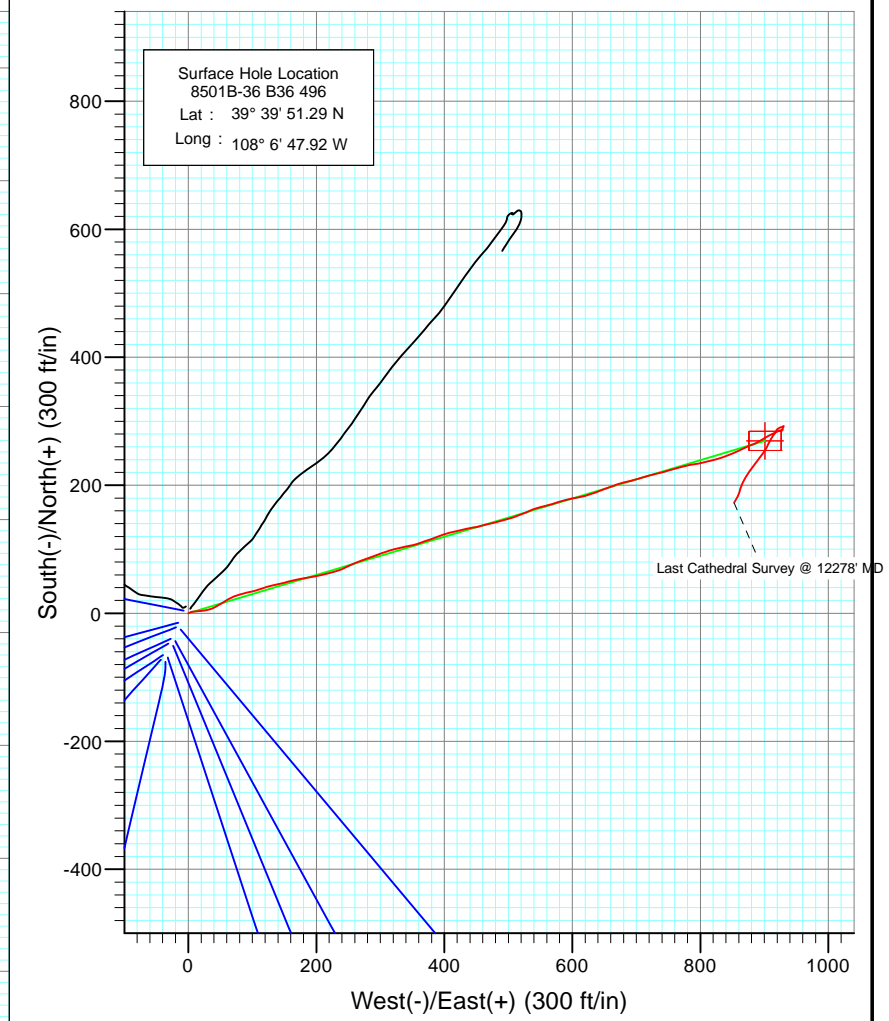
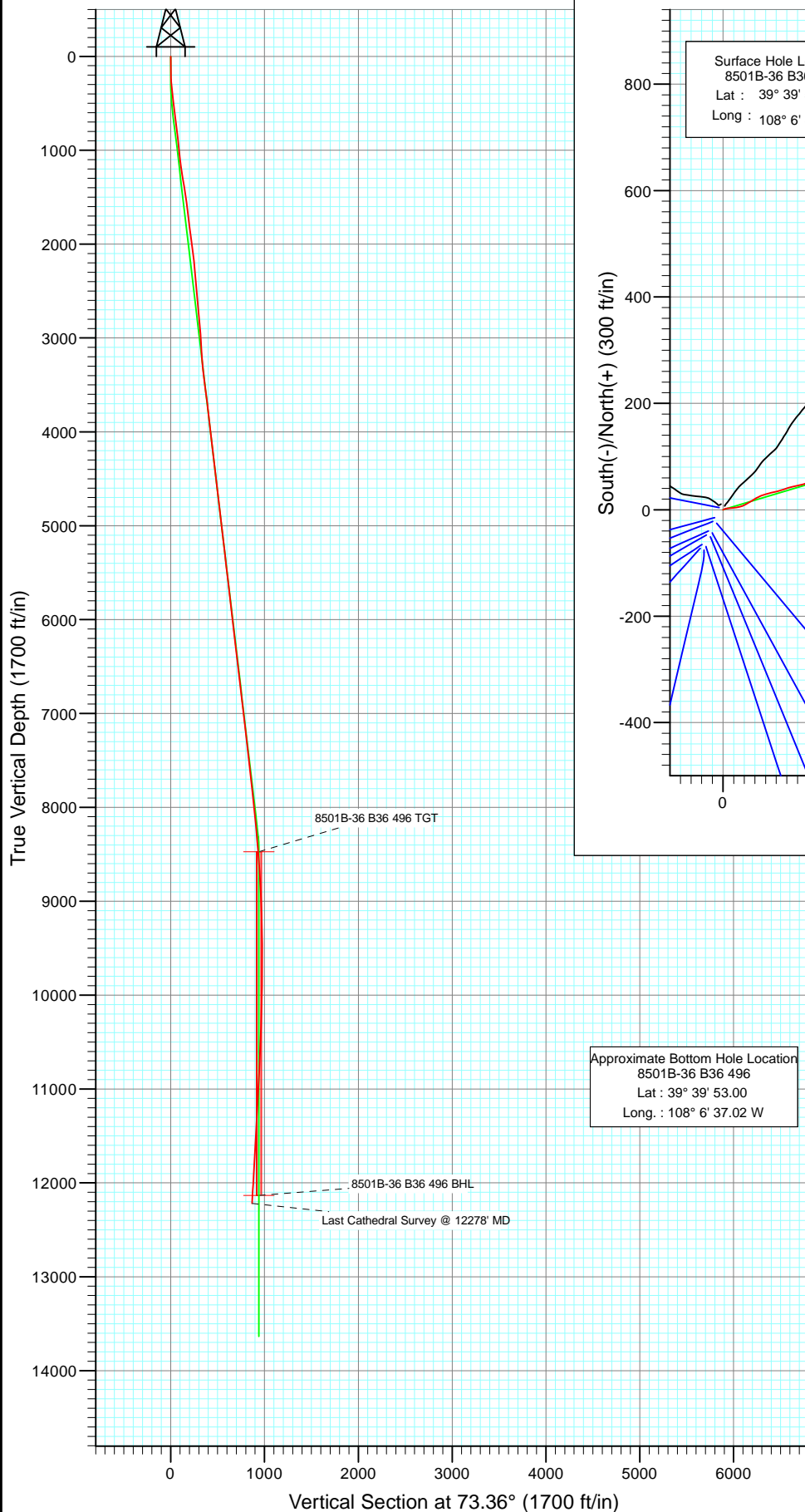
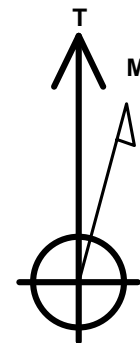




Project: Story Gulch
 Site: S36-T4S-R96W (B36 496)
 Well: 8501B-36 B36 496
 Wellbore: Final
 Design: DD



Approximate Bottom Hole Location
 8501B-36 B36 496
 Lat : 39° 39' 53.00
 Long : 108° 6' 37.02 W



Azimuths to True North
 Magnetic North: 10.57°

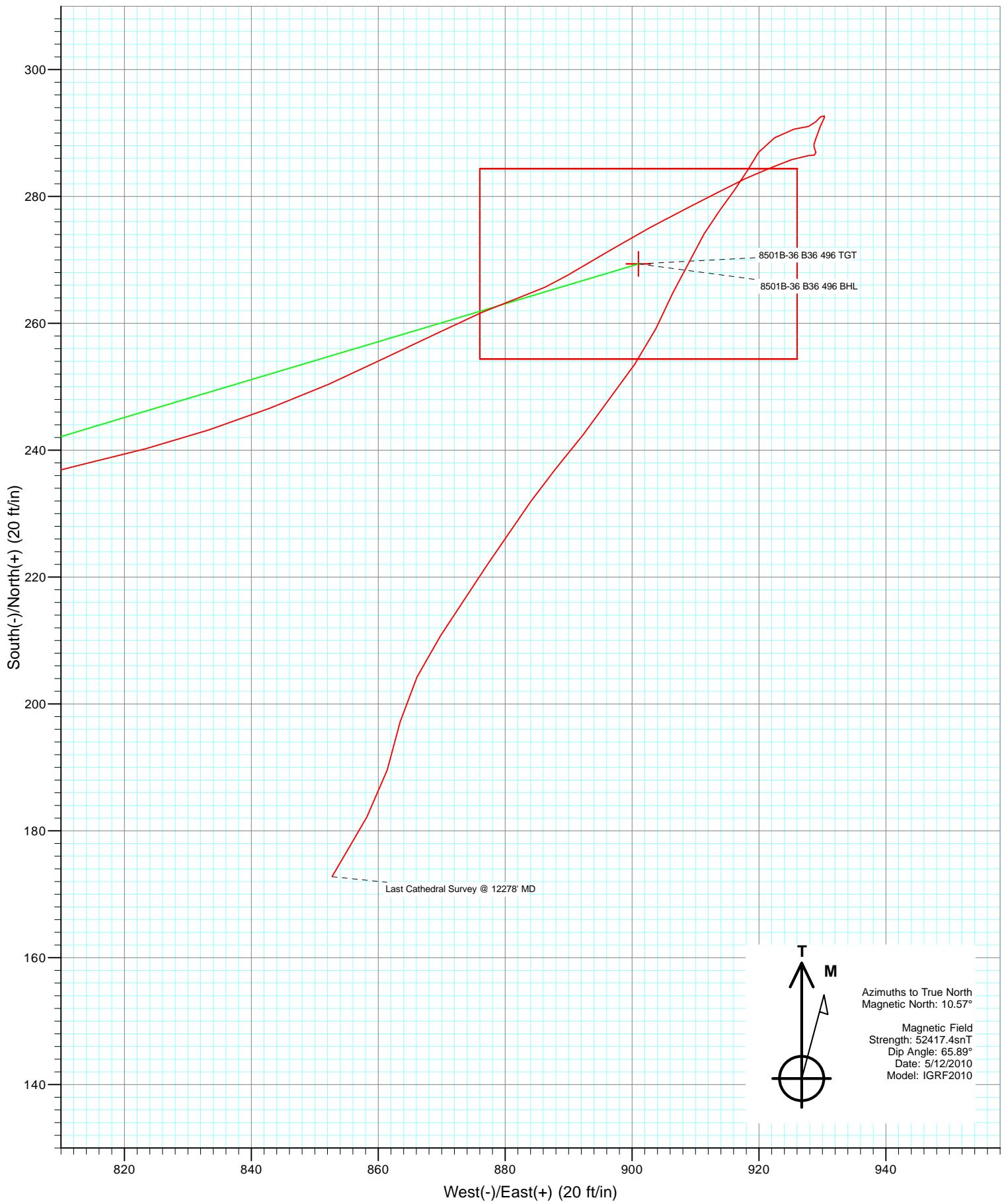
Magnetic Field
 Strength: 52417.4snT
 Dip Angle: 65.89°
 Date: 5/12/2010
 Model: IGRF2010

DESIGN DETAILS: DD
 105091, 105139; BH
 KBE @ 8374.0ft (Patterson 308)

Target	Azimuth	Origin	N/S	E/W	From TVD
8501B-36 B36 496 BHL	73.36	Slot	0.0	0.0	0.0



Project: Story Gulch
Site: S36-T4S-R96W (B36 496)
Well: 8501B-36 B36 496
Design: DD



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8501B-36 B36 496
Project:	Story Gulch	TVD Reference:	KBE @ 8374.0ft (Patterson 308)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KBE @ 8374.0ft (Patterson 308)
Well:	8501B-36 B36 496	North Reference:	True
Wellbore:	Final	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		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	8501B-36 B36 496					
Well Position	+N/-S	0.0 ft	Northing:	1,677,415.08 ft	Latitude:	39° 39' 51.29 N
	+E/-W	0.0 ft	Easting:	2,264,391.15 ft	Longitude:	108° 6' 47.92 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,352.0 ft

Wellbore	Final				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/12/2010	10.57	65.89	52,417

Design	DD				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	73.36	

Survey Program	Date	10/20/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
234.0	3,025.0	Survey #1 (Final)	MWD	Geolink MWD	
3,177.0	12,278.0	Survey #2 (Final)	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	
234.0	1.90	65.40	234.0	1.6	3.5	3.8	0.81	0.81	
265.0	3.10	81.30	264.9	2.0	4.8	5.2	4.44	3.87	
296.0	4.30	76.20	295.9	2.4	6.8	7.2	4.01	3.87	
327.0	5.50	83.90	326.7	2.8	9.4	9.8	4.41	3.87	
419.0	7.40	86.50	418.2	3.6	19.7	19.9	2.09	2.07	
512.0	7.60	74.60	510.4	5.6	31.6	31.9	1.68	0.22	
604.0	6.90	60.70	601.6	9.9	42.3	43.4	2.05	-0.76	
696.0	7.40	59.20	692.9	15.7	52.2	54.5	0.58	0.54	
791.0	6.80	58.90	787.2	21.7	62.3	65.9	0.63	-0.63	
886.0	5.70	69.30	881.6	26.3	71.5	76.0	1.66	-1.16	
982.0	5.80	73.90	977.2	29.3	80.6	85.6	0.49	0.10	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8501B-36 B36 496
Project:	Story Gulch	TVD Reference:	KBE @ 8374.0ft (Patterson 308)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KBE @ 8374.0ft (Patterson 308)
Well:	8501B-36 B36 496	North Reference:	True
Wellbore:	Final	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
1,077.0	6.90	76.40	1,071.6	32.0	90.8	96.1	1.19	1.16	
1,172.0	7.60	75.90	1,165.8	34.9	102.4	108.1	0.74	0.74	
1,267.0	8.60	70.50	1,259.9	38.8	115.2	121.5	1.32	1.05	
1,362.0	10.00	76.40	1,353.6	43.1	129.9	136.8	1.78	1.47	
1,457.0	9.60	77.20	1,447.2	46.8	145.6	152.9	0.44	-0.42	
1,552.0	6.90	74.10	1,541.2	50.1	158.9	166.6	2.88	-2.84	
1,647.0	6.90	78.60	1,635.5	52.8	169.9	177.9	0.57	0.00	
1,742.0	7.60	80.10	1,729.8	55.0	181.7	189.9	0.76	0.74	
1,837.0	7.30	80.40	1,824.0	57.1	193.9	202.1	0.32	-0.32	
1,932.0	7.70	77.20	1,918.2	59.5	206.0	214.4	0.61	0.42	
2,027.0	7.60	75.50	2,012.3	62.5	218.3	227.1	0.26	-0.11	
2,123.0	6.60	75.01	2,107.6	65.5	229.8	238.9	1.04	-1.04	
2,218.0	5.70	66.80	2,202.0	68.8	239.4	249.1	1.32	-0.95	
2,313.0	5.40	63.30	2,296.6	72.6	247.7	258.2	0.48	-0.32	
2,408.0	5.20	66.10	2,391.2	76.4	255.7	266.8	0.34	-0.21	
2,503.0	5.10	68.20	2,485.8	79.7	263.5	275.3	0.22	-0.11	
2,599.0	4.90	68.90	2,581.4	82.8	271.3	283.6	0.22	-0.21	
2,694.0	5.10	71.00	2,676.1	85.6	279.1	291.9	0.29	0.21	
2,788.0	5.60	70.00	2,769.7	88.5	287.3	300.7	0.54	0.53	
2,883.0	5.00	69.70	2,864.3	91.5	295.6	309.4	0.63	-0.63	
2,978.0	4.20	72.40	2,959.0	94.0	302.8	317.0	0.87	-0.84	
3,025.0	4.00	72.10	3,005.8	95.1	306.0	320.4	0.43	-0.43	
3,177.0	3.20	71.50	3,157.5	98.0	315.0	329.9	0.53	-0.53	
3,269.0	4.60	76.20	3,249.3	99.7	321.1	336.2	1.56	1.52	
3,361.0	6.20	75.70	3,340.9	101.8	329.5	344.8	1.74	1.74	
3,453.0	7.60	76.60	3,432.2	104.5	340.2	355.9	1.53	1.52	
3,544.0	7.00	79.50	3,522.5	106.9	351.5	367.4	0.77	-0.66	
3,636.0	7.70	69.30	3,613.8	110.1	362.8	379.1	1.61	0.76	
3,728.0	6.10	70.40	3,705.1	113.9	373.2	390.1	1.74	-1.74	
3,819.0	7.20	71.10	3,795.5	117.4	383.1	400.7	1.21	1.21	
3,911.0	6.50	68.10	3,886.8	121.2	393.4	411.6	0.85	-0.76	
4,003.0	6.40	73.40	3,978.2	124.6	403.1	421.9	0.66	-0.11	
4,095.0	7.20	78.90	4,069.6	127.2	413.7	432.8	1.12	0.87	
4,186.0	7.10	77.00	4,159.9	129.5	424.8	444.1	0.28	-0.11	
4,278.0	6.60	75.60	4,251.2	132.1	435.4	455.0	0.57	-0.54	
4,370.0	6.00	83.80	4,342.7	133.9	445.3	465.1	1.17	-0.65	
4,461.0	7.50	74.10	4,433.0	136.1	455.8	475.7	2.06	1.65	
4,553.0	6.50	76.60	4,524.3	138.9	466.6	486.9	1.14	-1.09	
4,645.0	6.20	76.20	4,615.8	141.3	476.5	497.0	0.33	-0.33	
4,736.0	6.90	74.90	4,706.2	143.9	486.6	507.4	0.79	0.77	
4,828.0	6.30	75.30	4,797.6	146.7	496.8	518.0	0.65	-0.65	
4,920.0	7.40	72.00	4,888.9	149.8	507.3	528.9	1.27	1.20	
5,012.0	6.90	67.50	4,980.2	153.7	518.0	540.4	0.82	-0.54	
5,103.0	6.60	66.90	5,070.6	157.9	527.9	551.0	0.34	-0.33	
5,195.0	6.30	67.80	5,162.0	161.8	537.4	561.3	0.34	-0.33	
5,287.0	7.10	75.90	5,253.4	165.1	547.6	572.0	1.34	0.87	
5,378.0	6.90	75.90	5,343.7	167.8	558.4	583.1	0.22	-0.22	
5,470.0	6.10	72.40	5,435.1	170.7	568.4	593.5	0.97	-0.87	
5,562.0	7.20	72.60	5,526.5	173.9	578.6	604.1	1.20	1.20	
5,653.0	6.60	75.60	5,616.8	176.9	589.1	615.0	0.77	-0.66	
5,745.0	5.90	78.00	5,708.3	179.2	598.8	625.0	0.81	-0.76	
5,836.0	6.60	80.50	5,798.7	181.0	608.5	634.9	0.83	0.77	
5,928.0	6.90	75.20	5,890.1	183.3	619.1	645.7	0.75	0.33	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8501B-36 B36 496
Project:	Story Gulch	TVD Reference:	KBE @ 8374.0ft (Patterson 308)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KBE @ 8374.0ft (Patterson 308)
Well:	8501B-36 B36 496	North Reference:	True
Wellbore:	Final	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
6,020.0	7.00	72.00	5,981.4	186.4	629.8	656.8	0.43	0.11	
6,111.0	5.60	68.30	6,071.9	189.8	639.2	666.8	1.60	-1.54	
6,203.0	6.90	69.50	6,163.3	193.4	648.5	676.7	1.42	1.41	
6,295.0	8.10	68.80	6,254.5	197.7	659.7	688.7	1.31	1.30	
6,387.0	6.80	72.80	6,345.7	201.6	671.0	700.6	1.52	-1.41	
6,478.0	6.60	76.50	6,436.1	204.4	681.2	711.2	0.52	-0.22	
6,570.0	6.50	74.60	6,527.5	207.0	691.4	721.7	0.26	-0.11	
6,662.0	7.20	73.90	6,618.9	210.0	701.9	732.7	0.77	0.76	
6,754.0	6.10	73.20	6,710.3	213.0	712.2	743.3	1.20	-1.20	
6,846.0	6.30	75.80	6,801.7	215.7	721.7	753.3	0.37	0.22	
6,937.0	6.80	77.30	6,892.1	218.1	731.8	763.6	0.58	0.55	
7,029.0	6.80	73.90	6,983.5	220.8	742.4	774.5	0.44	0.00	
7,121.0	6.00	73.30	7,074.9	223.7	752.2	784.8	0.87	-0.87	
7,212.0	7.00	74.50	7,165.3	226.5	762.1	795.1	1.11	1.10	
7,304.0	6.60	76.50	7,256.7	229.3	772.7	806.0	0.51	-0.43	
7,396.0	6.40	78.70	7,348.1	231.5	782.8	816.3	0.35	-0.22	
7,487.0	5.90	81.90	7,438.5	233.2	792.4	826.0	0.67	-0.55	
7,579.0	6.90	77.00	7,530.0	235.1	802.5	836.2	1.24	1.09	
7,670.0	6.90	75.20	7,620.3	237.7	813.1	847.1	0.24	0.00	
7,762.0	6.30	77.30	7,711.7	240.2	823.4	857.7	0.70	-0.65	
7,853.0	6.70	69.50	7,802.1	243.2	833.2	868.0	1.06	0.44	
7,945.0	6.10	71.40	7,893.5	246.6	842.9	878.2	0.69	-0.65	
8,037.0	6.40	64.60	7,985.0	250.4	852.1	888.2	0.87	0.33	
8,128.0	5.80	65.40	8,075.5	254.5	860.9	897.7	0.67	-0.66	
8,220.0	5.30	63.80	8,167.1	258.3	868.9	906.5	0.57	-0.54	
8,312.0	4.70	66.10	8,258.7	261.7	876.2	914.4	0.69	-0.65	
8,403.0	4.40	71.00	8,349.4	264.3	882.9	921.6	0.54	-0.33	
8,495.0	5.10	59.80	8,441.1	267.5	889.8	929.1	1.26	0.76	
8,587.0	4.80	59.20	8,532.8	271.6	896.6	936.8	0.33	-0.33	
8,678.0	4.20	61.80	8,623.5	275.1	902.8	943.8	0.70	-0.66	
8,770.0	3.90	62.90	8,715.3	278.1	908.6	950.2	0.34	-0.33	
8,861.0	3.10	62.90	8,806.1	280.6	913.5	955.6	0.88	-0.88	
8,953.0	3.00	63.70	8,897.9	282.8	917.9	960.5	0.12	-0.11	
9,045.0	2.50	71.30	8,989.8	284.5	922.0	964.8	0.67	-0.54	
9,135.0	1.90	64.30	9,079.8	285.8	925.2	968.3	0.73	-0.67	
9,226.0	1.60	92.20	9,170.7	286.4	927.8	971.0	0.98	-0.33	
9,318.0	0.70	350.90	9,262.7	286.9	929.0	972.3	2.03	-0.98	
9,410.0	0.40	322.40	9,354.7	287.7	928.7	972.2	0.43	-0.33	
9,501.0	1.50	22.80	9,445.7	289.1	929.0	972.9	1.48	1.21	
9,593.0	1.10	16.00	9,537.7	291.0	929.7	974.1	0.47	-0.43	
9,685.0	0.70	39.70	9,629.7	292.3	930.3	975.0	0.59	-0.43	
9,777.0	0.40	256.20	9,721.7	292.7	930.3	975.2	1.14	-0.33	
9,868.0	0.40	259.30	9,812.7	292.5	929.7	974.6	0.02	0.00	
9,960.0	1.00	210.00	9,904.7	291.8	929.0	973.7	0.87	0.65	
10,051.0	1.00	264.90	9,995.6	291.0	927.8	972.3	1.01	0.00	
10,143.0	1.90	256.50	10,087.6	290.6	925.5	970.0	1.00	0.98	
10,233.0	2.40	237.60	10,177.6	289.3	922.5	966.7	0.96	0.56	
10,326.0	1.90	215.30	10,270.5	286.9	920.0	963.6	1.04	-0.54	
10,418.0	2.30	208.20	10,362.4	284.1	918.2	961.1	0.52	0.43	
10,510.0	2.40	219.10	10,454.4	281.0	916.1	958.2	0.50	0.11	
10,601.0	2.50	213.20	10,545.3	277.8	913.8	955.1	0.30	0.11	
10,692.0	3.10	213.50	10,636.2	274.1	911.4	951.7	0.66	0.66	
10,785.0	3.60	203.20	10,818.8	264.7	906.4	944.2	0.43	0.27	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8501B-36 B36 496
Project:	Story Gulch	TVD Reference:	KBE @ 8374.0ft (Patterson 308)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KBE @ 8374.0ft (Patterson 308)
Well:	8501B-36 B36 496	North Reference:	True
Wellbore:	Final	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
10,967.0	4.00	207.00	10,910.6	259.2	903.8	940.2	0.51	0.43	
11,058.0	4.30	214.40	11,001.4	253.5	900.4	935.3	0.67	0.33	
11,241.0	4.30	218.00	11,183.9	242.5	892.3	924.4	0.15	0.00	
11,333.0	4.30	219.60	11,275.6	237.1	888.0	918.7	0.13	0.00	
11,425.0	3.90	214.70	11,367.4	231.9	884.0	913.4	0.58	-0.43	
11,608.0	3.70	214.30	11,550.0	221.9	877.1	903.9	0.11	-0.11	
11,791.0	4.60	212.60	11,732.5	210.8	869.9	893.8	0.50	0.49	
11,883.0	4.80	206.90	11,824.2	204.3	866.1	888.4	0.55	0.22	
11,974.0	4.80	194.40	11,914.9	197.2	863.5	883.8	1.15	0.00	
12,066.0	5.00	195.70	12,006.6	189.6	861.4	879.6	0.25	0.22	
12,158.0	5.20	210.80	12,098.2	182.2	858.2	874.4	1.47	0.22	
12,278.0	5.20	209.60	12,217.7	172.8	852.7	866.5	0.09	0.00	

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
8501B-36 B36 496 TGT - actual wellpath misses target center by 8.7ft at 8528.7ft MD (8474.7 TVD, 269.0 N, 892.3 E) - Point	0.00	0.00	8,474.0	269.4	901.0	1,677,658.41	2,265,299.52	39° 39' 53.95 N	108° 6' 36.40 W
8501B-36 B36 496 BHL - actual wellpath misses target center by 103.5ft at 12158.0ft MD (12098.2 TVD, 182.2 N, 858.2 E) - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	12,134.0	269.4	901.0	1,677,658.41	2,265,299.52	39° 39' 53.95 N	108° 6' 36.40 W

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
12,278.0	12,217.7	172.8	852.7	Last Cathedral Survey @ 12278' MD

Checked By: _____ Approved By: _____ Date: _____