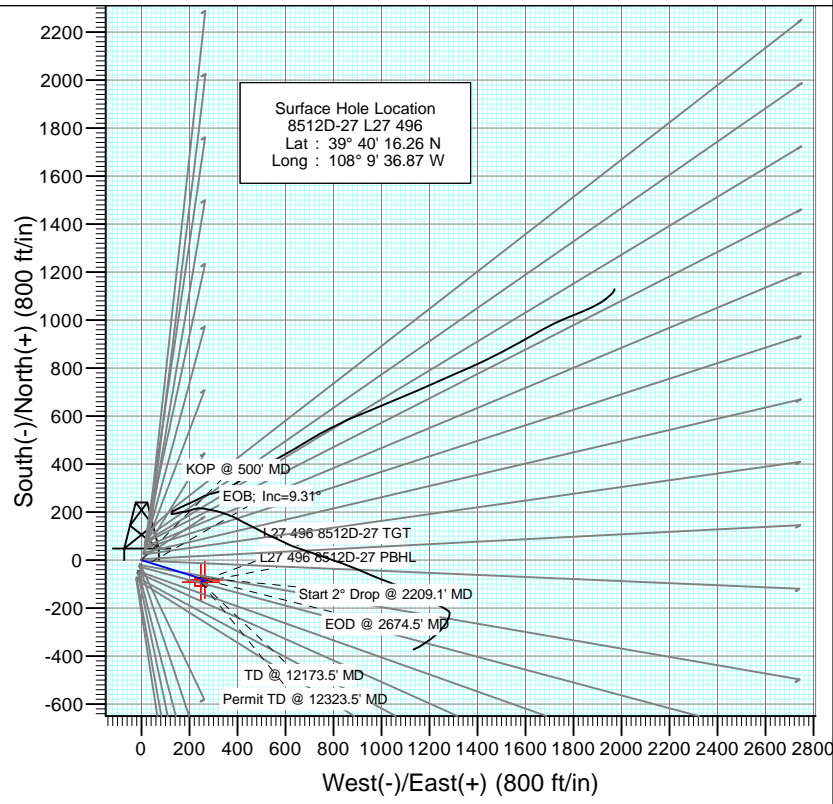


SECTION DETAILS

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	500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	
3	965.3	9.31	107.27	963.3	-11.2	36.0	2.00	107.27	37.7	
4	2209.1	9.31	107.27	2190.7	-70.9	228.1	0.00	0.00	238.5	
5	2674.5	0.00	0.00	2654.0	-82.1	264.1	2.00	180.00	276.1	
6	7674.5	0.00	0.00	7654.0	-82.1	264.1	0.00	0.00	276.1	L27 496 8512D-27 TGT
7	7776.0	0.25	239.64	7755.5	-82.2	263.9	0.25	239.64	276.0	
8	12173.5	0.25	239.64	12153.0	-92.1	247.1	0.00	0.00	263.7	L27 496 8512D-27 PBHL
9	12323.5	0.25	239.64	12303.0	-92.4	246.5	0.00	0.00	263.3	



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
L27 496 8512D-27 TGT	-82.1	264.1	1680234.36	2251520.289° 40' 15.45 N	108° 9' 33.49 W	
L27 496 8512D-27 PBHL	-92.1	247.1	1680224.89	2251502.929° 40' 15.35 N	108° 9' 33.71 W	

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1087.0	1090.7	A_GROOVE_TVD
1242.0	1247.8	B_GROOVE_TVD
1278.0	1284.2	B_GROOVE_BASE_TVD
2207.0	2225.6	GARDEN_GULCH_TVD
3208.0	3228.5	WASATCH_FM_TVD
5427.0	5447.5	WASATCH_G_TVD
7614.0	7634.5	WILLIAMS_FORK_TVD
7654.0	7674.5	TOG TVD
10822.0	10842.5	CAMEO_TVD
11273.0	11293.5	ROLLINS_TVD
11516.0	11536.5	COZZETTE_TVD
11699.0	11719.5	CORCORAN_TVD
12003.0	12023.5	UPPER_SEGO_TVD
12153.0	12173.5	SEGO_BASE_TARGET_TVD

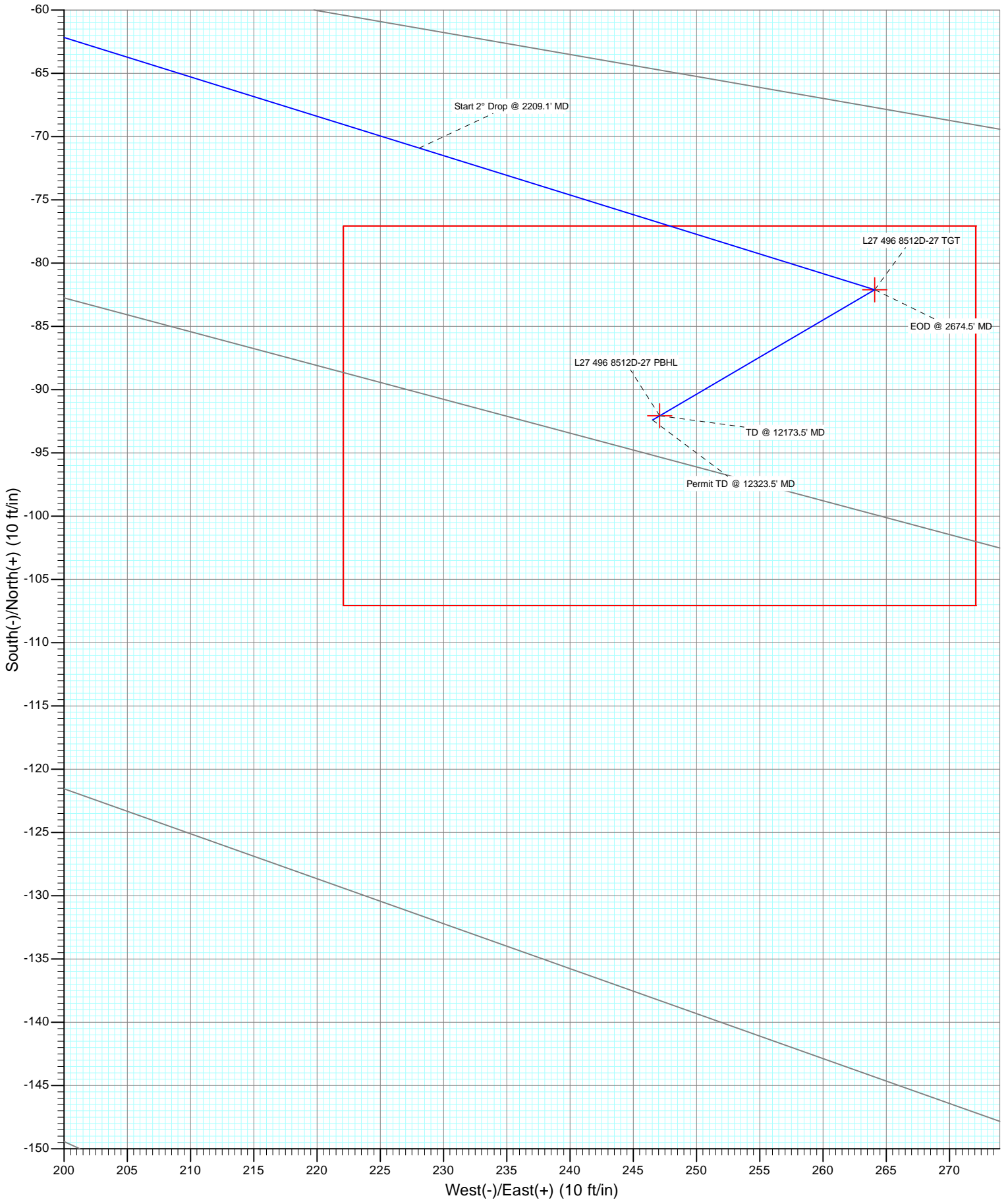
M Azimuths to True North
 Magnetic North: 10.28°
 Magnetic Field
 Strength: 52177.6snT
 Dip Angle: 65.82°
 Date: 9/25/2012
 Model: IGRF2010

Plan #1
 8512D-27 L27 496
 12xxx; LR
 WELL @ 8136.0ft (Original Well Elev)
 Ground Elevation @ 8104.0
 North American Datum 1983
 Well 8512D-27 L27 496, True North

Vertical Section at 110.43° (1500 ft/in)



Project: Story Gulch
Site: S27-T4S-R96W (L27 496)
Well: 8512D-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 8512D-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: 8512D-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 8512D-27 L27 496					
Well Position	+N/-S	0.0 ft	Northing:	1,680,324.15 ft	Latitude: 39° 40' 16.26 N
	+E/-W	0.0 ft	Easting:	2,251,258.62 ft	Longitude: 108° 9' 36.87 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	110.43

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	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
965.3	9.31	107.27	963.3	-11.2	36.0	2.00	2.00	0.00	107.27	
2,209.1	9.31	107.27	2,190.7	-70.9	228.1	0.00	0.00	0.00	0.00	
2,674.5	0.00	0.00	2,654.0	-82.1	264.1	2.00	-2.00	0.00	180.00	
7,674.5	0.00	0.00	7,654.0	-82.1	264.1	0.00	0.00	0.00	0.00	L27 496 8512D-27 TC
7,776.0	0.25	239.64	7,755.5	-82.2	263.9	0.25	0.25	-118.53	239.64	
12,173.5	0.25	239.64	12,153.0	-92.1	247.1	0.00	0.00	0.00	0.00	L27 496 8512D-27 PE
12,323.5	0.25	239.64	12,303.0	-92.4	246.5	0.00	0.00	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: 8512D-27 L27 496
Wellbore: DD
Design: Plan #1

Local Co-ordinate Reference: Well 8512D-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
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	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	KOP @ 500' MD
600.0	2.00	107.27	600.0	-0.5	1.7	1.7	2.00	2.00	
700.0	4.00	107.27	699.8	-2.1	6.7	7.0	2.00	2.00	
800.0	6.00	107.27	799.5	-4.7	15.0	15.7	2.00	2.00	
900.0	8.00	107.27	898.7	-8.3	26.6	27.8	2.00	2.00	
965.3	9.31	107.27	963.3	-11.2	36.0	37.7	2.00	2.00	EOB; Inc=9.31°
1,000.0	9.31	107.27	997.5	-12.9	41.4	43.2	0.00	0.00	
1,090.7	9.31	107.27	1,087.0	-17.2	55.4	57.9	0.00	0.00	A_GROOVE_TVD
1,100.0	9.31	107.27	1,096.2	-17.7	56.8	59.4	0.00	0.00	
1,200.0	9.31	107.27	1,194.9	-22.5	72.2	75.5	0.00	0.00	
1,247.8	9.31	107.27	1,242.0	-24.8	79.6	83.3	0.00	0.00	B_GROOVE_TVD
1,284.2	9.31	107.27	1,278.0	-26.5	85.3	89.1	0.00	0.00	B_GROOVE_BASE_TVD
1,300.0	9.31	107.27	1,293.6	-27.3	87.7	91.7	0.00	0.00	
1,400.0	9.31	107.27	1,392.2	-32.1	103.1	107.8	0.00	0.00	
1,500.0	9.31	107.27	1,490.9	-36.9	118.6	124.0	0.00	0.00	
1,600.0	9.31	107.27	1,589.6	-41.7	134.0	140.1	0.00	0.00	
1,700.0	9.31	107.27	1,688.3	-46.5	149.5	156.3	0.00	0.00	
1,800.0	9.31	107.27	1,787.0	-51.3	164.9	172.4	0.00	0.00	
1,900.0	9.31	107.27	1,885.7	-56.1	180.4	188.6	0.00	0.00	
2,000.0	9.31	107.27	1,984.3	-60.9	195.8	204.7	0.00	0.00	
2,100.0	9.31	107.27	2,083.0	-65.7	211.2	220.9	0.00	0.00	
2,200.0	9.31	107.27	2,181.7	-70.5	226.7	237.0	0.00	0.00	
2,209.1	9.31	107.27	2,190.7	-70.9	228.1	238.5	0.00	0.00	Start 2° Drop @ 2209.1' MD
2,225.6	8.98	107.27	2,207.0	-71.7	230.6	241.1	2.00	-2.00	GARDEN_GULCH_TVD.
2,300.0	7.49	107.27	2,280.6	-74.8	240.8	251.7	2.00	-2.00	
2,400.0	5.49	107.27	2,380.0	-78.2	251.6	263.0	2.00	-2.00	
2,500.0	3.49	107.27	2,479.6	-80.5	259.0	270.8	2.00	-2.00	
2,600.0	1.49	107.27	2,579.5	-81.8	263.2	275.2	2.00	-2.00	
2,674.5	0.00	0.00	2,654.0	-82.1	264.1	276.1	2.00	-2.00	EOD @ 2674.5' MD
2,700.0	0.00	0.00	2,679.5	-82.1	264.1	276.1	0.00	0.00	
2,800.0	0.00	0.00	2,779.5	-82.1	264.1	276.1	0.00	0.00	
2,900.0	0.00	0.00	2,879.5	-82.1	264.1	276.1	0.00	0.00	
3,000.0	0.00	0.00	2,979.5	-82.1	264.1	276.1	0.00	0.00	
3,100.0	0.00	0.00	3,079.5	-82.1	264.1	276.1	0.00	0.00	
3,200.0	0.00	0.00	3,179.5	-82.1	264.1	276.1	0.00	0.00	
3,228.5	0.00	0.00	3,208.0	-82.1	264.1	276.1	0.00	0.00	WASATCH_FM_TVD
3,300.0	0.00	0.00	3,279.5	-82.1	264.1	276.1	0.00	0.00	
3,400.0	0.00	0.00	3,379.5	-82.1	264.1	276.1	0.00	0.00	
3,500.0	0.00	0.00	3,479.5	-82.1	264.1	276.1	0.00	0.00	
3,600.0	0.00	0.00	3,579.5	-82.1	264.1	276.1	0.00	0.00	
3,700.0	0.00	0.00	3,679.5	-82.1	264.1	276.1	0.00	0.00	
3,800.0	0.00	0.00	3,779.5	-82.1	264.1	276.1	0.00	0.00	
3,900.0	0.00	0.00	3,879.5	-82.1	264.1	276.1	0.00	0.00	
4,000.0	0.00	0.00	3,979.5	-82.1	264.1	276.1	0.00	0.00	
4,100.0	0.00	0.00	4,079.5	-82.1	264.1	276.1	0.00	0.00	
4,200.0	0.00	0.00	4,179.5	-82.1	264.1	276.1	0.00	0.00	
4,300.0	0.00	0.00	4,279.5	-82.1	264.1	276.1	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: 8512D-27 L27 496
Wellbore: DD
Design: Plan #1

Local Co-ordinate Reference: Well 8512D-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
4,400.0	0.00	0.00	4,379.5	-82.1	264.1	276.1	0.00	0.00	
4,500.0	0.00	0.00	4,479.5	-82.1	264.1	276.1	0.00	0.00	
4,600.0	0.00	0.00	4,579.5	-82.1	264.1	276.1	0.00	0.00	
4,700.0	0.00	0.00	4,679.5	-82.1	264.1	276.1	0.00	0.00	
4,800.0	0.00	0.00	4,779.5	-82.1	264.1	276.1	0.00	0.00	
4,900.0	0.00	0.00	4,879.5	-82.1	264.1	276.1	0.00	0.00	
5,000.0	0.00	0.00	4,979.5	-82.1	264.1	276.1	0.00	0.00	
5,100.0	0.00	0.00	5,079.5	-82.1	264.1	276.1	0.00	0.00	
5,200.0	0.00	0.00	5,179.5	-82.1	264.1	276.1	0.00	0.00	
5,300.0	0.00	0.00	5,279.5	-82.1	264.1	276.1	0.00	0.00	
5,400.0	0.00	0.00	5,379.5	-82.1	264.1	276.1	0.00	0.00	
5,447.5	0.00	0.00	5,427.0	-82.1	264.1	276.1	0.00	0.00	WASATCH_G_TVD
5,500.0	0.00	0.00	5,479.5	-82.1	264.1	276.1	0.00	0.00	
5,600.0	0.00	0.00	5,579.5	-82.1	264.1	276.1	0.00	0.00	
5,700.0	0.00	0.00	5,679.5	-82.1	264.1	276.1	0.00	0.00	
5,800.0	0.00	0.00	5,779.5	-82.1	264.1	276.1	0.00	0.00	
5,900.0	0.00	0.00	5,879.5	-82.1	264.1	276.1	0.00	0.00	
6,000.0	0.00	0.00	5,979.5	-82.1	264.1	276.1	0.00	0.00	
6,100.0	0.00	0.00	6,079.5	-82.1	264.1	276.1	0.00	0.00	
6,200.0	0.00	0.00	6,179.5	-82.1	264.1	276.1	0.00	0.00	
6,300.0	0.00	0.00	6,279.5	-82.1	264.1	276.1	0.00	0.00	
6,400.0	0.00	0.00	6,379.5	-82.1	264.1	276.1	0.00	0.00	
6,500.0	0.00	0.00	6,479.5	-82.1	264.1	276.1	0.00	0.00	
6,600.0	0.00	0.00	6,579.5	-82.1	264.1	276.1	0.00	0.00	
6,700.0	0.00	0.00	6,679.5	-82.1	264.1	276.1	0.00	0.00	
6,800.0	0.00	0.00	6,779.5	-82.1	264.1	276.1	0.00	0.00	
6,900.0	0.00	0.00	6,879.5	-82.1	264.1	276.1	0.00	0.00	
7,000.0	0.00	0.00	6,979.5	-82.1	264.1	276.1	0.00	0.00	
7,100.0	0.00	0.00	7,079.5	-82.1	264.1	276.1	0.00	0.00	
7,200.0	0.00	0.00	7,179.5	-82.1	264.1	276.1	0.00	0.00	
7,300.0	0.00	0.00	7,279.5	-82.1	264.1	276.1	0.00	0.00	
7,400.0	0.00	0.00	7,379.5	-82.1	264.1	276.1	0.00	0.00	
7,500.0	0.00	0.00	7,479.5	-82.1	264.1	276.1	0.00	0.00	
7,600.0	0.00	0.00	7,579.5	-82.1	264.1	276.1	0.00	0.00	
7,634.5	0.00	0.00	7,614.0	-82.1	264.1	276.1	0.00	0.00	WILLIAMS_FORK_TVD
7,674.5	0.00	0.00	7,654.0	-82.1	264.1	276.1	0.00	0.00	TOG TVD
7,700.0	0.06	239.64	7,679.5	-82.1	264.1	276.1	0.25	0.25	
7,776.0	0.25	239.64	7,755.5	-82.2	263.9	276.0	0.25	0.25	
7,800.0	0.25	239.64	7,779.5	-82.3	263.8	275.9	0.00	0.00	
7,900.0	0.25	239.64	7,879.5	-82.5	263.4	275.7	0.00	0.00	
8,000.0	0.25	239.64	7,979.5	-82.7	263.0	275.4	0.00	0.00	
8,100.0	0.25	239.64	8,079.5	-82.9	262.7	275.1	0.00	0.00	
8,200.0	0.25	239.64	8,179.5	-83.2	262.3	274.8	0.00	0.00	
8,300.0	0.25	239.64	8,279.5	-83.4	261.9	274.5	0.00	0.00	
8,400.0	0.25	239.64	8,379.5	-83.6	261.5	274.3	0.00	0.00	
8,500.0	0.25	239.64	8,479.5	-83.8	261.1	274.0	0.00	0.00	
8,600.0	0.25	239.64	8,579.5	-84.1	260.8	273.7	0.00	0.00	
8,700.0	0.25	239.64	8,679.5	-84.3	260.4	273.4	0.00	0.00	
8,800.0	0.25	239.64	8,779.5	-84.5	260.0	273.1	0.00	0.00	
8,900.0	0.25	239.64	8,879.5	-84.7	259.6	272.9	0.00	0.00	
9,000.0	0.25	239.64	8,979.5	-85.0	259.2	272.6	0.00	0.00	
9,100.0	0.25	239.64	9,079.5	-85.2	258.8	272.3	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 8512D-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:	8512D-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	0.25	239.64	9,179.5	-85.4	258.5	272.0	0.00	0.00	
9,300.0	0.25	239.64	9,279.5	-85.6	258.1	271.7	0.00	0.00	
9,400.0	0.25	239.64	9,379.5	-85.9	257.7	271.5	0.00	0.00	
9,500.0	0.25	239.64	9,479.5	-86.1	257.3	271.2	0.00	0.00	
9,600.0	0.25	239.64	9,579.5	-86.3	256.9	270.9	0.00	0.00	
9,700.0	0.25	239.64	9,679.5	-86.5	256.6	270.6	0.00	0.00	
9,800.0	0.25	239.64	9,779.5	-86.7	256.2	270.3	0.00	0.00	
9,900.0	0.25	239.64	9,879.5	-87.0	255.8	270.1	0.00	0.00	
10,000.0	0.25	239.64	9,979.5	-87.2	255.4	269.8	0.00	0.00	
10,100.0	0.25	239.64	10,079.5	-87.4	255.0	269.5	0.00	0.00	
10,200.0	0.25	239.64	10,179.5	-87.6	254.6	269.2	0.00	0.00	
10,300.0	0.25	239.64	10,279.5	-87.9	254.3	268.9	0.00	0.00	
10,400.0	0.25	239.64	10,379.5	-88.1	253.9	268.7	0.00	0.00	
10,500.0	0.25	239.64	10,479.5	-88.3	253.5	268.4	0.00	0.00	
10,600.0	0.25	239.64	10,579.5	-88.5	253.1	268.1	0.00	0.00	
10,700.0	0.25	239.64	10,679.5	-88.8	252.7	267.8	0.00	0.00	
10,800.0	0.25	239.64	10,779.5	-89.0	252.3	267.5	0.00	0.00	
10,842.5	0.25	239.64	10,822.0	-89.1	252.2	267.4	0.00	0.00	CAMEO_TVD
10,900.0	0.25	239.64	10,879.5	-89.2	252.0	267.3	0.00	0.00	
11,000.0	0.25	239.64	10,979.5	-89.4	251.6	267.0	0.00	0.00	
11,100.0	0.25	239.64	11,079.5	-89.7	251.2	266.7	0.00	0.00	
11,200.0	0.25	239.64	11,179.5	-89.9	250.8	266.4	0.00	0.00	
11,293.5	0.25	239.64	11,273.0	-90.1	250.5	266.2	0.00	0.00	ROLLINS_TVD
11,300.0	0.25	239.64	11,279.5	-90.1	250.4	266.1	0.00	0.00	
11,400.0	0.25	239.64	11,379.5	-90.3	250.1	265.9	0.00	0.00	
11,500.0	0.25	239.64	11,479.5	-90.6	249.7	265.6	0.00	0.00	
11,536.5	0.25	239.64	11,516.0	-90.6	249.5	265.5	0.00	0.00	COZZETTE_TVD
11,600.0	0.25	239.64	11,579.5	-90.8	249.3	265.3	0.00	0.00	
11,700.0	0.25	239.64	11,679.5	-91.0	248.9	265.0	0.00	0.00	
11,719.5	0.25	239.64	11,699.0	-91.0	248.8	265.0	0.00	0.00	CORCORAN_TVD
11,800.0	0.25	239.64	11,779.5	-91.2	248.5	264.7	0.00	0.00	
11,900.0	0.25	239.64	11,879.5	-91.5	248.1	264.5	0.00	0.00	
12,000.0	0.25	239.64	11,979.5	-91.7	247.8	264.2	0.00	0.00	
12,023.5	0.25	239.64	12,003.0	-91.7	247.7	264.1	0.00	0.00	UPPER_SEGO_TVD
12,100.0	0.25	239.64	12,079.5	-91.9	247.4	263.9	0.00	0.00	
12,173.5	0.25	239.64	12,153.0	-92.1	247.1	263.7	0.00	0.00	TD @ 12173.5' MD - SEGO_BASE_TARGET_1
12,200.0	0.25	239.64	12,179.5	-92.1	247.0	263.6	0.00	0.00	
12,300.0	0.25	239.64	12,279.5	-92.3	246.6	263.3	0.00	0.00	
12,323.5	0.25	239.64	12,303.0	-92.4	246.5	263.3	0.00	0.00	Permit TD @ 12323.5' MD

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 8512D-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:	8512D-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 8512D-27 PBHI - plan hits target center - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	12,153.0	-92.1	247.1	1,680,224.89	2,251,502.92	39° 40' 15.35 N	108° 9' 33.71 W
L27 496 8512D-27 TGT - plan hits target center - Point	0.00	0.00	7,654.0	-82.1	264.1	1,680,234.36	2,251,520.21	39° 40' 15.45 N	108° 9' 33.49 W

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
1,090.7	1,087.0	A_GROOVE_TVD			
1,247.8	1,242.0	B_GROOVE_TVD			
1,284.2	1,278.0	B_GROOVE_BASE_TVD			
2,225.6	2,207.0	GARDEN_GULCH_TVD.			
3,228.5	3,208.0	WASATCH_FM_TVD			
5,447.5	5,427.0	WASATCH_G_TVD			
7,634.5	7,614.0	WILLIAMS_FORK_TVD			
7,674.5	7,654.0	TOG TVD			
10,842.5	10,822.0	CAMEO_TVD			
11,293.5	11,273.0	ROLLINS_TVD			
11,536.5	11,516.0	COZZETTE_TVD			
11,719.5	11,699.0	CORCORAN_TVD			
12,023.5	12,003.0	UPPER_SEGO_TVD			
12,173.5	12,153.0	SEGO_BASE_TARGET_TVD			

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
500.0	500.0	0.0	0.0	KOP @ 500' MD
965.3	963.3	-11.2	36.0	EOB; Inc=9.31°
2,209.1	2,190.7	-70.9	228.1	Start 2° Drop @ 2209.1' MD
2,674.5	2,654.0	-82.1	264.1	EOD @ 2674.5' MD
12,173.5	12,153.0	-82.1	264.1	TD @ 12173.5' MD
12,323.5	12,303.0	-82.2	263.9	Permit TD @ 12323.5' MD