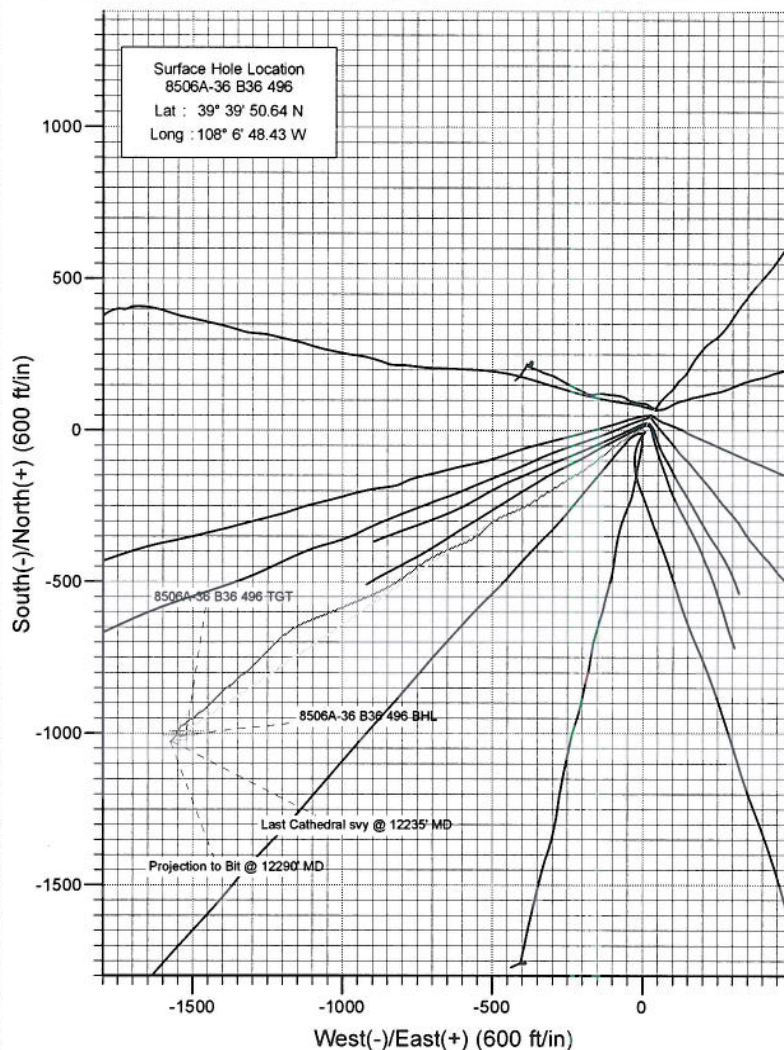
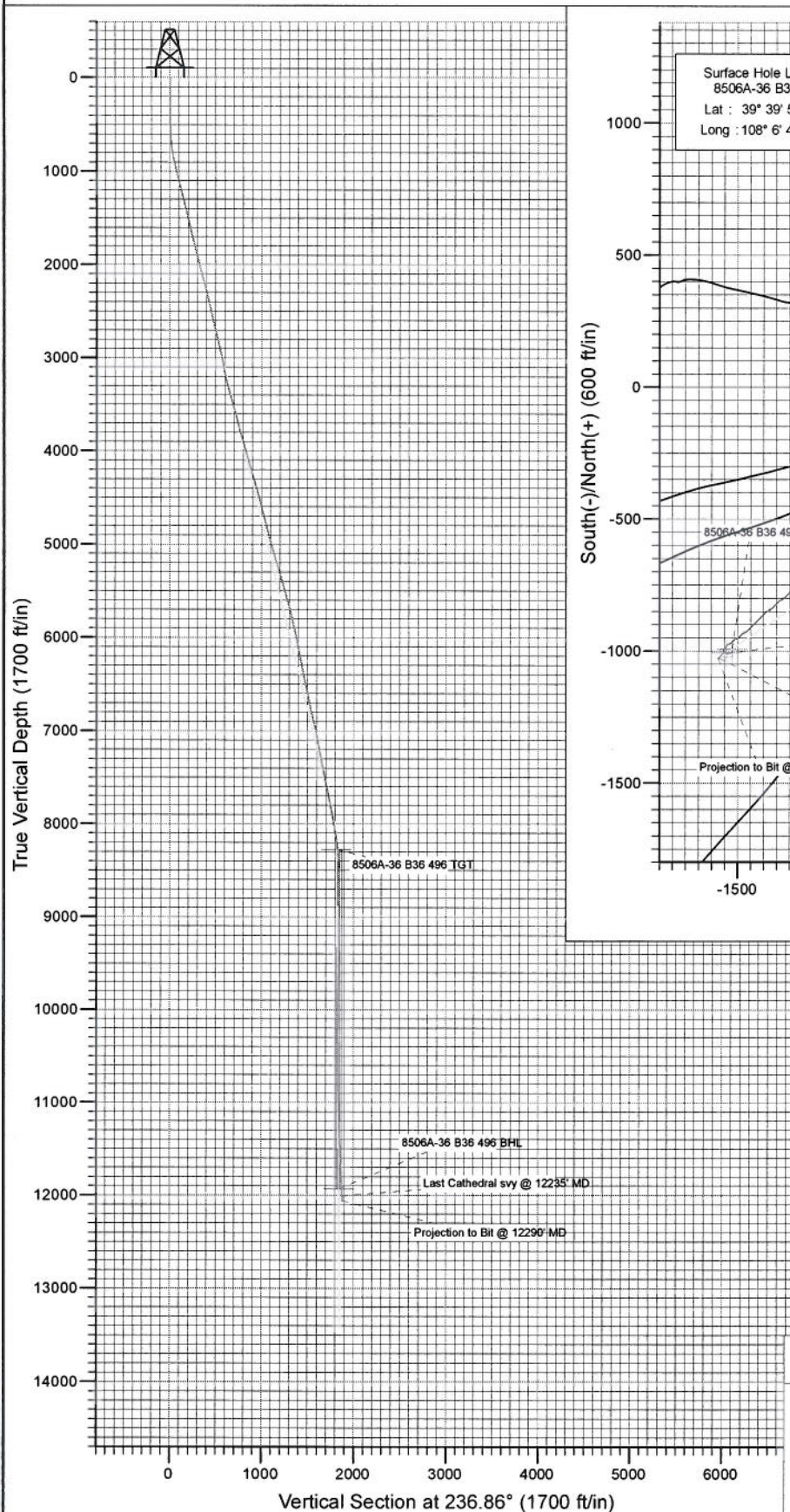




Project: Story Gulch
 Site: S36-T4S-R96W (B36 496)
 Well: 8506A-36 B36 496
 Wellbore: DD
 Design: Final



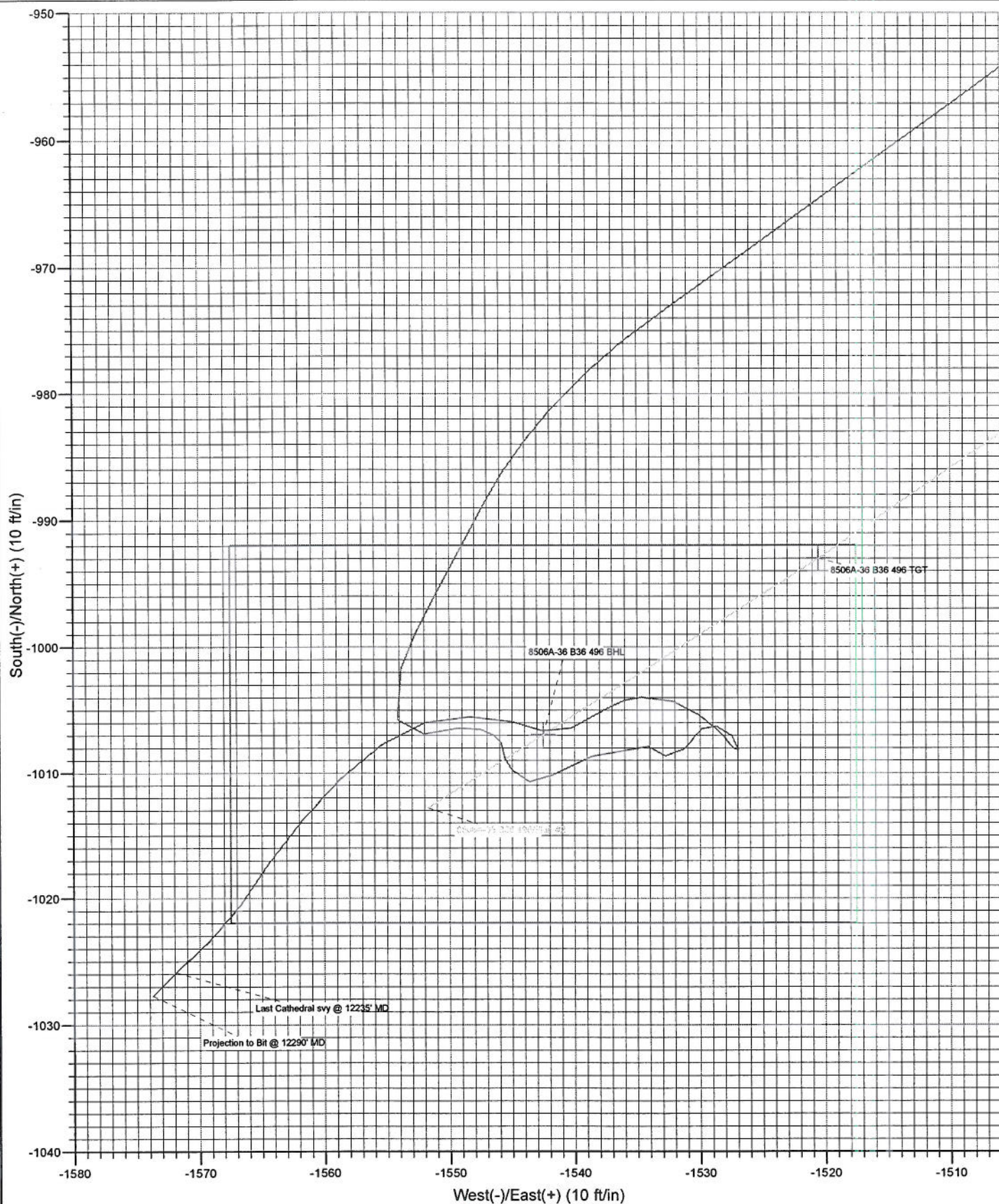
Azimuths to True North
 Magnetic North: 10.51°

Magnetic Field
 Strength: 52419.0nT
 Dip Angle: 65.89°
 Date: 8/24/2010
 Model: IGRF200510

DD 8506A-36 B36 496 105247, 105358; BH					
KBE @ 8374.0ft (Original Well Elev) North American Datum: 1983 Well 8506A-36 B36 496, True North					
Type	Target	Azimuth	Origin Type	N/S	E/W From TVD
Target	8506A-36 B36 496 BHL	236.86	Slot	0.0	0.0
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
8506A-36 B36 496 BHL	11934.0	-993.0	-1520.539°	39° 40.83 N	108° 7' 7.87 W



Project: Story Gulch
Site: S36-T4S-R96W (B36 496)
Well: 8506A-36 B36 496
Wellbore: DD
Design: Final



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506A-36 B36 496
Project:	Story Gulch	TVD Reference:	KBE @ 8374.0ft (Original Well Elev)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KBE @ 8374.0ft (Original Well Elev)
Well:	8506A-36 B36 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	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	8506A-36 B36 496					
Well Position	+N/-S	0.0 ft	Northing:	1,677,350.89 ft	Latitude:	39° 39' 50.64 N
	+E/-W	0.0 ft	Easting:	2,264,349.82 ft	Longitude:	108° 6' 48.43 W
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,352.0 ft	

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	8/24/2010	10.51	65.89	52,419

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	236.86	

Survey Program	Date 9/7/2010				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
169.0	2,987.0	Survey #1 (DD)	MWD	Geolink MWD	
3,086.0	12,290.0	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	
169.0	0.70	318.40	169.0	0.8	-0.7	0.2	0.41	0.41	
200.0	0.70	316.60	200.0	1.1	-0.9	0.2	0.07	0.00	
230.0	0.70	312.20	230.0	1.3	-1.2	0.3	0.18	0.00	
261.0	0.80	311.30	261.0	1.6	-1.5	0.4	0.32	0.32	
292.0	0.70	308.30	292.0	1.8	-1.8	0.5	0.35	-0.32	
323.0	0.90	305.90	323.0	2.1	-2.2	0.7	0.65	0.65	
353.0	0.90	304.80	353.0	2.4	-2.5	0.8	0.06	0.00	
384.0	0.90	291.80	384.0	2.6	-3.0	1.1	0.66	0.00	
415.0	0.80	285.70	415.0	2.7	-3.4	1.4	0.43	-0.32	
446.0	1.00	276.70	446.0	2.8	-3.9	1.7	0.79	0.65	
476.0	1.20	260.60	476.0	2.8	-4.5	2.2	1.22	0.67	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506A-36 B36 496
Project:	Story Gulch	TVD Reference:	KBE @ 8374.0ft (Original Well Elev)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KBE @ 8374.0ft (Original Well Elev)
Well:	8506A-36 B36 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
507.0	1.80	257.60	507.0	2.7	-5.3	2.9	1.95	1.94	
538.0	2.30	252.90	537.9	2.4	-6.3	4.0	1.70	1.61	
569.0	3.20	250.60	568.9	1.9	-7.7	5.4	2.92	2.90	
600.0	3.70	250.70	599.8	1.3	-9.5	7.2	1.61	1.61	
630.0	4.20	247.40	629.8	0.5	-11.4	9.3	1.83	1.67	
661.0	4.70	246.50	660.7	-0.4	-13.6	11.6	1.63	1.61	
692.0	5.40	244.70	691.6	-1.5	-16.1	14.3	2.31	2.26	
741.0	6.40	237.60	740.3	-4.0	-20.5	19.3	2.52	2.04	
787.0	8.20	237.80	785.9	-7.1	-25.4	25.2	3.91	3.91	
833.0	9.80	234.40	831.4	-11.1	-31.4	32.4	3.66	3.48	
879.0	11.90	239.10	876.5	-15.8	-38.7	41.0	4.95	4.57	
925.0	13.50	238.50	921.4	-21.1	-47.3	51.1	3.49	3.48	
971.0	14.20	236.90	966.1	-27.0	-56.6	62.1	1.73	1.52	
1,062.0	15.10	233.80	1,054.1	-40.1	-75.5	85.1	1.31	0.99	
1,154.0	14.80	231.20	1,143.0	-54.5	-94.4	108.8	0.80	-0.33	
1,246.0	14.30	232.60	1,232.0	-68.8	-112.5	131.8	0.66	-0.54	
1,337.0	14.30	233.30	1,320.2	-82.3	-130.5	154.3	0.19	0.00	
1,429.0	13.60	232.20	1,409.5	-95.7	-148.1	176.4	0.81	-0.76	
1,521.0	13.50	232.00	1,498.9	-109.0	-165.1	197.9	0.12	-0.11	
1,612.0	14.00	235.00	1,587.3	-121.8	-182.5	219.4	0.96	0.55	
1,704.0	13.50	238.10	1,676.7	-133.9	-200.8	241.3	0.97	-0.54	
1,795.0	14.00	239.80	1,765.1	-145.0	-219.3	262.9	0.71	0.55	
1,887.0	15.50	239.70	1,854.1	-156.8	-239.5	286.3	1.63	1.63	
1,979.0	15.00	237.10	1,942.8	-169.5	-260.1	310.5	0.92	-0.54	
2,071.0	13.50	235.60	2,032.0	-182.0	-279.0	333.1	1.68	-1.63	
2,162.0	13.60	237.40	2,120.5	-193.8	-296.8	354.5	0.48	0.11	
2,254.0	15.20	238.70	2,209.6	-205.9	-316.2	377.3	1.77	1.74	
2,346.0	15.40	240.00	2,298.3	-218.3	-337.1	401.6	0.43	0.22	
2,437.0	13.40	236.90	2,386.4	-230.1	-356.4	424.2	2.35	-2.20	
2,529.0	13.10	235.60	2,476.0	-241.8	-373.9	445.3	0.46	-0.33	
2,621.0	13.50	242.90	2,565.5	-252.6	-392.1	466.4	1.88	0.43	
2,712.0	14.10	247.20	2,653.9	-261.7	-411.7	487.8	1.31	0.66	
2,804.0	14.30	246.50	2,743.1	-270.6	-432.5	510.1	0.29	0.22	
2,896.0	13.90	247.40	2,832.3	-279.4	-453.1	532.1	0.50	-0.43	
2,987.0	12.30	245.00	2,921.0	-287.7	-472.0	552.5	1.86	-1.76	Last Cathedral svy @ 2987' MD
3,176.0	9.70	234.70	3,106.5	-305.4	-503.2	588.3	1.72	-1.38	
3,267.0	12.70	225.00	3,195.7	-316.9	-516.6	605.8	3.88	3.30	
3,359.0	15.60	225.00	3,284.9	-332.8	-532.5	627.8	3.15	3.15	
3,451.0	16.40	233.20	3,373.4	-349.3	-551.6	652.9	2.60	0.87	
3,543.0	16.30	241.20	3,461.7	-363.3	-573.3	678.7	2.45	-0.11	
3,634.0	15.60	249.50	3,549.2	-373.7	-596.0	703.4	2.62	-0.77	
3,726.0	15.80	248.70	3,637.8	-382.6	-619.3	727.7	0.32	0.22	
3,818.0	14.20	245.50	3,726.6	-391.9	-641.2	751.1	1.96	-1.74	
3,910.0	17.50	244.70	3,815.1	-402.4	-664.0	776.0	3.59	3.59	
4,001.0	15.80	243.80	3,902.3	-413.8	-687.5	801.8	1.89	-1.87	
4,093.0	14.20	240.50	3,991.2	-424.9	-708.5	825.5	1.97	-1.74	
4,185.0	16.30	236.70	4,079.9	-437.5	-729.1	849.7	2.53	2.28	
4,276.0	17.20	232.50	4,167.1	-452.7	-750.5	875.9	1.66	0.99	
4,368.0	16.70	233.40	4,255.1	-468.9	-771.9	902.7	0.61	-0.54	
4,460.0	15.70	233.90	4,343.4	-484.1	-792.6	928.3	1.10	-1.09	
4,552.0	15.70	237.70	4,432.0	-498.1	-813.1	953.2	1.12	0.00	
4,643.0	15.30	241.70	4,519.7	-510.3	-834.1	977.4	1.25	-0.44	
4,735.0	13.70	239.20	4,608.7	-521.7	-854.2	1,000.4	1.87	-1.74	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506A-36 B36 496
Project:	Story Gulch	TVD Reference:	KBE @ 8374.0ft (Original Well Elev)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KBE @ 8374.0ft (Original Well Elev)
Well:	8506A-36 B36 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
4,827.0	14.10	244.80	4,698.0	-532.0	-873.7	1,022.4	1.52	0.43	
4,918.0	15.80	247.50	4,786.0	-541.5	-895.1	1,045.6	2.02	1.87	
5,010.0	15.00	248.50	4,874.7	-550.6	-917.8	1,069.5	0.92	-0.87	
5,102.0	17.70	247.70	4,962.9	-560.3	-941.8	1,094.9	2.94	2.93	
5,194.0	16.10	247.00	5,051.0	-570.6	-966.5	1,121.2	1.75	-1.74	
5,285.0	16.70	247.70	5,138.3	-580.5	-990.2	1,146.5	0.69	0.66	
5,377.0	16.80	247.60	5,226.4	-590.6	-1,014.7	1,172.5	0.11	0.11	
5,469.0	17.20	248.90	5,314.3	-600.5	-1,039.7	1,198.9	0.60	0.43	
5,560.0	16.10	247.90	5,401.5	-610.1	-1,064.0	1,224.5	1.25	-1.21	
5,652.0	16.40	247.80	5,489.8	-619.8	-1,087.8	1,249.7	0.33	0.33	
5,743.0	15.80	247.00	5,577.3	-629.5	-1,111.1	1,274.5	0.70	-0.66	
5,835.0	15.50	248.80	5,665.9	-638.9	-1,134.1	1,298.9	0.62	-0.33	
5,927.0	15.00	241.60	5,754.6	-649.0	-1,156.0	1,322.8	2.13	-0.54	
6,018.0	13.50	232.00	5,842.8	-661.1	-1,174.8	1,345.1	3.07	-1.65	
6,110.0	12.20	232.50	5,932.5	-673.7	-1,190.9	1,365.5	1.42	-1.41	
6,201.0	11.30	232.60	6,021.6	-684.9	-1,205.6	1,384.0	0.99	-0.99	
6,293.0	10.80	230.30	6,111.9	-695.9	-1,219.4	1,401.5	0.72	-0.54	
6,385.0	11.80	221.60	6,202.1	-708.4	-1,232.3	1,419.2	2.15	1.09	
6,476.0	10.40	221.00	6,291.4	-721.6	-1,243.9	1,436.0	1.54	-1.54	
6,568.0	12.30	224.50	6,381.6	-734.9	-1,256.2	1,453.6	2.20	2.07	
6,659.0	13.60	227.10	6,470.3	-749.1	-1,270.8	1,473.6	1.57	1.43	
6,751.0	11.70	225.20	6,560.1	-763.0	-1,285.4	1,493.4	2.11	-2.07	
6,843.0	10.50	223.00	6,650.4	-775.7	-1,297.7	1,510.7	1.38	-1.30	
6,934.0	12.50	228.50	6,739.5	-788.3	-1,310.7	1,528.5	2.50	2.20	
7,026.0	14.70	230.90	6,828.9	-802.3	-1,327.3	1,550.0	2.47	2.39	
7,117.0	13.30	231.50	6,917.2	-816.1	-1,344.4	1,571.9	1.55	-1.54	
7,209.0	12.20	228.90	7,007.0	-829.0	-1,360.0	1,592.0	1.35	-1.20	
7,301.0	11.70	229.50	7,097.0	-841.5	-1,374.4	1,610.9	0.56	-0.54	
7,392.0	11.10	229.50	7,186.2	-853.2	-1,388.1	1,628.7	0.66	-0.66	
7,484.0	10.20	230.30	7,276.6	-864.1	-1,401.1	1,645.6	0.99	-0.98	
7,575.0	12.00	223.80	7,365.9	-876.1	-1,413.9	1,662.8	2.41	1.98	
7,667.0	11.10	225.40	7,456.0	-889.2	-1,426.8	1,680.8	1.04	-0.98	
7,759.0	10.00	225.00	7,546.5	-901.1	-1,438.8	1,697.3	1.20	-1.20	
7,850.0	12.60	230.30	7,635.7	-913.0	-1,452.0	1,714.9	3.07	2.86	
7,942.0	11.70	231.30	7,725.6	-925.3	-1,467.0	1,734.2	1.00	-0.98	
8,033.0	10.80	233.50	7,814.9	-936.1	-1,481.0	1,751.9	1.10	-0.99	
8,125.0	10.20	234.10	7,905.4	-946.0	-1,494.6	1,768.6	0.66	-0.65	
8,217.0	9.90	234.30	7,995.9	-955.4	-1,507.6	1,784.7	0.33	-0.33	
8,308.0	9.60	234.20	8,085.6	-964.4	-1,520.1	1,800.1	0.33	-0.33	
8,400.0	9.10	235.10	8,176.4	-973.0	-1,532.3	1,815.0	0.57	-0.54	
8,491.0	6.70	221.90	8,266.5	-981.1	-1,541.7	1,827.3	3.29	-2.64	
8,583.0	4.90	207.70	8,358.1	-988.6	-1,547.1	1,835.9	2.49	-1.96	
8,674.0	5.10	209.40	8,448.7	-995.6	-1,550.9	1,842.9	0.27	0.22	
8,766.0	3.40	198.80	8,540.5	-1,001.7	-1,553.8	1,848.7	2.03	-1.85	
8,857.0	2.00	159.80	8,631.4	-1,005.7	-1,554.1	1,851.2	2.45	-1.54	
8,949.0	2.00	76.90	8,723.3	-1,006.9	-1,552.0	1,850.0	2.88	0.00	
9,041.0	1.40	85.10	8,815.3	-1,006.4	-1,549.3	1,847.5	0.70	-0.65	
9,133.0	0.90	105.40	8,907.3	-1,006.5	-1,547.5	1,846.1	0.69	-0.54	
9,224.0	0.50	127.20	8,998.3	-1,007.0	-1,546.5	1,845.4	0.52	-0.44	
9,316.0	0.70	142.50	9,090.3	-1,007.6	-1,545.9	1,845.3	0.28	0.22	
9,408.0	0.90	185.40	9,182.3	-1,008.8	-1,545.6	1,845.7	0.67	0.22	
9,499.0	0.80	108.10	9,273.2	-1,009.7	-1,545.0	1,845.7	1.17	-0.11	
9,582.0	0.40	159.30	9,456.2	-1,010.7	-1,543.6	1,845.1	0.35	-0.22	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506A-36 B36 496
Project:	Story Gulch	TVD Reference:	KBE @ 8374.0ft (Original Well Elev)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KBE @ 8374.0ft (Original Well Elev)
Well:	8506A-36 B36 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
9,774.0	2.40	63.90	9,548.2	-1,010.2	-1,541.8	1,843.2	2.68	2.17	
9,865.0	2.00	65.90	9,639.1	-1,008.7	-1,538.6	1,839.8	0.45	-0.44	
10,049.0	1.00	108.70	9,823.1	-1,007.9	-1,534.1	1,835.6	0.78	-0.54	
10,140.0	1.00	129.90	9,914.1	-1,008.6	-1,532.8	1,834.9	0.40	0.00	
10,232.0	1.80	41.60	10,006.1	-1,008.1	-1,531.2	1,833.2	2.21	0.87	
10,323.0	0.80	35.30	10,097.0	-1,006.5	-1,529.9	1,831.3	1.11	-1.10	
10,415.0	1.10	110.20	10,189.0	-1,006.3	-1,528.7	1,830.1	1.28	0.33	
10,507.0	0.80	138.40	10,281.0	-1,007.1	-1,527.4	1,829.5	0.59	-0.33	
10,598.0	0.80	173.80	10,372.0	-1,008.2	-1,527.0	1,829.7	0.53	0.00	
10,690.0	1.10	330.90	10,464.0	-1,008.0	-1,527.3	1,829.9	2.03	0.33	
10,782.0	1.10	308.70	10,556.0	-1,006.7	-1,528.4	1,830.2	0.46	0.00	
10,873.0	1.50	309.00	10,647.0	-1,005.4	-1,530.0	1,830.8	0.44	0.44	
10,965.0	1.50	286.70	10,738.9	-1,004.3	-1,532.1	1,831.9	0.63	0.00	
11,057.0	1.70	269.10	10,830.9	-1,004.0	-1,534.6	1,833.9	0.57	0.22	
11,148.0	2.10	238.90	10,921.8	-1,004.9	-1,537.4	1,836.7	1.17	0.44	
11,240.0	1.90	243.80	11,013.8	-1,006.4	-1,540.2	1,839.9	0.29	-0.22	
11,332.0	1.30	294.70	11,105.7	-1,006.6	-1,542.6	1,842.0	1.61	-0.65	
11,423.0	1.90	281.40	11,196.7	-1,005.9	-1,545.0	1,843.6	0.77	0.66	
11,515.0	2.40	272.50	11,288.6	-1,005.5	-1,548.4	1,846.2	0.65	0.54	
11,606.0	2.20	252.10	11,379.6	-1,006.0	-1,552.0	1,849.5	0.92	-0.22	
11,698.0	2.60	235.40	11,471.5	-1,007.7	-1,555.4	1,853.3	0.87	0.43	
11,790.0	2.90	226.00	11,563.4	-1,010.5	-1,558.7	1,857.6	0.59	0.33	
11,881.0	2.90	218.70	11,654.3	-1,013.9	-1,561.8	1,862.1	0.41	0.00	
11,973.0	2.60	217.10	11,746.2	-1,017.4	-1,564.6	1,866.2	0.34	-0.33	
12,065.0	2.30	211.70	11,838.1	-1,020.6	-1,566.8	1,869.9	0.41	-0.33	
12,156.0	2.50	229.80	11,929.0	-1,023.5	-1,569.3	1,873.5	0.86	0.22	
12,235.0	2.70	225.20	12,007.9	-1,025.9	-1,571.9	1,877.0	0.37	0.25	Last Cathedral svy @ 12235' MD
12,290.0	2.70	225.20	12,062.9	-1,027.7	-1,573.7	1,879.6	0.00	0.00	Projection to Bit @ 12290' MD

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506A-36 B36 496
Project:	Story Gulch	TVD Reference:	KBE @ 8374.0ft (Original Well Elev)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KBE @ 8374.0ft (Original Well Elev)
Well:	8506A-36 B36 496	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US Multi Users DB

Targets

Target Name

- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
8506A-36 B36 496 BHL	0.00	0.00	11,934.0	-1,006.9	-1,542.5	1,676,388.73	2,262,779.00	39° 39' 40.69 N	108° 7' 8.15 W
- actual wellpath misses target center by 31.6ft at 12159.6ft MD (11932.6 TVD, -1023.6 N, -1569.4 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									
8506A-36 B36 496 TGT	0.00	0.00	8,274.0	-993.0	-1,520.5	1,676,402.03	2,262,801.38	39° 39' 40.83 N	108° 7' 7.87 W
- actual wellpath misses target center by 24.5ft at 8498.1ft MD (8273.6 TVD, -981.7 N, -1542.3 E)									
- Point									

Design Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S	+E/-W	
(ft)	(ft)	(ft)	(ft)	
2,987.0	2,921.0	-287.7	-472.0	Last Cathedral svy @ 2987' MD
12,235.0	12,007.9	-1,025.9	-1,571.9	Last Cathedral svy @ 12235' MD
12,290.0	12,062.9	-1,027.7	-1,573.7	Projection to Bit @ 12290' MD

Checked By: _____ Approved By: _____ Date: _____