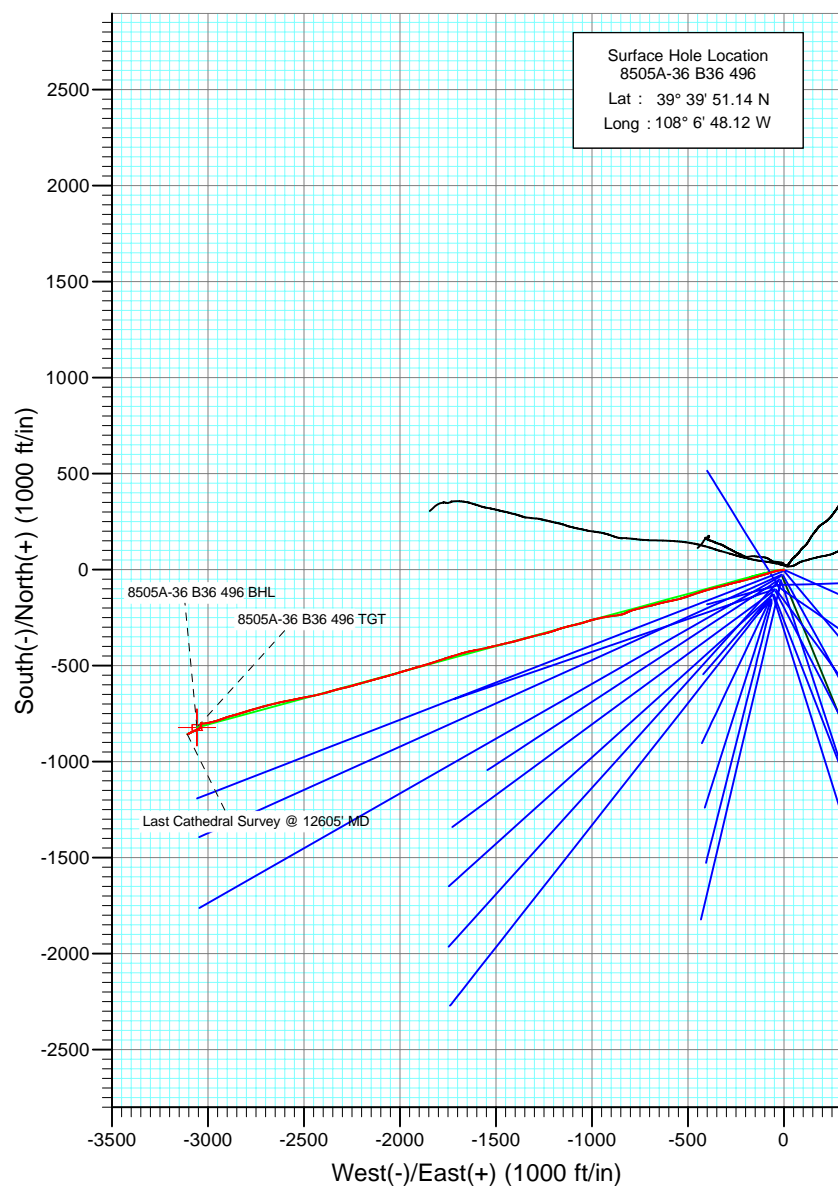
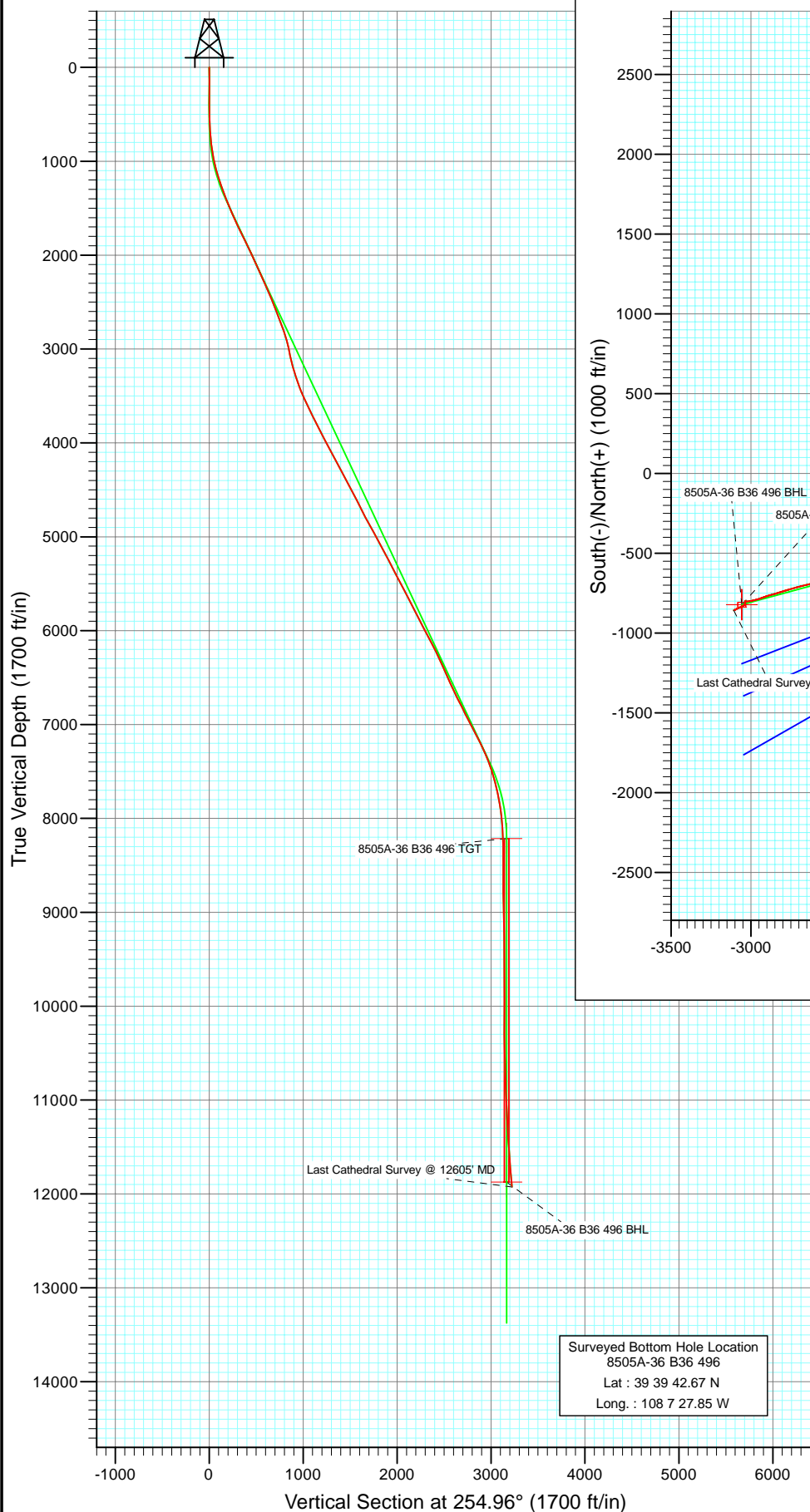




Project: Story Gulch  
 Site: S36-T4S-R96W (B36 496)  
 Well: 8505A-36 B36 496  
 Wellbore: DD  
 Design: Final Survey



Azimuths to True North  
 Magnetic North: 10.53°

Magnetic Field  
 Strength: 52435.3snT  
 Dip Angle: 65.89°  
 Date: 6/24/2010  
 Model: IGRF200510

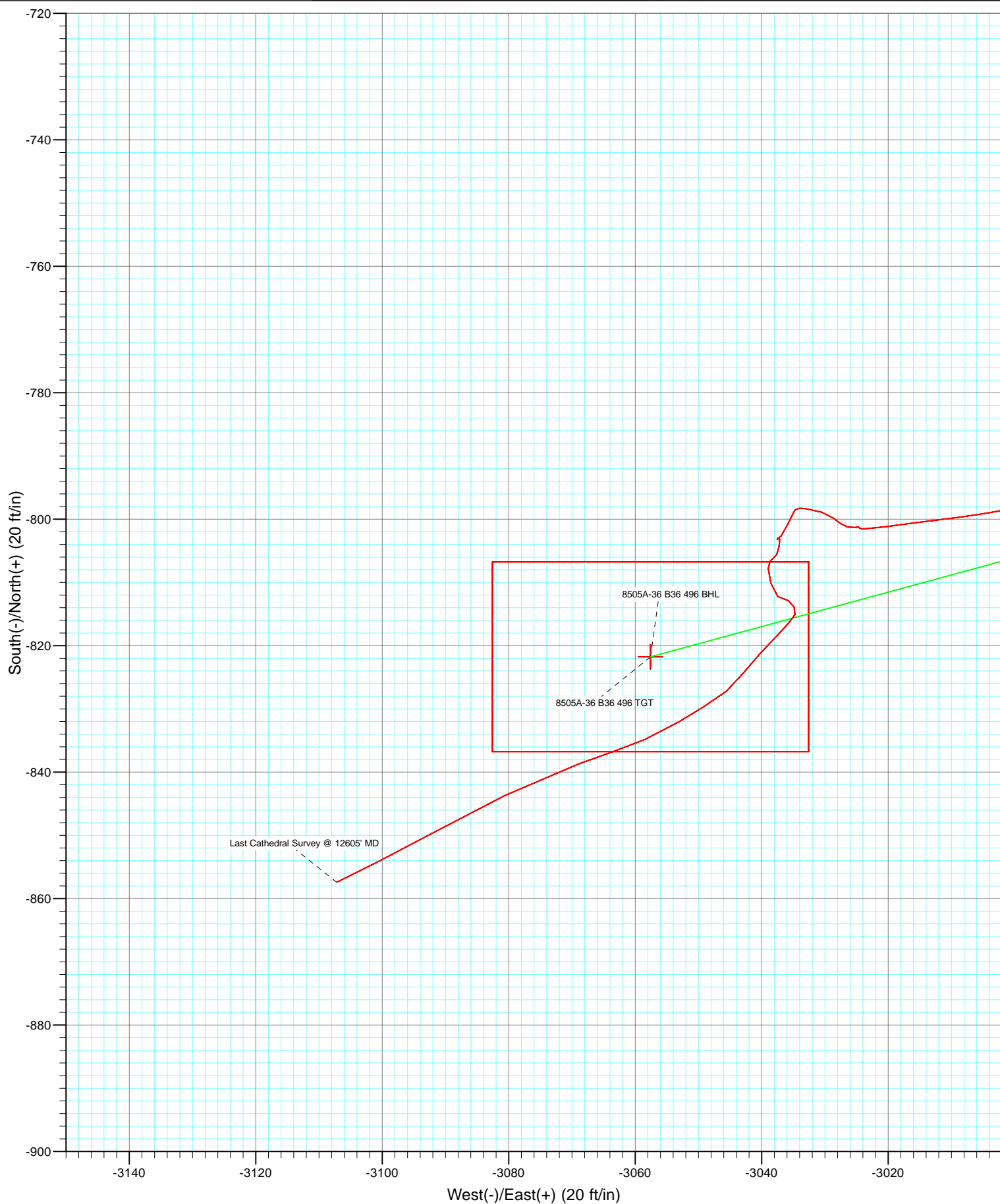
DESIGN DETAILS: DD  
 105093, 105271; BH

Target	Azimuth	Origin	N/S	E/W	From TVD
8505A-36 B36 496 BHL	254.96	Slot	0.0	0.0	0.0

Surveyed Bottom Hole Location  
 8505A-36 B36 496  
 Lat : 39 39 42.67 N  
 Long. : 108 7 27.85 W



Project: Story Gulch  
Site: S36-T4S-R96W (B36 496)  
Well: 8505A-36 B36 496  
Wellbore: DD  
Design: DD



# Cathedral Energy Services

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well 8505A-36 B36 496
<b>Project:</b>	Story Gulch	<b>TVD Reference:</b>	KBE @ 8374.0ft (Patterson 308)
<b>Site:</b>	S36-T4S-R96W (B36 496)	<b>MD Reference:</b>	KBE @ 8374.0ft (Patterson 308)
<b>Well:</b>	8505A-36 B36 496	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB

<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 (B36 496)			
Site Position:		Northing:	1,677,422.27 ft	Latitude:	39° 39' 51.36 N
From:	Lat/Long	Easting:	2,264,394.80 ft	Longitude:	108° 6' 47.88 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.65 °

Well	8505A-36 B36 496					
Well Position	+N/-S	0.0 ft	Northing:	1,677,400.90 ft	Latitude:	39° 39' 51.14 N
	+E/-W	0.0 ft	Easting:	2,264,375.00 ft	Longitude:	108° 6' 48.12 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,352.0 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	6/24/2010	10.53	65.89	52,435

<b>Design</b>	DD				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	254.96	

<b>Survey Program</b>	<b>Date</b>	7/3/2010			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
142.0	12,605.0	Survey #1 (DD)	MWD	Geolink MWD	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Formations / Comments</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00		
142.0	0.30	332.80	142.0	0.3	-0.2	0.1	0.21	0.21		
235.0	0.70	184.40	235.0	0.0	-0.3	0.3	1.04	0.43		
327.0	0.60	234.10	327.0	-0.9	-0.8	1.0	0.60	-0.11		
420.0	0.70	209.20	420.0	-1.6	-1.4	1.8	0.32	0.11		
512.0	1.00	266.40	512.0	-2.2	-2.5	3.0	0.93	0.33		
543.0	1.00	285.90	543.0	-2.1	-3.0	3.5	1.09	0.00		
574.0	1.30	274.20	574.0	-2.0	-3.6	4.0	1.22	0.97		
604.0	2.30	281.30	604.0	-1.9	-4.6	4.9	3.41	3.33		
635.0	2.80	277.20	634.9	-1.7	-5.9	6.2	1.72	1.61		
666.0	3.60	268.10	665.9	-1.6	-7.7	7.8	3.05	2.58		
697.0	4.10	266.30	696.8	-1.7	-9.7	9.8	1.66	1.61		
728.0	4.70	267.00	727.7	-1.8	-12.1	12.2	1.94	1.94		

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well 8505A-36 B36 496
<b>Project:</b>	Story Gulch	<b>TVD Reference:</b>	KBE @ 8374.0ft (Patterson 308)
<b>Site:</b>	S36-T4S-R96W (B36 496)	<b>MD Reference:</b>	KBE @ 8374.0ft (Patterson 308)
<b>Well:</b>	8505A-36 B36 496	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
760.0	5.60	266.20	759.6	-2.0	-15.0	15.0	2.82	2.81	
792.0	6.80	263.40	791.4	-2.3	-18.4	18.4	3.87	3.75	
823.0	7.50	260.10	822.2	-2.9	-22.2	22.2	2.62	2.26	
855.0	7.80	259.60	853.9	-3.7	-26.4	26.5	0.96	0.94	
887.0	8.70	260.60	885.5	-4.4	-31.0	31.0	2.85	2.81	
918.0	9.30	256.50	916.2	-5.4	-35.7	35.9	2.83	1.94	
950.0	10.50	254.80	947.7	-6.8	-41.0	41.4	3.86	3.75	
982.0	11.60	253.90	979.1	-8.4	-46.9	47.5	3.48	3.44	
1,014.0	12.50	254.70	1,010.4	-10.2	-53.4	54.2	2.86	2.81	
1,077.0	15.20	251.80	1,071.5	-14.6	-67.8	69.3	4.42	4.29	
1,172.0	16.50	252.30	1,162.9	-22.6	-92.5	95.2	1.38	1.37	
1,267.0	18.90	254.70	1,253.4	-30.8	-120.2	124.0	2.64	2.53	
1,362.0	22.00	252.60	1,342.4	-40.2	-152.0	157.2	3.35	3.26	
1,457.0	21.70	255.50	1,430.6	-49.9	-186.0	192.6	1.18	-0.32	
1,553.0	21.90	255.20	1,519.7	-58.9	-220.5	228.2	0.24	0.21	
1,648.0	23.90	256.90	1,607.3	-67.8	-256.4	265.2	2.22	2.11	
1,743.0	25.40	253.80	1,693.6	-77.8	-294.7	304.8	2.08	1.58	
1,837.0	27.10	256.50	1,777.9	-88.4	-334.9	346.3	2.21	1.81	
1,932.0	26.30	255.20	1,862.8	-98.9	-376.2	389.0	1.04	-0.84	
2,028.0	25.90	252.50	1,949.0	-110.6	-416.8	431.2	1.31	-0.42	
2,123.0	24.50	251.60	2,034.9	-123.1	-455.3	471.6	1.53	-1.47	
2,218.0	23.30	250.50	2,121.8	-135.6	-491.7	510.0	1.35	-1.26	
2,313.0	24.10	252.80	2,208.8	-147.6	-527.9	548.1	1.29	0.84	
2,409.0	25.60	258.00	2,295.9	-157.7	-566.9	588.4	2.76	1.56	
2,504.0	22.90	258.10	2,382.5	-165.8	-605.1	627.4	2.84	-2.84	
2,599.0	21.50	256.40	2,470.5	-173.7	-640.1	663.3	1.62	-1.47	
2,694.0	21.60	254.60	2,558.8	-182.4	-673.9	698.1	0.70	0.11	
2,789.0	21.40	256.90	2,647.2	-191.0	-707.6	733.0	0.91	-0.21	
2,883.0	20.60	256.90	2,735.0	-198.6	-740.4	766.6	0.85	-0.85	
2,978.0	18.60	256.10	2,824.5	-206.0	-771.4	798.5	2.12	-2.11	
3,065.0	15.50	250.00	2,907.6	-213.3	-795.8	823.9	4.11	-3.56	
3,178.0	11.30	242.40	3,017.5	-223.6	-819.8	849.8	4.02	-3.72	
3,269.0	12.90	252.40	3,106.5	-230.9	-837.4	868.7	2.89	1.76	
3,361.0	15.60	259.50	3,195.7	-236.2	-859.4	891.2	3.49	2.93	
3,453.0	18.10	263.70	3,283.7	-240.0	-885.8	917.7	3.02	2.72	
3,546.0	20.30	261.40	3,371.6	-244.0	-916.1	948.0	2.50	2.37	
3,637.0	21.90	258.00	3,456.5	-249.9	-948.3	980.7	2.21	1.76	
3,728.0	24.80	257.00	3,540.0	-257.7	-983.5	1,016.7	3.22	3.19	
3,820.0	26.40	251.60	3,623.0	-268.5	-1,021.7	1,056.4	3.07	1.74	
3,912.0	25.20	255.20	3,705.8	-280.0	-1,060.1	1,096.4	2.14	-1.30	
4,003.0	26.90	257.40	3,787.6	-289.4	-1,098.9	1,136.3	2.15	1.87	
4,095.0	28.20	255.20	3,869.1	-299.5	-1,140.2	1,178.9	1.79	1.41	
4,187.0	26.50	250.10	3,950.9	-312.1	-1,180.5	1,221.1	3.15	-1.85	
4,279.0	27.10	253.70	4,033.0	-324.9	-1,219.9	1,262.5	1.88	0.65	
4,370.0	29.10	256.60	4,113.3	-335.9	-1,261.4	1,305.3	2.66	2.20	
4,462.0	29.10	255.90	4,193.6	-346.5	-1,304.8	1,350.1	0.37	0.00	
4,554.0	28.50	254.70	4,274.3	-357.8	-1,347.7	1,394.4	0.91	-0.65	
4,645.0	27.10	254.10	4,354.8	-369.2	-1,388.6	1,436.8	1.57	-1.54	
4,737.0	27.90	257.40	4,436.4	-379.6	-1,429.7	1,479.3	1.87	0.87	
4,829.0	26.80	256.90	4,518.1	-389.0	-1,471.0	1,521.5	1.22	-1.20	
4,921.0	26.40	256.80	4,600.4	-398.4	-1,511.1	1,562.7	0.44	-0.43	
5,012.0	28.00	258.10	4,681.3	-407.4	-1,551.7	1,604.2	1.88	1.76	
5,104.0	26.70	258.10	4,763.0	-416.1	-1,593.0	1,646.4	1.41	-1.41	

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well 8505A-36 B36 496
<b>Project:</b>	Story Gulch	<b>TVD Reference:</b>	KBE @ 8374.0ft (Patterson 308)
<b>Site:</b>	S36-T4S-R96W (B36 496)	<b>MD Reference:</b>	KBE @ 8374.0ft (Patterson 308)
<b>Well:</b>	8505A-36 B36 496	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
5,196.0	28.80	258.30	4,844.4	-424.9	-1,635.0	1,689.2	2.28	2.28	
5,287.0	29.80	253.00	4,923.8	-435.9	-1,678.1	1,733.7	3.05	1.10	
5,379.0	29.40	253.50	5,003.8	-449.0	-1,721.6	1,779.1	0.51	-0.43	
5,471.0	28.10	251.80	5,084.4	-462.2	-1,763.8	1,823.3	1.67	-1.41	
5,563.0	27.60	251.30	5,165.8	-475.8	-1,804.6	1,866.2	0.60	-0.54	
5,654.0	26.10	252.40	5,247.0	-488.6	-1,843.6	1,907.3	1.74	-1.65	
5,746.0	27.00	255.10	5,329.3	-500.1	-1,883.1	1,948.4	1.64	0.98	
5,837.0	29.00	253.00	5,409.6	-511.9	-1,924.2	1,991.1	2.45	2.20	
5,929.0	27.90	253.80	5,490.5	-524.4	-1,966.2	2,034.9	1.27	-1.20	
6,020.0	26.60	252.50	5,571.4	-536.5	-2,006.0	2,076.5	1.57	-1.43	
6,112.0	26.70	254.40	5,653.6	-548.2	-2,045.6	2,117.8	0.93	0.11	
6,204.0	28.70	255.00	5,735.1	-559.5	-2,086.8	2,160.5	2.19	2.17	
6,295.0	27.60	254.50	5,815.3	-570.8	-2,128.3	2,203.5	1.24	-1.21	
6,387.0	26.20	254.00	5,897.4	-582.1	-2,168.3	2,245.1	1.54	-1.52	
6,479.0	26.10	255.20	5,979.9	-592.9	-2,207.4	2,285.6	0.59	-0.11	
6,571.0	28.00	253.90	6,061.9	-604.0	-2,247.7	2,327.5	2.16	2.07	
6,662.0	28.70	257.10	6,142.0	-614.8	-2,289.5	2,370.7	1.84	0.77	
6,754.0	26.60	255.10	6,223.5	-625.0	-2,331.0	2,413.3	2.50	-2.28	
6,846.0	24.20	252.60	6,306.6	-636.0	-2,368.9	2,452.8	2.86	-2.61	
6,938.0	24.10	256.50	6,390.5	-646.0	-2,405.2	2,490.4	1.74	-0.11	
7,030.0	23.60	257.60	6,474.7	-654.3	-2,441.4	2,527.6	0.73	-0.54	
7,121.0	25.40	260.60	6,557.5	-661.4	-2,478.5	2,565.2	2.40	1.98	
7,213.0	25.20	257.40	6,640.6	-668.9	-2,517.0	2,604.4	1.50	-0.22	
7,305.0	27.10	258.90	6,723.2	-677.3	-2,556.7	2,644.9	2.19	2.07	
7,396.0	26.20	259.00	6,804.6	-685.1	-2,596.8	2,685.6	0.99	-0.99	
7,488.0	27.00	256.60	6,886.8	-693.8	-2,637.0	2,726.7	1.46	0.87	
7,580.0	26.20	256.20	6,969.1	-703.5	-2,677.1	2,767.9	0.89	-0.87	
7,672.0	28.00	254.20	7,051.0	-714.2	-2,717.6	2,809.8	2.19	1.96	
7,763.0	27.40	253.90	7,131.6	-725.8	-2,758.3	2,852.1	0.68	-0.66	
7,855.0	26.70	252.50	7,213.5	-737.9	-2,798.3	2,893.9	1.03	-0.76	
7,946.0	23.60	253.10	7,295.9	-749.4	-2,835.2	2,932.6	3.42	-3.41	
8,037.0	21.00	254.90	7,380.0	-758.9	-2,868.4	2,967.1	2.95	-2.86	
8,129.0	18.80	252.30	7,466.5	-767.7	-2,898.5	2,998.4	2.58	-2.39	
8,221.0	16.10	249.50	7,554.3	-776.7	-2,924.5	3,025.9	3.07	-2.93	
8,312.0	14.10	251.70	7,642.2	-784.6	-2,946.9	3,049.5	2.29	-2.20	
8,404.0	11.80	255.90	7,731.8	-790.4	-2,966.6	3,070.1	2.70	-2.50	
8,496.0	10.10	256.40	7,822.1	-794.6	-2,983.6	3,087.6	1.85	-1.85	
8,587.0	7.80	258.10	7,912.0	-797.7	-2,997.4	3,101.7	2.54	-2.53	
8,679.0	6.00	263.00	8,003.3	-799.6	-3,008.3	3,112.7	2.06	-1.96	
8,771.0	4.50	262.10	8,095.0	-800.7	-3,016.6	3,121.1	1.63	-1.63	
8,862.0	2.30	264.30	8,185.8	-801.4	-3,022.0	3,126.4	2.42	-2.42	
8,954.0	0.40	276.50	8,277.8	-801.5	-3,024.2	3,128.5	2.08	-2.07	
9,045.0	0.10	330.80	8,368.8	-801.4	-3,024.5	3,128.9	0.39	-0.33	
9,137.0	0.20	302.50	8,460.8	-801.2	-3,024.7	3,129.0	0.13	0.11	
9,229.0	0.60	254.90	8,552.8	-801.3	-3,025.3	3,129.6	0.53	0.43	
9,321.0	0.80	284.90	8,644.8	-801.2	-3,026.4	3,130.6	0.45	0.22	
9,412.0	0.80	306.10	8,735.7	-800.7	-3,027.5	3,131.6	0.32	0.00	
9,504.0	1.00	308.40	8,827.7	-799.8	-3,028.6	3,132.4	0.22	0.22	
9,596.0	1.60	289.70	8,919.7	-798.9	-3,030.5	3,134.0	0.79	0.65	
9,687.0	1.90	276.90	9,010.7	-798.3	-3,033.2	3,136.4	0.54	0.33	
9,779.0	1.10	197.70	9,102.6	-798.9	-3,035.0	3,138.3	2.18	-0.87	
9,871.0	1.70	211.60	9,194.6	-800.9	-3,035.9	3,139.8	0.74	0.65	
9,962.0	0.80	203.70	9,285.6	-802.7	-3,036.9	3,141.2	1.00	-0.99	

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well 8505A-36 B36 496
<b>Project:</b>	Story Gulch	<b>TVD Reference:</b>	KBE @ 8374.0ft (Patterson 308)
<b>Site:</b>	S36-T4S-R96W (B36 496)	<b>MD Reference:</b>	KBE @ 8374.0ft (Patterson 308)
<b>Well:</b>	8505A-36 B36 496	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB

### Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
10,054.0	0.50	280.60	9,377.6	-803.2	-3,037.6	3,141.9	0.92	-0.33	
10,146.0	0.60	74.40	9,469.6	-803.0	-3,037.5	3,141.8	1.16	0.11	
10,233.0	0.40	194.10	9,556.6	-803.2	-3,037.1	3,141.5	1.00	-0.23	
10,325.0	1.00	181.70	9,648.6	-804.3	-3,037.2	3,141.9	0.67	0.65	
10,416.0	0.80	214.20	9,739.6	-805.6	-3,037.6	3,142.6	0.59	-0.22	
10,508.0	1.10	232.50	9,831.6	-806.7	-3,038.7	3,143.9	0.46	0.33	
10,600.0	0.90	144.20	9,923.5	-807.8	-3,038.9	3,144.5	1.52	-0.22	
10,692.0	2.20	180.00	10,015.5	-810.1	-3,038.5	3,144.7	1.70	1.41	
10,783.0	1.40	106.60	10,106.5	-812.2	-3,037.5	3,144.2	2.47	-0.88	
10,875.0	0.90	119.50	10,198.5	-812.9	-3,035.8	3,142.7	0.61	-0.54	
10,967.0	0.90	157.40	10,290.4	-813.9	-3,034.8	3,142.1	0.64	0.00	
11,058.0	0.70	197.10	10,381.4	-815.1	-3,034.7	3,142.3	0.63	-0.22	
11,150.0	1.40	226.50	10,473.4	-816.4	-3,035.7	3,143.6	0.94	0.76	
11,241.0	2.10	220.20	10,564.4	-818.4	-3,037.6	3,145.9	0.80	0.77	
11,333.0	2.50	226.10	10,656.3	-821.1	-3,040.1	3,149.1	0.50	0.43	
11,425.0	2.60	215.50	10,748.2	-824.2	-3,042.8	3,152.4	0.52	0.11	
11,516.0	2.60	230.70	10,839.1	-827.2	-3,045.6	3,155.9	0.76	0.00	
11,608.0	2.90	239.80	10,931.0	-829.7	-3,049.2	3,160.1	0.57	0.33	
11,699.0	2.60	237.20	11,021.9	-832.0	-3,052.9	3,164.2	0.36	-0.33	
11,855.0	2.00	249.60	11,177.8	-834.8	-3,058.5	3,170.3	0.50	-0.38	
11,976.0	3.20	248.70	11,298.7	-836.8	-3,063.6	3,175.8	0.99	0.99	
12,066.0	3.90	251.70	11,388.5	-838.7	-3,068.8	3,181.3	0.80	0.78	
12,249.0	4.20	242.40	11,571.0	-843.7	-3,080.7	3,194.1	0.39	0.16	
12,433.0	4.70	242.60	11,754.5	-850.3	-3,093.3	3,208.0	0.27	0.27	
12,525.0	5.40	241.90	11,846.1	-854.1	-3,100.5	3,215.9	0.76	0.76	
12,605.0	5.30	245.40	11,925.8	-857.4	-3,107.2	3,223.2	0.43	-0.12	Last Cathedral Survey @ 12605' MD

### Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
8505A-36 B36 496 BHL - hit/miss target - Shape	0.00	0.00	11,874.0	-821.8	-3,057.6	1,676,667.42	2,261,295.06	39° 39' 43.02 N	108° 7' 27.22 W
- actual wellpath misses target center by 60.5ft at 12525.0ft MD (11846.1 TVD, -854.1 N, -3100.5 E) - Rectangle (sides W30.0 H50.0 D0.0)									
8505A-36 B36 496 TGT - hit/miss target - Shape	0.00	0.00	8,214.0	-821.8	-3,057.6	1,676,667.42	2,261,295.06	39° 39' 43.02 N	108° 7' 27.22 W
- actual wellpath misses target center by 40.1ft at 8891.1ft MD (8214.8 TVD, -801.5 N, -3023.0 E) - Point									

### Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
12,605.0	11,925.8	-857.4	-3,107.2	Last Cathedral Survey @ 12605' MD

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_