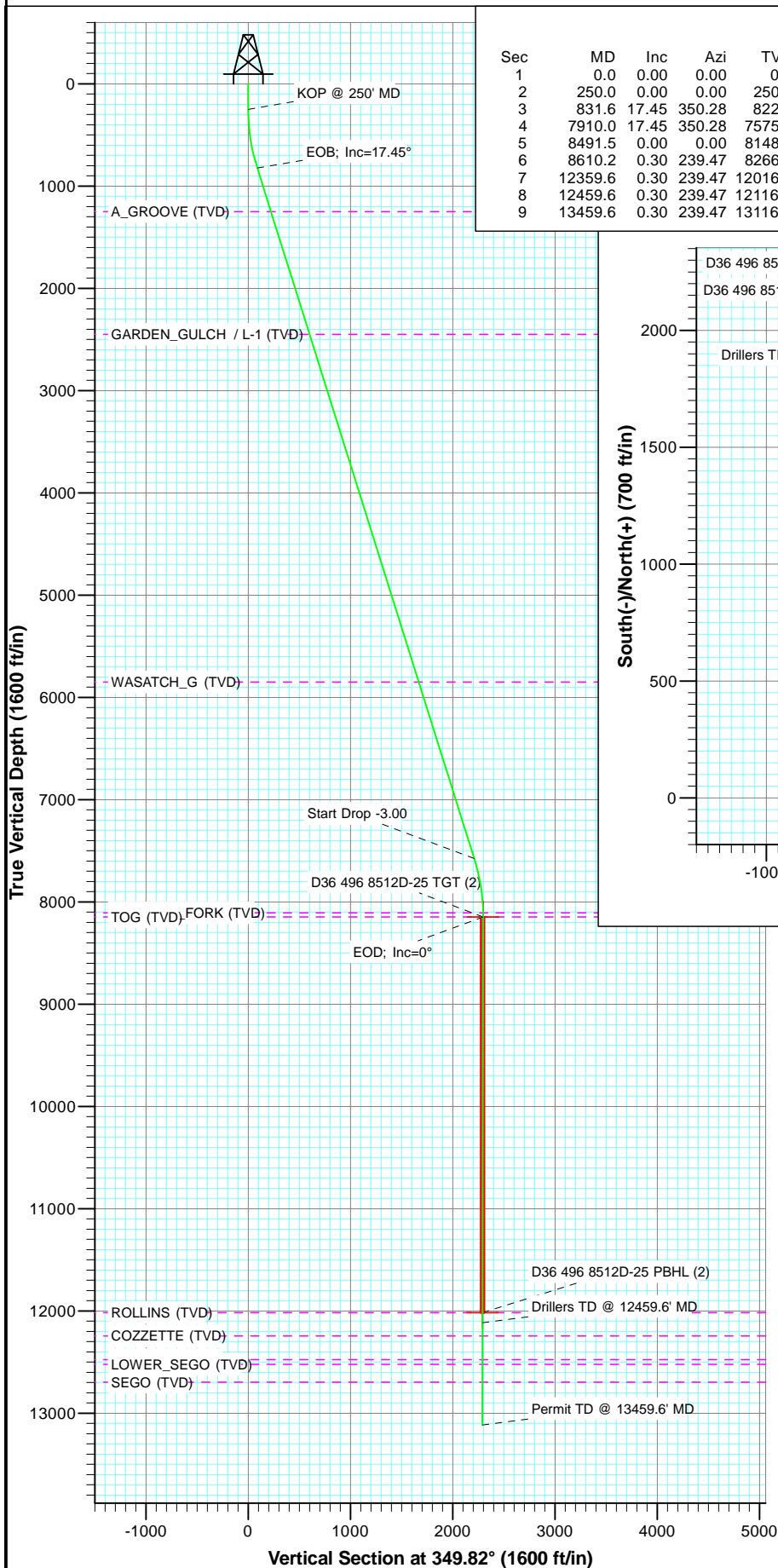
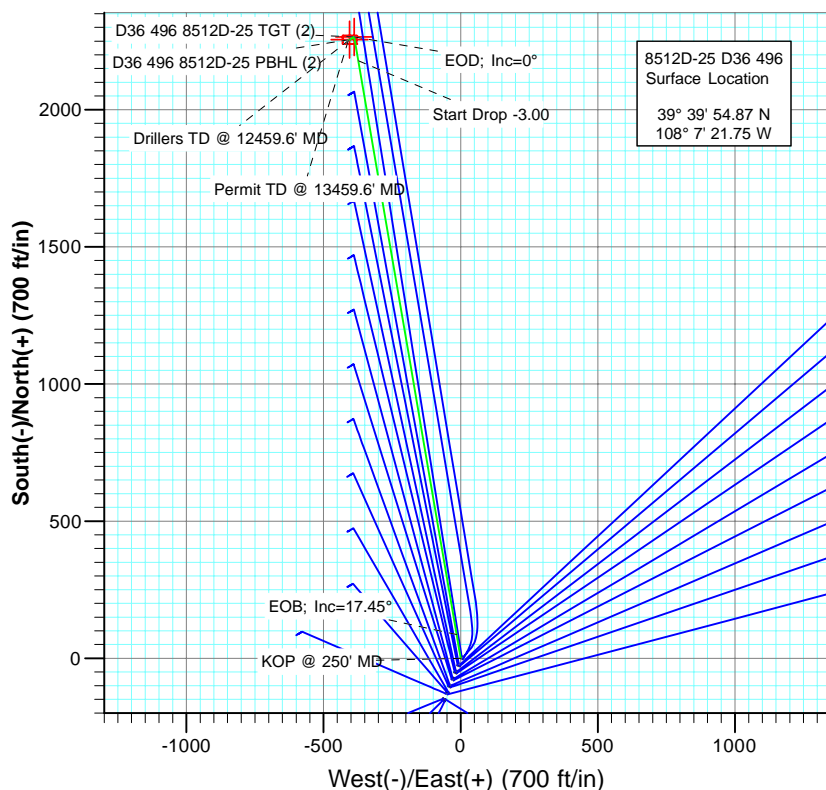




Project: Story Gulch  
Site: S36-T4S-R96W (D36 496)  
Well: 8512D-25 D36 496  
Wellbore: DD  
Plan: Plan #2



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	250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.0	
3	831.6	17.45	350.28	822.6	86.6	-14.8	3.00	350.28	87.9	
4	7910.0	17.45	350.28	7575.4	2178.4	-373.2	0.00	0.00	2210.1	
5	8491.5	0.00	0.00	8148.0	2265.0	-388.0	3.00	180.00	2297.9	D36 496 8512D-25 TGT (2)
6	8610.2	0.30	239.47	8266.7	2264.8	-388.3	0.25	239.47	2297.8	
7	12359.6	0.30	239.47	12016.0	2255.0	-405.0	0.00	0.00	2291.1	D36 496 8512D-25 PBHL (2)
8	12459.6	0.30	239.47	12116.0	2254.7	-405.4	0.00	0.00	2290.9	
9	13459.6	0.30	239.47	13116.0	2252.1	-409.9	0.00	0.00	2289.1	



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1251.0	1280.6	A_GROOVE (TVD)
2450.0	2537.4	GARDEN_GULCH / L-1 (TVD)
5850.0	6101.4	WASATCH_G (TVD)
8108.0	8451.5	WILLIAMS_FORK (TVD)
8148.0	8491.5	TOG (TVD)
12016.0	12359.6	ROLLINS (TVD)
12246.0	12589.6	COZZETTE (TVD)
12478.0	12821.6	CORCORAN (TVD)
12522.0	12865.6	LOWER_SEGO (TVD)
12697.0	13040.6	SEGO (TVD)

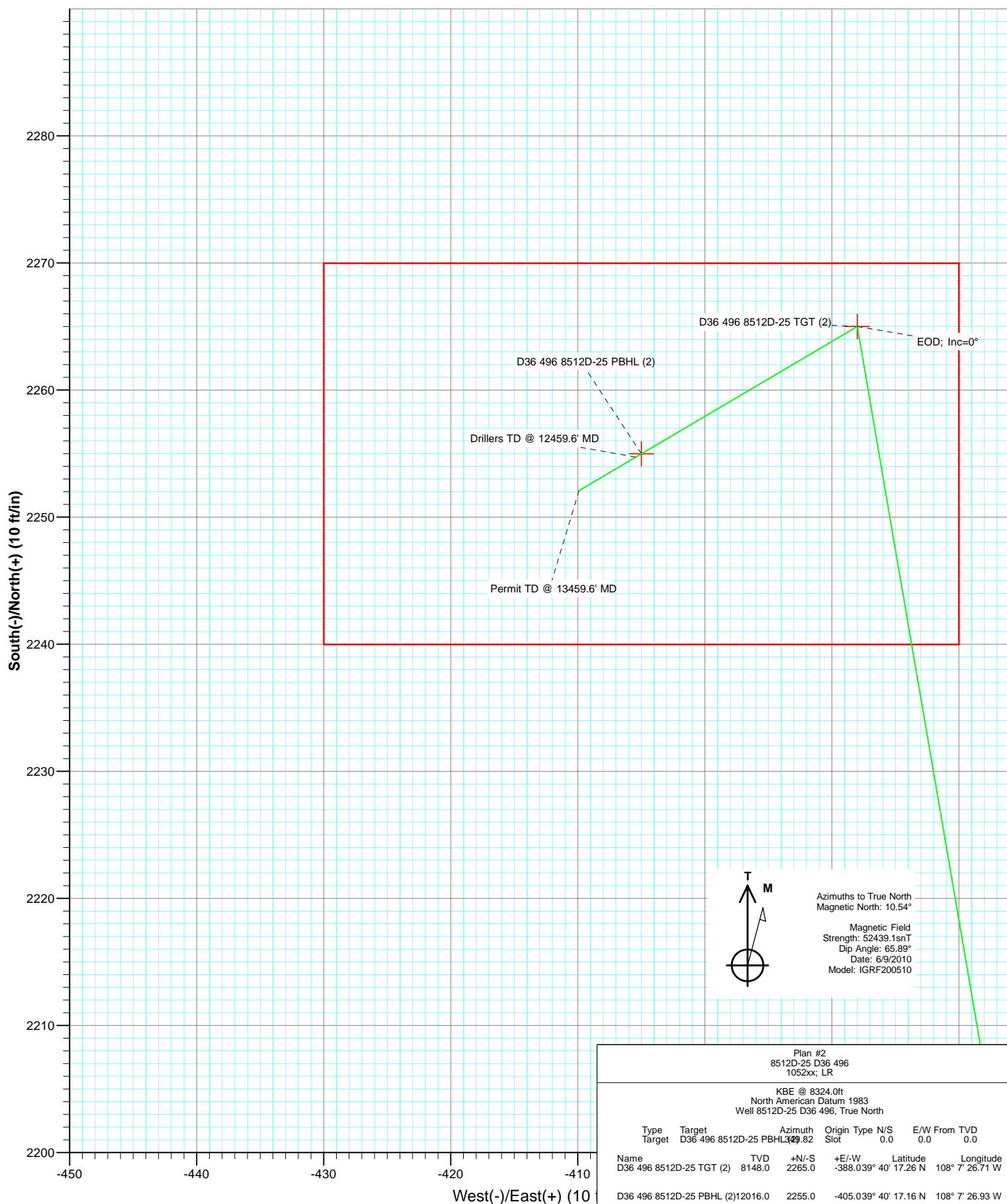


Azimuths to True North  
Magnetic North: 10.54°  
  
Magnetic Field  
Strength: 52439.1nT  
Dip Angle: 65.89°  
Date: 6/9/2010  
Model: IGRF200510

Plan #2 8512D-25 D36 496 1052xx; LR						
KBE @ 8324.0ft North American Datum 1983 Well 8512D-25 D36 496, True North						
Type	Target	Azimuth	Origin	Type	N/S	E/W From TVD
Target	D36 496 8512D-25 PBHL	349.82	Slot		0.0	0.0
Name	Target	TVD	+N/-S	+E/-W	Latitude	Longitude
D36 496 8512D-25 TGT (2)	8148.0	2265.0	-388.039° 40'	17.26 N	108° 7' 26.71 W	
D36 496 8512D-25 PBHL (2)	12016.0	2255.0	-405.039° 40'	17.16 N	108° 7' 26.93 W	



Project: Story Gulch  
Site: S36-T4S-R96W (D36 496)  
Well: 8512D-25 D36 496  
Wellbore: DD  
Plan: Plan #2



# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well 8512D-25 D36 496
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8324.0ft
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8324.0ft
<b>Site:</b>	S36-T4S-R96W (D36 496)	<b>North Reference:</b>	True
<b>Well:</b>	8512D-25 D36 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #2		

<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		S36-T4S-R96W (D36 496)			
Site Position:		Northing:	1,677,676.10 ft	Latitude:	39° 39' 53.09 N
From:	Lat/Long	Easting:	2,261,675.01 ft	Longitude:	108° 7' 22.74 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.65 °

Well	8512D-25 D36 496					
Well Position	+N/-S	0.0 ft	Northing:	1,677,853.99 ft	Latitude:	39° 39' 54.87 N
	+E/-W	0.0 ft	Easting:	2,261,757.22 ft	Longitude:	108° 7' 21.75 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,302.0 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	6/9/2010	10.54	65.89	52,439

<b>Design</b>	Plan #2			
<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	349.82

<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	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.00	0.00	
831.6	17.45	350.28	822.6	86.6	-14.8	3.00	3.00	0.00	350.28	
7,910.0	17.45	350.28	7,575.4	2,178.4	-373.2	0.00	0.00	0.00	0.00	
8,491.5	0.00	0.00	8,148.0	2,265.0	-388.0	3.00	-3.00	0.00	180.00	D36 496 8512D-25 TC
8,610.2	0.30	239.47	8,266.7	2,264.8	-388.3	0.25	0.25	-101.58	239.47	
12,359.6	0.30	239.47	12,016.0	2,255.0	-405.0	0.00	0.00	0.00	0.00	D36 496 8512D-25 PI
12,459.6	0.30	239.47	12,116.0	2,254.7	-405.4	0.00	0.00	0.00	0.00	
13,459.6	0.30	239.47	13,116.0	2,252.1	-409.9	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 8512D-25 D36 496
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8324.0ft
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8324.0ft
<b>Site:</b>	S36-T4S-R96W (D36 496)	<b>North Reference:</b>	True
<b>Well:</b>	8512D-25 D36 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #2		

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	
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	KOP @ 250' MD
300.0	1.50	350.28	300.0	0.6	-0.1	0.7	3.00	3.00	
400.0	4.50	350.28	399.8	5.8	-1.0	5.9	3.00	3.00	
500.0	7.50	350.28	499.3	16.1	-2.8	16.3	3.00	3.00	
600.0	10.50	350.28	598.0	31.5	-5.4	32.0	3.00	3.00	
700.0	13.50	350.28	695.8	52.0	-8.9	52.8	3.00	3.00	
800.0	16.50	350.28	792.4	77.5	-13.3	78.6	3.00	3.00	
831.6	17.45	350.28	822.6	86.6	-14.8	87.9	3.00	3.00	EOB; Inc=17.45°
900.0	17.45	350.28	887.9	106.8	-18.3	108.4	0.00	0.00	
1,000.0	17.45	350.28	983.3	136.4	-23.4	138.4	0.00	0.00	
1,100.0	17.45	350.28	1,078.7	165.9	-28.4	168.3	0.00	0.00	
1,200.0	17.45	350.28	1,174.1	195.5	-33.5	198.3	0.00	0.00	
1,280.6	17.45	350.28	1,251.0	219.3	-37.6	222.5	0.00	0.00	A_GROOVE (TVD)
1,300.0	17.45	350.28	1,269.5	225.0	-38.5	228.3	0.00	0.00	
1,400.0	17.45	350.28	1,364.9	254.6	-43.6	258.3	0.00	0.00	
1,500.0	17.45	350.28	1,460.3	284.1	-48.7	288.3	0.00	0.00	
1,600.0	17.45	350.28	1,555.7	313.7	-53.7	318.2	0.00	0.00	
1,700.0	17.45	350.28	1,651.1	343.2	-58.8	348.2	0.00	0.00	
1,800.0	17.45	350.28	1,746.5	372.8	-63.9	378.2	0.00	0.00	
1,900.0	17.45	350.28	1,841.9	402.3	-68.9	408.2	0.00	0.00	
2,000.0	17.45	350.28	1,937.3	431.9	-74.0	438.2	0.00	0.00	
2,100.0	17.45	350.28	2,032.7	461.4	-79.0	468.2	0.00	0.00	
2,200.0	17.45	350.28	2,128.1	491.0	-84.1	498.1	0.00	0.00	
2,300.0	17.45	350.28	2,223.5	520.6	-89.2	528.1	0.00	0.00	
2,400.0	17.45	350.28	2,318.9	550.1	-94.2	558.1	0.00	0.00	
2,500.0	17.45	350.28	2,414.3	579.7	-99.3	588.1	0.00	0.00	
2,537.4	17.45	350.28	2,450.0	590.7	-101.2	599.3	0.00	0.00	GARDEN_GULCH / L-1 (TVD)
2,600.0	17.45	350.28	2,509.7	609.2	-104.4	618.1	0.00	0.00	
2,700.0	17.45	350.28	2,605.1	638.8	-109.4	648.0	0.00	0.00	
2,800.0	17.45	350.28	2,700.5	668.3	-114.5	678.0	0.00	0.00	
2,900.0	17.45	350.28	2,795.9	697.9	-119.5	708.0	0.00	0.00	
3,000.0	17.45	350.28	2,891.3	727.4	-124.6	738.0	0.00	0.00	
3,100.0	17.45	350.28	2,986.7	757.0	-129.7	768.0	0.00	0.00	
3,200.0	17.45	350.28	3,082.1	786.5	-134.7	797.9	0.00	0.00	
3,300.0	17.45	350.28	3,177.5	816.1	-139.8	827.9	0.00	0.00	
3,400.0	17.45	350.28	3,272.9	845.6	-144.9	857.9	0.00	0.00	
3,500.0	17.45	350.28	3,368.3	875.2	-149.9	887.9	0.00	0.00	
3,600.0	17.45	350.28	3,463.7	904.7	-155.0	917.9	0.00	0.00	
3,700.0	17.45	350.28	3,559.1	934.3	-160.0	947.9	0.00	0.00	
3,800.0	17.45	350.28	3,654.5	963.8	-165.1	977.8	0.00	0.00	
3,900.0	17.45	350.28	3,749.9	993.4	-170.2	1,007.8	0.00	0.00	
4,000.0	17.45	350.28	3,845.3	1,022.9	-175.2	1,037.8	0.00	0.00	
4,100.0	17.45	350.28	3,940.7	1,052.5	-180.3	1,067.8	0.00	0.00	
4,200.0	17.45	350.28	4,036.1	1,082.0	-185.4	1,097.8	0.00	0.00	
4,300.0	17.45	350.28	4,131.5	1,111.6	-190.4	1,127.7	0.00	0.00	
4,400.0	17.45	350.28	4,226.9	1,141.1	-195.5	1,157.7	0.00	0.00	
4,500.0	17.45	350.28	4,322.3	1,170.7	-200.5	1,187.7	0.00	0.00	
4,600.0	17.45	350.28	4,417.7	1,200.2	-205.6	1,217.7	0.00	0.00	
4,700.0	17.45	350.28	4,513.1	1,229.8	-210.7	1,247.7	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 8512D-25 D36 496
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8324.0ft
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8324.0ft
<b>Site:</b>	S36-T4S-R96W (D36 496)	<b>North Reference:</b>	True
<b>Well:</b>	8512D-25 D36 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #2		

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	17.45	350.28	4,608.5	1,259.3	-215.7	1,277.6	0.00	0.00	
4,900.0	17.45	350.28	4,703.9	1,288.9	-220.8	1,307.6	0.00	0.00	
5,000.0	17.45	350.28	4,799.3	1,318.4	-225.9	1,337.6	0.00	0.00	
5,100.0	17.45	350.28	4,894.7	1,348.0	-230.9	1,367.6	0.00	0.00	
5,200.0	17.45	350.28	4,990.1	1,377.6	-236.0	1,397.6	0.00	0.00	
5,300.0	17.45	350.28	5,085.5	1,407.1	-241.0	1,427.6	0.00	0.00	
5,400.0	17.45	350.28	5,180.9	1,436.7	-246.1	1,457.5	0.00	0.00	
5,500.0	17.45	350.28	5,276.3	1,466.2	-251.2	1,487.5	0.00	0.00	
5,600.0	17.45	350.28	5,371.7	1,495.8	-256.2	1,517.5	0.00	0.00	
5,700.0	17.45	350.28	5,467.1	1,525.3	-261.3	1,547.5	0.00	0.00	
5,800.0	17.45	350.28	5,562.5	1,554.9	-266.4	1,577.5	0.00	0.00	
5,900.0	17.45	350.28	5,657.9	1,584.4	-271.4	1,607.4	0.00	0.00	
6,000.0	17.45	350.28	5,753.3	1,614.0	-276.5	1,637.4	0.00	0.00	
6,100.0	17.45	350.28	5,848.7	1,643.5	-281.5	1,667.4	0.00	0.00	
6,101.4	17.45	350.28	5,850.0	1,643.9	-281.6	1,667.8	0.00	0.00	WASATCH_G (TVD)
6,200.0	17.45	350.28	5,944.1	1,673.1	-286.6	1,697.4	0.00	0.00	
6,300.0	17.45	350.28	6,039.5	1,702.6	-291.7	1,727.4	0.00	0.00	
6,400.0	17.45	350.28	6,134.9	1,732.2	-296.7	1,757.3	0.00	0.00	
6,500.0	17.45	350.28	6,230.3	1,761.7	-301.8	1,787.3	0.00	0.00	
6,600.0	17.45	350.28	6,325.7	1,791.3	-306.9	1,817.3	0.00	0.00	
6,700.0	17.45	350.28	6,421.1	1,820.8	-311.9	1,847.3	0.00	0.00	
6,800.0	17.45	350.28	6,516.5	1,850.4	-317.0	1,877.3	0.00	0.00	
6,900.0	17.45	350.28	6,611.9	1,879.9	-322.0	1,907.3	0.00	0.00	
7,000.0	17.45	350.28	6,707.3	1,909.5	-327.1	1,937.2	0.00	0.00	
7,100.0	17.45	350.28	6,802.7	1,939.0	-332.2	1,967.2	0.00	0.00	
7,200.0	17.45	350.28	6,898.1	1,968.6	-337.2	1,997.2	0.00	0.00	
7,300.0	17.45	350.28	6,993.5	1,998.1	-342.3	2,027.2	0.00	0.00	
7,400.0	17.45	350.28	7,088.9	2,027.7	-347.3	2,057.2	0.00	0.00	
7,500.0	17.45	350.28	7,184.3	2,057.2	-352.4	2,087.1	0.00	0.00	
7,600.0	17.45	350.28	7,279.7	2,086.8	-357.5	2,117.1	0.00	0.00	
7,700.0	17.45	350.28	7,375.1	2,116.3	-362.5	2,147.1	0.00	0.00	
7,800.0	17.45	350.28	7,470.5	2,145.9	-367.6	2,177.1	0.00	0.00	
7,900.0	17.45	350.28	7,565.9	2,175.5	-372.7	2,207.1	0.00	0.00	
7,910.0	17.45	350.28	7,575.4	2,178.4	-373.2	2,210.1	0.00	0.00	Start Drop -3.00
8,000.0	14.75	350.28	7,661.9	2,203.0	-377.4	2,235.0	3.00	-3.00	
8,100.0	11.75	350.28	7,759.2	2,225.6	-381.2	2,257.9	3.00	-3.00	
8,200.0	8.75	350.28	7,857.6	2,243.1	-384.3	2,275.7	3.00	-3.00	
8,300.0	5.75	350.28	7,956.8	2,255.5	-386.4	2,288.3	3.00	-3.00	
8,400.0	2.75	350.28	8,056.5	2,262.8	-387.6	2,295.7	3.00	-3.00	
8,451.5	1.20	350.28	8,108.0	2,264.6	-387.9	2,297.5	3.00	-3.00	WILLIAMS_FORK (TVD)
8,491.5	0.00	0.00	8,148.0	2,265.0	-388.0	2,297.9	3.00	-3.00	EOD; Inc=0° - TOG (TVD) - D36 496 8512D-25
8,500.0	0.02	239.47	8,156.5	2,265.0	-388.0	2,297.9	0.25	0.25	
8,600.0	0.27	239.47	8,256.5	2,264.9	-388.2	2,297.8	0.25	0.25	
8,610.2	0.30	239.47	8,266.7	2,264.8	-388.3	2,297.8	0.25	0.25	
8,668.8	0.30	239.47	8,325.3	2,264.7	-388.5	2,297.7	0.00	0.00	D36 496 8512D-25 TGT
8,700.0	0.30	239.47	8,356.5	2,264.6	-388.7	2,297.6	0.00	0.00	
8,800.0	0.30	239.47	8,456.5	2,264.3	-389.1	2,297.5	0.00	0.00	
8,900.0	0.30	239.47	8,556.5	2,264.1	-389.6	2,297.3	0.00	0.00	
9,000.0	0.30	239.47	8,656.5	2,263.8	-390.0	2,297.1	0.00	0.00	
9,100.0	0.30	239.47	8,756.5	2,263.6	-390.4	2,296.9	0.00	0.00	
9,200.0	0.30	239.47	8,856.5	2,263.3	-390.9	2,296.7	0.00	0.00	
9,300.0	0.30	239.47	8,956.5	2,263.0	-391.3	2,296.6	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 8512D-25 D36 496
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8324.0ft
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8324.0ft
<b>Site:</b>	S36-T4S-R96W (D36 496)	<b>North Reference:</b>	True
<b>Well:</b>	8512D-25 D36 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #2		

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
9,400.0	0.30	239.47	9,056.5	2,262.8	-391.8	2,296.4	0.00	0.00	
9,500.0	0.30	239.47	9,156.5	2,262.5	-392.2	2,296.2	0.00	0.00	
9,600.0	0.30	239.47	9,256.5	2,262.2	-392.7	2,296.0	0.00	0.00	
9,700.0	0.30	239.47	9,356.5	2,262.0	-393.1	2,295.8	0.00	0.00	
9,800.0	0.30	239.47	9,456.4	2,261.7	-393.6	2,295.7	0.00	0.00	
9,900.0	0.30	239.47	9,556.4	2,261.5	-394.0	2,295.5	0.00	0.00	
10,000.0	0.30	239.47	9,656.4	2,261.2	-394.5	2,295.3	0.00	0.00	
10,100.0	0.30	239.47	9,756.4	2,260.9	-394.9	2,295.1	0.00	0.00	
10,200.0	0.30	239.47	9,856.4	2,260.7	-395.4	2,294.9	0.00	0.00	
10,300.0	0.30	239.47	9,956.4	2,260.4	-395.8	2,294.8	0.00	0.00	
10,400.0	0.30	239.47	10,056.4	2,260.1	-396.2	2,294.6	0.00	0.00	
10,500.0	0.30	239.47	10,156.4	2,259.9	-396.7	2,294.4	0.00	0.00	
10,600.0	0.30	239.47	10,256.4	2,259.6	-397.1	2,294.2	0.00	0.00	
10,700.0	0.30	239.47	10,356.4	2,259.3	-397.6	2,294.0	0.00	0.00	
10,800.0	0.30	239.47	10,456.4	2,259.1	-398.0	2,293.9	0.00	0.00	
10,900.0	0.30	239.47	10,556.4	2,258.8	-398.5	2,293.7	0.00	0.00	
11,000.0	0.30	239.47	10,656.4	2,258.6	-398.9	2,293.5	0.00	0.00	
11,100.0	0.30	239.47	10,756.4	2,258.3	-399.4	2,293.3	0.00	0.00	
11,200.0	0.30	239.47	10,856.4	2,258.0	-399.8	2,293.1	0.00	0.00	
11,300.0	0.30	239.47	10,956.4	2,257.8	-400.3	2,293.0	0.00	0.00	
11,400.0	0.30	239.47	11,056.4	2,257.5	-400.7	2,292.8	0.00	0.00	
11,500.0	0.30	239.47	11,156.4	2,257.2	-401.2	2,292.6	0.00	0.00	
11,600.0	0.30	239.47	11,256.4	2,257.0	-401.6	2,292.4	0.00	0.00	
11,700.0	0.30	239.47	11,356.4	2,256.7	-402.0	2,292.2	0.00	0.00	
11,800.0	0.30	239.47	11,456.4	2,256.5	-402.5	2,292.1	0.00	0.00	
11,900.0	0.30	239.47	11,556.4	2,256.2	-402.9	2,291.9	0.00	0.00	
12,000.0	0.30	239.47	11,656.4	2,255.9	-403.4	2,291.7	0.00	0.00	
12,100.0	0.30	239.47	11,756.4	2,255.7	-403.8	2,291.5	0.00	0.00	
12,200.0	0.30	239.47	11,856.4	2,255.4	-404.3	2,291.3	0.00	0.00	
12,300.0	0.30	239.47	11,956.4	2,255.1	-404.7	2,291.2	0.00	0.00	
12,328.8	0.30	239.47	11,985.2	2,255.1	-404.8	2,291.1	0.00	0.00	D36 496 8512D-25 PBHL
12,359.6	0.30	239.47	12,016.0	2,255.0	-405.0	2,291.1	0.00	0.00	ROLLINS (TVD) - D36 496 8512D-25 PBHL (2)
12,400.0	0.30	239.47	12,056.4	2,254.9	-405.2	2,291.0	0.00	0.00	
12,459.6	0.30	239.47	12,116.0	2,254.7	-405.4	2,290.9	0.00	0.00	Drillers TD @ 12459.6' MD
12,500.0	0.30	239.47	12,156.4	2,254.6	-405.6	2,290.8	0.00	0.00	
12,589.6	0.30	239.47	12,246.0	2,254.4	-406.0	2,290.6	0.00	0.00	COZZETTE (TVD)
12,600.0	0.30	239.47	12,256.4	2,254.4	-406.1	2,290.6	0.00	0.00	
12,700.0	0.30	239.47	12,356.4	2,254.1	-406.5	2,290.4	0.00	0.00	
12,800.0	0.30	239.47	12,456.4	2,253.8	-407.0	2,290.3	0.00	0.00	
12,821.6	0.30	239.47	12,478.0	2,253.8	-407.0	2,290.2	0.00	0.00	CORCORAN (TVD)
12,865.6	0.30	239.47	12,522.0	2,253.7	-407.2	2,290.2	0.00	0.00	LOWER_SEGO (TVD)
12,900.0	0.30	239.47	12,556.4	2,253.6	-407.4	2,290.1	0.00	0.00	
13,000.0	0.30	239.47	12,656.4	2,253.3	-407.8	2,289.9	0.00	0.00	
13,040.6	0.30	239.47	12,697.0	2,253.2	-408.0	2,289.8	0.00	0.00	SEGO (TVD)
13,100.0	0.30	239.47	12,756.4	2,253.0	-408.3	2,289.7	0.00	0.00	
13,200.0	0.30	239.47	12,856.4	2,252.8	-408.7	2,289.5	0.00	0.00	
13,300.0	0.30	239.47	12,956.4	2,252.5	-409.2	2,289.4	0.00	0.00	
13,400.0	0.30	239.47	13,056.4	2,252.2	-409.6	2,289.2	0.00	0.00	
13,459.6	0.30	239.47	13,116.0	2,252.1	-409.9	2,289.1	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 8512D-25 D36 496
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8324.0ft
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8324.0ft
<b>Site:</b>	S36-T4S-R96W (D36 496)	<b>North Reference:</b>	True
<b>Well:</b>	8512D-25 D36 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #2		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
D36 496 8512D-25 PBH	0.00	0.00	12,016.0	2,255.0	-405.0	1,680,119.72	2,261,417.49	39° 40' 17.16 N	108° 7' 26.93 W
- plan hits target center									
- Rectangle (sides W30.0 H50.0 D0.0)									
D36 496 8512D-25 PBH	0.00	0.00	11,984.0	1,800.7	-401.1	1,679,665.49	2,261,408.28	39° 40' 12.67 N	108° 7' 26.88 W
- plan misses target center by 454.4ft at 12328.8ft MD (11985.2 TVD, 2255.1 N, -404.8 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									
D36 496 8512D-25 TGT	0.00	0.00	8,324.0	1,800.7	-401.1	1,679,665.49	2,261,408.28	39° 40' 12.67 N	108° 7' 26.88 W
- plan misses target center by 464.2ft at 8668.8ft MD (8325.3 TVD, 2264.7 N, -388.5 E)									
- Point									
D36 496 8512D-25 TGT	0.00	0.00	8,148.0	2,265.0	-388.0	1,680,129.24	2,261,434.76	39° 40' 17.26 N	108° 7' 26.71 W
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
1,280.6	1,251.0	A_GROOVE (TVD)				
2,537.4	2,450.0	GARDEN_GULCH / L-1 (TVD)				
6,101.4	5,850.0	WASATCH_G (TVD)				
8,451.5	8,108.0	WILLIAMS_FORK (TVD)				
8,491.5	8,148.0	TOG (TVD)				
12,359.6	12,016.0	ROLLINS (TVD)				
12,589.6	12,246.0	COZZETTE (TVD)				
12,821.6	12,478.0	CORCORAN (TVD)				
12,865.6	12,522.0	LOWER_SEGO (TVD)				
13,040.6	12,697.0	SEGO (TVD)				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)		
250.0	250.0	0.0	0.0	KOP @ 250' MD	
831.6	822.6	86.6	-14.8	EOB; Inc=17.45°	
7,910.0	7,575.4	2,178.4	-373.2	Start Drop -3.00	
8,491.5	8,148.0	2,265.0	-388.0	EOD; Inc=0°	
12,459.6	12,116.0	2,264.8	-388.3	Drillers TD @ 12459.6' MD	
13,459.6	13,116.0	2,255.0	-405.0	Permit TD @ 13459.6' MD	