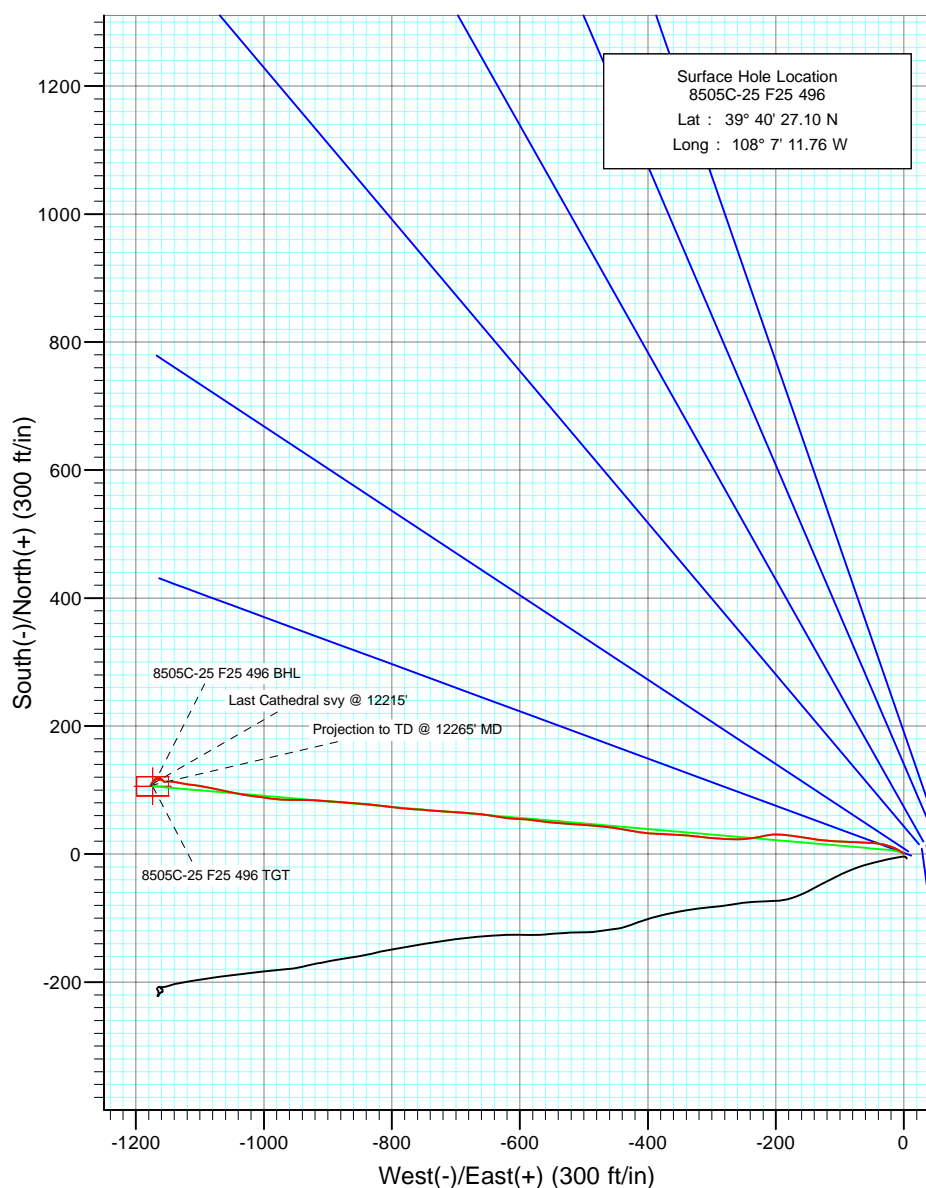
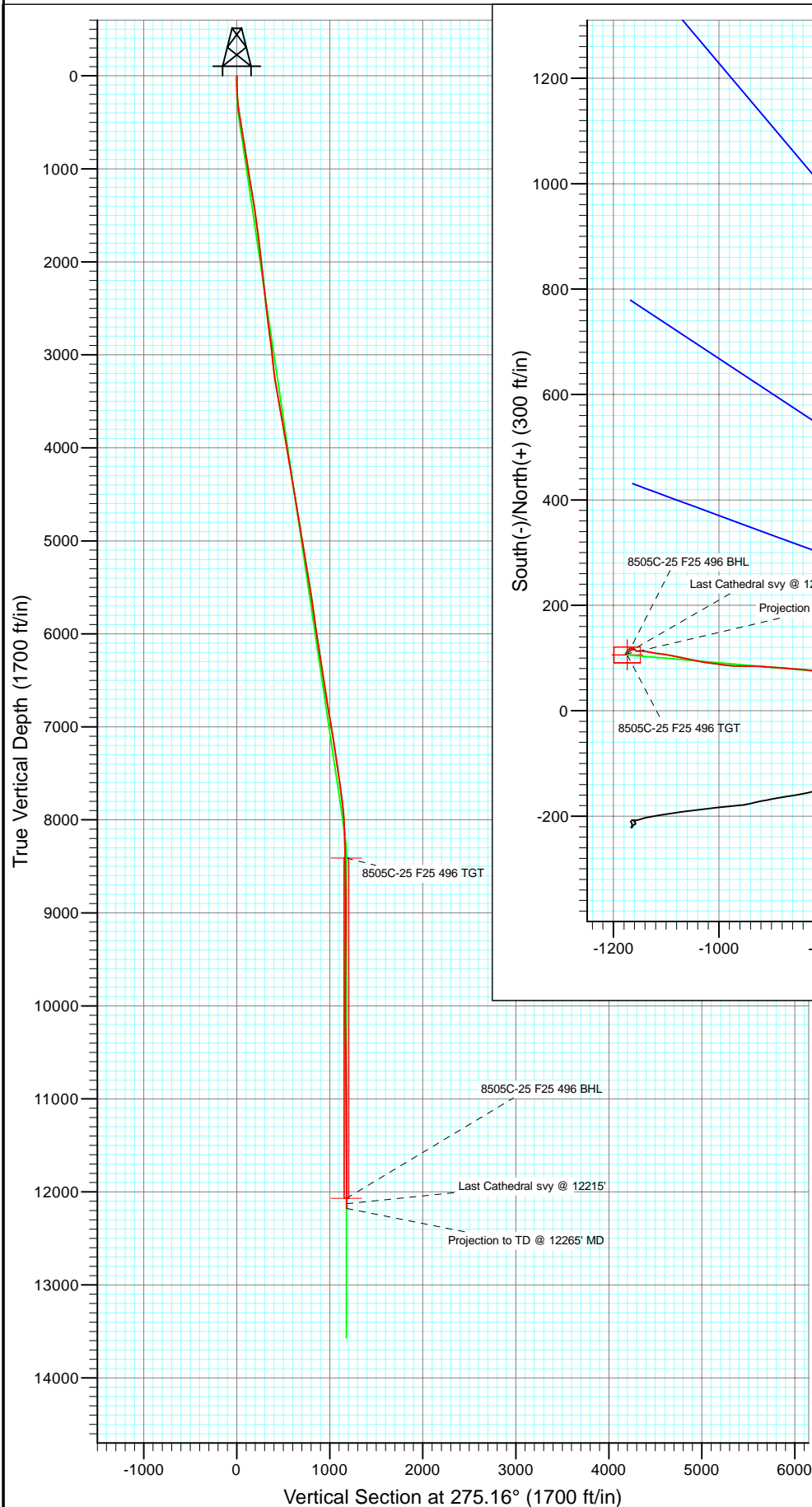




Project: Story Gulch
 Site: F25 496
 Well: 8505C-25 F25 496
 Wellbore: DD
 Design: Final



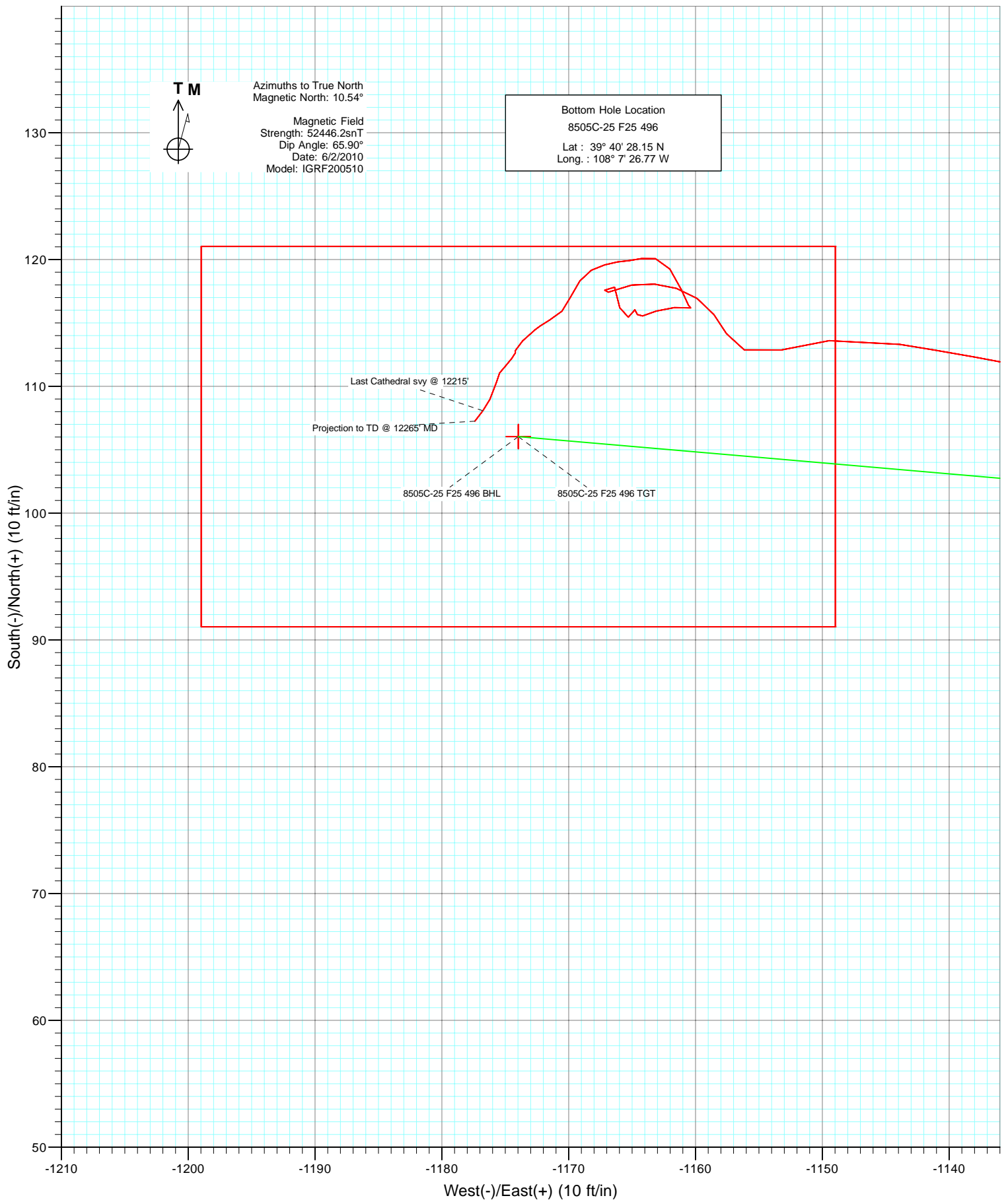
Azimuths to True North
 Magnetic North: 10.54°

Magnetic Field
 Strength: 52446.2snT
 Dip Angle: 65.90°
 Date: 6/2/2010
 Model: IGRF200510

DD 8505C-25 F25 496 Job #105121 (SH) 105238 (MH): KR						
KBE @ 8320.0ft (Patterson 306) North American Datum 1983 Well 8505C-25 F25 496, True North						
Type	Target	Azimuth	Origin	Type	N/S	E/W From
Target	8505C-25 F25 496 BHL	275.16	Slot		0.0	0.0
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	
8505C-25 F25 496 BHL	12070.0	106.0	-1174.039° 40' 28.15 N	108° 7' 26.77 W		



Project: Story Gulch
Site: F25 496
Well: 8505C-25 F25 496
Wellbore: DD
Design: Final



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8505C-25 F25 496
Project:	Story Gulch	TVD Reference:	KBE @ 8320.0ft (Patterson 306)
Site:	F25 496	MD Reference:	KBE @ 8320.0ft (Patterson 306)
Well:	8505C-25 F25 496	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US Multi Users DB

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		F25 496			
Site Position:		Northing:	1,681,091.06 ft	Latitude:	39° 40' 27.10 N
From:	Lat/Long	Easting:	2,262,632.54 ft	Longitude:	108° 7' 11.76 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.65 °

Well	8505C-25 F25 496					
Well Position	+N/-S	0.0 ft	Northing:	1,681,091.05 ft	Latitude:	39° 40' 27.10 N
	+E/-W	0.0 ft	Easting:	2,262,632.54 ft	Longitude:	108° 7' 11.76 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,298.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	6/2/2010	10.54	65.90	52,446

Design	DD				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	275.16	

Survey Program	Date	6/10/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
174.0	12,265.0	Survey #1 (DD)	MWD	Geolink MWD	

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	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00		
174.0	2.50	305.50	173.9	2.2	-3.1	3.3	1.44	1.44		
204.0	3.30	315.10	203.9	3.2	-4.2	4.5	3.11	2.67		
266.0	5.60	300.70	265.7	6.0	-8.1	8.6	4.10	3.71		
297.0	6.30	299.00	296.5	7.6	-10.9	11.5	2.33	2.26		
328.0	7.30	297.30	327.3	9.3	-14.1	14.9	3.29	3.23		
358.0	8.20	290.60	357.1	11.0	-17.8	18.7	4.25	3.00		
389.0	8.70	286.20	387.7	12.4	-22.1	23.2	2.64	1.61		
482.0	9.40	281.20	479.6	15.8	-36.3	37.6	1.13	0.75		
574.0	9.50	271.80	570.3	17.5	-51.3	52.7	1.68	0.11		
664.0	9.80	271.40	659.0	17.9	-66.4	67.7	0.34	0.33		
757.0	8.90	273.40	750.8	18.6	-81.5	82.8	1.03	-0.97		
789.0	8.80	274.80	782.4	18.9	-86.4	87.7	0.74	-0.31		

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8505C-25 F25 496
Project:	Story Gulch	TVD Reference:	KBE @ 8320.0ft (Patterson 306)
Site:	F25 496	MD Reference:	KBE @ 8320.0ft (Patterson 306)
Well:	8505C-25 F25 496	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	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
884.0	8.70	272.70	876.3	19.9	-100.8	102.2	0.35	-0.11	
979.0	8.70	273.60	970.2	20.7	-115.2	116.5	0.14	0.00	
1,074.0	9.00	275.30	1,064.1	21.8	-129.7	131.2	0.42	0.32	
1,169.0	9.60	281.10	1,157.9	24.0	-144.9	146.5	1.17	0.63	
1,264.0	9.00	277.40	1,251.6	26.5	-160.0	161.8	0.89	-0.63	
1,359.0	9.70	277.30	1,345.3	28.5	-175.3	177.2	0.74	0.74	
1,454.0	9.10	276.80	1,439.1	30.4	-190.7	192.7	0.64	-0.63	
1,548.0	7.60	265.20	1,532.1	30.7	-204.3	206.3	2.39	-1.60	
1,643.0	6.90	256.90	1,626.3	28.9	-216.1	217.9	1.32	-0.74	
1,738.0	7.40	260.10	1,720.6	26.6	-227.7	229.2	0.67	0.53	
1,834.0	7.00	261.60	1,815.8	24.6	-239.6	240.8	0.46	-0.42	
1,929.0	7.00	265.20	1,910.1	23.3	-251.1	252.2	0.46	0.00	
2,024.0	7.20	270.20	2,004.4	22.8	-262.8	263.8	0.68	0.21	
2,119.0	6.90	274.40	2,098.7	23.3	-274.5	275.4	0.63	-0.32	
2,214.0	5.60	273.30	2,193.1	24.0	-284.8	285.8	1.37	-1.37	
2,309.0	5.10	272.60	2,287.7	24.5	-293.6	294.6	0.53	-0.53	
2,404.0	5.90	275.80	2,382.2	25.2	-302.7	303.7	0.90	0.84	
2,500.0	6.60	277.40	2,477.7	26.4	-313.1	314.2	0.75	0.73	
2,690.0	7.70	275.20	2,666.2	28.9	-336.6	337.8	0.60	0.58	
2,785.0	8.00	273.20	2,760.3	29.9	-349.5	350.8	0.43	0.32	
2,880.0	7.50	273.50	2,854.4	30.6	-362.3	363.6	0.53	-0.53	
2,975.0	6.40	271.60	2,948.7	31.1	-373.8	375.1	1.18	-1.16	
3,084.0	5.30	274.10	3,057.2	31.7	-384.9	386.2	1.04	-1.01	
3,176.0	6.70	270.60	3,148.7	32.0	-394.5	395.8	1.57	1.52	
3,267.0	7.80	279.60	3,238.9	33.1	-405.9	407.2	1.73	1.21	
3,359.0	9.80	277.60	3,329.9	35.2	-419.8	421.3	2.20	2.17	
3,451.0	10.10	280.80	3,420.5	37.7	-435.5	437.1	0.68	0.33	
3,542.0	9.80	279.00	3,510.1	40.4	-451.0	452.8	0.47	-0.33	
3,634.0	10.50	276.20	3,600.7	42.6	-467.0	469.0	0.93	0.76	
3,726.0	9.30	274.60	3,691.3	44.1	-482.8	484.8	1.34	-1.30	
3,817.0	9.80	274.00	3,781.0	45.2	-497.8	499.9	0.56	0.55	
3,909.0	10.10	275.40	3,871.6	46.5	-513.7	515.8	0.42	0.33	
4,001.0	8.60	272.60	3,962.4	47.6	-528.6	530.7	1.70	-1.63	
4,092.0	9.30	275.00	4,052.3	48.5	-542.7	544.9	0.87	0.77	
4,184.0	9.90	276.90	4,143.0	50.1	-558.0	560.2	0.74	0.65	
4,276.0	9.60	278.50	4,233.7	52.2	-573.4	575.8	0.44	-0.33	
4,367.0	10.10	274.90	4,323.4	54.0	-588.9	591.3	0.87	0.55	
4,459.0	9.50	272.00	4,414.0	55.0	-604.5	607.0	0.84	-0.65	
4,551.0	9.10	276.00	4,504.8	56.0	-619.3	621.8	0.83	-0.43	
4,642.0	8.90	281.60	4,594.7	58.2	-633.4	636.0	0.99	-0.22	
4,734.0	10.40	277.70	4,685.4	60.7	-648.6	651.4	1.78	1.63	
4,826.0	10.20	275.50	4,775.9	62.6	-664.9	667.8	0.48	-0.22	
4,918.0	9.60	275.10	4,866.5	64.1	-680.7	683.7	0.66	-0.65	
5,009.0	9.20	274.80	4,956.3	65.4	-695.5	698.5	0.44	-0.44	
5,101.0	9.00	273.40	5,047.1	66.4	-710.0	713.1	0.32	-0.22	
5,193.0	8.30	271.40	5,138.1	67.0	-723.8	726.9	0.83	-0.76	
5,284.0	9.70	275.70	5,228.0	67.9	-738.0	741.1	1.71	1.54	
5,376.0	9.60	275.60	5,318.7	69.4	-753.3	756.5	0.11	-0.11	
5,468.0	8.70	271.70	5,409.5	70.4	-767.9	771.1	1.19	-0.98	
5,559.0	9.60	275.60	5,499.3	71.3	-782.4	785.6	1.20	0.99	
5,651.0	9.10	277.50	5,590.1	73.0	-797.2	800.5	0.64	-0.54	
5,743.0	8.40	277.10	5,681.1	74.8	-811.1	814.5	0.76	-0.76	
5,835.0	7.90	277.00	5,772.1	76.4	-824.0	827.6	0.54	-0.54	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8505C-25 F25 496
Project:	Story Gulch	TVD Reference:	KBE @ 8320.0ft (Patterson 306)
Site:	F25 496	MD Reference:	KBE @ 8320.0ft (Patterson 306)
Well:	8505C-25 F25 496	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	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
5,926.0	7.10	275.30	5,862.3	77.7	-835.8	839.4	0.91	-0.88	
6,018.0	8.90	273.40	5,953.4	78.6	-848.6	852.2	1.98	1.96	
6,110.0	8.20	274.40	6,044.4	79.6	-862.3	865.9	0.78	-0.76	
6,201.0	7.60	276.10	6,134.6	80.7	-874.7	878.4	0.71	-0.66	
6,293.0	8.70	273.40	6,225.6	81.8	-887.7	891.5	1.27	1.20	
6,385.0	9.20	275.40	6,316.5	82.9	-902.0	905.8	0.64	0.54	
6,476.0	8.40	271.70	6,406.4	83.7	-915.9	919.7	1.08	-0.88	
6,568.0	9.70	273.70	6,497.3	84.4	-930.3	934.1	1.45	1.41	
6,660.0	8.80	267.80	6,588.1	84.7	-945.1	948.9	1.42	-0.98	
6,751.0	9.20	271.00	6,678.0	84.5	-959.3	963.0	0.70	0.44	
6,843.0	9.10	274.40	6,768.8	85.2	-973.9	977.6	0.60	-0.11	
6,935.0	9.70	277.70	6,859.6	86.8	-988.8	992.6	0.88	0.65	
7,027.0	9.40	277.90	6,950.3	88.9	-1,004.0	1,007.9	0.33	-0.33	
7,118.0	8.80	275.60	7,040.2	90.6	-1,018.3	1,022.3	0.77	-0.66	
7,210.0	9.20	282.00	7,131.0	92.8	-1,032.5	1,036.6	1.17	0.43	
7,302.0	9.00	282.10	7,221.9	95.8	-1,046.7	1,051.1	0.22	-0.22	
7,394.0	8.80	282.10	7,312.8	98.8	-1,060.6	1,065.2	0.22	-0.22	
7,485.0	8.40	280.60	7,402.7	101.5	-1,073.9	1,078.7	0.50	-0.44	
7,577.0	8.40	281.70	7,493.7	104.1	-1,087.1	1,092.1	0.17	0.00	
7,669.0	7.60	277.80	7,584.8	106.3	-1,099.7	1,104.8	1.05	-0.87	
7,761.0	7.30	278.00	7,676.1	107.9	-1,111.6	1,116.8	0.33	-0.33	
7,852.0	7.30	279.20	7,766.3	109.7	-1,123.0	1,128.3	0.17	0.00	
7,944.0	7.20	280.60	7,857.6	111.7	-1,134.4	1,139.9	0.22	-0.11	
8,036.0	4.80	279.00	7,949.1	113.3	-1,143.9	1,149.4	2.61	-2.61	
8,127.0	2.30	260.20	8,039.9	113.6	-1,149.5	1,155.0	2.99	-2.75	
8,219.0	2.50	258.20	8,131.8	112.9	-1,153.2	1,158.7	0.24	0.22	
8,311.0	1.30	293.70	8,223.8	112.9	-1,156.2	1,161.6	1.77	-1.30	
8,403.0	1.20	332.20	8,315.8	114.2	-1,157.6	1,163.1	0.90	-0.11	
8,494.0	1.10	320.80	8,406.7	115.7	-1,158.6	1,164.3	0.27	-0.11	
8,586.0	1.20	307.30	8,498.7	116.9	-1,159.9	1,165.7	0.31	0.11	
8,678.0	1.10	283.20	8,590.7	117.7	-1,161.5	1,167.4	0.53	-0.11	
8,770.0	1.10	278.60	8,682.7	118.1	-1,163.2	1,169.1	0.10	0.00	
8,861.0	1.20	257.80	8,773.7	118.0	-1,165.0	1,170.9	0.47	0.11	
8,953.0	1.20	248.20	8,865.7	117.4	-1,166.9	1,172.7	0.22	0.00	
9,045.0	1.00	49.90	8,957.6	117.6	-1,167.2	1,173.0	2.36	-0.22	
9,137.0	0.40	151.30	9,049.6	117.8	-1,166.4	1,172.3	1.25	-0.65	
9,229.0	1.70	169.30	9,141.6	116.2	-1,166.0	1,171.7	1.44	1.41	
9,320.0	0.90	36.50	9,232.6	115.5	-1,165.3	1,171.0	2.64	-0.88	
9,412.0	0.10	84.50	9,324.6	116.0	-1,164.8	1,170.5	0.91	-0.87	
9,504.0	0.50	162.30	9,416.6	115.7	-1,164.6	1,170.3	0.53	0.43	
9,596.0	0.50	47.10	9,508.6	115.6	-1,164.2	1,169.8	0.92	0.00	
9,687.0	1.00	81.40	9,599.6	115.9	-1,163.1	1,168.8	0.72	0.55	
9,779.0	0.80	76.40	9,691.6	116.2	-1,161.7	1,167.4	0.23	-0.22	
9,870.0	0.20	176.60	9,783.6	116.2	-1,160.4	1,166.1	0.46	-0.32	
10,151.0	1.20	336.70	10,063.6	117.6	-1,161.1	1,167.0	0.76	0.54	
10,243.0	1.10	324.30	10,155.5	119.3	-1,162.0	1,168.0	0.29	-0.11	
10,334.0	0.80	280.60	10,246.5	120.1	-1,163.2	1,169.2	0.84	-0.33	
10,426.0	0.60	257.30	10,338.5	120.1	-1,164.3	1,170.3	0.37	-0.22	
10,518.0	0.60	262.80	10,430.5	119.9	-1,165.2	1,171.3	0.06	0.00	
10,609.0	0.60	264.50	10,521.5	119.8	-1,166.2	1,172.2	0.02	0.00	
10,701.0	0.70	251.00	10,613.5	119.6	-1,167.2	1,173.2	0.20	0.11	
10,793.0	0.70	244.40	10,705.5	119.2	-1,168.2	1,174.2	0.09	0.00	
10,885.0	0.90	214.10	10,797.5	118.3	-1,169.1	1,175.0	0.50	0.22	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8505C-25 F25 496
Project:	Story Gulch	TVD Reference:	KBE @ 8320.0ft (Patterson 306)
Site:	F25 496	MD Reference:	KBE @ 8320.0ft (Patterson 306)
Well:	8505C-25 F25 496	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	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
10,976.0	1.10	206.90	10,888.5	117.0	-1,169.9	1,175.7	0.26	0.22	
11,068.0	0.40	224.80	10,980.5	115.9	-1,170.5	1,176.2	0.79	-0.76	
11,160.0	1.10	237.60	11,072.5	115.2	-1,171.5	1,177.1	0.78	0.76	
11,251.0	0.00	226.50	11,163.5	114.8	-1,172.2	1,177.8	1.21	-1.21	
11,342.0	0.60	234.30	11,254.5	114.5	-1,172.6	1,178.2	0.66	0.66	
11,433.0	1.10	224.90	11,345.4	113.6	-1,173.6	1,179.1	0.57	0.55	
11,524.0	0.20	161.60	11,436.4	112.8	-1,174.2	1,179.6	1.13	-0.99	
11,615.0	0.10	225.60	11,527.4	112.6	-1,174.2	1,179.6	0.20	-0.11	
11,706.0	0.00	192.30	11,618.4	112.6	-1,174.3	1,179.6	0.11	-0.11	
11,798.0	0.50	212.40	11,710.4	112.2	-1,174.5	1,179.8	0.54	0.54	
11,890.0	0.50	226.60	11,802.4	111.6	-1,175.0	1,180.3	0.13	0.00	
11,982.0	0.40	211.00	11,894.4	111.1	-1,175.4	1,180.7	0.17	-0.11	
12,073.0	0.60	191.20	11,985.4	110.3	-1,175.7	1,180.9	0.29	0.22	
12,165.0	1.20	206.20	12,077.4	109.0	-1,176.2	1,181.3	0.70	0.65	
12,215.0	1.20	216.90	12,127.4	108.1	-1,176.8	1,181.7	0.45	0.00	Last Cathedral svy @ 12215'
12,265.0	1.20	216.90	12,177.4	107.3	-1,177.4	1,182.3	0.00	0.00	Projection to TD @ 12265' MD

Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- Shape									
8505C-25 F25 496 TGT	0.00	0.00	8,410.0	106.0	-1,174.0	1,681,230.90	2,261,462.12	39° 40' 28.15 N	108° 7' 26.77 W
- survey misses target center by 18.2ft at 8497.3ft MD (8410.1 TVD, 115.7 N, -1158.6 E)									
- Point									
8505C-25 F25 496 BHL	0.00	0.00	12,070.0	106.0	-1,174.0	1,681,230.90	2,261,462.12	39° 40' 28.15 N	108° 7' 26.77 W
- survey misses target center by 3.8ft at 12157.6ft MD (12070.0 TVD, 109.1 N, -1176.2 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
12,215.0	12,127.4	108.1	-1,176.8	Last Cathedral svy @ 12215'
12,265.0	12,177.4	107.3	-1,177.4	Projection to TD @ 12265' MD

Checked By: _____ Approved By: _____ Date: _____