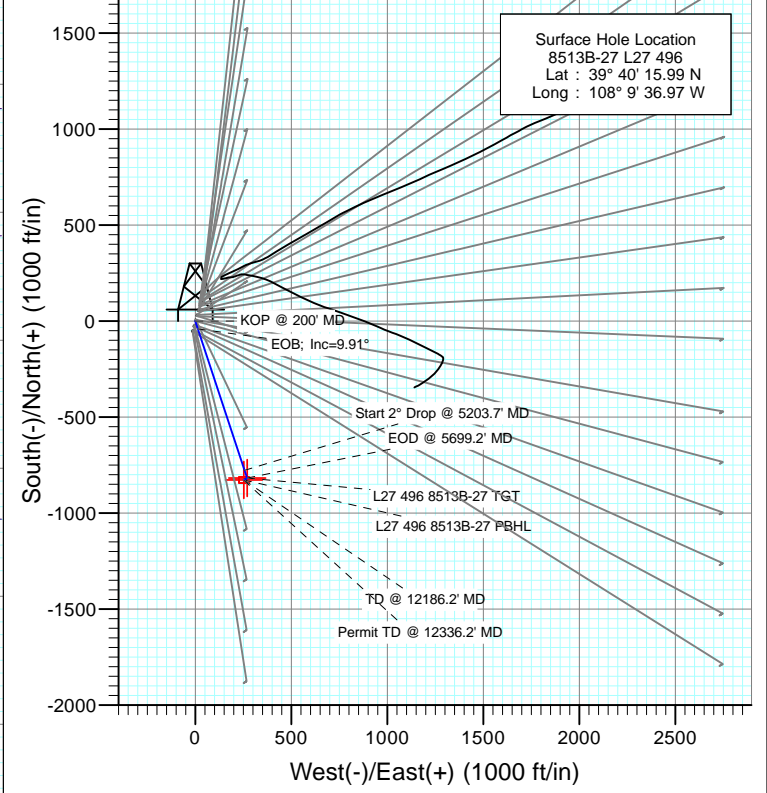


SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	695.4	9.91	161.70	693.0	-40.6	13.4	2.00	161.70	42.7	
4	5203.7	9.91	161.70	5134.0	-777.1	257.0	0.00	0.00	818.3	
5	5699.2	0.00	0.00	5627.0	-817.7	270.4	2.00	180.00	861.0	
6	7699.2	0.00	0.00	7627.0	-817.7	270.4	0.00	0.00	861.0	L27 496 8513B-27 TGT
7	7801.2	0.26	239.68	7729.0	-817.8	270.2	0.25	239.68	861.1	
8	12186.2	0.26	239.68	12114.0	-827.7	253.4	0.00	0.00	865.6	L27 496 8513B-27 PBHL
9	12336.2	0.26	239.68	12264.0	-828.0	252.8	0.00	0.00	865.7	



Surface Hole Location
 8513B-27 L27 496
 Lat : 39° 40' 15.99 N
 Long : 108° 9' 36.97 W

DESIGN TARGET DETAILS						
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
L27 496 8513B-27 TGT	-817.7	270.4	1679471.81	2251496.3539°	40° 7.91 N	108° 9' 33.51 W
L27 496 8513B-27 PBHL	-827.7	253.4	1679462.34	2251479.0239°	40° 7.81 N	108° 9' 33.73 W

M Azimuths to True North
 Magnetic North: 10.28°

Magnetic Field
 Strength: 52177.5snT
 Dip Angle: 65.82°
 Date: 9/25/2012
 Model: IGRF2010

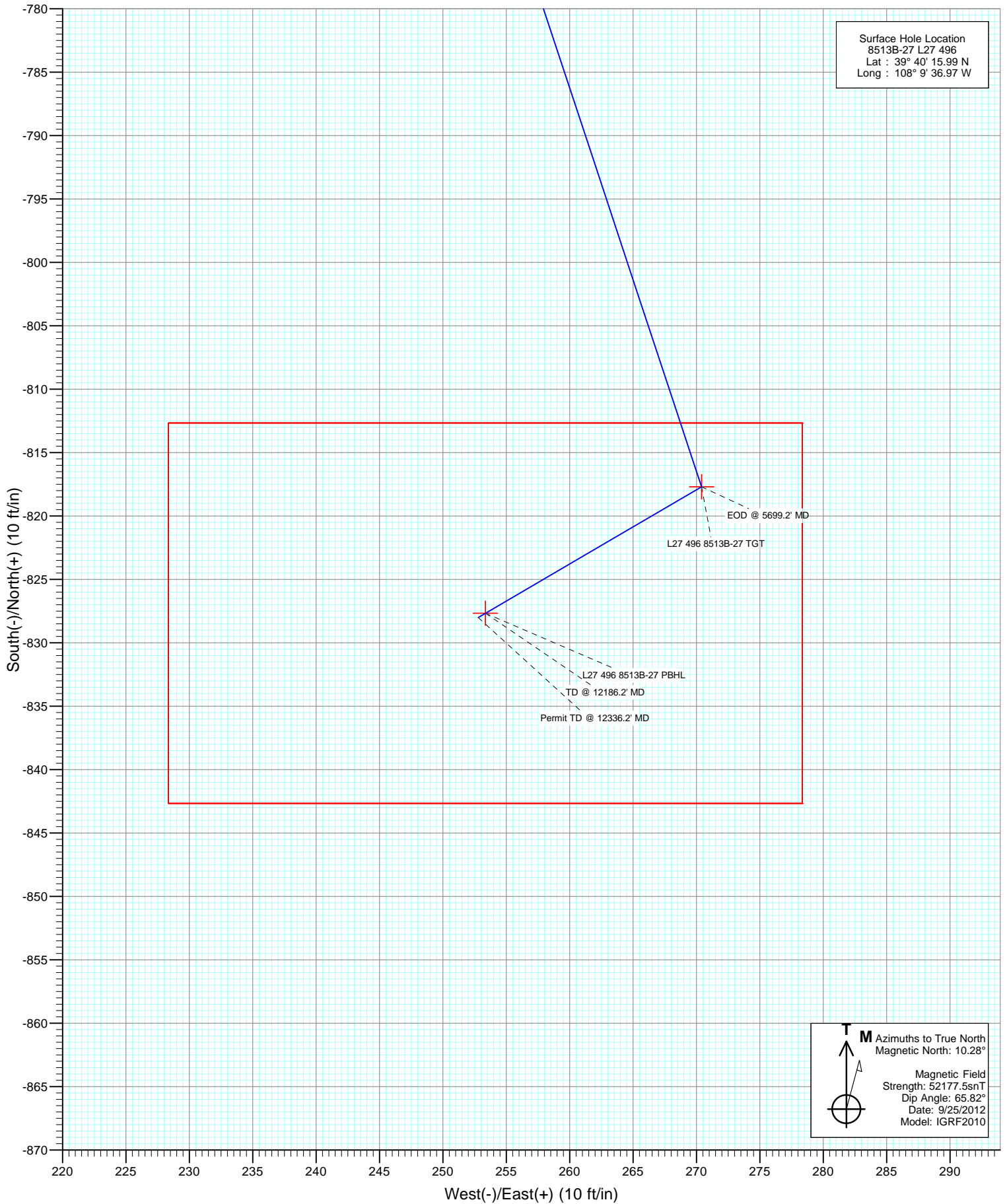
FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1073.0	1081.2	A_GROOVE_TVD
1228.0	1238.6	B_GROOVE_TVD
1255.0	1266.0	B_GROOVE_BASE_TVD
2190.0	2215.1	GARDEN_GULCH_TVD
3183.0	3223.2	WASATCH_FM_TVD
5397.0	5468.9	WASATCH_G_TVD
7587.0	7659.2	WILLIAMS_FORK_TVD
7627.0	7699.2	TOG_TVD
10778.0	10850.2	CAMEO_TVD
11237.0	11309.2	ROLLINS_TVD
11471.0	11543.2	COZZETTE_TVD
11656.0	11728.2	CORCORAN_TVD
11964.0	12036.2	UPPER_SEGO_TVD
12114.0	12186.2	SEGO BASE TARGET TVD

Plan #1
 8513B-27 L27 496
 12xxx; LR
 WELL @ 8136.0ft (Original Well Elev)
 Ground Elevation @ 8104.0
 North American Datum 1983
 Well 8513B-27 L27 496, True North

Vertical Section at 162.98° (1500 ft/in)



Project: Story Gulch
Site: S27-T4S-R96W (L27 496)
Well: 8513B-27 L27 496
Wellbore: DD
Design: Plan #1



Cathedral Energy Services

Planning Report

Database: USA EDM 5000 Multi Users DB	Local Co-ordinate Reference: Well 8513B-27 L27 496
Company: EnCana Oil & Gas (USA) Inc	TVD Reference: WELL @ 8136.0ft (Original Well Elev)
Project: Story Gulch	MD Reference: WELL @ 8136.0ft (Original Well Elev)
Site: S27-T4S-R96W (L27 496)	North Reference: True
Well: 8513B-27 L27 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 S27-T4S-R96W (L27 496)					
Site Position:		Northing:	1,680,404.44 ft	Latitude:	39° 40' 17.06 N
From:	Lat/Long	Easting:	2,251,282.88 ft	Longitude:	108° 9' 36.59 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.68 °

Well 8513B-27 L27 496					
Well Position	+N/-S	0.0 ft	Northing:	1,680,297.07 ft	Latitude: 39° 40' 15.99 N
	+E/-W	0.0 ft	Easting:	2,251,250.01 ft	Longitude: 108° 9' 36.97 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level: 8,104.0 ft

Wellbore DD					
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF2010	9/25/2012	(°) 10.28	(°) 65.82	(nT) 52,178

Design Plan #1				
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	162.98

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	
695.4	9.91	161.70	693.0	-40.6	13.4	2.00	2.00	0.00	161.70	
5,203.7	9.91	161.70	5,134.0	-777.1	257.0	0.00	0.00	0.00	0.00	
5,699.2	0.00	0.00	5,627.0	-817.7	270.4	2.00	-2.00	0.00	180.00	
7,699.2	0.00	0.00	7,627.0	-817.7	270.4	0.00	0.00	0.00	0.00	L27 496 8513B-27 TC
7,801.2	0.26	239.68	7,729.0	-817.8	270.2	0.25	0.25	-117.96	239.68	
12,186.2	0.26	239.68	12,114.0	-827.7	253.4	0.00	0.00	0.00	0.00	L27 496 8513B-27 PE
12,336.2	0.26	239.68	12,264.0	-828.0	252.8	0.00	0.00	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 8513B-27 L27 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 8136.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 8136.0ft (Original Well Elev)
Site:	S27-T4S-R96W (L27 496)	North Reference:	True
Well:	8513B-27 L27 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	KOP @ 200' MD
300.0	2.00	161.70	300.0	-1.7	0.5	1.7	2.00	2.00	
400.0	4.00	161.70	399.8	-6.6	2.2	7.0	2.00	2.00	
500.0	6.00	161.70	499.5	-14.9	4.9	15.7	2.00	2.00	
600.0	8.00	161.70	598.7	-26.5	8.8	27.9	2.00	2.00	
695.4	9.91	161.70	693.0	-40.6	13.4	42.7	2.00	2.00	EOB; Inc=9.91°
700.0	9.91	161.70	697.5	-41.3	13.7	43.5	0.00	0.00	
800.0	9.91	161.70	796.0	-57.7	19.1	60.7	0.00	0.00	
900.0	9.91	161.70	894.5	-74.0	24.5	77.9	0.00	0.00	
1,000.0	9.91	161.70	993.0	-90.3	29.9	95.1	0.00	0.00	
1,081.2	9.91	161.70	1,073.0	-103.6	34.3	109.1	0.00	0.00	A_GROOVE_TVD
1,100.0	9.91	161.70	1,091.5	-106.7	35.3	112.3	0.00	0.00	
1,200.0	9.91	161.70	1,190.0	-123.0	40.7	129.5	0.00	0.00	
1,238.6	9.91	161.70	1,228.0	-129.3	42.8	136.2	0.00	0.00	B_GROOVE_TVD
1,266.0	9.91	161.70	1,255.0	-133.8	44.2	140.9	0.00	0.00	B_GROOVE_BASE_TVD
1,300.0	9.91	161.70	1,288.5	-139.3	46.1	146.7	0.00	0.00	
1,400.0	9.91	161.70	1,387.0	-155.7	51.5	163.9	0.00	0.00	
1,500.0	9.91	161.70	1,485.5	-172.0	56.9	181.1	0.00	0.00	
1,600.0	9.91	161.70	1,584.0	-188.4	62.3	198.3	0.00	0.00	
1,700.0	9.91	161.70	1,682.5	-204.7	67.7	215.5	0.00	0.00	
1,800.0	9.91	161.70	1,781.1	-221.0	73.1	232.7	0.00	0.00	
1,900.0	9.91	161.70	1,879.6	-237.4	78.5	250.0	0.00	0.00	
2,000.0	9.91	161.70	1,978.1	-253.7	83.9	267.2	0.00	0.00	
2,100.0	9.91	161.70	2,076.6	-270.0	89.3	284.4	0.00	0.00	
2,200.0	9.91	161.70	2,175.1	-286.4	94.7	301.6	0.00	0.00	
2,215.1	9.91	161.70	2,190.0	-288.9	95.5	304.2	0.00	0.00	GARDEN_GULCH_TVD.
2,300.0	9.91	161.70	2,273.6	-302.7	100.1	318.8	0.00	0.00	
2,400.0	9.91	161.70	2,372.1	-319.1	105.5	336.0	0.00	0.00	
2,500.0	9.91	161.70	2,470.6	-335.4	110.9	353.2	0.00	0.00	
2,600.0	9.91	161.70	2,569.1	-351.7	116.3	370.4	0.00	0.00	
2,700.0	9.91	161.70	2,667.6	-368.1	121.7	387.6	0.00	0.00	
2,800.0	9.91	161.70	2,766.1	-384.4	127.1	404.8	0.00	0.00	
2,900.0	9.91	161.70	2,864.6	-400.7	132.5	422.0	0.00	0.00	
3,000.0	9.91	161.70	2,963.2	-417.1	137.9	439.2	0.00	0.00	
3,100.0	9.91	161.70	3,061.7	-433.4	143.3	456.4	0.00	0.00	
3,200.0	9.91	161.70	3,160.2	-449.8	148.7	473.6	0.00	0.00	
3,223.2	9.91	161.70	3,183.0	-453.5	150.0	477.6	0.00	0.00	WASATCH_FM_TVD
3,300.0	9.91	161.70	3,258.7	-466.1	154.1	490.8	0.00	0.00	
3,400.0	9.91	161.70	3,357.2	-482.4	159.5	508.0	0.00	0.00	
3,500.0	9.91	161.70	3,455.7	-498.8	164.9	525.2	0.00	0.00	
3,600.0	9.91	161.70	3,554.2	-515.1	170.3	542.4	0.00	0.00	
3,700.0	9.91	161.70	3,652.7	-531.4	175.7	559.6	0.00	0.00	
3,800.0	9.91	161.70	3,751.2	-547.8	181.1	576.8	0.00	0.00	
3,900.0	9.91	161.70	3,849.7	-564.1	186.5	594.0	0.00	0.00	
4,000.0	9.91	161.70	3,948.2	-580.5	191.9	611.2	0.00	0.00	
4,100.0	9.91	161.70	4,046.7	-596.8	197.4	628.4	0.00	0.00	
4,200.0	9.91	161.70	4,145.3	-613.1	202.8	645.6	0.00	0.00	
4,300.0	9.91	161.70	4,243.8	-629.5	208.2	662.8	0.00	0.00	
4,400.0	9.91	161.70	4,342.3	-645.8	213.6	680.0	0.00	0.00	
4,500.0	9.91	161.70	4,440.8	-662.2	219.0	697.2	0.00	0.00	

Cathedral Energy Services

Planning Report

Database: USA EDM 5000 Multi Users DB
Company: EnCana Oil & Gas (USA) Inc
Project: Story Gulch
Site: S27-T4S-R96W (L27 496)
Well: 8513B-27 L27 496
Wellbore: DD
Design: Plan #1

Local Co-ordinate Reference: Well 8513B-27 L27 496
TVD Reference: WELL @ 8136.0ft (Original Well Elev)
MD Reference: WELL @ 8136.0ft (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
4,600.0	9.91	161.70	4,539.3	-678.5	224.4	714.4	0.00	0.00	
4,700.0	9.91	161.70	4,637.8	-694.8	229.8	731.6	0.00	0.00	
4,800.0	9.91	161.70	4,736.3	-711.2	235.2	748.9	0.00	0.00	
4,900.0	9.91	161.70	4,834.8	-727.5	240.6	766.1	0.00	0.00	
5,000.0	9.91	161.70	4,933.3	-743.8	246.0	783.3	0.00	0.00	
5,100.0	9.91	161.70	5,031.8	-760.2	251.4	800.5	0.00	0.00	
5,200.0	9.91	161.70	5,130.3	-776.5	256.8	817.7	0.00	0.00	
5,203.7	9.91	161.70	5,134.0	-777.1	257.0	818.3	0.00	0.00	Start 2° Drop @ 5203.7' MD
5,300.0	7.98	161.70	5,229.1	-791.3	261.7	833.3	2.00	-2.00	
5,400.0	5.98	161.70	5,328.4	-802.9	265.5	845.4	2.00	-2.00	
5,468.9	4.60	161.70	5,397.0	-808.9	267.5	851.8	2.00	-2.00	WASATCH_G_TVD
5,500.0	3.98	161.70	5,428.0	-811.1	268.2	854.1	2.00	-2.00	
5,600.0	1.98	161.70	5,527.8	-816.1	269.9	859.3	2.00	-2.00	
5,699.2	0.00	0.00	5,627.0	-817.7	270.4	861.0	2.00	-2.00	EOD @ 5699.2' MD
5,700.0	0.00	0.00	5,627.8	-817.7	270.4	861.0	0.00	0.00	
5,800.0	0.00	0.00	5,727.8	-817.7	270.4	861.0	0.00	0.00	
5,900.0	0.00	0.00	5,827.8	-817.7	270.4	861.0	0.00	0.00	
6,000.0	0.00	0.00	5,927.8	-817.7	270.4	861.0	0.00	0.00	
6,100.0	0.00	0.00	6,027.8	-817.7	270.4	861.0	0.00	0.00	
6,200.0	0.00	0.00	6,127.8	-817.7	270.4	861.0	0.00	0.00	
6,300.0	0.00	0.00	6,227.8	-817.7	270.4	861.0	0.00	0.00	
6,400.0	0.00	0.00	6,327.8	-817.7	270.4	861.0	0.00	0.00	
6,500.0	0.00	0.00	6,427.8	-817.7	270.4	861.0	0.00	0.00	
6,600.0	0.00	0.00	6,527.8	-817.7	270.4	861.0	0.00	0.00	
6,700.0	0.00	0.00	6,627.8	-817.7	270.4	861.0	0.00	0.00	
6,800.0	0.00	0.00	6,727.8	-817.7	270.4	861.0	0.00	0.00	
6,900.0	0.00	0.00	6,827.8	-817.7	270.4	861.0	0.00	0.00	
7,000.0	0.00	0.00	6,927.8	-817.7	270.4	861.0	0.00	0.00	
7,100.0	0.00	0.00	7,027.8	-817.7	270.4	861.0	0.00	0.00	
7,200.0	0.00	0.00	7,127.8	-817.7	270.4	861.0	0.00	0.00	
7,300.0	0.00	0.00	7,227.8	-817.7	270.4	861.0	0.00	0.00	
7,400.0	0.00	0.00	7,327.8	-817.7	270.4	861.0	0.00	0.00	
7,500.0	0.00	0.00	7,427.8	-817.7	270.4	861.0	0.00	0.00	
7,600.0	0.00	0.00	7,527.8	-817.7	270.4	861.0	0.00	0.00	
7,659.2	0.00	0.00	7,587.0	-817.7	270.4	861.0	0.00	0.00	WILLIAMS_FORK_TVD
7,699.2	0.00	0.00	7,627.0	-817.7	270.4	861.0	0.00	0.00	TOG TVD
7,700.0	0.00	239.68	7,627.8	-817.7	270.4	861.0	0.25	0.25	
7,800.0	0.25	239.68	7,727.8	-817.8	270.2	861.1	0.25	0.25	
7,801.2	0.26	239.68	7,729.0	-817.8	270.2	861.1	0.25	0.25	
7,900.0	0.26	239.68	7,827.8	-818.0	269.8	861.2	0.00	0.00	
8,000.0	0.26	239.68	7,927.8	-818.3	269.4	861.3	0.00	0.00	
8,100.0	0.26	239.68	8,027.8	-818.5	269.1	861.4	0.00	0.00	
8,200.0	0.26	239.68	8,127.8	-818.7	268.7	861.5	0.00	0.00	
8,300.0	0.26	239.68	8,227.8	-818.9	268.3	861.6	0.00	0.00	
8,400.0	0.26	239.68	8,327.8	-819.2	267.9	861.7	0.00	0.00	
8,500.0	0.26	239.68	8,427.8	-819.4	267.5	861.8	0.00	0.00	
8,600.0	0.26	239.68	8,527.8	-819.6	267.1	861.9	0.00	0.00	
8,700.0	0.26	239.68	8,627.8	-819.8	266.8	862.0	0.00	0.00	
8,800.0	0.26	239.68	8,727.8	-820.1	266.4	862.1	0.00	0.00	
8,900.0	0.26	239.68	8,827.8	-820.3	266.0	862.2	0.00	0.00	
9,000.0	0.26	239.68	8,927.8	-820.5	265.6	862.3	0.00	0.00	
9,100.0	0.26	239.68	9,027.8	-820.7	265.2	862.4	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 8513B-27 L27 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 8136.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 8136.0ft (Original Well Elev)
Site:	S27-T4S-R96W (L27 496)	North Reference:	True
Well:	8513B-27 L27 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
9,200.0	0.26	239.68	9,127.8	-821.0	264.8	862.5	0.00	0.00	
9,300.0	0.26	239.68	9,227.8	-821.2	264.4	862.6	0.00	0.00	
9,400.0	0.26	239.68	9,327.8	-821.4	264.1	862.7	0.00	0.00	
9,500.0	0.26	239.68	9,427.8	-821.6	263.7	862.8	0.00	0.00	
9,600.0	0.26	239.68	9,527.8	-821.9	263.3	862.9	0.00	0.00	
9,700.0	0.26	239.68	9,627.8	-822.1	262.9	863.0	0.00	0.00	
9,800.0	0.26	239.68	9,727.8	-822.3	262.5	863.1	0.00	0.00	
9,900.0	0.26	239.68	9,827.8	-822.5	262.1	863.2	0.00	0.00	
10,000.0	0.26	239.68	9,927.8	-822.8	261.8	863.3	0.00	0.00	
10,100.0	0.26	239.68	10,027.8	-823.0	261.4	863.4	0.00	0.00	
10,200.0	0.26	239.68	10,127.8	-823.2	261.0	863.5	0.00	0.00	
10,300.0	0.26	239.68	10,227.8	-823.4	260.6	863.6	0.00	0.00	
10,400.0	0.26	239.68	10,327.8	-823.7	260.2	863.7	0.00	0.00	
10,500.0	0.26	239.68	10,427.8	-823.9	259.8	863.8	0.00	0.00	
10,600.0	0.26	239.68	10,527.8	-824.1	259.5	864.0	0.00	0.00	
10,700.0	0.26	239.68	10,627.8	-824.3	259.1	864.1	0.00	0.00	
10,800.0	0.26	239.68	10,727.8	-824.6	258.7	864.2	0.00	0.00	
10,850.2	0.26	239.68	10,778.0	-824.7	258.5	864.2	0.00	0.00	CAMEO_TVD
10,900.0	0.26	239.68	10,827.8	-824.8	258.3	864.3	0.00	0.00	
11,000.0	0.26	239.68	10,927.8	-825.0	257.9	864.4	0.00	0.00	
11,100.0	0.26	239.68	11,027.8	-825.2	257.5	864.5	0.00	0.00	
11,200.0	0.26	239.68	11,127.8	-825.5	257.1	864.6	0.00	0.00	
11,300.0	0.26	239.68	11,227.8	-825.7	256.8	864.7	0.00	0.00	
11,309.2	0.26	239.68	11,237.0	-825.7	256.7	864.7	0.00	0.00	ROLLINS_TVD
11,400.0	0.26	239.68	11,327.8	-825.9	256.4	864.8	0.00	0.00	
11,500.0	0.26	239.68	11,427.8	-826.1	256.0	864.9	0.00	0.00	
11,543.2	0.26	239.68	11,471.0	-826.2	255.8	864.9	0.00	0.00	COZZETTE_TVD
11,600.0	0.26	239.68	11,527.8	-826.3	255.6	865.0	0.00	0.00	
11,700.0	0.26	239.68	11,627.8	-826.6	255.2	865.1	0.00	0.00	
11,728.2	0.26	239.68	11,656.0	-826.6	255.1	865.1	0.00	0.00	CORCORAN_TVD
11,800.0	0.26	239.68	11,727.8	-826.8	254.8	865.2	0.00	0.00	
11,900.0	0.26	239.68	11,827.8	-827.0	254.5	865.3	0.00	0.00	
12,000.0	0.26	239.68	11,927.8	-827.2	254.1	865.4	0.00	0.00	
12,036.2	0.26	239.68	11,964.0	-827.3	253.9	865.4	0.00	0.00	UPPER_SEGO_TVD
12,100.0	0.26	239.68	12,027.8	-827.5	253.7	865.5	0.00	0.00	
12,186.2	0.26	239.68	12,114.0	-827.7	253.4	865.6	0.00	0.00	TD @ 12186.2' MD - SEGO_BASE_TARGET_1
12,200.0	0.26	239.68	12,127.8	-827.7	253.3	865.6	0.00	0.00	
12,300.0	0.26	239.68	12,227.8	-827.9	252.9	865.7	0.00	0.00	
12,336.2	0.26	239.68	12,264.0	-828.0	252.8	865.7	0.00	0.00	Permit TD @ 12336.2' MD

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 8513B-27 L27 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 8136.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 8136.0ft (Original Well Elev)
Site:	S27-T4S-R96W (L27 496)	North Reference:	True
Well:	8513B-27 L27 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
L27 496 8513B-27 PBHI - plan hits target center - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	12,114.0	-827.7	253.4	1,679,462.34	2,251,479.02	39° 40' 7.81 N	108° 9' 33.73 W
L27 496 8513B-27 TGT - plan hits target center - Point	0.00	0.00	7,627.0	-817.7	270.4	1,679,471.81	2,251,496.35	39° 40' 7.91 N	108° 9' 33.51 W

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
1,081.2	1,073.0	A_GROOVE_TVD			
1,238.6	1,228.0	B_GROOVE_TVD			
1,266.0	1,255.0	B_GROOVE_BASE_TVD			
2,215.1	2,190.0	GARDEN_GULCH_TVD.			
3,223.2	3,183.0	WASATCH_FM_TVD			
5,468.9	5,397.0	WASATCH_G_TVD			
7,659.2	7,587.0	WILLIAMS_FORK_TVD			
7,699.2	7,627.0	TOG TVD			
10,850.2	10,778.0	CAMEO_TVD			
11,309.2	11,237.0	ROLLINS_TVD			
11,543.2	11,471.0	COZZETTE_TVD			
11,728.2	11,656.0	CORCORAN_TVD			
12,036.2	11,964.0	UPPER_SEGO_TVD			
12,186.2	12,114.0	SEGO_BASE_TARGET_TVD			

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP @ 200' MD
695.4	693.0	-40.6	13.4	EOB; Inc=9.91°
5,203.7	5,134.0	-777.1	257.0	Start 2° Drop @ 5203.7' MD
5,699.2	5,627.0	-817.7	270.4	EOD @ 5699.2' MD
12,186.2	12,114.0	-817.7	270.4	TD @ 12186.2' MD
12,336.2	12,264.0	-817.8	270.2	Permit TD @ 12336.2' MD