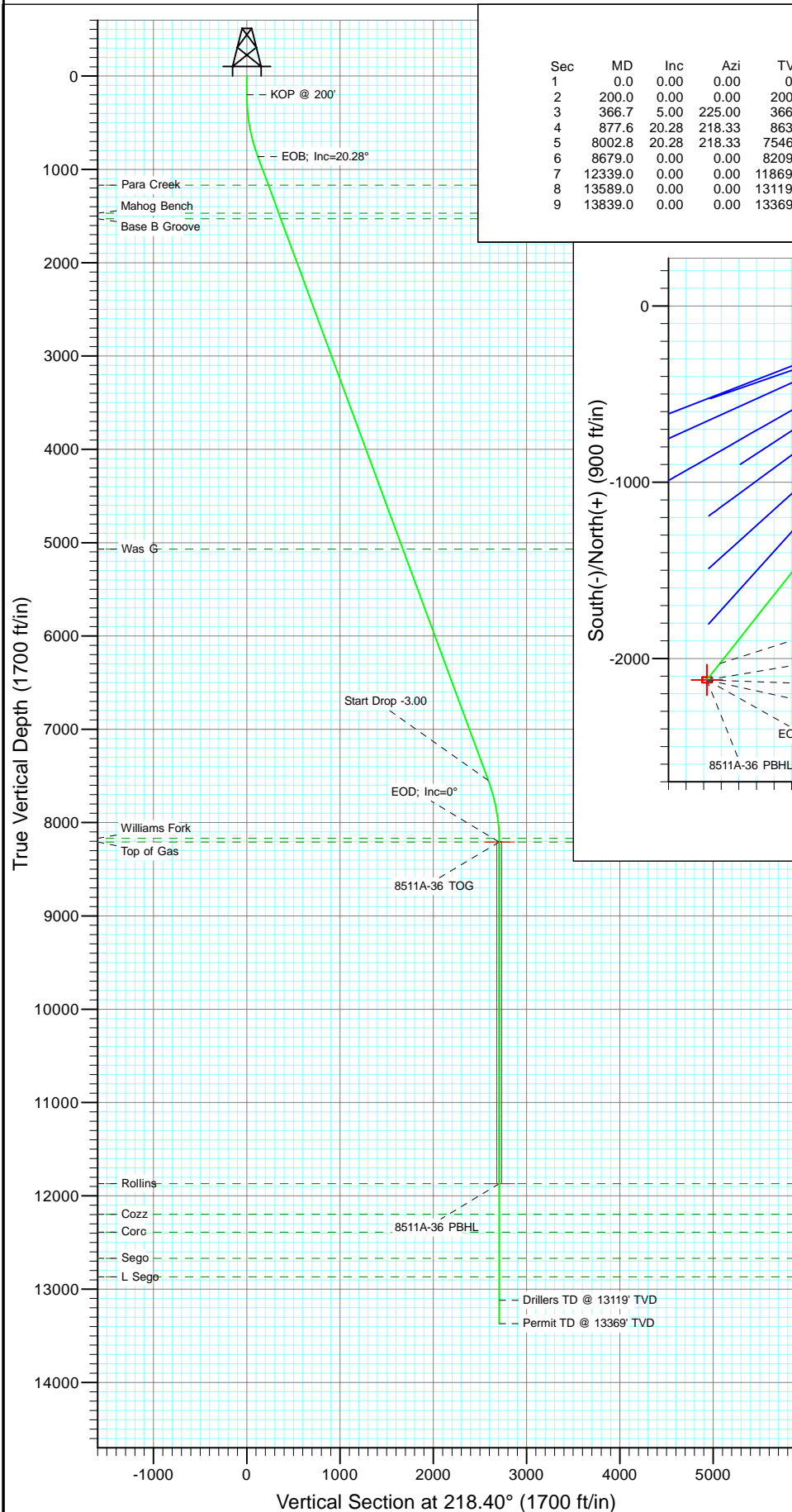


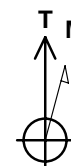
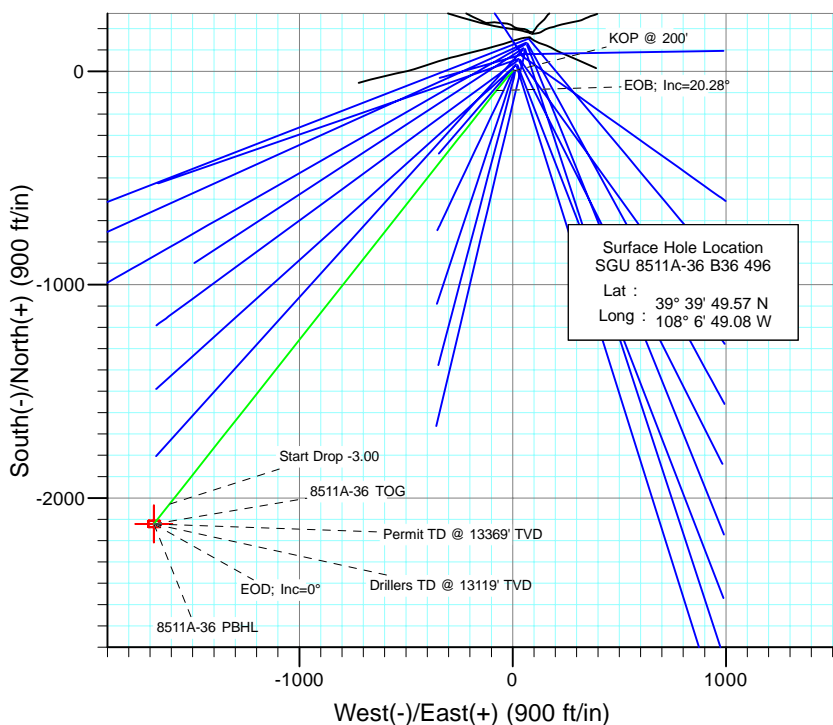


Project: Story Gulch
Site: S36-T4S-R96W (B36 496)
Well: SGU 8511A-36 B36 496
Wellbore: DD
Design: Plan #1



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	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	366.7	5.00	225.00	366.5	-5.1	-5.1	3.00	225.00	7.2	
4	877.6	20.28	218.33	863.6	-90.9	-76.2	3.00	-8.77	118.6	
5	8002.8	20.28	218.33	7546.9	-2028.7	-1608.1	0.00	0.00	2588.8	
6	8679.0	0.00	0.00	8209.0	-2121.7	-1681.6	3.00	180.00	2707.3	8511A-36 TOG
7	12339.0	0.00	0.00	11869.0	-2121.7	-1681.6	0.00	0.00	2707.3	8511A-36 PBHL
8	13589.0	0.00	0.00	13119.0	-2121.7	-1681.6	0.00	0.00	2707.3	
9	13839.0	0.00	0.00	13369.0	-2121.7	-1681.6	0.00	0.00	2707.3	



Azimuths to True North
Magnetic North: 10.55°

Magnetic Field
Strength: 52448.1nT
Dip Angle: 65.90°
Date: 5/6/2010
Model: IGRF200510

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1169.0	1203.3	Para Creek
1469.0	1523.1	Mahog Bench
1529.0	1587.1	Base B Groove
5069.0	5361.1	Was G
8169.0	8639.0	Williams Fork
8209.0	8679.0	Top of Gas
11869.0	12339.0	Rollins
12199.0	12669.0	Cozz
12389.0	12859.0	Corc
12669.0	13139.0	Sego
12869.0	13339.0	L Sego

Plan #1
SGU 8511A-36 B36 496

WELL @ 8374.0ft (Original Well Elev)
North American Datum 1983
Well SGU 8511A-36 B36 496, True North

Type	Target	Azimuth	Origin	Type	N/S	E/W	From
TD	No Target (Freehand)	218.40	Slot		0.0	0.0	TVD
Name	TVD	+N/-S	+E/-W	Latitude	Longitude		
8511A-36 PBHL	11869.0	-2121.7	-1681.639°	39° 39' 28.60 N	108° 7' 10.58 W		

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well SGU 8511A-36 B36 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 8374.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 8374.0ft (Original Well Elev)
Site:	S36-T4S-R96W (B36 496)	North Reference:	True
Well:	SGU 8511A-36 B36 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		S36-T4S-R96W (B36 496)			
Site Position:		Northing:	1,677,422.27 ft	Latitude:	39° 39' 51.36 N
From:	Lat/Long	Easting:	2,264,394.80 ft	Longitude:	108° 6' 47.88 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.65 °

Well	SGU 8511A-36 B36 496					
Well Position	+N/-S	0.0 ft	Northing:	1,677,243.83 ft	Latitude:	39° 39' 49.57 N
	+E/-W	0.0 ft	Easting:	2,264,295.68 ft	Longitude:	108° 6' 49.08 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,352.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	5/6/2010	10.55	65.90	52,448

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	218.40

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	
366.7	5.00	225.00	366.5	-5.1	-5.1	3.00	3.00	0.00	225.00	
877.6	20.28	218.33	863.6	-90.9	-76.2	3.00	2.99	-1.31	-8.77	
8,002.8	20.28	218.33	7,546.9	-2,028.7	-1,608.1	0.00	0.00	0.00	0.00	
8,679.0	0.00	0.00	8,209.0	-2,121.7	-1,681.6	3.00	-3.00	0.00	180.00	8511A-36 TOG
12,339.0	0.00	0.00	11,869.0	-2,121.7	-1,681.6	0.00	0.00	0.00	0.00	8511A-36 PBHL
13,589.0	0.00	0.00	13,119.0	-2,121.7	-1,681.6	0.00	0.00	0.00	0.00	
13,839.0	0.00	0.00	13,369.0	-2,121.7	-1,681.6	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 SGU 8511A-36 B36 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 8374.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 8374.0ft (Original Well Elev)
Site:	S36-T4S-R96W (B36 496)	North Reference:	True
Well:	SGU 8511A-36 B36 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	
30.0	0.00	0.00	30.0	0.0	0.0	0.0	0.00	0.00	
60.0	0.00	0.00	60.0	0.0	0.0	0.0	0.00	0.00	
90.0	0.00	0.00	90.0	0.0	0.0	0.0	0.00	0.00	
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.00	0.00	
180.0	0.00	0.00	180.0	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'
210.0	0.30	225.00	210.0	0.0	0.0	0.0	3.00	3.00	
240.0	1.20	225.00	240.0	-0.3	-0.3	0.4	3.00	3.00	
270.0	2.10	225.00	270.0	-0.9	-0.9	1.3	3.00	3.00	
300.0	3.00	225.00	300.0	-1.9	-1.9	2.6	3.00	3.00	
330.0	3.90	225.00	329.9	-3.1	-3.1	4.4	3.00	3.00	
360.0	4.80	225.00	359.8	-4.7	-4.7	6.7	3.00	3.00	
366.7	5.00	225.00	366.5	-5.1	-5.1	7.2	3.00	3.00	
390.0	5.69	223.92	389.7	-6.7	-6.7	9.4	3.00	2.97	
420.0	6.59	222.87	419.5	-9.0	-8.9	12.6	3.00	2.98	
450.0	7.48	222.07	449.3	-11.7	-11.3	16.2	3.00	2.98	
480.0	8.38	221.44	479.0	-14.8	-14.1	20.4	3.00	2.99	
510.0	9.27	220.93	508.6	-18.3	-17.1	25.0	3.00	2.99	
540.0	10.17	220.51	538.2	-22.1	-20.4	30.0	3.00	2.99	
570.0	11.07	220.16	567.7	-26.3	-24.0	35.6	3.00	2.99	
600.0	11.97	219.86	597.1	-30.9	-27.9	41.5	3.00	2.99	
630.0	12.86	219.60	626.4	-35.9	-32.0	48.0	3.00	2.99	
660.0	13.76	219.38	655.6	-41.2	-36.4	54.9	3.00	2.99	
690.0	14.66	219.18	684.7	-46.9	-41.0	62.3	3.00	3.00	
720.0	15.56	219.00	713.6	-53.0	-46.0	70.1	3.00	3.00	
750.0	16.46	218.84	742.5	-59.4	-51.2	78.4	3.00	3.00	
780.0	17.36	218.70	771.2	-66.2	-56.6	87.1	3.00	3.00	
810.0	18.26	218.57	799.7	-73.4	-62.4	96.3	3.00	3.00	
840.0	19.16	218.46	828.1	-80.9	-68.3	105.9	3.00	3.00	
870.0	20.06	218.35	856.4	-88.8	-74.6	115.9	3.00	3.00	
877.6	20.28	218.33	863.5	-90.9	-76.2	118.6	3.00	3.00	EOB; Inc=20.28°
900.0	20.28	218.33	884.6	-97.0	-81.0	126.3	0.01	0.01	
930.0	20.28	218.33	912.7	-105.1	-87.5	136.7	0.00	0.00	
960.0	20.28	218.33	940.8	-113.3	-93.9	147.1	0.00	0.00	
990.0	20.28	218.33	969.0	-121.4	-100.4	157.5	0.00	0.00	
1,020.0	20.28	218.33	997.1	-129.6	-106.8	167.9	0.00	0.00	
1,050.0	20.28	218.33	1,025.3	-137.8	-113.3	178.3	0.00	0.00	
1,080.0	20.28	218.33	1,053.4	-145.9	-119.7	188.7	0.00	0.00	
1,110.0	20.28	218.33	1,081.5	-154.1	-126.2	199.1	0.00	0.00	
1,140.0	20.28	218.33	1,109.7	-162.2	-132.6	209.5	0.00	0.00	
1,170.0	20.28	218.33	1,137.8	-170.4	-139.1	219.9	0.00	0.00	
1,200.0	20.28	218.33	1,165.9	-178.6	-145.5	230.3	0.00	0.00	
1,203.3	20.28	218.33	1,169.0	-179.4	-146.2	231.5	0.00	0.00	Para Creek
1,230.0	20.28	218.33	1,194.1	-186.7	-152.0	240.7	0.00	0.00	
1,260.0	20.28	218.33	1,222.2	-194.9	-158.4	251.1	0.00	0.00	
1,290.0	20.28	218.33	1,250.4	-203.0	-164.9	261.5	0.00	0.00	
1,320.0	20.28	218.33	1,278.5	-211.2	-171.3	271.9	0.00	0.00	
1,350.0	20.28	218.33	1,306.6	-219.4	-177.8	282.3	0.00	0.00	
1,380.0	20.28	218.33	1,334.8	-227.5	-184.2	292.7	0.00	0.00	
1,410.0	20.28	218.33	1,362.9	-235.7	-190.7	303.1	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well SGU 8511A-36 B36 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 8374.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 8374.0ft (Original Well Elev)
Site:	S36-T4S-R96W (B36 496)	North Reference:	True
Well:	SGU 8511A-36 B36 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
1,440.0	20.28	218.33	1,391.1	-243.8	-197.1	313.5	0.00	0.00	
1,470.0	20.28	218.33	1,419.2	-252.0	-203.6	323.9	0.00	0.00	
1,500.0	20.28	218.33	1,447.3	-260.1	-210.0	334.3	0.00	0.00	
1,523.1	20.28	218.33	1,469.0	-266.4	-215.0	342.3	0.00	0.00	Mahog Bench
1,530.0	20.28	218.33	1,475.5	-268.3	-216.5	344.7	0.00	0.00	
1,560.0	20.28	218.33	1,503.6	-276.5	-222.9	355.1	0.00	0.00	
1,587.1	20.28	218.33	1,529.0	-283.8	-228.8	364.5	0.00	0.00	Base B Groove
1,590.0	20.28	218.33	1,531.8	-284.6	-229.4	365.5	0.00	0.00	
1,620.0	20.28	218.33	1,559.9	-292.8	-235.8	375.9	0.00	0.00	
1,650.0	20.28	218.33	1,588.0	-300.9	-242.3	386.3	0.00	0.00	
1,680.0	20.28	218.33	1,616.2	-309.1	-248.7	396.7	0.00	0.00	
1,710.0	20.28	218.33	1,644.3	-317.3	-255.2	407.1	0.00	0.00	
1,740.0	20.28	218.33	1,672.5	-325.4	-261.6	417.5	0.00	0.00	
1,770.0	20.28	218.33	1,700.6	-333.6	-268.1	427.9	0.00	0.00	
1,800.0	20.28	218.33	1,728.7	-341.7	-274.5	438.3	0.00	0.00	
1,830.0	20.28	218.33	1,756.9	-349.9	-281.0	448.7	0.00	0.00	
1,860.0	20.28	218.33	1,785.0	-358.1	-287.4	459.2	0.00	0.00	
1,890.0	20.28	218.33	1,813.2	-366.2	-293.9	469.6	0.00	0.00	
1,920.0	20.28	218.33	1,841.3	-374.4	-300.3	480.0	0.00	0.00	
1,950.0	20.28	218.33	1,869.4	-382.5	-306.8	490.4	0.00	0.00	
1,980.0	20.28	218.33	1,897.6	-390.7	-313.2	500.8	0.00	0.00	
2,010.0	20.28	218.33	1,925.7	-398.9	-319.7	511.2	0.00	0.00	
2,040.0	20.28	218.33	1,953.9	-407.0	-326.1	521.6	0.00	0.00	
2,070.0	20.28	218.33	1,982.0	-415.2	-332.6	532.0	0.00	0.00	
2,100.0	20.28	218.33	2,010.1	-423.3	-339.0	542.4	0.00	0.00	
2,130.0	20.28	218.33	2,038.3	-431.5	-345.5	552.8	0.00	0.00	
2,160.0	20.28	218.33	2,066.4	-439.6	-351.9	563.2	0.00	0.00	
2,190.0	20.28	218.33	2,094.5	-447.8	-358.4	573.6	0.00	0.00	
2,220.0	20.28	218.33	2,122.7	-456.0	-364.8	584.0	0.00	0.00	
2,250.0	20.28	218.33	2,150.8	-464.1	-371.3	594.4	0.00	0.00	
2,280.0	20.28	218.33	2,179.0	-472.3	-377.7	604.8	0.00	0.00	
2,310.0	20.28	218.33	2,207.1	-480.4	-384.2	615.2	0.00	0.00	
2,340.0	20.28	218.33	2,235.2	-488.6	-390.6	625.6	0.00	0.00	
2,370.0	20.28	218.33	2,263.4	-496.8	-397.1	636.0	0.00	0.00	
2,400.0	20.28	218.33	2,291.5	-504.9	-403.5	646.4	0.00	0.00	
2,430.0	20.28	218.33	2,319.7	-513.1	-410.0	656.8	0.00	0.00	
2,460.0	20.28	218.33	2,347.8	-521.2	-416.4	667.2	0.00	0.00	
2,490.0	20.28	218.33	2,375.9	-529.4	-422.9	677.6	0.00	0.00	

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
8511A-36 TOG	0.00	0.00	8,209.0	-2,121.7	-1,681.6	1,675,171.41	2,262,553.77	39° 39' 28.60 N	108° 7' 10.58 W
- hit/miss target									
- Shape									
- plan misses target center by 6176.1ft at 2490.0ft MD (2375.9 TVD, -529.4 N, -422.9 E)									
- Point									
8511A-36 PBHL	0.00	0.00	11,869.0	-2,121.7	-1,681.6	1,675,171.41	2,262,553.77	39° 39' 28.60 N	108° 7' 10.58 W
- plan misses target center by 9707.6ft at 2490.0ft MD (2375.9 TVD, -529.4 N, -422.9 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well SGU 8511A-36 B36 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 8374.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 8374.0ft (Original Well Elev)
Site:	S36-T4S-R96W (B36 496)	North Reference:	True
Well:	SGU 8511A-36 B36 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
2,500.0	20.28	218.33	2,385.3	-532.1	-425.0	681.0	0.00	0.00	
2,600.0	20.28	218.33	2,479.1	-559.3	-446.5	715.7	0.00	0.00	
2,700.0	20.28	218.33	2,572.9	-586.5	-468.0	750.4	0.00	0.00	
2,800.0	20.28	218.33	2,666.7	-613.7	-489.5	785.0	0.00	0.00	
2,900.0	20.28	218.33	2,760.5	-640.9	-511.0	819.7	0.00	0.00	
3,000.0	20.28	218.33	2,854.3	-668.1	-532.5	854.4	0.00	0.00	
3,100.0	20.28	218.33	2,948.1	-695.3	-554.0	889.0	0.00	0.00	
3,200.0	20.28	218.33	3,041.9	-722.5	-575.5	923.7	0.00	0.00	
3,300.0	20.28	218.33	3,135.7	-749.7	-597.0	958.4	0.00	0.00	
3,400.0	20.28	218.33	3,229.5	-776.9	-618.5	993.1	0.00	0.00	
3,500.0	20.28	218.33	3,323.3	-804.1	-640.0	1,027.7	0.00	0.00	
3,600.0	20.28	218.33	3,417.1	-831.3	-661.5	1,062.4	0.00	0.00	
3,700.0	20.28	218.33	3,510.9	-858.5	-683.0	1,097.1	0.00	0.00	
3,800.0	20.28	218.33	3,604.7	-885.7	-704.5	1,131.7	0.00	0.00	
3,900.0	20.28	218.33	3,698.5	-912.9	-726.0	1,166.4	0.00	0.00	
4,000.0	20.28	218.33	3,792.3	-940.1	-747.5	1,201.1	0.00	0.00	
4,100.0	20.28	218.33	3,886.1	-967.3	-769.0	1,235.7	0.00	0.00	
4,200.0	20.28	218.33	3,979.9	-994.5	-790.5	1,270.4	0.00	0.00	
4,300.0	20.28	218.33	4,073.7	-1,021.7	-812.0	1,305.1	0.00	0.00	
4,400.0	20.28	218.33	4,167.5	-1,048.9	-833.5	1,339.7	0.00	0.00	
4,500.0	20.28	218.33	4,261.3	-1,076.1	-855.0	1,374.4	0.00	0.00	
4,600.0	20.28	218.33	4,355.1	-1,103.3	-876.5	1,409.1	0.00	0.00	
4,700.0	20.28	218.33	4,448.9	-1,130.5	-898.0	1,443.7	0.00	0.00	
4,800.0	20.28	218.33	4,542.7	-1,157.7	-919.5	1,478.4	0.00	0.00	
4,900.0	20.28	218.33	4,636.5	-1,184.9	-941.0	1,513.1	0.00	0.00	
5,000.0	20.28	218.33	4,730.3	-1,212.1	-962.5	1,547.8	0.00	0.00	
5,100.0	20.28	218.33	4,824.1	-1,239.3	-984.0	1,582.4	0.00	0.00	
5,200.0	20.28	218.33	4,917.9	-1,266.5	-1,005.5	1,617.1	0.00	0.00	
5,300.0	20.28	218.33	5,011.7	-1,293.6	-1,027.0	1,651.8	0.00	0.00	
5,361.1	20.28	218.33	5,069.0	-1,310.3	-1,040.2	1,673.0	0.00	0.00	Was G
5,400.0	20.28	218.33	5,105.5	-1,320.8	-1,048.5	1,686.4	0.00	0.00	
5,500.0	20.28	218.33	5,199.3	-1,348.0	-1,070.0	1,721.1	0.00	0.00	
5,600.0	20.28	218.33	5,293.1	-1,375.2	-1,091.5	1,755.8	0.00	0.00	
5,700.0	20.28	218.33	5,386.9	-1,402.4	-1,113.0	1,790.4	0.00	0.00	
5,800.0	20.28	218.33	5,480.7	-1,429.6	-1,134.5	1,825.1	0.00	0.00	
5,900.0	20.28	218.33	5,574.5	-1,456.8	-1,156.0	1,859.8	0.00	0.00	
6,000.0	20.28	218.33	5,668.3	-1,484.0	-1,177.5	1,894.4	0.00	0.00	
6,100.0	20.28	218.33	5,762.1	-1,511.2	-1,199.0	1,929.1	0.00	0.00	
6,200.0	20.28	218.33	5,855.8	-1,538.4	-1,220.5	1,963.8	0.00	0.00	
6,300.0	20.28	218.33	5,949.6	-1,565.6	-1,242.0	1,998.4	0.00	0.00	
6,400.0	20.28	218.33	6,043.4	-1,592.8	-1,263.5	2,033.1	0.00	0.00	
6,500.0	20.28	218.33	6,137.2	-1,620.0	-1,285.0	2,067.8	0.00	0.00	
6,600.0	20.28	218.33	6,231.0	-1,647.2	-1,306.5	2,102.5	0.00	0.00	
6,700.0	20.28	218.33	6,324.8	-1,674.4	-1,328.0	2,137.1	0.00	0.00	
6,800.0	20.28	218.33	6,418.6	-1,701.6	-1,349.5	2,171.8	0.00	0.00	
6,900.0	20.28	218.33	6,512.4	-1,728.8	-1,371.0	2,206.5	0.00	0.00	
7,000.0	20.28	218.33	6,606.2	-1,756.0	-1,392.5	2,241.1	0.00	0.00	
7,100.0	20.28	218.33	6,700.0	-1,783.2	-1,414.0	2,275.8	0.00	0.00	
7,200.0	20.28	218.33	6,793.8	-1,810.4	-1,435.5	2,310.5	0.00	0.00	
7,300.0	20.28	218.33	6,887.6	-1,837.6	-1,457.0	2,345.1	0.00	0.00	
7,400.0	20.28	218.33	6,981.4	-1,864.8	-1,478.5	2,379.8	0.00	0.00	
7,500.0	20.28	218.33	7,075.2	-1,892.0	-1,500.0	2,414.5	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well SGU 8511A-36 B36 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 8374.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 8374.0ft (Original Well Elev)
Site:	S36-T4S-R96W (B36 496)	North Reference:	True
Well:	SGU 8511A-36 B36 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
7,600.0	20.28	218.33	7,169.0	-1,919.2	-1,521.5	2,449.1	0.00	0.00	
7,700.0	20.28	218.33	7,262.8	-1,946.4	-1,543.0	2,483.8	0.00	0.00	
7,800.0	20.28	218.33	7,356.6	-1,973.6	-1,564.5	2,518.5	0.00	0.00	
7,900.0	20.28	218.33	7,450.4	-2,000.8	-1,586.0	2,553.1	0.00	0.00	
8,000.0	20.28	218.33	7,544.2	-2,028.0	-1,607.5	2,587.8	0.00	0.00	
8,002.8	20.28	218.33	7,546.8	-2,028.7	-1,608.1	2,588.8	0.00	0.00	Start Drop -3.00
8,100.0	17.37	218.33	7,638.8	-2,053.3	-1,627.6	2,620.2	3.00	-3.00	
8,200.0	14.37	218.33	7,735.0	-2,074.8	-1,644.5	2,647.5	3.00	-3.00	
8,300.0	11.37	218.33	7,832.5	-2,092.3	-1,658.3	2,669.8	3.00	-3.00	
8,400.0	8.37	218.33	7,931.0	-2,105.7	-1,669.0	2,686.9	3.00	-3.00	
8,500.0	5.37	218.33	8,030.3	-2,115.1	-1,676.4	2,698.9	3.00	-3.00	
8,600.0	2.37	218.33	8,130.0	-2,120.4	-1,680.6	2,705.6	3.00	-3.00	
8,639.0	1.20	218.33	8,169.0	-2,121.3	-1,681.3	2,706.8	3.00	-3.00	Williams Fork
8,679.0	0.00	0.00	8,209.0	-2,121.7	-1,681.6	2,707.3	3.00	-3.00	EOD; Inc=0° - Top of Gas - 8511A-36 TOG
8,700.0	0.00	0.00	8,230.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
8,800.0	0.00	0.00	8,330.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
8,900.0	0.00	0.00	8,430.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
9,000.0	0.00	0.00	8,530.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
9,100.0	0.00	0.00	8,630.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
9,200.0	0.00	0.00	8,730.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
9,300.0	0.00	0.00	8,830.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
9,400.0	0.00	0.00	8,930.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
9,500.0	0.00	0.00	9,030.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
9,600.0	0.00	0.00	9,130.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
9,700.0	0.00	0.00	9,230.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
9,800.0	0.00	0.00	9,330.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
9,900.0	0.00	0.00	9,430.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
10,000.0	0.00	0.00	9,530.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
10,100.0	0.00	0.00	9,630.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
10,200.0	0.00	0.00	9,730.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
10,300.0	0.00	0.00	9,830.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
10,400.0	0.00	0.00	9,930.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
10,500.0	0.00	0.00	10,030.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
10,600.0	0.00	0.00	10,130.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
10,700.0	0.00	0.00	10,230.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
10,800.0	0.00	0.00	10,330.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
10,900.0	0.00	0.00	10,430.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
11,000.0	0.00	0.00	10,530.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
11,100.0	0.00	0.00	10,630.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
11,200.0	0.00	0.00	10,730.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
11,300.0	0.00	0.00	10,830.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
11,400.0	0.00	0.00	10,930.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
11,500.0	0.00	0.00	11,030.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
11,600.0	0.00	0.00	11,130.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
11,700.0	0.00	0.00	11,230.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
11,800.0	0.00	0.00	11,330.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
11,900.0	0.00	0.00	11,430.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
12,000.0	0.00	0.00	11,530.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
12,100.0	0.00	0.00	11,630.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
12,200.0	0.00	0.00	11,730.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
12,300.0	0.00	0.00	11,830.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
12,339.0	0.00	0.00	11,869.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	Rollins - 8511A-36 PBHL

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well SGU 8511A-36 B36 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 8374.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 8374.0ft (Original Well Elev)
Site:	S36-T4S-R96W (B36 496)	North Reference:	True
Well:	SGU 8511A-36 B36 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
12,400.0	0.00	0.00	11,930.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
12,500.0	0.00	0.00	12,030.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
12,600.0	0.00	0.00	12,130.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
12,669.0	0.00	0.00	12,199.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	Cozz
12,700.0	0.00	0.00	12,230.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
12,800.0	0.00	0.00	12,330.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
12,859.0	0.00	0.00	12,389.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	Corc
12,900.0	0.00	0.00	12,430.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
13,000.0	0.00	0.00	12,530.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
13,100.0	0.00	0.00	12,630.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
13,139.0	0.00	0.00	12,669.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	Sego
13,200.0	0.00	0.00	12,730.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
13,300.0	0.00	0.00	12,830.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
13,339.0	0.00	0.00	12,869.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	L Sego
13,400.0	0.00	0.00	12,930.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
13,500.0	0.00	0.00	13,030.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
13,589.0	0.00	0.00	13,119.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	Drillers TD @ 13119' TVD
13,600.0	0.00	0.00	13,130.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
13,700.0	0.00	0.00	13,230.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
13,800.0	0.00	0.00	13,330.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	
13,839.0	0.00	0.00	13,369.0	-2,121.7	-1,681.6	2,707.3	0.00	0.00	Permit TD @ 13369' TVD

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
8511A-36 TOG - plan hits target center - Point	0.00	0.00	8,209.0	-2,121.7	-1,681.6	1,675,171.41	2,262,553.77	39° 39' 28.60 N	108° 7' 10.58 W
8511A-36 PBHL - plan hits target center - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	11,869.0	-2,121.7	-1,681.6	1,675,171.41	2,262,553.77	39° 39' 28.60 N	108° 7' 10.58 W

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well SGU 8511A-36 B36 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 8374.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 8374.0ft (Original Well Elev)
Site:	S36-T4S-R96W (B36 496)	North Reference:	True
Well:	SGU 8511A-36 B36 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,203.3	1,169.0	Para Creek		0.00		
1,523.1	1,469.0	Mahog Bench		0.00		
1,587.1	1,529.0	Base B Groove		0.00		
5,361.1	5,069.0	Was G		0.00		
8,639.0	8,169.0	Williams Fork		0.00		
8,679.0	8,209.0	Top of Gas		0.00		
12,339.0	11,869.0	Rollins		0.00		
12,669.0	12,199.0	Cozz		0.00		
12,859.0	12,389.0	Corc		0.00		
13,139.0	12,669.0	Sego		0.00		
13,339.0	12,869.0	L Sego		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'	
877.6	863.6	-5.1	-5.1	EOB; Inc=20.28°	
8,002.8	7,546.9	-90.9	-76.2	Start Drop -3.00	
8,679.0	8,209.0	-2,028.7	-1,608.1	EOD; Inc=0°	
13,589.0	13,119.0	-2,121.7	-1,681.6	Drillers TD @ 13119' TVD	
13,839.0	13,369.0	-2,121.7	-1,681.6	Permit TD @ 13369' TVD	