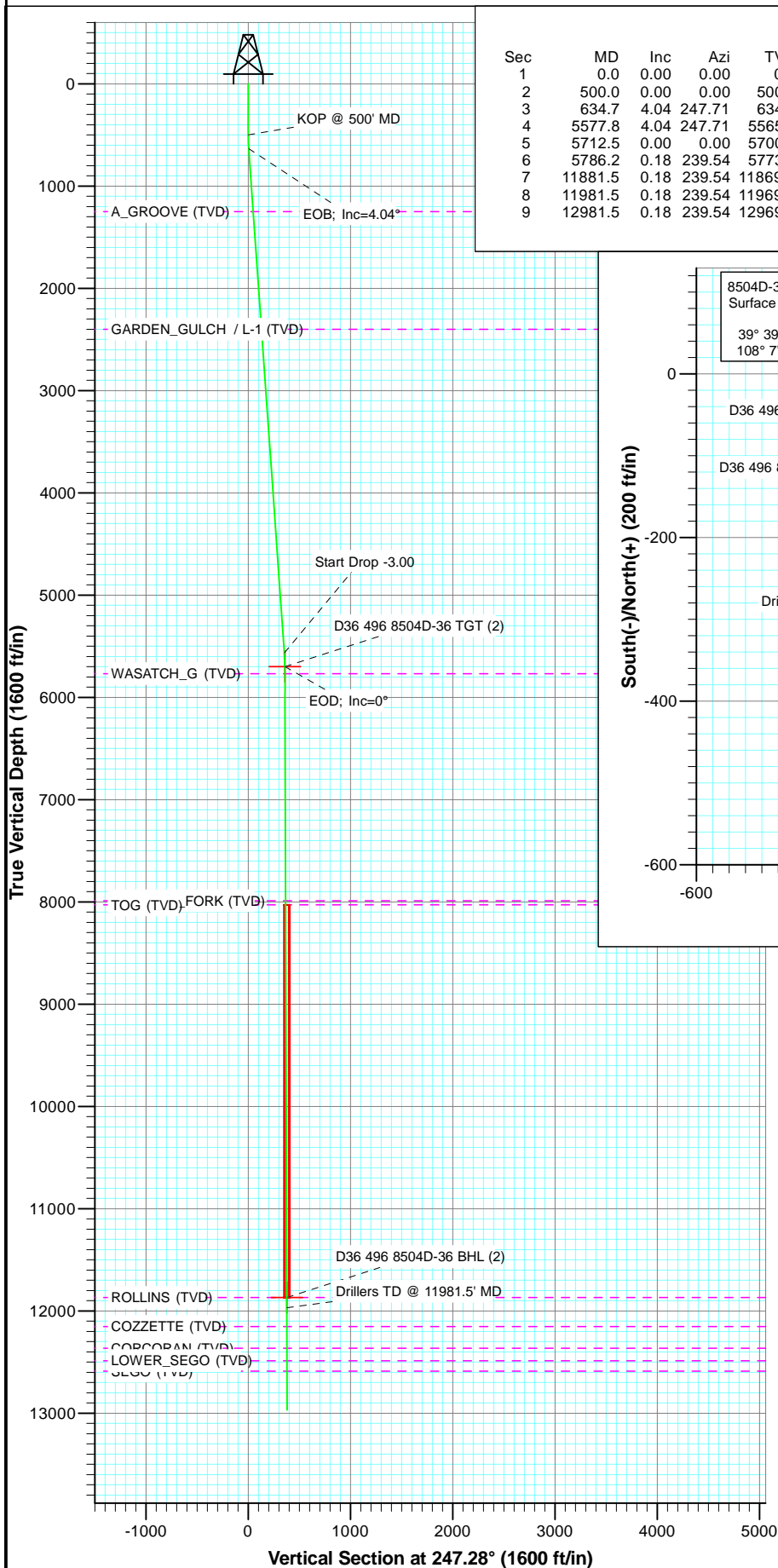
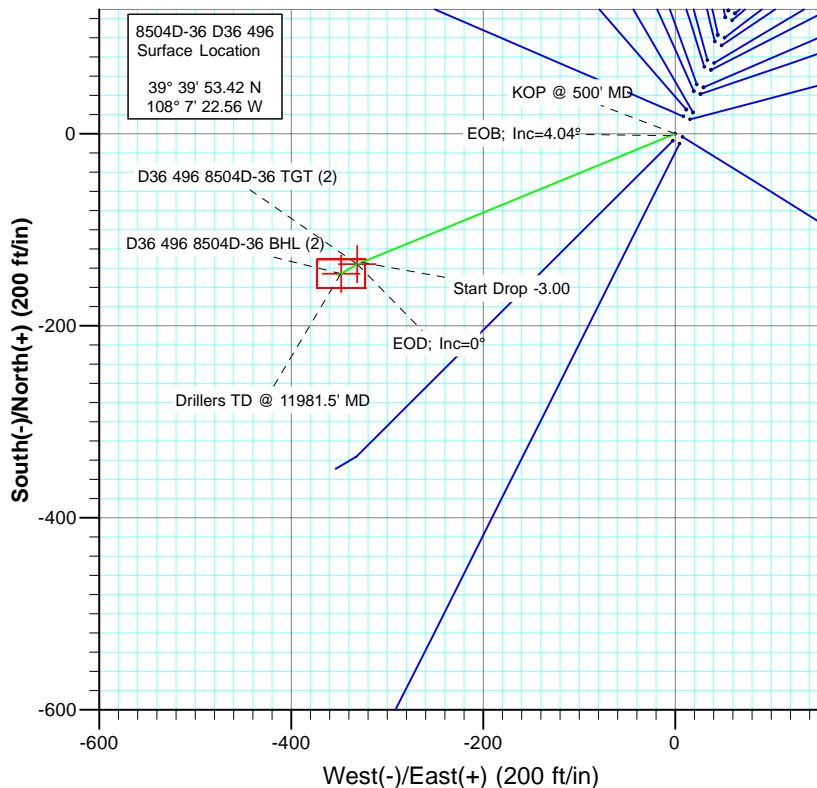




Project: Story Gulch  
Site: S36-T4S-R96W (D36 496)  
Well: 8504D-36 D36 496  
Wellbore: DD  
Plan: Plan #2



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	634.7	4.04	247.71	634.5	-1.8	-4.4	3.00	247.71	4.7	
4	5577.8	4.04	247.71	5565.5	-133.9	-326.6	0.00	0.00	353.0	
5	5712.5	0.00	0.00	5700.0	-135.7	-331.0	3.00	180.00	357.7	D36 496 8504D-36 TGT (2)
6	5786.2	0.18	239.54	5773.7	-135.8	-331.1	0.25	239.54	357.8	
7	11881.5	0.18	239.54	11869.0	-145.7	-348.0	0.00	0.00	377.3	D36 496 8504D-36 BHL (2)
8	11981.5	0.18	239.54	11969.0	-145.9	-348.3	0.00	0.00	377.6	
9	12981.5	0.18	239.54	12969.0	-147.5	-351.0	0.00	0.00	380.8	



TVDPath	MDPath	Formation
1250.0	1251.6	A_GROOVE (TVD)
2401.0	2405.5	GARDEN_GULCH / L-1 (TVD)
5768.0	5780.5	WASATCH_G (TVD)
7989.0	8001.5	WILLIAMS_FORK (TVD)
8029.0	8041.5	TOG (TVD)
11869.0	11881.5	ROLLINS (TVD)
12153.0	12165.5	COZZETTE (TVD)
12366.0	12378.5	CORCORAN (TVD)
12487.0	12499.5	LOWER_SEGO (TVD)
12590.0	12602.5	SEG0 (TVD)



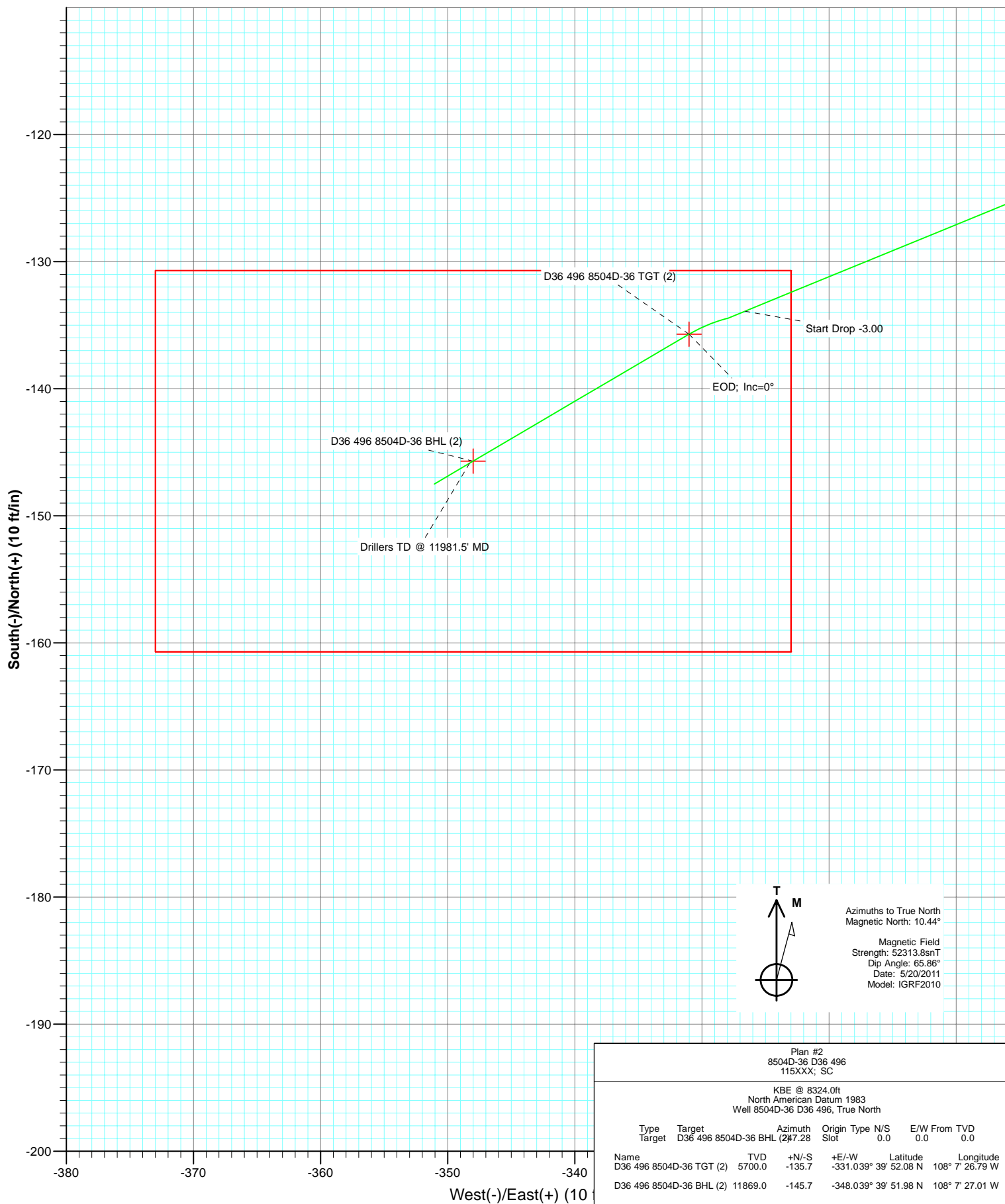
Azimuths to True North  
Magnetic North: 10.44°  
Magnetic Field  
Strength: 52313.8nT  
Dip Angle: 65.86°  
Date: 5/20/2011  
Model: IGRF2010

Plan #2  
8504D-36 D36 496  
115XXX; SC  
KBE @ 8324.0ft  
North American Datum 1983  
Well 8504D-36 D36 496, True North

Type	Target	Target	Azimuth	Origin	Type	N/S	E/W	From	TVD
	Target	D36 496 8504D-36 BHL	(247.28	Slot		0.0	0.0	0.0	0.0
Name		TVD							
D36 496 8504D-36 TGT (2)		5700.0	-135.7		+E/-W	-331.039° 39'	52.08 N	108° 7'	26.79 W
D36 496 8504D-36 BHL (2)		11869.0	-145.7			-348.039° 39'	51.98 N	108° 7'	27.01 W



Project: Story Gulch  
 Site: S36-T4S-R96W (D36 496)  
 Well: 8504D-36 D36 496  
 Wellbore: DD  
 Plan: Plan #2



Plan #2 8504D-36 D36 496 115XXX; SC							
KBE @ 8324.0ft North American Datum 1983 Well 8504D-36 D36 496, True North							
Type	Target	Target	Azimuth	Origin	Type	N/S	E/W From TVD
Target	D36 496	8504D-36 BHL	(2) 247.28	Slot		0.0	0.0
Name	Target	TVD	+N/-S	+E/-W	Latitude	Longitude	
D36 496	8504D-36 TGT (2)	5700.0	-135.7	-331.039° 39' 52.08 N	108° 7' 26.79 W		
D36 496	8504D-36 BHL (2)	11869.0	-145.7	-348.039° 39' 51.98 N	108° 7' 27.01 W		

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well 8504D-36 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>	8504D-36 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	8504D-36 D36 496					
Well Position	+N/-S	0.0 ft	Northing:	1,677,708.76 ft	Latitude:	39° 39' 53.42 N
	+E/-W	0.0 ft	Easting:	2,261,689.71 ft	Longitude:	108° 7' 22.56 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>
	IGRF2010	5/20/2011	10.44	65.86	52,314

<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	247.28	

<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	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
634.7	4.04	247.71	634.5	-1.8	-4.4	3.00	3.00	0.00	247.71	
5,577.8	4.04	247.71	5,565.5	-133.9	-326.6	0.00	0.00	0.00	0.00	
5,712.5	0.00	0.00	5,700.0	-135.7	-331.0	3.00	-3.00	0.00	180.00	D36 496 8504D-36 TC
5,786.2	0.18	239.54	5,773.7	-135.8	-331.1	0.25	0.25	-163.45	239.54	
11,881.5	0.18	239.54	11,869.0	-145.7	-348.0	0.00	0.00	0.00	0.00	D36 496 8504D-36 BI
11,981.5	0.18	239.54	11,969.0	-145.9	-348.3	0.00	0.00	0.00	0.00	
12,981.5	0.18	239.54	12,969.0	-147.5	-351.0	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 8504D-36 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>	8504D-36 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	
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	3.00	247.71	600.0	-1.0	-2.4	2.6	3.00	3.00	
634.7	4.04	247.71	634.5	-1.8	-4.4	4.7	3.00	3.00	EOB; Inc=4.04°
700.0	4.04	247.71	699.7	-3.5	-8.6	9.3	0.00	0.00	
800.0	4.04	247.71	799.5	-6.2	-15.2	16.4	0.00	0.00	
900.0	4.04	247.71	899.2	-8.9	-21.7	23.4	0.00	0.00	
1,000.0	4.04	247.71	999.0	-11.6	-28.2	30.5	0.00	0.00	
1,100.0	4.04	247.71	1,098.7	-14.2	-34.7	37.5	0.00	0.00	
1,200.0	4.04	247.71	1,198.5	-16.9	-41.2	44.6	0.00	0.00	
1,251.6	4.04	247.71	1,250.0	-18.3	-44.6	48.2	0.00	0.00	A_GROOVE (TVD)
1,300.0	4.04	247.71	1,298.2	-19.6	-47.8	51.6	0.00	0.00	
1,400.0	4.04	247.71	1,398.0	-22.3	-54.3	58.7	0.00	0.00	
1,500.0	4.04	247.71	1,497.7	-24.9	-60.8	65.7	0.00	0.00	
1,600.0	4.04	247.71	1,597.5	-27.6	-67.3	72.8	0.00	0.00	
1,700.0	4.04	247.71	1,697.2	-30.3	-73.8	79.8	0.00	0.00	
1,800.0	4.04	247.71	1,797.0	-32.9	-80.4	86.8	0.00	0.00	
1,900.0	4.04	247.71	1,896.7	-35.6	-86.9	93.9	0.00	0.00	
2,000.0	4.04	247.71	1,996.5	-38.3	-93.4	100.9	0.00	0.00	
2,100.0	4.04	247.71	2,096.2	-41.0	-99.9	108.0	0.00	0.00	
2,200.0	4.04	247.71	2,196.0	-43.6	-106.4	115.0	0.00	0.00	
2,300.0	4.04	247.71	2,295.8	-46.3	-112.9	122.1	0.00	0.00	
2,400.0	4.04	247.71	2,395.5	-49.0	-119.5	129.1	0.00	0.00	
2,405.5	4.04	247.71	2,401.0	-49.1	-119.8	129.5	0.00	0.00	GARDEN_GULCH / L-1 (TVD)
2,500.0	4.04	247.71	2,495.3	-51.6	-126.0	136.2	0.00	0.00	
2,600.0	4.04	247.71	2,595.0	-54.3	-132.5	143.2	0.00	0.00	
2,700.0	4.04	247.71	2,694.8	-57.0	-139.0	150.2	0.00	0.00	
2,800.0	4.04	247.71	2,794.5	-59.7	-145.5	157.3	0.00	0.00	
2,900.0	4.04	247.71	2,894.3	-62.3	-152.1	164.3	0.00	0.00	
3,000.0	4.04	247.71	2,994.0	-65.0	-158.6	171.4	0.00	0.00	
3,100.0	4.04	247.71	3,093.8	-67.7	-165.1	178.4	0.00	0.00	
3,200.0	4.04	247.71	3,193.5	-70.4	-171.6	185.5	0.00	0.00	
3,300.0	4.04	247.71	3,293.3	-73.0	-178.1	192.5	0.00	0.00	
3,400.0	4.04	247.71	3,393.0	-75.7	-184.6	199.6	0.00	0.00	
3,500.0	4.04	247.71	3,492.8	-78.4	-191.2	206.6	0.00	0.00	
3,600.0	4.04	247.71	3,592.5	-81.0	-197.7	213.6	0.00	0.00	
3,700.0	4.04	247.71	3,692.3	-83.7	-204.2	220.7	0.00	0.00	
3,800.0	4.04	247.71	3,792.0	-86.4	-210.7	227.7	0.00	0.00	
3,900.0	4.04	247.71	3,891.8	-89.1	-217.2	234.8	0.00	0.00	
4,000.0	4.04	247.71	3,991.5	-91.7	-223.8	241.8	0.00	0.00	
4,100.0	4.04	247.71	4,091.3	-94.4	-230.3	248.9	0.00	0.00	
4,200.0	4.04	247.71	4,191.0	-97.1	-236.8	255.9	0.00	0.00	
4,300.0	4.04	247.71	4,290.8	-99.8	-243.3	263.0	0.00	0.00	
4,400.0	4.04	247.71	4,390.5	-102.4	-249.8	270.0	0.00	0.00	
4,500.0	4.04	247.71	4,490.3	-105.1	-256.4	277.0	0.00	0.00	
4,600.0	4.04	247.71	4,590.0	-107.8	-262.9	284.1	0.00	0.00	
4,700.0	4.04	247.71	4,689.8	-110.4	-269.4	291.1	0.00	0.00	
4,800.0	4.04	247.71	4,789.5	-113.1	-275.9	298.2	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 8504D-36 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>	8504D-36 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
4,900.0	4.04	247.71	4,889.3	-115.8	-282.4	305.2	0.00	0.00	
5,000.0	4.04	247.71	4,989.0	-118.5	-288.9	312.3	0.00	0.00	
5,100.0	4.04	247.71	5,088.8	-121.1	-295.5	319.3	0.00	0.00	
5,200.0	4.04	247.71	5,188.5	-123.8	-302.0	326.4	0.00	0.00	
5,300.0	4.04	247.71	5,288.3	-126.5	-308.5	333.4	0.00	0.00	
5,400.0	4.04	247.71	5,388.0	-129.1	-315.0	340.5	0.00	0.00	
5,500.0	4.04	247.71	5,487.8	-131.8	-321.5	347.5	0.00	0.00	
5,577.8	4.04	247.71	5,565.5	-133.9	-326.6	353.0	0.00	0.00	Start Drop -3.00
5,600.0	3.38	247.71	5,587.6	-134.4	-327.9	354.4	3.00	-3.00	
5,700.0	0.38	247.71	5,687.5	-135.7	-331.0	357.7	3.00	-3.00	
5,712.5	0.00	0.00	5,700.0	-135.7	-331.0	357.7	3.00	-3.00	EOD; Inc=0° - D36 496 8504D-36 TGT (2)
5,780.5	0.17	239.54	5,768.0	-135.8	-331.1	357.8	0.25	0.25	WASATCH_G (TVD)
5,786.2	0.18	239.54	5,773.7	-135.8	-331.1	357.8	0.25	0.25	
5,800.0	0.18	239.54	5,787.5	-135.8	-331.1	357.9	0.00	0.00	
5,900.0	0.18	239.54	5,887.5	-135.9	-331.4	358.2	0.00	0.00	
6,000.0	0.18	239.54	5,987.5	-136.1	-331.7	358.5	0.00	0.00	
6,100.0	0.18	239.54	6,087.5	-136.3	-332.0	358.8	0.00	0.00	
6,200.0	0.18	239.54	6,187.5	-136.4	-332.2	359.2	0.00	0.00	
6,300.0	0.18	239.54	6,287.5	-136.6	-332.5	359.5	0.00	0.00	
6,400.0	0.18	239.54	6,387.5	-136.8	-332.8	359.8	0.00	0.00	
6,500.0	0.18	239.54	6,487.5	-136.9	-333.1	360.1	0.00	0.00	
6,600.0	0.18	239.54	6,587.5	-137.1	-333.4	360.4	0.00	0.00	
6,700.0	0.18	239.54	6,687.5	-137.2	-333.6	360.8	0.00	0.00	
6,800.0	0.18	239.54	6,787.5	-137.4	-333.9	361.1	0.00	0.00	
6,900.0	0.18	239.54	6,887.5	-137.6	-334.2	361.4	0.00	0.00	
7,000.0	0.18	239.54	6,987.5	-137.7	-334.5	361.7	0.00	0.00	
7,100.0	0.18	239.54	7,087.5	-137.9	-334.7	362.0	0.00	0.00	
7,200.0	0.18	239.54	7,187.5	-138.1	-335.0	362.3	0.00	0.00	
7,300.0	0.18	239.54	7,287.5	-138.2	-335.3	362.7	0.00	0.00	
7,400.0	0.18	239.54	7,387.5	-138.4	-335.6	363.0	0.00	0.00	
7,500.0	0.18	239.54	7,487.5	-138.6	-335.9	363.3	0.00	0.00	
7,600.0	0.18	239.54	7,587.5	-138.7	-336.1	363.6	0.00	0.00	
7,700.0	0.18	239.54	7,687.5	-138.9	-336.4	363.9	0.00	0.00	
7,800.0	0.18	239.54	7,787.5	-139.0	-336.7	364.3	0.00	0.00	
7,900.0	0.18	239.54	7,887.5	-139.2	-337.0	364.6	0.00	0.00	
8,000.0	0.18	239.54	7,987.5	-139.4	-337.2	364.9	0.00	0.00	
8,001.5	0.18	239.54	7,989.0	-139.4	-337.2	364.9	0.00	0.00	WILLIAMS_FORK (TVD)
8,041.5	0.18	239.54	8,029.0	-139.4	-337.4	365.0	0.00	0.00	TOG (TVD)
8,100.0	0.18	239.54	8,087.5	-139.5	-337.5	365.2	0.00	0.00	
8,200.0	0.18	239.54	8,187.5	-139.7	-337.8	365.5	0.00	0.00	
8,300.0	0.18	239.54	8,287.5	-139.9	-338.1	365.9	0.00	0.00	
8,400.0	0.18	239.54	8,387.5	-140.0	-338.3	366.2	0.00	0.00	
8,500.0	0.18	239.54	8,487.5	-140.2	-338.6	366.5	0.00	0.00	
8,600.0	0.18	239.54	8,587.5	-140.3	-338.9	366.8	0.00	0.00	
8,700.0	0.18	239.54	8,687.5	-140.5	-339.2	367.1	0.00	0.00	
8,800.0	0.18	239.54	8,787.5	-140.7	-339.5	367.4	0.00	0.00	
8,900.0	0.18	239.54	8,887.5	-140.8	-339.7	367.8	0.00	0.00	
9,000.0	0.18	239.54	8,987.5	-141.0	-340.0	368.1	0.00	0.00	
9,100.0	0.18	239.54	9,087.5	-141.2	-340.3	368.4	0.00	0.00	
9,200.0	0.18	239.54	9,187.5	-141.3	-340.6	368.7	0.00	0.00	
9,300.0	0.18	239.54	9,287.5	-141.5	-340.8	369.0	0.00	0.00	
9,400.0	0.18	239.54	9,387.5	-141.7	-341.1	369.4	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 8504D-36 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>	8504D-36 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
9,500.0	0.18	239.54	9,487.5	-141.8	-341.4	369.7	0.00	0.00	
9,600.0	0.18	239.54	9,587.5	-142.0	-341.7	370.0	0.00	0.00	
9,700.0	0.18	239.54	9,687.5	-142.1	-342.0	370.3	0.00	0.00	
9,800.0	0.18	239.54	9,787.5	-142.3	-342.2	370.6	0.00	0.00	
9,900.0	0.18	239.54	9,887.5	-142.5	-342.5	371.0	0.00	0.00	
10,000.0	0.18	239.54	9,987.5	-142.6	-342.8	371.3	0.00	0.00	
10,100.0	0.18	239.54	10,087.5	-142.8	-343.1	371.6	0.00	0.00	
10,200.0	0.18	239.54	10,187.5	-143.0	-343.3	371.9	0.00	0.00	
10,300.0	0.18	239.54	10,287.5	-143.1	-343.6	372.2	0.00	0.00	
10,400.0	0.18	239.54	10,387.5	-143.3	-343.9	372.5	0.00	0.00	
10,500.0	0.18	239.54	10,487.5	-143.4	-344.2	372.9	0.00	0.00	
10,600.0	0.18	239.54	10,587.5	-143.6	-344.4	373.2	0.00	0.00	
10,700.0	0.18	239.54	10,687.5	-143.8	-344.7	373.5	0.00	0.00	
10,800.0	0.18	239.54	10,787.5	-143.9	-345.0	373.8	0.00	0.00	
10,900.0	0.18	239.54	10,887.5	-144.1	-345.3	374.1	0.00	0.00	
11,000.0	0.18	239.54	10,987.5	-144.3	-345.6	374.5	0.00	0.00	
11,100.0	0.18	239.54	11,087.5	-144.4	-345.8	374.8	0.00	0.00	
11,200.0	0.18	239.54	11,187.5	-144.6	-346.1	375.1	0.00	0.00	
11,300.0	0.18	239.54	11,287.5	-144.7	-346.4	375.4	0.00	0.00	
11,400.0	0.18	239.54	11,387.5	-144.9	-346.7	375.7	0.00	0.00	
11,500.0	0.18	239.54	11,487.5	-145.1	-346.9	376.1	0.00	0.00	
11,600.0	0.18	239.54	11,587.5	-145.2	-347.2	376.4	0.00	0.00	
11,700.0	0.18	239.54	11,687.5	-145.4	-347.5	376.7	0.00	0.00	
11,800.0	0.18	239.54	11,787.5	-145.6	-347.8	377.0	0.00	0.00	
11,847.4	0.18	239.54	11,834.8	-145.6	-347.9	377.2	0.00	0.00	D36 496 8504D-36 BHL
11,881.5	0.18	239.54	11,869.0	-145.7	-348.0	377.3	0.00	0.00	ROLLINS (TVD) - D36 496 8504D-36 BHL (2)
11,900.0	0.18	239.54	11,887.5	-145.7	-348.0	377.3	0.00	0.00	
11,981.5	0.18	239.54	11,969.0	-145.9	-348.3	377.6	0.00	0.00	Drillers TD @ 11981.5' MD
12,000.0	0.18	239.54	11,987.5	-145.9	-348.3	377.6	0.00	0.00	
12,100.0	0.18	239.54	12,087.5	-146.1	-348.6	378.0	0.00	0.00	
12,165.5	0.18	239.54	12,153.0	-146.2	-348.8	378.2	0.00	0.00	COZZETTE (TVD)
12,200.0	0.18	239.54	12,187.5	-146.2	-348.9	378.3	0.00	0.00	
12,300.0	0.18	239.54	12,287.5	-146.4	-349.2	378.6	0.00	0.00	
12,378.5	0.18	239.54	12,366.0	-146.5	-349.4	378.8	0.00	0.00	CORCORAN (TVD)
12,400.0	0.18	239.54	12,387.5	-146.5	-349.4	378.9	0.00	0.00	
12,499.5	0.18	239.54	12,487.0	-146.7	-349.7	379.2	0.00	0.00	LOWER_SEGO (TVD)
12,500.0	0.18	239.54	12,487.5	-146.7	-349.7	379.2	0.00	0.00	
12,600.0	0.18	239.54	12,587.5	-146.9	-350.0	379.6	0.00	0.00	
12,602.5	0.18	239.54	12,590.0	-146.9	-350.0	379.6	0.00	0.00	SEGO (TVD)
12,700.0	0.18	239.54	12,687.5	-147.0	-350.3	379.9	0.00	0.00	
12,800.0	0.18	239.54	12,787.5	-147.2	-350.5	380.2	0.00	0.00	
12,900.0	0.18	239.54	12,887.5	-147.4	-350.8	380.5	0.00	0.00	
12,981.5	0.18	239.54	12,969.0	-147.5	-351.0	380.8	0.00	0.00	Permit TD @ 12981.5' MD

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well 8504D-36 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>	8504D-36 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 8504D-36 BHL	0.00	0.00	11,834.0	-654.6	-346.4	1,677,064.38	2,261,324.52	39° 39' 46.95 N	108° 7' 26.99 W
- plan misses target center by 509.0ft at 11847.4ft MD (11834.8 TVD, -145.6 N, -347.9 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									
D36 496 8504D-36 BHL	0.00	0.00	11,869.0	-145.7	-348.0	1,677,573.17	2,261,337.66	39° 39' 51.98 N	108° 7' 27.01 W
- plan hits target center									
- Rectangle (sides W30.0 H50.0 D0.0)									
D36 496 8504D-36 TGT	0.00	0.00	5,700.0	-135.7	-331.0	1,677,582.67	2,261,354.93	39° 39' 52.08 N	108° 7' 26.79 W
- plan hits target center									
- Point									

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
1,251.6	1,250.0	A_GROOVE (TVD)		0.00	
2,405.5	2,401.0	GARDEN_GULCH / L-1 (TVD)		0.00	
5,780.5	5,768.0	WASATCH_G (TVD)		0.00	
8,001.5	7,989.0	WILLIAMS_FORK (TVD)		0.00	
8,041.5	8,029.0	TOG (TVD)		0.00	
11,881.5	11,869.0	ROLLINS (TVD)		0.00	
12,165.5	12,153.0	COZZETTE (TVD)		0.00	
12,378.5	12,366.0	CORCORAN (TVD)		0.00	
12,499.5	12,487.0	LOWER_SEGO (TVD)		0.00	
12,602.5	12,590.0	SEGO (TVD)		0.00	

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
634.7	634.5	-1.8	-4.4	EOB; Inc=4.04°
5,577.8	5,565.5	-133.9	-326.6	Start Drop -3.00
5,712.5	5,700.0	-135.7	-331.0	EOD; Inc=0°
11,981.5	11,969.0	-135.8	-331.1	Drillers TD @ 11981.5' MD
12,981.5	12,969.0	-145.7	-348.0	Permit TD @ 12981.5' MD