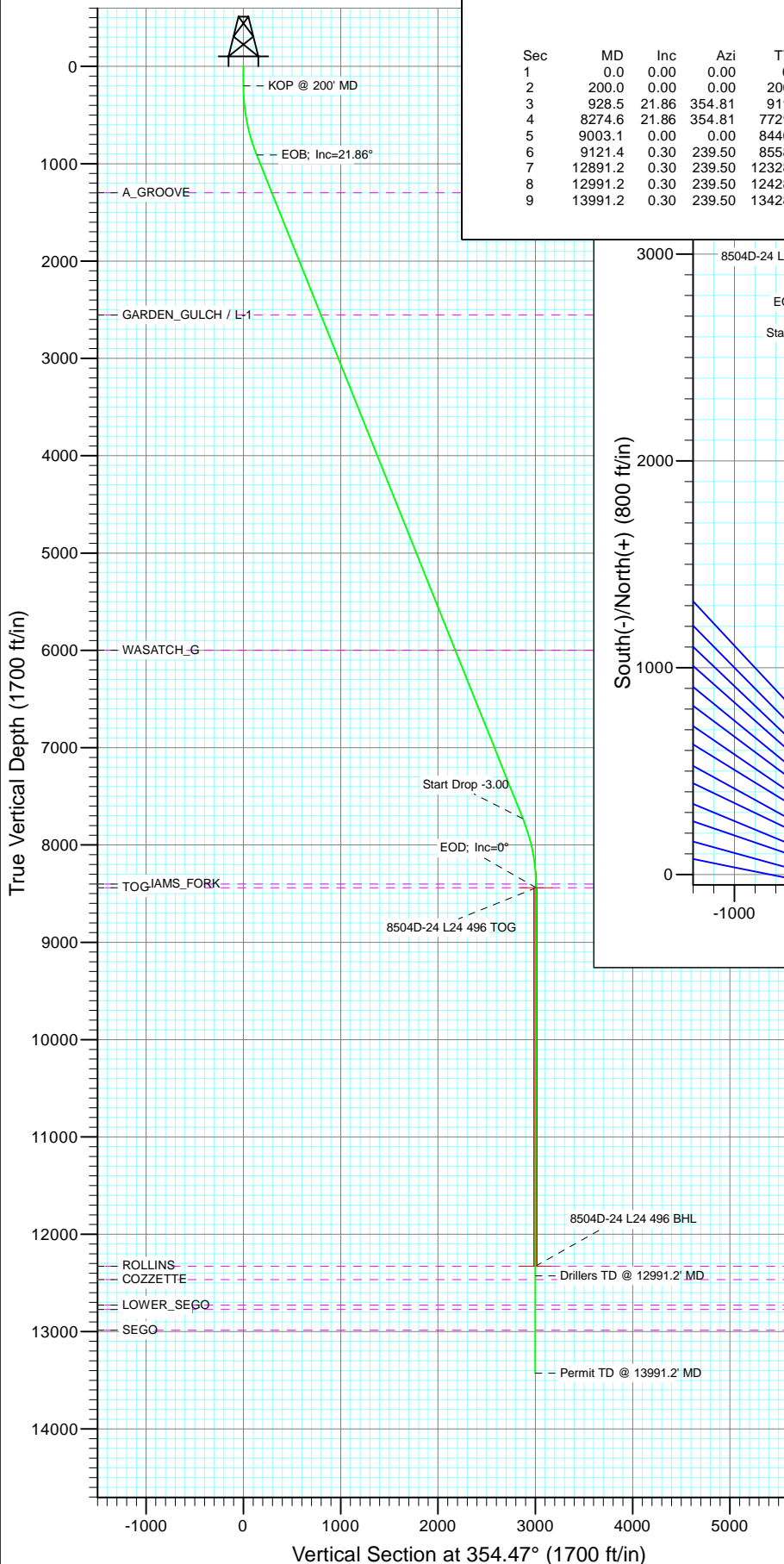
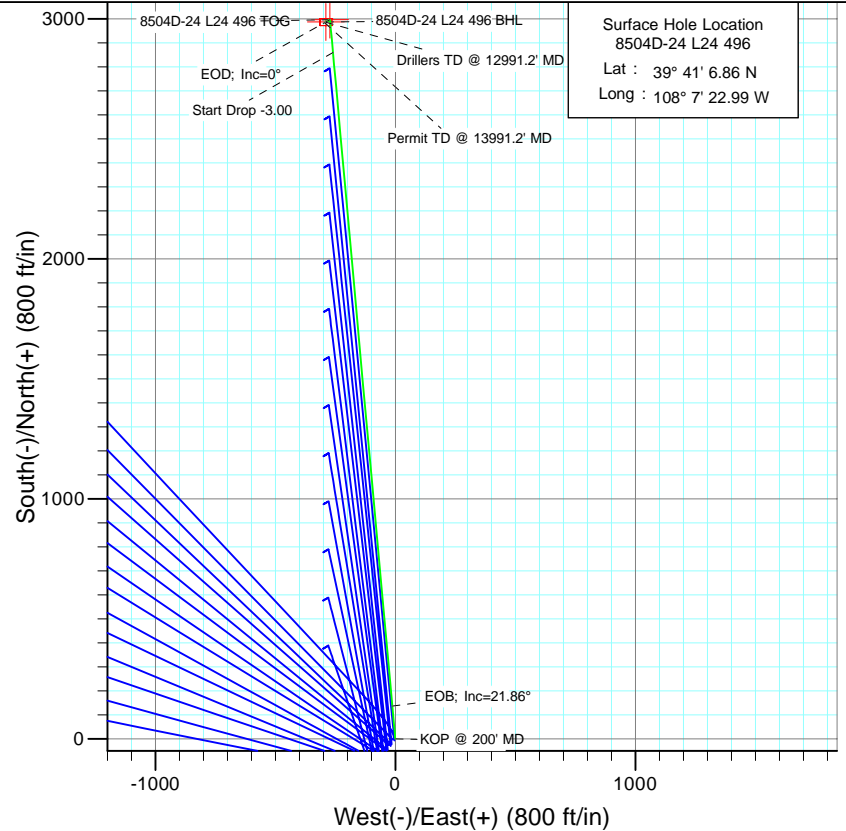




Project: Story Gulch  
Site: L24 496  
Well: 8504D-24 L24 496  
Wellbore: DD  
Design: Plan #1



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	928.5	21.86	354.81	911.0	136.7	-12.4	3.00	354.81	137.3	
4	8274.6	21.86	354.81	7729.0	2860.3	-259.8	0.00	0.00	2872.0	
5	9003.1	0.00	0.00	8440.0	2997.0	-272.2	3.00	180.00	3009.3	8504D-24 L24 496 TOG
6	9121.4	0.30	239.50	8558.3	2996.8	-272.5	0.25	239.50	3009.2	
7	12891.2	0.30	239.50	12328.0	2987.0	-289.2	0.00	0.00	3000.9	8504D-24 L24 496 BHL
8	12991.2	0.30	239.50	12428.0	2986.7	-289.7	0.00	0.00	3000.7	
9	13991.2	0.30	239.50	13428.0	2984.1	-294.1	0.00	0.00	2998.5	



Surface Hole Location  
8504D-24 L24 496  
Lat : 39° 41' 6.86 N  
Long : 108° 7' 22.99 W



Azimuths to True North  
Magnetic North: 10.44°

Magnetic Field  
Strength: 52326.9nT  
Dip Angle: 65.87°  
Date: 5/16/2011  
Model: IGRF2010

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1298.0	1345.5	A_GROOVE
2554.0	2698.8	GARDEN_GULCH / L-1
5998.0	6409.5	WASATCH_G
8400.0	8963.1	WILLIAMS_FORK
8440.0	9003.1	TOG
12328.0	12891.2	ROLLINS
12466.0	13029.2	COZZETTE
12727.0	13290.2	LOWER_SEGO
12773.0	13336.2	CORCORAN
12986.0	13549.2	SEGO

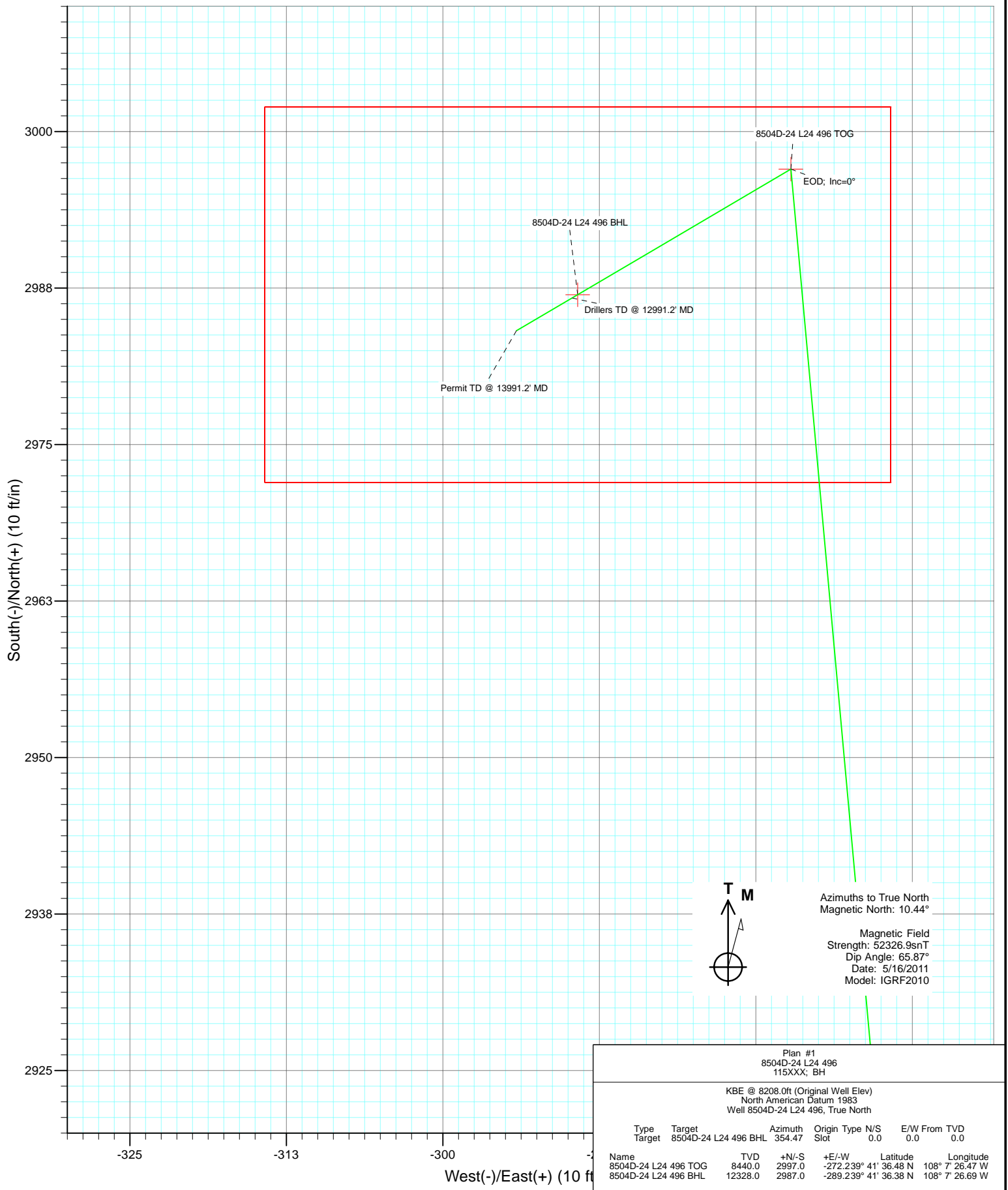
Plan #1  
8504D-24 L24 496  
115XXX; BH

KBE @ 8208.0ft (Original Well Elev)  
North American Datum 1983  
Well 8504D-24 L24 496, True North

Type	Target	Target	Azimuth	Origin	Type	N/S	E/W	From	TVD
Target	8504D-24 L24 496 BHL	8504D-24 L24 496 BHL	354.47	Slot	0.0	0.0	0.0	0.0	0.0
Name	8504D-24 L24 496 TOG	TVD	+N/-S	+E/-W	Latitude	Longitude			
	8504D-24 L24 496 TOG	8440.0	2997.0	-272.239° 41'	36.48 N	108° 7' 26.47 W			
	8504D-24 L24 496 BHL	12328.0	2987.0	-289.239° 41'	36.38 N	108° 7' 26.69 W			



Project: Story Gulch  
 Site: L24 496  
 Well: 8504D-24 L24 496  
 Wellbore: DD  
 Design: Plan #1



# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well 8504D-24 L24 496
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Site:</b>	L24 496	<b>North Reference:</b>	True
<b>Well:</b>	8504D-24 L24 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

<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		L24 496			
Site Position:		Northing:	1,685,024.52 ft	Latitude:	39° 41' 5.72 N
From:	Lat/Long	Easting:	2,261,789.15 ft	Longitude:	108° 7' 23.99 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.65 °

Well	8504D-24 L24 496					
Well Position	+N/-S	0.0 ft	Northing:	1,685,137.55 ft	Latitude:	39° 41' 6.86 N
	+E/-W	0.0 ft	Easting:	2,261,870.63 ft	Longitude:	108° 7' 22.99 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,193.0 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	5/16/2011	10.44	65.87	52,327

<b>Design</b>	Plan #1			
<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	354.47

<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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
928.5	21.86	354.81	911.0	136.7	-12.4	3.00	3.00	0.00	354.81	
8,274.6	21.86	354.81	7,729.0	2,860.3	-259.8	0.00	0.00	0.00	0.00	
9,003.1	0.00	0.00	8,440.0	2,997.0	-272.2	3.00	-3.00	0.00	180.00	8504D-24 L24 496 TC
9,121.4	0.30	239.50	8,558.3	2,996.8	-272.5	0.25	0.25	-101.88	239.50	
12,891.2	0.30	239.50	12,328.0	2,987.0	-289.2	0.00	0.00	0.00	0.00	8504D-24 L24 496 B+
12,991.2	0.30	239.50	12,428.0	2,986.7	-289.7	0.00	0.00	0.00	0.00	
13,991.2	0.30	239.50	13,428.0	2,984.1	-294.1	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-24 L24 496
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Site:</b>	L24 496	<b>North Reference:</b>	True
<b>Well:</b>	8504D-24 L24 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	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	3.00	354.81	300.0	2.6	-0.2	2.6	3.00	3.00	
400.0	6.00	354.81	399.6	10.4	-0.9	10.5	3.00	3.00	
500.0	9.00	354.81	498.8	23.4	-2.1	23.5	3.00	3.00	
600.0	12.00	354.81	597.1	41.6	-3.8	41.7	3.00	3.00	
700.0	15.00	354.81	694.3	64.8	-5.9	65.1	3.00	3.00	
800.0	18.00	354.81	790.2	93.1	-8.5	93.5	3.00	3.00	
900.0	21.00	354.81	884.4	126.3	-11.5	126.8	3.00	3.00	
928.5	21.86	354.81	911.0	136.7	-12.4	137.3	3.00	3.00	EOB; Inc=21.86°
1,000.0	21.86	354.81	977.3	163.2	-14.8	163.9	0.00	0.00	
1,100.0	21.86	354.81	1,070.1	200.3	-18.2	201.1	0.00	0.00	
1,200.0	21.86	354.81	1,162.9	237.4	-21.6	238.3	0.00	0.00	
1,300.0	21.86	354.81	1,255.8	274.4	-24.9	275.6	0.00	0.00	
1,345.5	21.86	354.81	1,298.0	291.3	-26.5	292.5	0.00	0.00	A_GROOVE
1,400.0	21.86	354.81	1,348.6	311.5	-28.3	312.8	0.00	0.00	
1,500.0	21.86	354.81	1,441.4	348.6	-31.7	350.0	0.00	0.00	
1,600.0	21.86	354.81	1,534.2	385.7	-35.0	387.2	0.00	0.00	
1,700.0	21.86	354.81	1,627.0	422.7	-38.4	424.5	0.00	0.00	
1,800.0	21.86	354.81	1,719.8	459.8	-41.8	461.7	0.00	0.00	
1,900.0	21.86	354.81	1,812.6	496.9	-45.1	498.9	0.00	0.00	
2,000.0	21.86	354.81	1,905.4	534.0	-48.5	536.2	0.00	0.00	
2,100.0	21.86	354.81	1,998.3	571.0	-51.9	573.4	0.00	0.00	
2,200.0	21.86	354.81	2,091.1	608.1	-55.2	610.6	0.00	0.00	
2,300.0	21.86	354.81	2,183.9	645.2	-58.6	647.8	0.00	0.00	
2,400.0	21.86	354.81	2,276.7	682.3	-62.0	685.1	0.00	0.00	
2,500.0	21.86	354.81	2,369.5	719.3	-65.3	722.3	0.00	0.00	
2,600.0	21.86	354.81	2,462.3	756.4	-68.7	759.5	0.00	0.00	
2,698.8	21.86	354.81	2,554.0	793.0	-72.0	796.3	0.00	0.00	GARDEN_GULCH / L-1
2,700.0	21.86	354.81	2,555.1	793.5	-72.1	796.7	0.00	0.00	
2,800.0	21.86	354.81	2,647.9	830.6	-75.4	834.0	0.00	0.00	
2,900.0	21.86	354.81	2,740.8	867.6	-78.8	871.2	0.00	0.00	
3,000.0	21.86	354.81	2,833.6	904.7	-82.2	908.4	0.00	0.00	
3,100.0	21.86	354.81	2,926.4	941.8	-85.5	945.7	0.00	0.00	
3,200.0	21.86	354.81	3,019.2	978.9	-88.9	982.9	0.00	0.00	
3,300.0	21.86	354.81	3,112.0	1,015.9	-92.3	1,020.1	0.00	0.00	
3,400.0	21.86	354.81	3,204.8	1,053.0	-95.6	1,057.3	0.00	0.00	
3,500.0	21.86	354.81	3,297.6	1,090.1	-99.0	1,094.6	0.00	0.00	
3,600.0	21.86	354.81	3,390.4	1,127.2	-102.4	1,131.8	0.00	0.00	
3,700.0	21.86	354.81	3,483.2	1,164.2	-105.7	1,169.0	0.00	0.00	
3,800.0	21.86	354.81	3,576.1	1,201.3	-109.1	1,206.2	0.00	0.00	
3,900.0	21.86	354.81	3,668.9	1,238.4	-112.5	1,243.5	0.00	0.00	
4,000.0	21.86	354.81	3,761.7	1,275.5	-115.8	1,280.7	0.00	0.00	
4,100.0	21.86	354.81	3,854.5	1,312.5	-119.2	1,317.9	0.00	0.00	
4,200.0	21.86	354.81	3,947.3	1,349.6	-122.6	1,355.2	0.00	0.00	
4,300.0	21.86	354.81	4,040.1	1,386.7	-125.9	1,392.4	0.00	0.00	
4,400.0	21.86	354.81	4,132.9	1,423.8	-129.3	1,429.6	0.00	0.00	
4,500.0	21.86	354.81	4,225.7	1,460.8	-132.7	1,466.8	0.00	0.00	
4,600.0	21.86	354.81	4,318.6	1,497.9	-136.0	1,504.1	0.00	0.00	
4,700.0	21.86	354.81	4,411.4	1,535.0	-139.4	1,541.3	0.00	0.00	
4,800.0	21.86	354.81	4,504.2	1,572.1	-142.8	1,578.5	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-24 L24 496
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Site:</b>	L24 496	<b>North Reference:</b>	True
<b>Well:</b>	8504D-24 L24 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	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
4,900.0	21.86	354.81	4,597.0	1,609.1	-146.1	1,615.7	0.00	0.00	
5,000.0	21.86	354.81	4,689.8	1,646.2	-149.5	1,653.0	0.00	0.00	
5,100.0	21.86	354.81	4,782.6	1,683.3	-152.9	1,690.2	0.00	0.00	
5,200.0	21.86	354.81	4,875.4	1,720.4	-156.3	1,727.4	0.00	0.00	
5,300.0	21.86	354.81	4,968.2	1,757.5	-159.6	1,764.7	0.00	0.00	
5,400.0	21.86	354.81	5,061.1	1,794.5	-163.0	1,801.9	0.00	0.00	
5,500.0	21.86	354.81	5,153.9	1,831.6	-166.4	1,839.1	0.00	0.00	
5,600.0	21.86	354.81	5,246.7	1,868.7	-169.7	1,876.3	0.00	0.00	
5,700.0	21.86	354.81	5,339.5	1,905.8	-173.1	1,913.6	0.00	0.00	
5,800.0	21.86	354.81	5,432.3	1,942.8	-176.5	1,950.8	0.00	0.00	
5,900.0	21.86	354.81	5,525.1	1,979.9	-179.8	1,988.0	0.00	0.00	
6,000.0	21.86	354.81	5,617.9	2,017.0	-183.2	2,025.2	0.00	0.00	
6,100.0	21.86	354.81	5,710.7	2,054.1	-186.6	2,062.5	0.00	0.00	
6,200.0	21.86	354.81	5,803.5	2,091.1	-189.9	2,099.7	0.00	0.00	
6,300.0	21.86	354.81	5,896.4	2,128.2	-193.3	2,136.9	0.00	0.00	
6,400.0	21.86	354.81	5,989.2	2,165.3	-196.7	2,174.2	0.00	0.00	
6,409.5	21.86	354.81	5,998.0	2,168.8	-197.0	2,177.7	0.00	0.00	WASATCH_G
6,500.0	21.86	354.81	6,082.0	2,202.4	-200.0	2,211.4	0.00	0.00	
6,600.0	21.86	354.81	6,174.8	2,239.4	-203.4	2,248.6	0.00	0.00	
6,700.0	21.86	354.81	6,267.6	2,276.5	-206.8	2,285.8	0.00	0.00	
6,800.0	21.86	354.81	6,360.4	2,313.6	-210.1	2,323.1	0.00	0.00	
6,900.0	21.86	354.81	6,453.2	2,350.7	-213.5	2,360.3	0.00	0.00	
7,000.0	21.86	354.81	6,546.0	2,387.7	-216.9	2,397.5	0.00	0.00	
7,100.0	21.86	354.81	6,638.9	2,424.8	-220.2	2,434.7	0.00	0.00	
7,200.0	21.86	354.81	6,731.7	2,461.9	-223.6	2,472.0	0.00	0.00	
7,300.0	21.86	354.81	6,824.5	2,499.0	-227.0	2,509.2	0.00	0.00	
7,400.0	21.86	354.81	6,917.3	2,536.0	-230.3	2,546.4	0.00	0.00	
7,500.0	21.86	354.81	7,010.1	2,573.1	-233.7	2,583.7	0.00	0.00	
7,600.0	21.86	354.81	7,102.9	2,610.2	-237.1	2,620.9	0.00	0.00	
7,700.0	21.86	354.81	7,195.7	2,647.3	-240.4	2,658.1	0.00	0.00	
7,800.0	21.86	354.81	7,288.5	2,684.3	-243.8	2,695.3	0.00	0.00	
7,900.0	21.86	354.81	7,381.4	2,721.4	-247.2	2,732.6	0.00	0.00	
8,000.0	21.86	354.81	7,474.2	2,758.5	-250.5	2,769.8	0.00	0.00	
8,100.0	21.86	354.81	7,567.0	2,795.6	-253.9	2,807.0	0.00	0.00	
8,200.0	21.86	354.81	7,659.8	2,832.6	-257.3	2,844.2	0.00	0.00	
8,274.6	21.86	354.81	7,729.0	2,860.3	-259.8	2,872.0	0.00	0.00	Start Drop -3.00
8,300.0	21.09	354.81	7,752.7	2,869.6	-260.6	2,881.3	3.00	-3.00	
8,400.0	18.09	354.81	7,846.9	2,902.9	-263.7	2,914.8	3.00	-3.00	
8,500.0	15.09	354.81	7,942.7	2,931.4	-266.2	2,943.4	3.00	-3.00	
8,600.0	12.09	354.81	8,039.9	2,954.8	-268.4	2,966.9	3.00	-3.00	
8,700.0	9.09	354.81	8,138.2	2,973.1	-270.0	2,985.3	3.00	-3.00	
8,800.0	6.09	354.81	8,237.3	2,986.3	-271.2	2,998.5	3.00	-3.00	
8,900.0	3.09	354.81	8,336.9	2,994.2	-271.9	3,006.5	3.00	-3.00	
8,963.1	1.20	354.81	8,400.0	2,996.6	-272.2	3,008.9	3.00	-3.00	WILLIAMS_FORK
9,000.0	0.09	354.81	8,436.9	2,997.0	-272.2	3,009.3	3.00	-3.00	
9,003.1	0.00	0.00	8,440.0	2,997.0	-272.2	3,009.3	3.00	-3.00	EOD; Inc=0° - TOG - 8504D-24 L24 496 TOG
9,100.0	0.24	239.50	8,536.9	2,996.9	-272.4	3,009.2	0.25	0.25	
9,121.4	0.30	239.50	8,558.3	2,996.8	-272.5	3,009.2	0.25	0.25	
9,200.0	0.30	239.50	8,636.9	2,996.6	-272.8	3,009.0	0.00	0.00	
9,300.0	0.30	239.50	8,736.9	2,996.4	-273.3	3,008.8	0.00	0.00	
9,400.0	0.30	239.50	8,836.9	2,996.1	-273.7	3,008.5	0.00	0.00	
9,500.0	0.30	239.50	8,936.9	2,995.9	-274.1	3,008.3	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-24 L24 496
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Site:</b>	L24 496	<b>North Reference:</b>	True
<b>Well:</b>	8504D-24 L24 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	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
9,600.0	0.30	239.50	9,036.9	2,995.6	-274.6	3,008.1	0.00	0.00	
9,700.0	0.30	239.50	9,136.9	2,995.3	-275.0	3,007.9	0.00	0.00	
9,800.0	0.30	239.50	9,236.9	2,995.1	-275.5	3,007.7	0.00	0.00	
9,900.0	0.30	239.50	9,336.9	2,994.8	-275.9	3,007.5	0.00	0.00	
10,000.0	0.30	239.50	9,436.9	2,994.5	-276.4	3,007.2	0.00	0.00	
10,100.0	0.30	239.50	9,536.9	2,994.3	-276.8	3,007.0	0.00	0.00	
10,200.0	0.30	239.50	9,636.9	2,994.0	-277.3	3,006.8	0.00	0.00	
10,300.0	0.30	239.50	9,736.9	2,993.8	-277.7	3,006.6	0.00	0.00	
10,400.0	0.30	239.50	9,836.9	2,993.5	-278.1	3,006.4	0.00	0.00	
10,500.0	0.30	239.50	9,936.9	2,993.2	-278.6	3,006.2	0.00	0.00	
10,600.0	0.30	239.50	10,036.9	2,993.0	-279.0	3,005.9	0.00	0.00	
10,700.0	0.30	239.50	10,136.9	2,992.7	-279.5	3,005.7	0.00	0.00	
10,800.0	0.30	239.50	10,236.9	2,992.4	-279.9	3,005.5	0.00	0.00	
10,900.0	0.30	239.50	10,336.9	2,992.2	-280.4	3,005.3	0.00	0.00	
11,000.0	0.30	239.50	10,436.9	2,991.9	-280.8	3,005.1	0.00	0.00	
11,100.0	0.30	239.50	10,536.9	2,991.7	-281.3	3,004.8	0.00	0.00	
11,200.0	0.30	239.50	10,636.9	2,991.4	-281.7	3,004.6	0.00	0.00	
11,300.0	0.30	239.50	10,736.9	2,991.1	-282.2	3,004.4	0.00	0.00	
11,400.0	0.30	239.50	10,836.9	2,990.9	-282.6	3,004.2	0.00	0.00	
11,500.0	0.30	239.50	10,936.9	2,990.6	-283.0	3,004.0	0.00	0.00	
11,600.0	0.30	239.50	11,036.9	2,990.4	-283.5	3,003.8	0.00	0.00	
11,700.0	0.30	239.50	11,136.9	2,990.1	-283.9	3,003.5	0.00	0.00	
11,800.0	0.30	239.50	11,236.9	2,989.8	-284.4	3,003.3	0.00	0.00	
11,900.0	0.30	239.50	11,336.9	2,989.6	-284.8	3,003.1	0.00	0.00	
12,000.0	0.30	239.50	11,436.9	2,989.3	-285.3	3,002.9	0.00	0.00	
12,100.0	0.30	239.50	11,536.8	2,989.0	-285.7	3,002.7	0.00	0.00	
12,200.0	0.30	239.50	11,636.8	2,988.8	-286.2	3,002.4	0.00	0.00	
12,300.0	0.30	239.50	11,736.8	2,988.5	-286.6	3,002.2	0.00	0.00	
12,400.0	0.30	239.50	11,836.8	2,988.3	-287.0	3,002.0	0.00	0.00	
12,500.0	0.30	239.50	11,936.8	2,988.0	-287.5	3,001.8	0.00	0.00	
12,600.0	0.30	239.50	12,036.8	2,987.7	-287.9	3,001.6	0.00	0.00	
12,700.0	0.30	239.50	12,136.8	2,987.5	-288.4	3,001.4	0.00	0.00	
12,800.0	0.30	239.50	12,236.8	2,987.2	-288.8	3,001.1	0.00	0.00	
12,891.2	0.30	239.50	12,328.0	2,987.0	-289.2	3,000.9	0.00	0.00	ROLLINS - 8504D-24 L24 496 BHL
12,900.0	0.30	239.50	12,336.8	2,986.9	-289.3	3,000.9	0.00	0.00	
12,991.2	0.30	239.50	12,428.0	2,986.7	-289.7	3,000.7	0.00	0.00	Drillers TD @ 12991.2' MD
13,000.0	0.30	239.50	12,436.8	2,986.7	-289.7	3,000.7	0.00	0.00	
13,029.2	0.30	239.50	12,466.0	2,986.6	-289.8	3,000.6	0.00	0.00	COZZETTE
13,100.0	0.30	239.50	12,536.8	2,986.4	-290.2	3,000.5	0.00	0.00	
13,200.0	0.30	239.50	12,636.8	2,986.2	-290.6	3,000.3	0.00	0.00	
13,290.2	0.30	239.50	12,727.0	2,985.9	-291.0	3,000.1	0.00	0.00	LOWER_SEGO
13,300.0	0.30	239.50	12,736.8	2,985.9	-291.0	3,000.1	0.00	0.00	
13,336.2	0.30	239.50	12,773.0	2,985.8	-291.2	3,000.0	0.00	0.00	CORCORAN
13,400.0	0.30	239.50	12,836.8	2,985.6	-291.5	2,999.8	0.00	0.00	
13,500.0	0.30	239.50	12,936.8	2,985.4	-291.9	2,999.6	0.00	0.00	
13,549.2	0.30	239.50	12,986.0	2,985.2	-292.2	2,999.5	0.00	0.00	SEGO
13,600.0	0.30	239.50	13,036.8	2,985.1	-292.4	2,999.4	0.00	0.00	
13,700.0	0.30	239.50	13,136.8	2,984.9	-292.8	2,999.2	0.00	0.00	
13,800.0	0.30	239.50	13,236.8	2,984.6	-293.3	2,999.0	0.00	0.00	
13,900.0	0.30	239.50	13,336.8	2,984.3	-293.7	2,998.7	0.00	0.00	
13,991.2	0.30	239.50	13,428.0	2,984.1	-294.1	2,998.5	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-24 L24 496
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8208.0ft (Original Well Elev)
<b>Site:</b>	L24 496	<b>North Reference:</b>	True
<b>Well:</b>	8504D-24 L24 496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

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)		
8504D-24 L24 496 BHL	0.00	0.00	12,328.0	2,987.0	-289.2	1,688,131.63	2,261,667.76	39° 41' 36.38 N	108° 7' 26.69 W
- plan hits target center									
- Rectangle (sides W30.0 H50.0 D0.0)									
8504D-24 L24 496 TOG	0.00	0.00	8,440.0	2,997.0	-272.2	1,688,141.16	2,261,685.06	39° 41' 36.48 N	108° 7' 26.47 W
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
1,345.5	1,298.0	A_GROOVE				
2,698.8	2,554.0	GARDEN_GULCH / L-1				
6,409.5	5,998.0	WASATCH_G				
8,963.1	8,400.0	WILLIAMS_FORK				
9,003.1	8,440.0	TOG				
12,891.2	12,328.0	ROLLINS				
13,029.2	12,466.0	COZZETTE				
13,290.2	12,727.0	LOWER_SEGO				
13,336.2	12,773.0	CORCORAN				
13,549.2	12,986.0	SEGO				

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
928.5	911.0	136.7	-12.4	EOB; Inc=21.86°
8,274.6	7,729.0	2,860.3	-259.8	Start Drop -3.00
9,003.1	8,440.0	2,997.0	-272.2	EOD; Inc=0°
12,991.2	12,428.0	2,986.7	-289.7	Drillers TD @ 12991.2' MD
13,991.2	13,428.0	2,984.1	-294.1	Permit TD @ 13991.2' MD