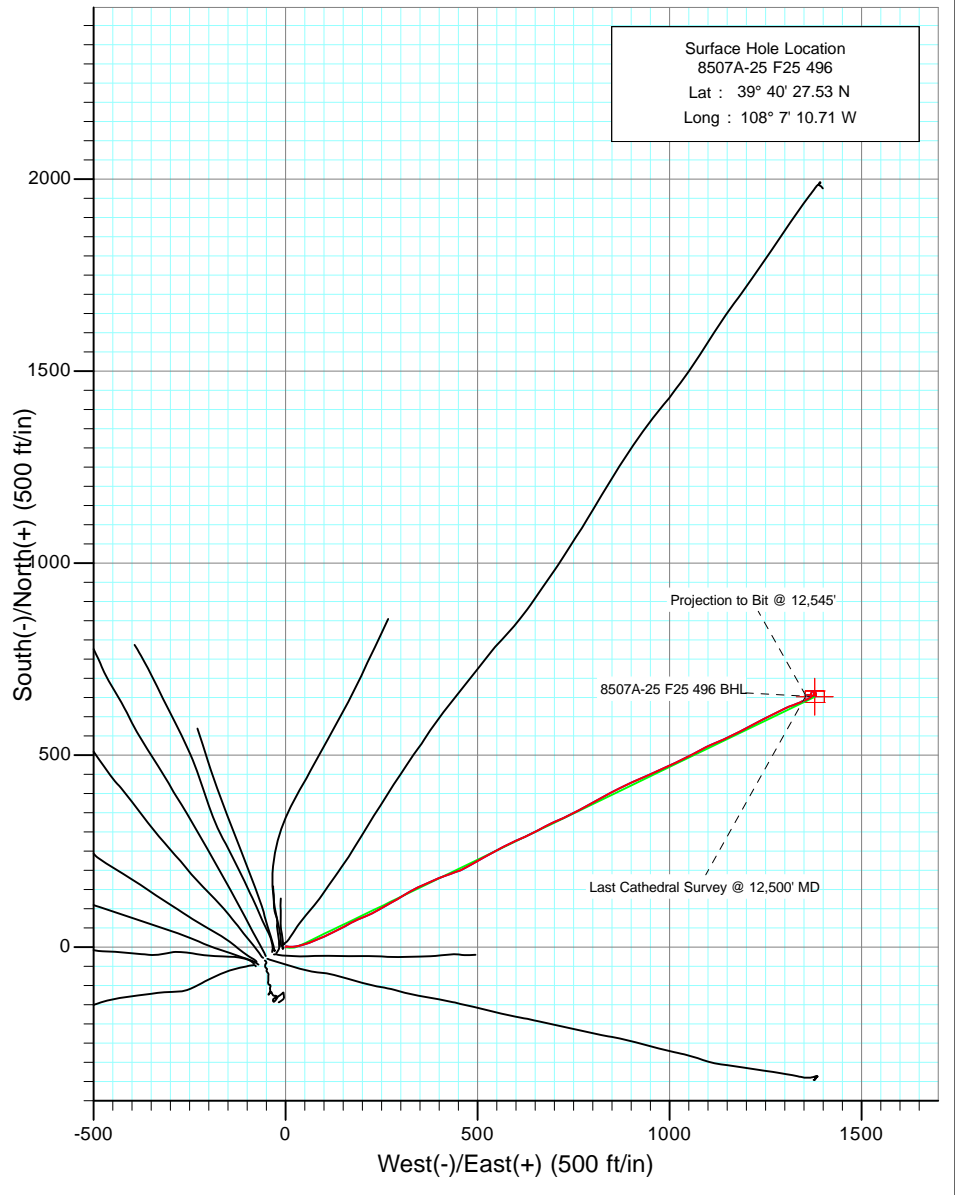
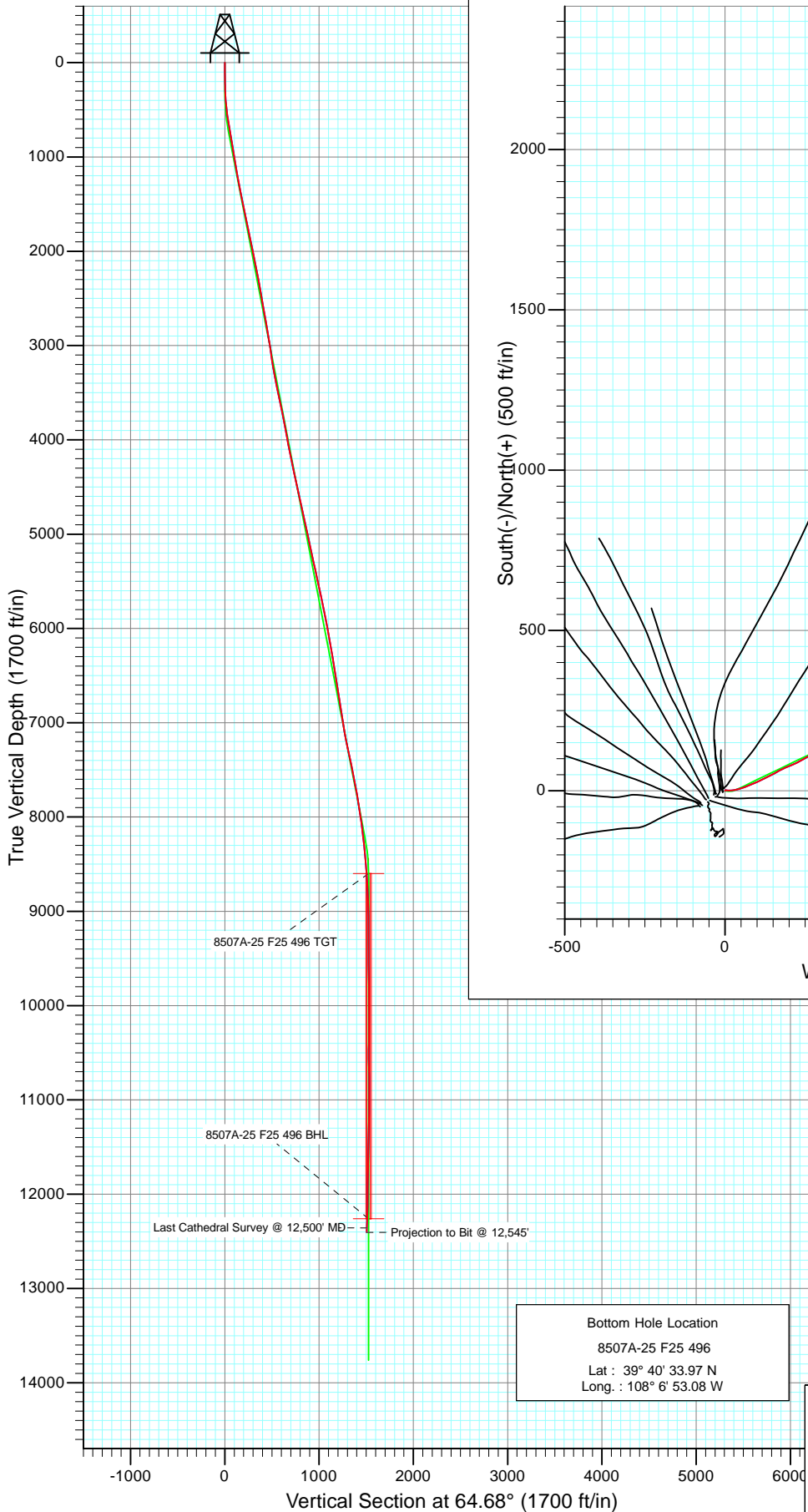
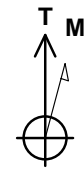




Project: Story Gulch
 Site: F25 496
 Well: 8507A-25 F25 496
 Wellbore: DD
 Design: FINAL



Bottom Hole Location
 8507A-25 F25 496
 Lat : 39° 40' 33.97 N
 Long : 108° 6' 53.08 W



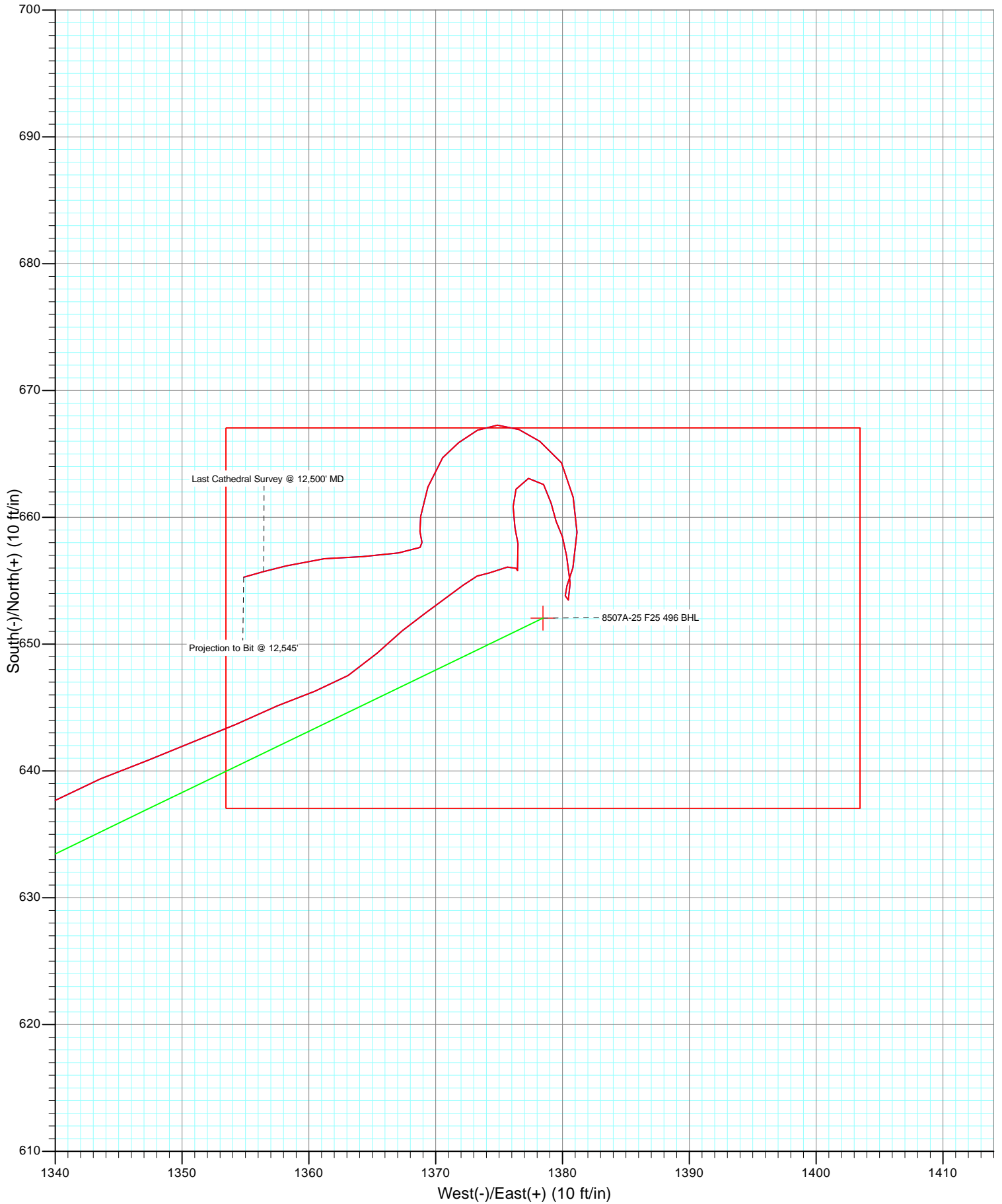
Azimuths to True North
 Magnetic North: 10.55°
 Magnetic Field
 Strength: 52451.9snT
 Dip Angle: 65.90°
 Date: 5/12/2010
 Model: IGRF200510

DESIGN DETAILS: DD
 Job #105211(SH), 105360 (MH): KR
 KBE @ 8320.0ft (Patterson 306)

Target	Azimuth	Origin	N/S	E/W	From TVD
8507A-25 F25 496 BHL	64.68	Slot	0.0	0.0	0.0



Project: Story Gulch
Site: F25 496
Well: 8507A-25 F25 496
Wellbore: DD
Design: FINAL



Cathedral Energy

Survey Report

Company: EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference: Well 8507A-25 F25 496
Project: Story Gulch	TVD Reference: KBE @ 8320.0ft (Patterson 306)
Site: F25 496	MD Reference: KBE @ 8320.0ft (Patterson 306)
Well: 8507A-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 8507A-25 F25 496					
Well Position	+N/-S	0.0 ft	Northing:	1,681,131.57 ft	Latitude: 39° 40' 27.53 N
	+E/-W	0.0 ft	Easting:	2,262,715.51 ft	Longitude: 108° 7' 10.71 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	5/12/2010	10.55	65.90	52,452

Design DD					
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:		Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
		0.0	0.0	0.0	64.68

Survey Program		Date 9/30/2010
From (ft)	To (ft)	Survey (Wellbore)
183.0	12,545.0	Survey #1 (DD)
		Tool Name
		MWD
		Description
		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	
183.0	1.20	39.60	183.0	1.5	1.2	1.7	0.66	0.66	
214.0	1.20	50.00	214.0	1.9	1.7	2.3	0.70	0.00	
245.0	1.10	89.10	245.0	2.1	2.2	2.9	2.50	-0.32	
305.0	2.20	106.00	304.9	1.8	3.9	4.3	1.99	1.83	
397.0	4.80	95.80	396.8	1.0	9.4	8.9	2.89	2.83	
488.0	6.90	86.60	487.3	0.9	18.7	17.3	2.52	2.31	
580.0	9.00	80.70	578.4	2.4	31.3	29.3	2.45	2.28	
671.0	9.80	69.10	668.2	6.3	45.6	43.9	2.26	0.88	
764.0	9.40	72.40	759.9	11.4	60.2	59.3	0.73	-0.43	
795.0	9.60	73.20	790.5	12.9	65.1	64.4	0.77	0.65	
892.0	9.80	68.10	886.1	18.4	80.5	80.6	0.91	0.21	
987.0	9.50	63.60	979.7	24.9	95.0	96.5	0.85	-0.32	

Cathedral Energy

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8507A-25 F25 496
Project:	Story Gulch	TVD Reference:	KBE @ 8320.0ft (Patterson 306)
Site:	F25 496	MVD Reference:	KBE @ 8320.0ft (Patterson 306)
Well:	8507A-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
1,082.0	9.30	65.10	1,073.5	31.6	109.0	112.0	0.33	-0.21	
1,177.0	9.60	64.10	1,167.2	38.3	123.1	127.6	0.36	0.32	
1,273.0	10.90	63.20	1,261.6	45.9	138.4	144.7	1.36	1.35	
1,368.0	11.50	61.40	1,354.8	54.4	154.7	163.1	0.73	0.63	
1,464.0	10.70	61.00	1,449.0	63.3	170.9	181.6	0.84	-0.83	
1,559.0	12.20	66.50	1,542.1	71.6	187.8	200.4	1.95	1.58	
1,654.0	12.20	68.00	1,635.0	79.4	206.3	220.5	0.33	0.00	
1,749.0	12.40	63.00	1,727.8	87.8	224.7	240.7	1.14	0.21	
1,844.0	11.70	60.90	1,820.7	97.1	242.2	260.5	0.87	-0.74	
1,939.0	11.10	59.80	1,913.8	106.4	258.6	279.2	0.67	-0.63	
2,034.0	12.00	60.90	2,006.9	115.8	275.1	298.2	0.98	0.95	
2,129.0	11.40	59.70	2,100.0	125.3	291.8	317.4	0.68	-0.63	
2,224.0	10.40	57.70	2,193.2	134.6	307.2	335.3	1.13	-1.05	
2,319.0	10.30	60.30	2,286.7	143.4	321.8	352.2	0.50	-0.11	
2,413.0	11.10	63.00	2,379.1	151.7	337.2	369.7	1.00	0.85	
2,509.0	10.10	66.70	2,473.4	159.2	353.1	387.3	1.26	-1.04	
2,604.0	10.00	66.40	2,567.0	165.8	368.4	403.9	0.12	-0.11	
2,699.0	10.10	65.10	2,660.5	172.6	383.5	420.5	0.26	0.11	
2,794.0	9.50	68.10	2,754.1	179.1	398.3	436.6	0.83	-0.63	
2,889.0	9.50	70.10	2,847.8	184.7	412.9	452.2	0.35	0.00	
2,985.0	9.90	70.10	2,942.4	190.2	428.2	468.3	0.42	0.42	
2,990.0	9.80	69.20	2,947.4	190.5	429.0	469.2	3.67	-2.00	
3,091.0	8.20	71.80	3,047.1	195.8	443.8	484.9	1.63	-1.58	
3,182.0	8.30	67.60	3,137.2	200.3	456.1	497.9	0.67	0.11	
3,274.0	9.60	61.10	3,228.1	206.5	468.9	512.2	1.79	1.41	
3,366.0	10.90	60.60	3,318.6	214.5	483.2	528.5	1.42	1.41	
3,458.0	11.30	61.90	3,408.9	223.0	498.7	546.2	0.51	0.43	
3,549.0	11.70	58.30	3,498.0	232.1	514.5	564.3	0.90	0.44	
3,641.0	12.60	61.20	3,588.0	241.8	531.2	583.6	1.18	0.98	
3,733.0	10.90	60.70	3,678.1	250.9	547.6	602.3	1.85	-1.85	
3,825.0	10.90	61.20	3,768.4	259.3	562.8	619.6	0.10	0.00	
3,917.0	11.20	67.60	3,858.7	266.9	578.7	637.2	1.37	0.33	
4,008.0	10.60	65.20	3,948.0	273.8	594.4	654.4	0.83	-0.66	
4,100.0	9.50	65.60	4,038.6	280.5	609.0	670.5	1.20	-1.20	
4,192.0	11.60	64.40	4,129.1	287.6	624.3	687.3	2.29	2.28	
4,283.0	12.10	63.50	4,218.1	295.8	641.1	706.0	0.59	0.55	
4,375.0	12.70	61.90	4,308.0	304.9	658.6	725.8	0.75	0.65	
4,467.0	12.50	63.20	4,397.8	314.2	676.4	745.8	0.38	-0.22	
4,559.0	12.20	63.40	4,487.6	323.0	694.0	765.5	0.33	-0.33	
4,650.0	13.10	66.30	4,576.4	331.5	712.1	785.4	1.21	0.99	
4,742.0	11.30	67.00	4,666.4	339.2	729.9	804.8	1.96	-1.96	
4,834.0	11.80	60.50	4,756.5	347.3	746.4	823.2	1.51	0.54	
4,926.0	12.30	62.60	4,846.5	355.5	763.3	842.4	0.72	0.54	
5,017.0	12.40	61.50	4,935.4	365.6	780.5	861.8	0.28	0.11	
5,109.0	13.10	61.80	5,025.1	375.2	798.3	882.1	0.76	0.76	
5,201.0	11.70	61.50	5,114.9	384.6	815.7	901.8	1.52	-1.52	
5,293.0	12.40	60.10	5,204.9	394.0	832.5	921.0	0.82	0.76	
5,384.0	12.10	62.50	5,293.8	403.3	849.4	940.3	0.65	-0.33	
5,476.0	12.60	64.10	5,383.7	412.1	867.0	959.9	0.66	0.54	
5,568.0	12.50	63.80	5,473.5	420.9	885.0	979.9	0.13	-0.11	
5,659.0	12.00	66.10	5,562.4	429.1	902.4	999.2	0.77	-0.55	
5,751.0	12.50	65.70	5,652.4	437.0	920.3	1,018.8	0.55	0.54	
5,843.0	11.60	66.30	5,742.3	444.8	937.8	1,038.0	0.99	-0.98	

Cathedral Energy

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8507A-25 F25 496
Project:	Story Gulch	TVD Reference:	KBE @ 8320.0ft (Patterson 306)
Site:	F25 496	MVD Reference:	KBE @ 8320.0ft (Patterson 306)
Well:	8507A-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
5,935.0	10.60	65.90	5,832.6	452.0	954.0	1,055.7	1.09	-1.09	
6,026.0	10.90	65.80	5,922.0	459.0	969.5	1,072.6	0.33	0.33	
6,118.0	10.30	67.00	6,012.4	465.7	985.0	1,089.5	0.69	-0.65	
6,210.0	10.00	66.00	6,103.0	472.2	999.9	1,105.8	0.38	-0.33	
6,301.0	10.30	63.70	6,192.6	479.0	1,014.4	1,121.8	0.55	0.33	
6,393.0	10.90	61.60	6,283.0	486.8	1,029.4	1,138.7	0.78	0.65	
6,485.0	10.30	64.00	6,373.4	494.5	1,044.4	1,155.6	0.81	-0.65	
6,577.0	8.40	64.30	6,464.2	501.1	1,057.9	1,170.5	2.07	-2.07	
6,669.0	9.20	62.30	6,555.1	507.4	1,070.5	1,184.6	0.93	0.87	
6,761.0	8.60	61.00	6,646.0	514.2	1,083.0	1,198.8	0.69	-0.65	
6,853.0	8.50	63.50	6,737.0	520.5	1,095.1	1,212.5	0.42	-0.11	
6,945.0	7.80	66.30	6,828.1	526.1	1,106.9	1,225.5	0.87	-0.76	
7,036.0	8.90	65.20	6,918.1	531.5	1,118.9	1,238.7	1.22	1.21	
7,128.0	10.20	66.00	7,008.8	537.8	1,132.8	1,254.0	1.42	1.41	
7,220.0	10.50	67.30	7,099.3	544.3	1,148.0	1,270.5	0.41	0.33	
7,312.0	10.90	64.10	7,189.7	551.4	1,163.6	1,287.6	0.78	0.43	
7,403.0	11.30	62.60	7,279.0	559.2	1,179.2	1,305.1	0.54	0.44	
7,495.0	12.90	62.10	7,369.0	568.2	1,196.3	1,324.4	1.74	1.74	
7,587.0	11.70	62.30	7,458.9	577.3	1,213.6	1,344.0	1.31	-1.30	
7,678.0	10.90	62.30	7,548.1	585.6	1,229.4	1,361.8	0.88	-0.88	
7,770.0	11.20	63.40	7,638.4	593.7	1,245.1	1,379.4	0.40	0.33	
7,862.0	10.50	63.40	7,728.7	601.4	1,260.6	1,396.7	0.76	-0.76	
7,954.0	9.40	63.50	7,819.4	608.5	1,274.8	1,412.6	1.20	-1.20	
8,045.0	8.90	63.20	7,909.2	615.0	1,287.7	1,427.1	0.55	-0.55	
8,137.0	8.20	64.40	8,000.2	621.1	1,300.0	1,440.7	0.79	-0.76	
8,229.0	7.40	67.40	8,091.3	626.2	1,311.4	1,453.2	0.98	-0.87	
8,320.0	6.80	69.10	8,181.6	630.3	1,321.8	1,464.4	0.70	-0.66	
8,412.0	5.70	69.90	8,273.1	633.9	1,331.2	1,474.4	1.20	-1.20	
8,504.0	5.70	63.10	8,364.6	637.5	1,339.6	1,483.5	0.73	0.00	
8,596.0	4.80	70.80	8,456.2	640.8	1,347.3	1,491.9	1.24	-0.98	
8,687.0	4.70	64.70	8,546.9	643.7	1,354.3	1,499.5	0.57	-0.11	
8,779.0	3.70	70.40	8,638.7	646.3	1,360.5	1,506.2	1.18	-1.09	
8,871.0	3.60	46.50	8,730.5	649.3	1,365.4	1,511.9	1.65	-0.11	
8,962.0	2.70	55.30	8,821.4	652.5	1,369.2	1,516.7	1.12	-0.99	
9,054.0	1.90	51.10	8,913.3	654.6	1,372.2	1,520.3	0.89	-0.87	
9,146.0	1.10	89.30	9,005.3	655.6	1,374.2	1,522.6	1.35	-0.87	
9,237.0	0.90	51.40	9,096.2	656.1	1,375.7	1,524.1	0.74	-0.22	
9,328.0	0.70	165.80	9,187.2	656.0	1,376.4	1,524.7	1.48	-0.22	
9,420.0	1.10	357.80	9,279.2	656.3	1,376.5	1,524.9	1.95	0.43	
9,512.0	0.90	5.00	9,371.2	657.9	1,376.5	1,525.6	0.26	-0.22	
9,603.0	0.30	227.60	9,462.2	658.5	1,376.4	1,525.8	1.25	-0.66	
9,695.0	1.10	3.30	9,554.2	659.2	1,376.3	1,526.0	1.45	0.87	
9,787.0	1.00	345.80	9,646.2	660.8	1,376.1	1,526.5	0.36	-0.11	
9,879.0	0.90	35.70	9,738.2	662.2	1,376.3	1,527.3	0.88	-0.11	
9,970.0	0.80	64.90	9,829.2	663.1	1,377.3	1,528.6	0.48	-0.11	
10,062.0	1.20	141.10	9,921.2	662.6	1,378.5	1,529.5	1.38	0.43	
10,154.0	0.90	181.20	10,013.1	661.1	1,379.1	1,529.4	0.84	-0.33	
10,246.0	1.00	150.00	10,105.1	659.7	1,379.5	1,529.1	0.57	0.11	
10,337.0	0.70	168.70	10,196.1	658.5	1,380.0	1,529.0	0.44	-0.33	
10,429.0	1.20	166.70	10,288.1	657.0	1,380.3	1,528.7	0.54	0.54	
10,521.0	1.50	177.40	10,380.1	654.8	1,380.6	1,528.0	0.42	0.33	
10,614.0	0.30	234.20	10,473.1	653.5	1,380.5	1,527.3	1.46	-1.29	
10,705.0	0.60	354.50	10,564.1	653.8	1,380.2	1,527.2	0.87	0.33	

Cathedral Energy

Survey Report

Company: EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference: Well 8507A-25 F25 496
Project: Story Gulch	TVD Reference: KBE @ 8320.0ft (Patterson 306)
Site: F25 496	MD Reference: KBE @ 8320.0ft (Patterson 306)
Well: 8507A-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
10,797.0	2.30	20.60	10,656.0	656.0	1,380.8	1,528.7	1.94	1.85	
10,889.0	1.40	342.80	10,748.0	658.8	1,381.1	1,530.2	1.60	-0.98	
10,981.0	2.10	1.30	10,840.0	661.6	1,380.8	1,531.1	0.97	0.76	
11,072.0	1.80	317.70	10,930.9	664.3	1,379.9	1,531.5	1.62	-0.33	
11,164.0	1.20	310.10	11,022.9	666.0	1,378.2	1,530.6	0.69	-0.65	
11,256.0	1.20	289.10	11,114.9	666.9	1,376.6	1,529.6	0.48	0.00	
11,347.0	1.00	271.60	11,205.8	667.3	1,374.9	1,528.2	0.43	-0.22	
11,439.0	1.10	241.40	11,297.8	666.9	1,373.3	1,526.6	0.60	0.11	
11,531.0	1.10	231.80	11,389.8	665.9	1,371.8	1,524.8	0.20	0.00	
11,622.0	1.10	222.30	11,480.8	664.7	1,370.6	1,523.2	0.20	0.00	
11,714.0	2.20	199.10	11,572.8	662.4	1,369.4	1,521.1	1.38	1.20	
11,806.0	0.80	178.10	11,664.7	660.1	1,368.8	1,519.6	1.61	-1.52	
11,897.0	0.70	188.00	11,755.7	658.9	1,368.8	1,519.1	0.18	-0.11	
11,989.0	0.50	143.50	11,847.7	658.0	1,368.9	1,518.8	0.53	-0.22	
12,081.0	0.50	260.40	11,939.7	657.6	1,368.8	1,518.5	0.93	0.00	
12,172.0	1.70	254.50	12,030.7	657.2	1,367.1	1,516.8	1.32	1.32	
12,264.0	1.90	272.80	12,122.6	656.9	1,364.2	1,514.1	0.66	0.22	
12,356.0	1.90	260.80	12,214.6	656.7	1,361.2	1,511.3	0.43	0.00	
12,447.0	1.90	258.00	12,305.5	656.2	1,358.2	1,508.4	0.10	0.00	
12,500.0	2.10	254.00	12,358.5	655.7	1,356.5	1,506.6	0.46	0.38	Last Cathedral Survey @ 12,500' MD
12,545.0	2.10	254.00	12,403.5	655.3	1,354.9	1,505.0	0.00	0.00	Projection to Bit @ 12,545'

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
8507A-25 F25 496 BHL - hit/miss target - Shape	0.00	0.00	12,260.0	652.1	1,378.5	1,681,743.61	2,264,112.20	39° 40' 33.97 N	108° 6' 53.08 W
- survey misses target center by 19.2ft at 12400.9ft MD (12259.4 TVD, 656.5 N, 1359.7 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									
8507A-25 F25 496 TGT - survey misses target center by 21.5ft at 8741.8ft MD (8601.6 TVD, 645.4 N, 1358.1 E)	0.00	0.00	8,600.0	652.1	1,378.5	1,681,743.61	2,264,112.20	39° 40' 33.97 N	108° 6' 53.08 W
- Point									

Survey Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
12,500.0	12,358.5	655.7	1,356.5	Last Cathedral Survey @ 12,500' MD
12,545.0	12,403.5	655.3	1,354.9	Projection to Bit @ 12,545'

Checked By: _____ Approved By: _____ Date: _____