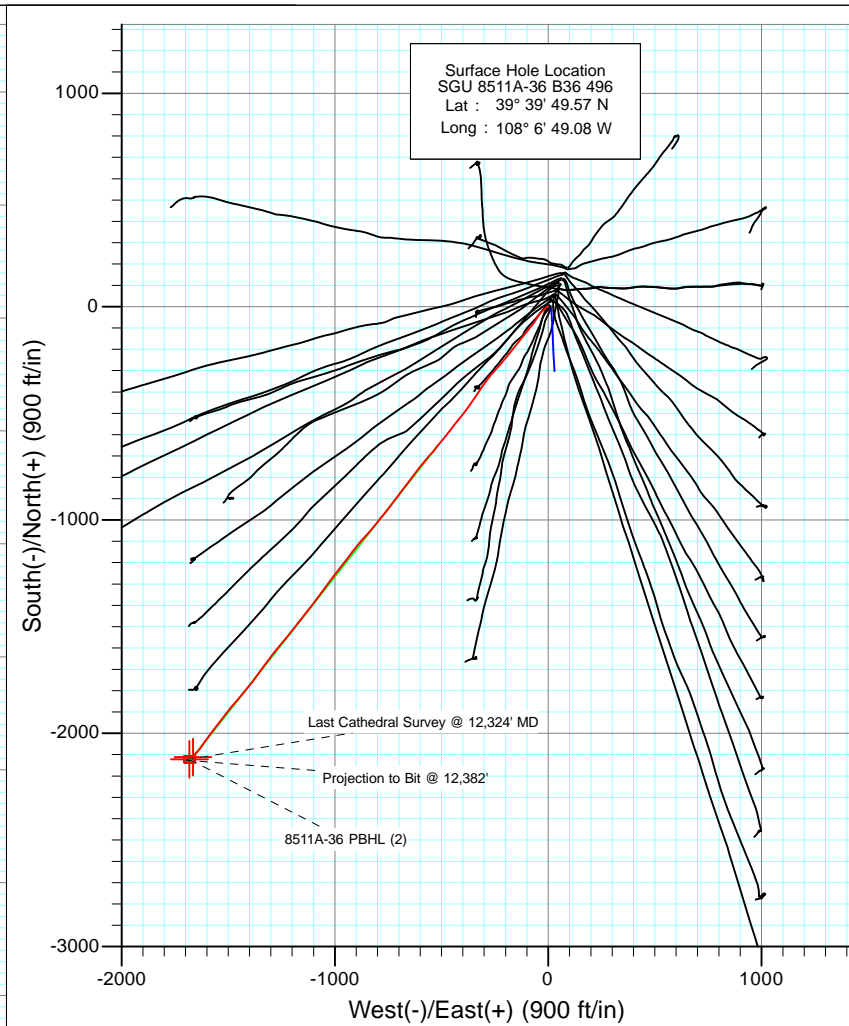
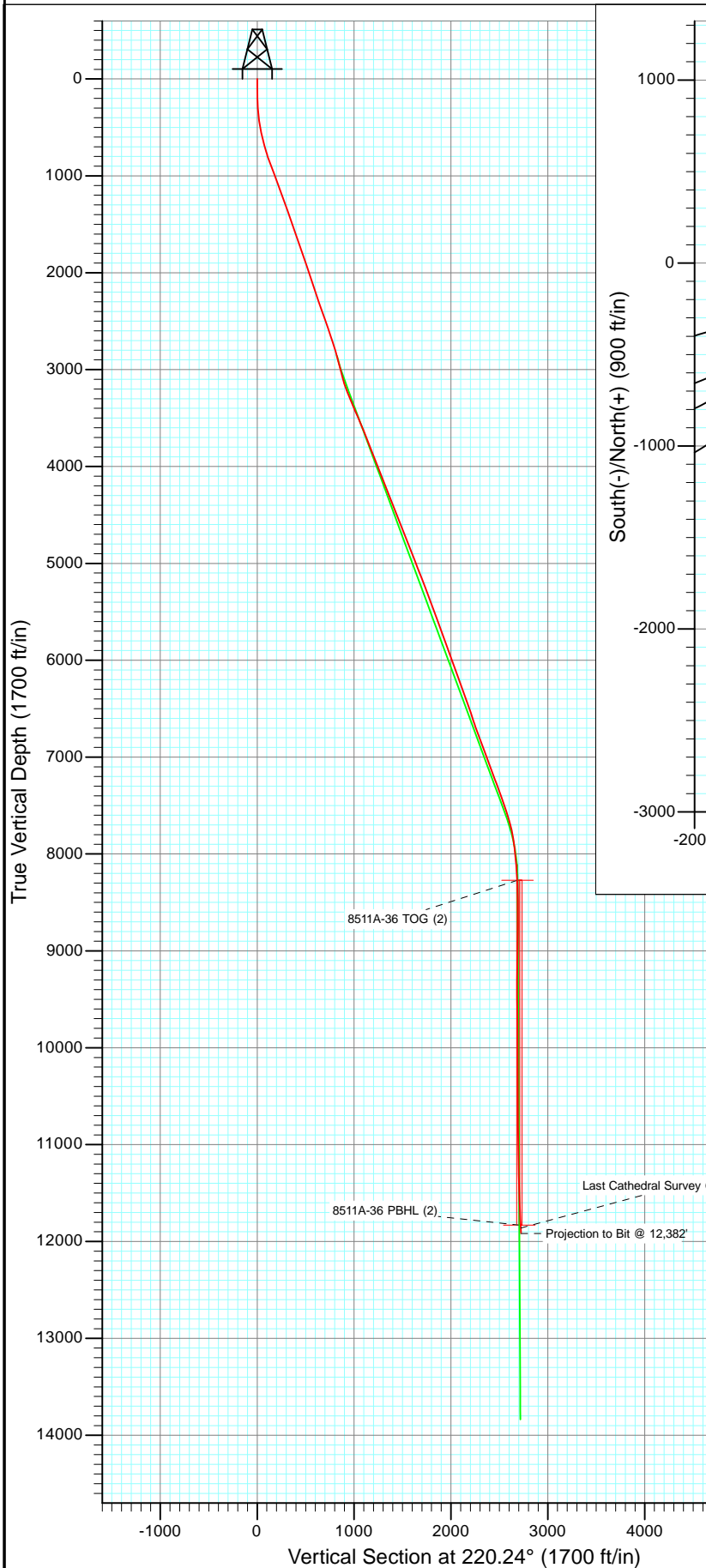




Project: Story Gulch
 Site: S36-T4S-R96W (B36 496)
 Well: SGU 8511A-36 B36 496
 Wellbore: DD
 Design: FINAL



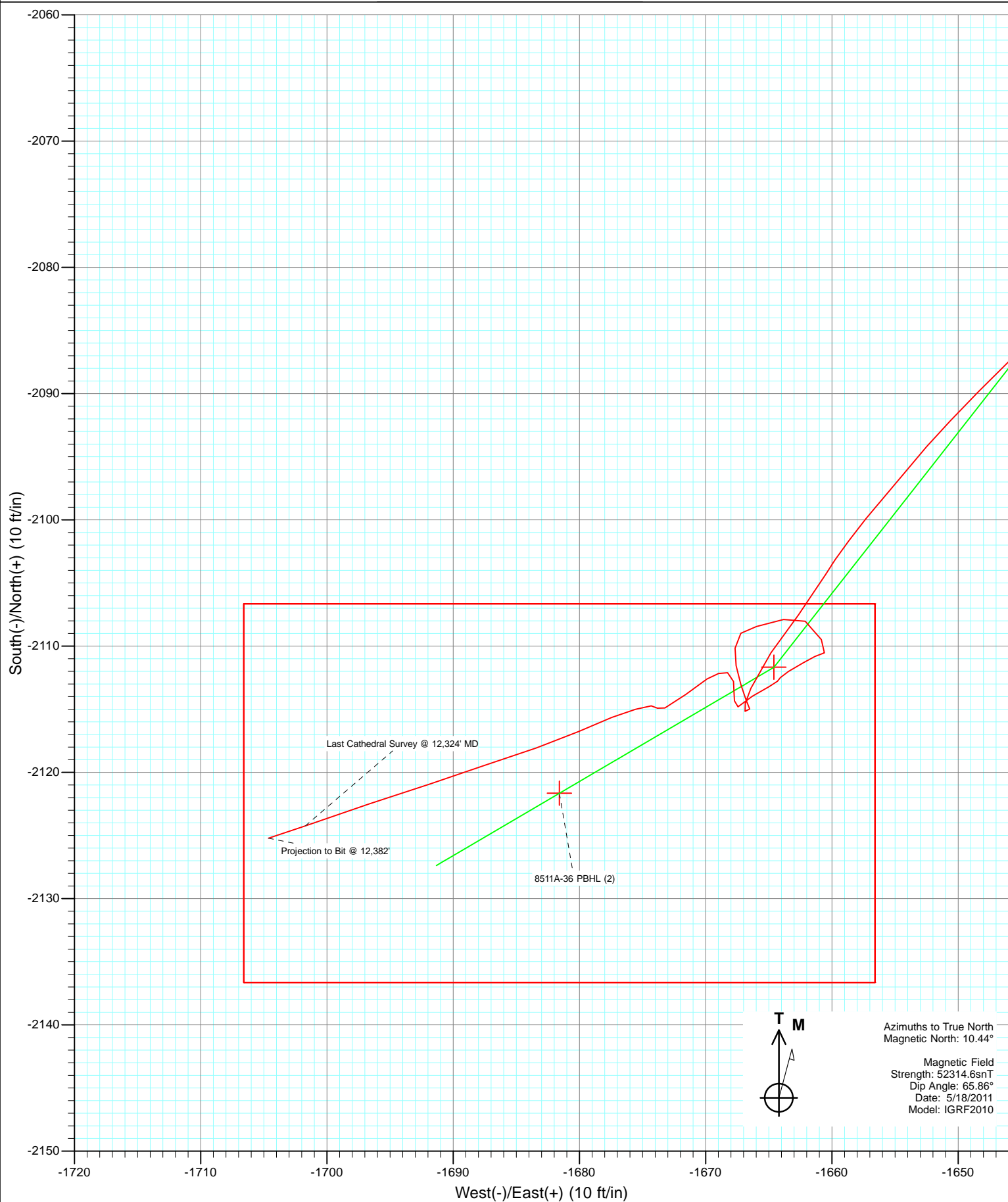
Azimuths to True North
 Magnetic North: 10.44°

Magnetic Field
 Strength: 52314.6nT
 Dip Angle: 65.86°
 Date: 5/18/2011
 Model: IGRF2010

DD SGU 8511A-36 B36 496 105550 (SH), 115206 (MH); LR						
KBE 2 @ 8373.0ft (Patterson 308) North American Datum 1983 Well SGU 8511A-36 B36 496, True North						
Type User	Target No Target (Freehand)	Azimuth 220.24	Origin Slot	Type	N/S 0.0	E/W 0.0
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	From TVD 0.0
8511A-36 TOG (2)	8999.0	-2111.7	-1664.6	39° 39' 28.70 N	108° 7' 10.36 W	
8511A-36 PBHL (2)	11832.0	-2121.6	-1681.6	39° 39' 28.60 N	108° 7' 10.58 W	



Project: Story Gulch
Site: S36-T4S-R96W (B36 496)
Well: SGU 8511A-36 B36 496
Wellbore: DD
Design: FINAL



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well SGU 8511A-36 B36 496
Project:	Story Gulch	TVD Reference:	KBE 2 @ 8373.0ft (Patterson 308)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KBE 2 @ 8373.0ft (Patterson 308)
Well:	SGU 8511A-36 B36 496	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	USA EDM 5000 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	SGU 8511A-36 B36 496					
Well Position	+N/-S	0.0 ft	Northing:	1,677,243.80 ft	Latitude:	39° 39' 49.57 N
	+E/-W	0.0 ft	Easting:	2,264,295.68 ft	Longitude:	108° 6' 49.08 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,351.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/18/2011	10.44	65.86	52,315

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	220.24	

Survey Program	Date	6/22/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
170.0	2,990.0	Survey #1 (DD)	MWD	Geolink MWD	
3,080.0	12,382.0	Survey #2 (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		
170.0	1.40	251.20	170.0	-0.7	-2.0	1.8	0.82	0.82		
200.0	2.10	251.90	200.0	-1.0	-2.8	2.6	2.33	2.33		
231.0	2.40	247.10	230.9	-1.4	-4.0	3.6	1.14	0.97		
262.0	2.70	235.80	261.9	-2.1	-5.2	4.9	1.88	0.97		
293.0	3.40	234.70	292.9	-3.0	-6.5	6.5	2.27	2.26		
322.0	4.50	240.80	321.8	-4.0	-8.2	8.4	4.06	3.79		
353.0	5.10	233.80	352.7	-5.5	-10.4	10.9	2.70	1.94		
384.0	6.40	227.80	383.5	-7.4	-12.8	13.9	4.61	4.19		
414.0	7.50	233.60	413.3	-9.7	-15.6	17.5	4.34	3.67		
445.0	8.40	227.80	444.0	-12.4	-18.9	21.7	3.89	2.90		
476.0	9.70	224.90	474.6	-15.8	-22.4	26.6	4.44	4.19		

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well SGU 8511A-36 B36 496
Project:	Story Gulch	TVD Reference:	KBE 2 @ 8373.0ft (Patterson 308)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KBE 2 @ 8373.0ft (Patterson 308)
Well:	SGU 8511A-36 B36 496	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	USA EDM 5000 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
506.0	10.50	224.80	504.2	-19.5	-26.1	31.8	2.67	2.67	
538.0	11.60	224.00	535.6	-23.9	-30.4	37.9	3.47	3.44	
570.0	12.20	220.40	566.9	-28.8	-34.9	44.5	2.98	1.87	
602.0	13.10	216.70	598.1	-34.3	-39.2	51.5	3.78	2.81	
633.0	14.10	217.20	628.2	-40.1	-43.6	58.8	3.25	3.23	
665.0	15.00	211.80	659.2	-46.7	-48.1	66.8	5.08	2.81	
697.0	15.50	210.80	690.1	-53.9	-52.5	75.1	1.77	1.56	
728.0	16.30	212.70	719.9	-61.1	-57.0	83.5	3.08	2.58	
760.0	16.70	215.50	750.6	-68.7	-62.1	92.5	2.78	1.25	
792.0	17.40	216.20	781.2	-76.3	-67.6	101.9	2.28	2.19	
823.0	18.40	217.20	810.7	-83.9	-73.3	111.4	3.37	3.23	
855.0	19.40	218.40	841.0	-92.1	-79.6	121.7	3.35	3.12	
918.0	20.60	217.80	900.2	-109.1	-92.9	143.3	1.93	1.90	
982.0	21.10	220.30	960.0	-126.7	-107.3	166.0	1.59	0.78	
1,077.0	21.60	219.80	1,048.4	-153.2	-129.5	200.6	0.56	0.53	
1,172.0	19.40	219.00	1,137.4	-178.9	-150.6	233.9	2.33	-2.32	
1,267.0	19.80	217.40	1,226.9	-204.0	-170.3	265.7	0.70	0.42	
1,362.0	20.30	217.90	1,316.2	-229.7	-190.2	298.3	0.56	0.53	
1,457.0	19.00	218.90	1,405.6	-254.8	-210.1	330.2	1.41	-1.37	
1,552.0	18.60	221.80	1,495.6	-278.1	-229.9	360.8	1.07	-0.42	
1,647.0	19.10	224.30	1,585.5	-300.5	-250.8	391.5	1.00	0.53	
1,742.0	19.60	218.40	1,675.1	-324.1	-271.6	422.9	2.12	0.53	
1,837.0	19.70	216.00	1,764.6	-349.6	-290.9	454.8	0.86	0.11	
1,932.0	18.90	214.70	1,854.2	-375.2	-309.1	486.1	0.96	-0.84	
2,027.0	18.30	213.40	1,944.3	-400.3	-326.0	516.2	0.77	-0.63	
2,122.0	18.50	215.10	2,034.4	-425.1	-342.9	546.0	0.60	0.21	
2,218.0	18.50	214.50	2,125.5	-450.1	-360.3	576.3	0.20	0.00	
2,313.0	18.40	214.60	2,215.6	-474.9	-377.4	606.2	0.11	-0.11	
2,408.0	19.70	219.10	2,305.4	-499.6	-396.0	637.2	2.06	1.37	
2,503.0	19.60	219.80	2,394.8	-524.3	-416.3	669.1	0.27	-0.11	
2,598.0	19.20	218.40	2,484.4	-548.8	-436.2	700.7	0.65	-0.42	
2,694.0	18.80	216.80	2,575.2	-573.5	-455.2	731.9	0.68	-0.42	
2,789.0	18.50	218.50	2,665.2	-597.6	-473.8	762.2	0.65	-0.32	
2,884.0	17.50	219.70	2,755.6	-620.4	-492.3	791.6	1.12	-1.05	
2,990.0	16.00	218.90	2,857.1	-644.0	-511.7	822.1	1.43	-1.42	Last Cathedral svy @ 2990' MD
3,080.0	13.90	216.50	2,944.0	-662.4	-525.9	845.3	2.43	-2.33	
3,172.0	14.40	219.80	3,033.2	-680.0	-539.8	867.8	1.03	0.54	
3,263.0	16.70	223.80	3,120.9	-698.2	-556.1	892.2	2.79	2.53	
3,355.0	20.40	220.40	3,208.1	-719.9	-575.6	921.4	4.19	4.02	
3,447.0	22.70	218.10	3,293.7	-746.1	-597.0	955.2	2.66	2.50	
3,538.0	22.70	216.00	3,377.6	-774.1	-618.1	990.2	0.89	0.00	
3,630.0	24.10	218.00	3,462.1	-803.3	-640.1	1,026.7	1.75	1.52	
3,722.0	22.70	218.80	3,546.5	-831.9	-662.8	1,063.2	1.56	-1.52	
3,813.0	23.00	216.60	3,630.4	-859.9	-684.4	1,098.5	0.99	0.33	
3,905.0	20.60	215.40	3,715.8	-887.5	-704.5	1,132.6	2.65	-2.61	
3,996.0	21.60	219.20	3,800.7	-913.5	-724.4	1,165.3	1.86	1.10	
4,088.0	21.40	217.00	3,886.3	-940.1	-745.2	1,199.0	0.90	-0.22	
4,179.0	20.80	217.80	3,971.2	-966.1	-765.1	1,231.7	0.73	-0.66	
4,271.0	22.20	218.50	4,056.8	-992.6	-785.9	1,265.4	1.55	1.52	
4,362.0	21.10	219.20	4,141.3	-1,018.8	-807.0	1,298.9	1.24	-1.21	
4,454.0	22.70	220.70	4,226.7	-1,045.0	-829.0	1,333.3	1.84	1.74	
4,546.0	21.90	222.00	4,311.8	-1,071.3	-852.1	1,368.2	1.02	-0.87	
4,637.0	21.10	222.50	4,396.5	-1,095.9	-874.5	1,401.5	0.90	-0.88	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well SGU 8511A-36 B36 496
Project:	Story Gulch	TVD Reference:	KBE 2 @ 8373.0ft (Patterson 308)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KBE 2 @ 8373.0ft (Patterson 308)
Well:	SGU 8511A-36 B36 496	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	USA EDM 5000 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
4,728.0	21.10	219.30	4,481.4	-1,120.7	-895.9	1,434.2	1.27	0.00	
4,820.0	22.40	217.00	4,566.8	-1,147.5	-917.0	1,468.3	1.69	1.41	
4,912.0	21.50	217.00	4,652.2	-1,175.0	-937.7	1,502.6	0.98	-0.98	
5,003.0	20.00	218.30	4,737.3	-1,200.5	-957.3	1,534.8	1.72	-1.65	
5,095.0	21.50	218.00	4,823.3	-1,226.1	-977.5	1,567.4	1.63	1.63	
5,186.0	22.50	217.10	4,907.7	-1,253.2	-998.2	1,601.5	1.16	1.10	
5,278.0	20.70	216.90	4,993.2	-1,280.2	-1,018.6	1,635.3	1.96	-1.96	
5,370.0	22.00	215.50	5,078.9	-1,307.3	-1,038.4	1,668.7	1.52	1.41	
5,462.0	20.70	217.60	5,164.6	-1,334.2	-1,058.3	1,702.1	1.64	-1.41	
5,553.0	21.60	216.60	5,249.4	-1,360.4	-1,078.1	1,734.9	1.07	0.99	
5,645.0	20.50	216.30	5,335.3	-1,386.9	-1,097.8	1,767.8	1.20	-1.20	
5,737.0	19.60	218.10	5,421.7	-1,412.1	-1,116.8	1,799.3	1.19	-0.98	
5,829.0	21.00	217.70	5,508.0	-1,437.2	-1,136.4	1,831.2	1.53	1.52	
5,921.0	20.20	217.70	5,594.1	-1,462.9	-1,156.2	1,863.6	0.87	-0.87	
6,012.0	19.20	219.20	5,679.8	-1,486.9	-1,175.3	1,894.2	1.23	-1.10	
6,104.0	19.30	219.30	5,766.7	-1,510.4	-1,194.5	1,924.6	0.11	0.11	
6,196.0	20.80	218.30	5,853.1	-1,535.0	-1,214.2	1,956.1	1.67	1.63	
6,287.0	19.70	219.30	5,938.5	-1,559.5	-1,234.0	1,987.6	1.27	-1.21	
6,379.0	20.30	219.90	6,024.9	-1,583.8	-1,254.0	2,019.0	0.69	0.65	
6,471.0	19.20	218.80	6,111.5	-1,607.8	-1,273.7	2,050.1	1.26	-1.20	
6,562.0	20.40	218.50	6,197.1	-1,631.9	-1,293.0	2,080.9	1.32	1.32	
6,654.0	19.80	216.30	6,283.5	-1,657.0	-1,312.2	2,112.5	1.05	-0.65	
6,746.0	19.80	216.00	6,370.1	-1,682.1	-1,330.6	2,143.6	0.11	0.00	
6,837.0	20.50	216.80	6,455.5	-1,707.4	-1,349.2	2,174.9	0.83	0.77	
6,929.0	17.80	216.00	6,542.4	-1,731.6	-1,367.1	2,205.0	2.95	-2.93	
7,020.0	17.80	217.40	6,629.0	-1,753.9	-1,383.7	2,232.7	0.47	0.00	
7,112.0	19.80	218.40	6,716.1	-1,777.3	-1,401.9	2,262.4	2.20	2.17	
7,203.0	21.20	219.00	6,801.4	-1,802.2	-1,421.9	2,294.2	1.56	1.54	
7,294.0	20.70	221.20	6,886.4	-1,827.1	-1,442.8	2,326.7	1.02	-0.55	
7,386.0	19.60	221.80	6,972.7	-1,850.8	-1,463.8	2,358.4	1.22	-1.20	
7,478.0	20.50	218.50	7,059.1	-1,874.9	-1,484.1	2,390.0	1.57	0.98	
7,569.0	19.80	217.80	7,144.6	-1,899.6	-1,503.5	2,421.3	0.81	-0.77	
7,661.0	21.30	218.60	7,230.7	-1,925.0	-1,523.5	2,453.6	1.66	1.63	
7,752.0	20.00	217.60	7,315.9	-1,950.2	-1,543.3	2,485.6	1.48	-1.43	
7,844.0	19.80	217.00	7,402.4	-1,975.1	-1,562.3	2,516.9	0.31	-0.22	
7,935.0	18.80	217.20	7,488.3	-1,999.1	-1,580.4	2,546.9	1.10	-1.10	
8,027.0	18.70	215.00	7,575.4	-2,023.0	-1,597.8	2,576.4	0.78	-0.11	
8,119.0	15.40	216.60	7,663.3	-2,044.9	-1,613.6	2,603.3	3.62	-3.59	
8,210.0	12.40	214.90	7,751.7	-2,062.6	-1,626.4	2,625.1	3.33	-3.30	
8,302.0	9.80	217.50	7,841.9	-2,076.9	-1,636.8	2,642.7	2.88	-2.83	
8,394.0	7.40	225.70	7,932.9	-2,087.3	-1,645.8	2,656.5	2.92	-2.61	
8,485.0	4.80	221.50	8,023.4	-2,094.2	-1,652.5	2,666.1	2.90	-2.86	
8,576.0	4.60	218.60	8,114.1	-2,099.9	-1,657.3	2,673.6	0.34	-0.22	
8,667.0	2.30	210.30	8,204.9	-2,104.3	-1,660.5	2,679.0	2.58	-2.53	
8,759.0	2.50	217.20	8,296.8	-2,107.5	-1,662.7	2,682.8	0.38	0.22	
8,851.0	2.10	214.60	8,388.7	-2,110.5	-1,664.8	2,686.5	0.45	-0.43	
8,942.0	2.00	204.10	8,479.7	-2,113.3	-1,666.4	2,689.7	0.43	-0.11	
9,034.0	0.50	149.70	8,571.7	-2,115.2	-1,666.9	2,691.4	1.91	-1.63	
9,125.0	0.70	17.80	8,662.7	-2,115.0	-1,666.5	2,691.0	1.21	0.22	
9,217.0	0.70	298.30	8,754.6	-2,114.2	-1,666.8	2,690.6	0.97	0.00	
9,309.0	1.10	7.50	8,846.6	-2,113.0	-1,667.2	2,690.0	1.17	0.43	
9,400.0	1.00	321.20	8,937.6	-2,111.5	-1,667.6	2,689.1	0.91	-0.11	
9,485.0	1.20	25.40	9,022.6	-2,110.2	-1,667.7	2,688.1	1.39	0.24	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well SGU 8511A-36 B36 496
Project:	Story Gulch	TVD Reference:	KBE 2 @ 8373.0ft (Patterson 308)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KBE 2 @ 8373.0ft (Patterson 308)
Well:	SGU 8511A-36 B36 496	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	USA EDM 5000 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
9,577.0	0.40	8.70	9,114.6	-2,109.0	-1,667.2	2,686.9	0.90	-0.87	
9,669.0	1.50	79.60	9,206.6	-2,108.4	-1,666.0	2,685.7	1.54	1.20	
9,760.0	1.30	70.60	9,297.6	-2,107.9	-1,663.8	2,683.9	0.33	-0.22	
9,852.0	1.10	123.50	9,389.5	-2,108.0	-1,662.1	2,682.9	1.18	-0.22	
9,943.0	1.40	150.60	9,480.5	-2,109.5	-1,660.8	2,683.1	0.72	0.33	
10,035.0	0.40	257.50	9,572.5	-2,110.5	-1,660.6	2,683.8	1.70	-1.09	
10,127.0	0.60	242.40	9,664.5	-2,110.8	-1,661.3	2,684.5	0.26	0.22	
10,218.0	0.70	240.80	9,755.5	-2,111.3	-1,662.2	2,685.4	0.11	0.11	
10,310.0	1.00	238.70	9,847.5	-2,112.0	-1,663.4	2,686.7	0.33	0.33	
10,401.0	0.10	165.20	9,938.5	-2,112.5	-1,664.1	2,687.5	1.07	-0.99	
10,493.0	0.40	230.20	10,030.5	-2,112.8	-1,664.3	2,687.9	0.40	0.33	
10,584.0	0.60	241.00	10,121.5	-2,113.2	-1,665.0	2,688.7	0.24	0.22	
10,676.0	1.30	240.00	10,213.5	-2,114.0	-1,666.3	2,690.1	0.76	0.76	
10,768.0	0.50	217.60	10,305.5	-2,114.8	-1,667.4	2,691.5	0.93	-0.87	
10,859.0	1.00	357.70	10,396.5	-2,114.3	-1,667.7	2,691.3	1.56	0.55	
10,951.0	0.90	355.80	10,488.4	-2,112.8	-1,667.8	2,690.2	0.11	-0.11	
11,043.0	0.50	265.70	10,580.4	-2,112.1	-1,668.3	2,689.9	1.12	-0.43	
11,134.0	0.40	265.00	10,671.4	-2,112.2	-1,669.0	2,690.4	0.11	-0.11	
11,226.0	0.90	236.30	10,763.4	-2,112.6	-1,669.9	2,691.4	0.63	0.54	
11,318.0	1.70	232.70	10,855.4	-2,113.8	-1,671.6	2,693.4	0.87	0.87	
11,409.0	0.80	246.40	10,946.4	-2,114.9	-1,673.2	2,695.3	1.04	-0.99	
11,500.0	0.30	358.10	11,037.4	-2,114.9	-1,673.8	2,695.7	1.05	-0.55	
11,592.0	0.60	263.90	11,129.4	-2,114.7	-1,674.3	2,695.8	0.75	0.33	
11,684.0	1.00	253.10	11,221.4	-2,115.0	-1,675.6	2,696.9	0.46	0.43	
11,775.0	1.50	250.20	11,312.3	-2,115.6	-1,677.4	2,698.6	0.55	0.55	
11,867.0	2.00	244.10	11,404.3	-2,116.7	-1,680.0	2,701.1	0.58	0.54	
11,958.0	2.60	252.50	11,495.2	-2,118.1	-1,683.4	2,704.3	0.75	0.66	
12,050.0	2.80	250.50	11,587.1	-2,119.4	-1,687.5	2,708.0	0.24	0.22	
12,141.0	2.90	251.80	11,678.0	-2,120.9	-1,691.8	2,711.9	0.13	0.11	
12,233.0	3.50	251.80	11,769.9	-2,122.5	-1,696.7	2,716.2	0.65	0.65	
12,324.0	3.20	250.20	11,860.7	-2,124.2	-1,701.7	2,720.8	0.35	-0.33	Last Cathedral Survey @ 12,324' MD
12,382.0	2.90	252.70	11,918.6	-2,125.2	-1,704.6	2,723.4	0.57	-0.52	Projection to Bit @ 12,382'

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well SGU 8511A-36 B36 496
Project:	Story Gulch	TVD Reference:	KBE 2 @ 8373.0ft (Patterson 308)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KBE 2 @ 8373.0ft (Patterson 308)
Well:	SGU 8511A-36 B36 496	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	USA EDM 5000 Multi Users DB

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
8511A-36 TOG	0.00	0.00	8,999.0	-2,111.7	-1,664.6	1,675,180.89	2,262,571.03	39° 39' 28.70 N	108° 7' 10.36 W
- actual wellpath misses target center by 3.4ft at 9461.4ft MD (8999.0 TVD, -2110.6 N, -1667.8 E)									
- Point									
8511A-36 TOG (2)	0.00	0.00	8,272.0	-2,111.7	-1,664.6	1,675,180.89	2,262,571.03	39° 39' 28.70 N	108° 7' 10.36 W
- actual wellpath misses target center by 5.6ft at 8734.4ft MD (8272.2 TVD, -2106.7 N, -1662.0 E)									
- Point									
8511A-36 PBHL	0.00	0.00	11,828.0	-2,121.6	-1,681.6	1,675,171.41	2,262,553.77	39° 39' 28.60 N	108° 7' 10.58 W
- actual wellpath misses target center by 18.4ft at 12290.2ft MD (11826.9 TVD, -2123.6 N, -1699.9 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									
8511A-36 PBHL (2)	0.00	0.00	11,832.0	-2,121.6	-1,681.6	1,675,171.41	2,262,553.77	39° 39' 28.60 N	108° 7' 10.58 W
- actual wellpath misses target center by 18.7ft at 12294.2ft MD (11830.9 TVD, -2123.7 N, -1700.1 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									

Design Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
2,990.0	2,857.1	-644.0	-511.7	Last Cathedral svy @ 2990' MD
12,324.0	11,860.7	-2,124.2	-1,701.7	Last Cathedral Survey @ 12,324' MD
12,382.0	11,918.6	-2,125.2	-1,704.6	Projection to Bit @ 12,382'

Checked By: _____ Approved By: _____ Date: _____