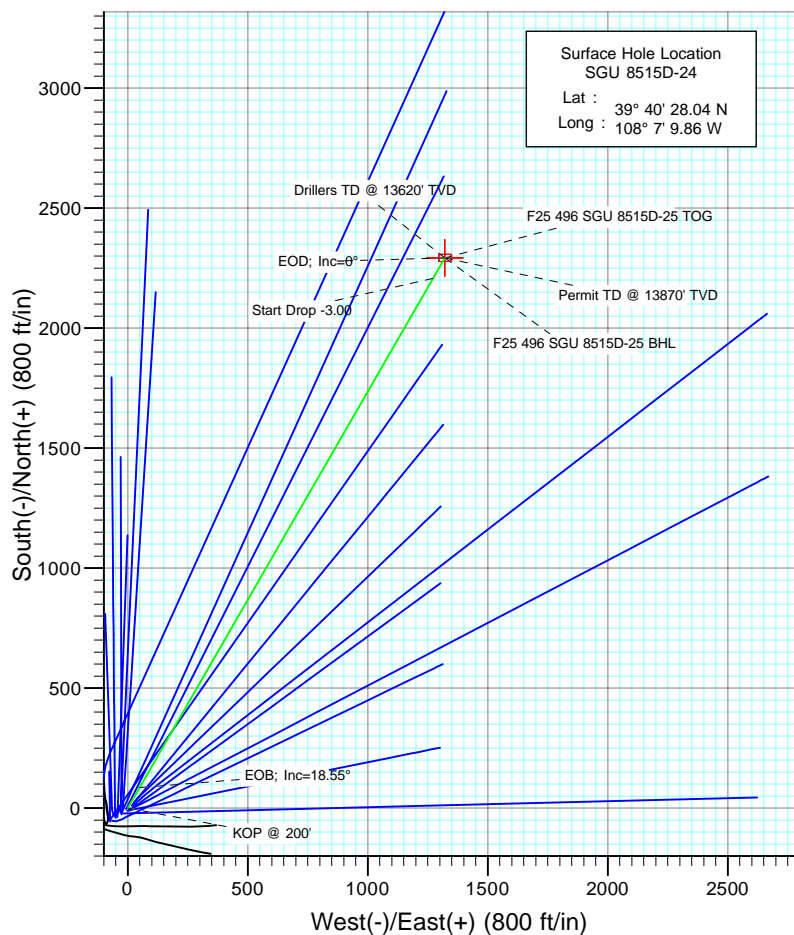




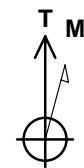
Project: Story Gulch  
Site: F25 496  
Well: SGU 8515D-24  
Wellbore: DD  
Design: Plan #1



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	818.3	18.55	29.96	807.6	86.0	49.5	3.00	29.96	99.2	
4	8512.9	18.55	29.96	8102.4	2206.7	1271.9	0.00	0.00	2547.0	
5	9131.2	0.00	0.00	8710.0	2292.7	1321.4	3.00	180.00	2646.2	F25 496 SGU 8515D-25 TOG
6	12791.2	0.00	0.00	12370.0	2292.7	1321.4	0.00	0.00	2646.2	F25 496 SGU 8515D-25 BHL
7	14041.2	0.00	0.00	13620.0	2292.7	1321.4	0.00	0.00	2646.2	
8	14291.2	0.00	0.00	13870.0	2292.7	1321.4	0.00	0.00	2646.2	



Bottom Hole Location  
SGU 8515D-24  
Lat : 39° 40' 50.70 N  
Long. : 108° 6' 52.96 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
1670.0	1728.0	Para Creek
1970.0	2044.4	Mahog Bench
2030.0	2107.7	Base B
5570.0	5841.7	Was G
8670.0	9091.2	WF
8710.0	9131.2	TOG
12370.0	12791.2	Rollins
12700.0	13121.2	Cozzette
12890.0	13311.2	Corcoran
13170.0	13591.2	Sego
13370.0	13791.2	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 8515D-25 BHL	1321.4	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 8515D-24
<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 8515D-24	<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		

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

Well	SGU 8515D-24					
Well Position	+N/-S	0.0 ft	Northing:	1,681,181.80 ft	Latitude:	39° 40' 28.04 N
	+E/-W	0.0 ft	Easting:	2,262,783.34 ft	Longitude:	108° 7' 9.86 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	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 (nT)</b>
	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) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	29.96

<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	
818.3	18.55	29.96	807.6	86.0	49.5	3.00	3.00	0.00	29.96	
8,512.9	18.55	29.96	8,102.4	2,206.7	1,271.9	0.00	0.00	0.00	0.00	
9,131.2	0.00	0.00	8,710.0	2,292.7	1,321.4	3.00	-3.00	0.00	180.00	F25 496 SGU 8515D-
12,791.2	0.00	0.00	12,370.0	2,292.7	1,321.4	0.00	0.00	0.00	0.00	F25 496 SGU 8515D-
14,041.2	0.00	0.00	13,620.0	2,292.7	1,321.4	0.00	0.00	0.00	0.00	
14,291.2	0.00	0.00	13,870.0	2,292.7	1,321.4	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 SGU 8515D-24
<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 8515D-24	<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
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'
300.0	3.00	29.96	300.0	2.3	1.3	2.6	3.00	3.00	
400.0	6.00	29.96	399.6	9.1	5.2	10.5	3.00	3.00	
500.0	9.00	29.96	498.8	20.4	11.7	23.5	3.00	3.00	
600.0	12.00	29.96	597.1	36.2	20.8	41.7	3.00	3.00	
700.0	15.00	29.96	694.3	56.4	32.5	65.1	3.00	3.00	
800.0	18.00	29.96	790.2	81.0	46.7	93.5	3.00	3.00	
818.3	18.55	29.96	807.6	86.0	49.5	99.2	3.00	3.00	EOB; Inc=18.55°
900.0	18.55	29.96	885.0	108.5	62.5	125.2	0.00	0.00	
1,000.0	18.55	29.96	979.8	136.0	78.4	157.0	0.00	0.00	
1,100.0	18.55	29.96	1,074.6	163.6	94.3	188.8	0.00	0.00	
1,200.0	18.55	29.96	1,169.4	191.2	110.2	220.6	0.00	0.00	
1,300.0	18.55	29.96	1,264.2	218.7	126.1	252.5	0.00	0.00	
1,400.0	18.55	29.96	1,359.0	246.3	141.9	284.3	0.00	0.00	
1,500.0	18.55	29.96	1,453.8	273.8	157.8	316.1	0.00	0.00	
1,600.0	18.55	29.96	1,548.6	301.4	173.7	347.9	0.00	0.00	
1,700.0	18.55	29.96	1,643.5	329.0	189.6	379.7	0.00	0.00	
1,728.0	18.55	29.96	1,670.0	336.7	194.1	388.6	0.00	0.00	Para Creek
1,800.0	18.55	29.96	1,738.3	356.5	205.5	411.5	0.00	0.00	
1,900.0	18.55	29.96	1,833.1	384.1	221.4	443.3	0.00	0.00	
2,000.0	18.55	29.96	1,927.9	411.7	237.3	475.1	0.00	0.00	
2,044.4	18.55	29.96	1,970.0	423.9	244.3	489.3	0.00	0.00	Mahog Bench
2,100.0	18.55	29.96	2,022.7	439.2	253.1	506.9	0.00	0.00	
2,107.7	18.55	29.96	2,030.0	441.3	254.4	509.4	0.00	0.00	Base B
2,200.0	18.55	29.96	2,117.5	466.8	269.0	538.8	0.00	0.00	
2,300.0	18.55	29.96	2,212.3	494.3	284.9	570.6	0.00	0.00	
2,400.0	18.55	29.96	2,307.1	521.9	300.8	602.4	0.00	0.00	
2,500.0	18.55	29.96	2,401.9	549.5	316.7	634.2	0.00	0.00	
2,600.0	18.55	29.96	2,496.7	577.0	332.6	666.0	0.00	0.00	
2,700.0	18.55	29.96	2,591.5	604.6	348.5	697.8	0.00	0.00	
2,800.0	18.55	29.96	2,686.3	632.1	364.3	729.6	0.00	0.00	
2,900.0	18.55	29.96	2,781.1	659.7	380.2	761.4	0.00	0.00	
3,000.0	18.55	29.96	2,875.9	687.3	396.1	793.3	0.00	0.00	
3,100.0	18.55	29.96	2,970.7	714.8	412.0	825.1	0.00	0.00	
3,200.0	18.55	29.96	3,065.5	742.4	427.9	856.9	0.00	0.00	
3,300.0	18.55	29.96	3,160.3	770.0	443.8	888.7	0.00	0.00	
3,400.0	18.55	29.96	3,255.1	797.5	459.7	920.5	0.00	0.00	
3,500.0	18.55	29.96	3,349.9	825.1	475.5	952.3	0.00	0.00	
3,600.0	18.55	29.96	3,444.7	852.6	491.4	984.1	0.00	0.00	
3,700.0	18.55	29.96	3,539.6	880.2	507.3	1,015.9	0.00	0.00	
3,800.0	18.55	29.96	3,634.4	907.8	523.2	1,047.7	0.00	0.00	
3,900.0	18.55	29.96	3,729.2	935.3	539.1	1,079.6	0.00	0.00	
4,000.0	18.55	29.96	3,824.0	962.9	555.0	1,111.4	0.00	0.00	
4,100.0	18.55	29.96	3,918.8	990.5	570.9	1,143.2	0.00	0.00	
4,200.0	18.55	29.96	4,013.6	1,018.0	586.7	1,175.0	0.00	0.00	
4,300.0	18.55	29.96	4,108.4	1,045.6	602.6	1,206.8	0.00	0.00	
4,400.0	18.55	29.96	4,203.2	1,073.1	618.5	1,238.6	0.00	0.00	
4,500.0	18.55	29.96	4,298.0	1,100.7	634.4	1,270.4	0.00	0.00	
4,600.0	18.55	29.96	4,392.8	1,128.3	650.3	1,302.2	0.00	0.00	
4,700.0	18.55	29.96	4,487.6	1,155.8	666.2	1,334.1	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 SGU 8515D-24
<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 8515D-24	<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
4,800.0	18.55	29.96	4,582.4	1,183.4	682.1	1,365.9	0.00	0.00	
4,900.0	18.55	29.96	4,677.2	1,210.9	697.9	1,397.7	0.00	0.00	
5,000.0	18.55	29.96	4,772.0	1,238.5	713.8	1,429.5	0.00	0.00	
5,100.0	18.55	29.96	4,866.8	1,266.1	729.7	1,461.3	0.00	0.00	
5,200.0	18.55	29.96	4,961.6	1,293.6	745.6	1,493.1	0.00	0.00	
5,300.0	18.55	29.96	5,056.4	1,321.2	761.5	1,524.9	0.00	0.00	
5,400.0	18.55	29.96	5,151.2	1,348.8	777.4	1,556.7	0.00	0.00	
5,500.0	18.55	29.96	5,246.0	1,376.3	793.2	1,588.5	0.00	0.00	
5,600.0	18.55	29.96	5,340.9	1,403.9	809.1	1,620.4	0.00	0.00	
5,700.0	18.55	29.96	5,435.7	1,431.4	825.0	1,652.2	0.00	0.00	
5,800.0	18.55	29.96	5,530.5	1,459.0	840.9	1,684.0	0.00	0.00	
5,841.7	18.55	29.96	5,570.0	1,470.5	847.5	1,697.3	0.00	0.00	Was G
5,900.0	18.55	29.96	5,625.3	1,486.6	856.8	1,715.8	0.00	0.00	
6,000.0	18.55	29.96	5,720.1	1,514.1	872.7	1,747.6	0.00	0.00	
6,100.0	18.55	29.96	5,814.9	1,541.7	888.6	1,779.4	0.00	0.00	
6,200.0	18.55	29.96	5,909.7	1,569.2	904.4	1,811.2	0.00	0.00	
6,300.0	18.55	29.96	6,004.5	1,596.8	920.3	1,843.0	0.00	0.00	
6,400.0	18.55	29.96	6,099.3	1,624.4	936.2	1,874.9	0.00	0.00	
6,500.0	18.55	29.96	6,194.1	1,651.9	952.1	1,906.7	0.00	0.00	
6,600.0	18.55	29.96	6,288.9	1,679.5	968.0	1,938.5	0.00	0.00	
6,700.0	18.55	29.96	6,383.7	1,707.1	983.9	1,970.3	0.00	0.00	
6,800.0	18.55	29.96	6,478.5	1,734.6	999.8	2,002.1	0.00	0.00	
6,900.0	18.55	29.96	6,573.3	1,762.2	1,015.6	2,033.9	0.00	0.00	
7,000.0	18.55	29.96	6,668.1	1,789.7	1,031.5	2,065.7	0.00	0.00	
7,100.0	18.55	29.96	6,762.9	1,817.3	1,047.4	2,097.5	0.00	0.00	
7,200.0	18.55	29.96	6,857.7	1,844.9	1,063.3	2,129.3	0.00	0.00	
7,300.0	18.55	29.96	6,952.5	1,872.4	1,079.2	2,161.2	0.00	0.00	
7,400.0	18.55	29.96	7,047.3	1,900.0	1,095.1	2,193.0	0.00	0.00	
7,500.0	18.55	29.96	7,142.1	1,927.5	1,111.0	2,224.8	0.00	0.00	
7,600.0	18.55	29.96	7,237.0	1,955.1	1,126.8	2,256.6	0.00	0.00	
7,700.0	18.55	29.96	7,331.8	1,982.7	1,142.7	2,288.4	0.00	0.00	
7,800.0	18.55	29.96	7,426.6	2,010.2	1,158.6	2,320.2	0.00	0.00	
7,900.0	18.55	29.96	7,521.4	2,037.8	1,174.5	2,352.0	0.00	0.00	
8,000.0	18.55	29.96	7,616.2	2,065.4	1,190.4	2,383.8	0.00	0.00	
8,100.0	18.55	29.96	7,711.0	2,092.9	1,206.3	2,415.7	0.00	0.00	
8,200.0	18.55	29.96	7,805.8	2,120.5	1,222.2	2,447.5	0.00	0.00	
8,300.0	18.55	29.96	7,900.6	2,148.0	1,238.0	2,479.3	0.00	0.00	
8,400.0	18.55	29.96	7,995.4	2,175.6	1,253.9	2,511.1	0.00	0.00	
8,500.0	18.55	29.96	8,090.2	2,203.2	1,269.8	2,542.9	0.00	0.00	
8,512.9	18.55	29.96	8,102.4	2,206.7	1,271.9	2,547.0	0.00	0.00	Start Drop -3.00
8,600.0	15.94	29.96	8,185.6	2,229.1	1,284.8	2,572.8	3.00	-3.00	
8,700.0	12.94	29.96	8,282.4	2,250.7	1,297.2	2,597.8	3.00	-3.00	
8,800.0	9.94	29.96	8,380.4	2,267.9	1,307.1	2,617.6	3.00	-3.00	
8,900.0	6.94	29.96	8,479.3	2,280.6	1,314.4	2,632.2	3.00	-3.00	
9,000.0	3.94	29.96	8,578.9	2,288.8	1,319.2	2,641.7	3.00	-3.00	
9,091.2	1.20	29.96	8,670.0	2,292.3	1,321.2	2,645.8	3.00	-3.00	WF
9,100.0	0.94	29.96	8,678.8	2,292.5	1,321.3	2,646.0	3.00	-3.00	
9,131.2	0.00	0.00	8,710.0	2,292.7	1,321.4	2,646.2	3.00	-3.00	EOD; Inc=0° - TOG - F25 496 SGU 8515D-25 1
9,200.0	0.00	0.00	8,778.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
9,300.0	0.00	0.00	8,878.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
9,400.0	0.00	0.00	8,978.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
9,500.0	0.00	0.00	9,078.8	2,292.7	1,321.4	2,646.2	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 8515D-24
<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 8515D-24	<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
9,600.0	0.00	0.00	9,178.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
9,700.0	0.00	0.00	9,278.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
9,800.0	0.00	0.00	9,378.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
9,900.0	0.00	0.00	9,478.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
10,000.0	0.00	0.00	9,578.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
10,100.0	0.00	0.00	9,678.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
10,200.0	0.00	0.00	9,778.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
10,300.0	0.00	0.00	9,878.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
10,400.0	0.00	0.00	9,978.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
10,500.0	0.00	0.00	10,078.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
10,600.0	0.00	0.00	10,178.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
10,700.0	0.00	0.00	10,278.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
10,800.0	0.00	0.00	10,378.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
10,900.0	0.00	0.00	10,478.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
11,000.0	0.00	0.00	10,578.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
11,100.0	0.00	0.00	10,678.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
11,200.0	0.00	0.00	10,778.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
11,300.0	0.00	0.00	10,878.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
11,400.0	0.00	0.00	10,978.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
11,500.0	0.00	0.00	11,078.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
11,600.0	0.00	0.00	11,178.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
11,700.0	0.00	0.00	11,278.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
11,800.0	0.00	0.00	11,378.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
11,900.0	0.00	0.00	11,478.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
12,000.0	0.00	0.00	11,578.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
12,100.0	0.00	0.00	11,678.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
12,200.0	0.00	0.00	11,778.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
12,300.0	0.00	0.00	11,878.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
12,400.0	0.00	0.00	11,978.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
12,500.0	0.00	0.00	12,078.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
12,600.0	0.00	0.00	12,178.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
12,700.0	0.00	0.00	12,278.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
12,791.2	0.00	0.00	12,370.0	2,292.7	1,321.4	2,646.2	0.00	0.00	Rollins - F25 496 SGU 8515D-25 BHL
12,800.0	0.00	0.00	12,378.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
12,900.0	0.00	0.00	12,478.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
13,000.0	0.00	0.00	12,578.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
13,100.0	0.00	0.00	12,678.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
13,121.2	0.00	0.00	12,700.0	2,292.7	1,321.4	2,646.2	0.00	0.00	Cozzette
13,200.0	0.00	0.00	12,778.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
13,300.0	0.00	0.00	12,878.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
13,311.2	0.00	0.00	12,890.0	2,292.7	1,321.4	2,646.2	0.00	0.00	Corcoran
13,400.0	0.00	0.00	12,978.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
13,500.0	0.00	0.00	13,078.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
13,591.2	0.00	0.00	13,170.0	2,292.7	1,321.4	2,646.2	0.00	0.00	Sego
13,600.0	0.00	0.00	13,178.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
13,700.0	0.00	0.00	13,278.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
13,791.2	0.00	0.00	13,370.0	2,292.7	1,321.4	2,646.2	0.00	0.00	Lower Sergo
13,800.0	0.00	0.00	13,378.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
13,900.0	0.00	0.00	13,478.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
14,000.0	0.00	0.00	13,578.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
14,041.2	0.00	0.00	13,620.0	2,292.7	1,321.4	2,646.2	0.00	0.00	Drillers TD @ 13620' TVD
14,100.0	0.00	0.00	13,678.8	2,292.7	1,321.4	2,646.2	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 8515D-24
<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 8515D-24	<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
14,200.0	0.00	0.00	13,778.8	2,292.7	1,321.4	2,646.2	0.00	0.00	
14,291.2	0.00	0.00	13,870.0	2,292.7	1,321.4	2,646.2	0.00	0.00	Permit TD @ 13870' TVD

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
F25 496 SGU 8515D-25	0.00	0.00	8,710.0	2,292.7	1,321.4	1,683,435.44	2,264,170.30	39° 40' 50.70 N	108° 6' 52.96 W
- plan hits target center									
- Point									
F25 496 SGU 8515D-25	0.00	0.00	12,370.0	2,292.7	1,321.4	1,683,435.44	2,264,170.30	39° 40' 50.70 N	108° 6' 52.96 W
- plan hits target center									
- Rectangle (sides W30.0 H50.0 D0.0)									

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,728.0	1,670.0	Para Creek		0.00		
2,044.4	1,970.0	Mahog Bench		0.00		
2,107.7	2,030.0	Base B		0.00		
5,841.7	5,570.0	Was G		0.00		
9,091.2	8,670.0	WF		0.00		
9,131.2	8,710.0	TOG		0.00		
12,791.2	12,370.0	Rollins		0.00		
13,121.2	12,700.0	Cozzette		0.00		
13,311.2	12,890.0	Corcoran		0.00		
13,591.2	13,170.0	Sego		0.00		
13,791.2	13,370.0	Lower Sergo		0.00		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.0	200.0	0.0	0.0	KOP @ 200'	
818.3	807.6	86.0	49.5	EOB; Inc=18.55°	
8,512.9	8,102.4	2,206.7	1,271.9	Start Drop -3.00	
9,131.2	8,710.0	2,292.7	1,321.4	EOD; Inc=0°	
14,041.2	13,620.0	2,292.7	1,321.4	Drillers TD @ 13620' TVD	
14,291.2	13,870.0	2,292.7	1,321.4	Permit TD @ 13870' TVD	