

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site:	S33-T4S-R96W (E34 496)	North Reference:	True
Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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		S33-T4S-R96W (E34 496)			
Site Position:		Northing:	1,676,257.20 ft	Latitude:	39° 39' 36.020 N
From:	Lat/Long	Easting:	2,251,040.13 ft	Longitude:	108° 9' 38.140 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.68 °

Well	8506E-34E 34 496					
Well Position	+N/-S	0.0 ft	Northing:	1,676,227.74 ft	Latitude:	39° 39' 35.730 N
	+E/-W	0.0 ft	Easting:	2,251,043.18 ft	Longitude:	108° 9' 38.090 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,301.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/19/2012	10.32	65.82	52,197

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	120.15

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
357.6	3.15	117.83	357.5	-2.0	3.8	2.00	2.00	0.00	117.83	
7,456.3	3.15	117.83	7,445.5	-184.3	349.1	0.00	0.00	0.00	0.00	
7,613.9	0.00	0.00	7,603.0	-186.3	352.9	2.00	-2.00	0.00	180.00	E34 496 8506E-34E 1
7,658.4	0.22	236.44	7,647.5	-186.3	352.8	0.50	0.50	-277.52	236.44	
12,282.9	0.22	236.44	12,272.0	-196.3	337.9	0.00	0.00	0.00	0.00	E34 496 8506E-34E F
12,432.9	0.22	236.44	12,422.0	-196.6	337.4	0.00	0.00	0.00	0.00	

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Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site:	S33-T4S-R96W (E34 496)	North Reference:	True
Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	KOP @ 200'
300.0	2.00	117.83	300.0	-0.8	1.5	1.7	2.00	2.00	
357.6	3.15	117.83	357.5	-2.0	3.8	4.3	2.00	2.00	EOB; Inc=3.15°
400.0	3.15	117.83	399.9	-3.1	5.9	6.7	0.00	0.00	
500.0	3.15	117.83	499.7	-5.7	10.8	12.2	0.00	0.00	
600.0	3.15	117.83	599.6	-8.2	15.6	17.7	0.00	0.00	
700.0	3.15	117.83	699.4	-10.8	20.5	23.1	0.00	0.00	
800.0	3.15	117.83	799.3	-13.4	25.3	28.6	0.00	0.00	
900.0	3.15	117.83	899.1	-15.9	30.2	34.1	0.00	0.00	
1,000.0	3.15	117.83	998.9	-18.5	35.1	39.6	0.00	0.00	
1,100.0	3.15	117.83	1,098.8	-21.1	39.9	45.1	0.00	0.00	
1,193.3	3.15	117.83	1,192.0	-23.5	44.5	50.3	0.00	0.00	A_GROOVE_TVD
1,200.0	3.15	117.83	1,198.6	-23.7	44.8	50.6	0.00	0.00	
1,300.0	3.15	117.83	1,298.5	-26.2	49.7	56.1	0.00	0.00	
1,346.6	3.15	117.83	1,345.0	-27.4	51.9	58.7	0.00	0.00	B_GROOVE_TVD
1,374.6	3.15	117.83	1,373.0	-28.1	53.3	60.2	0.00	0.00	B_GROOVE_BASE_TVD
1,400.0	3.15	117.83	1,398.3	-28.8	54.5	61.6	0.00	0.00	
1,500.0	3.15	117.83	1,498.2	-31.4	59.4	67.1	0.00	0.00	
1,600.0	3.15	117.83	1,598.0	-33.9	64.3	72.6	0.00	0.00	
1,700.0	3.15	117.83	1,697.9	-36.5	69.1	78.1	0.00	0.00	
1,800.0	3.15	117.83	1,797.7	-39.1	74.0	83.6	0.00	0.00	
1,900.0	3.15	117.83	1,897.6	-41.6	78.8	89.1	0.00	0.00	
2,000.0	3.15	117.83	1,997.4	-44.2	83.7	94.6	0.00	0.00	
2,100.0	3.15	117.83	2,097.3	-46.8	88.6	100.1	0.00	0.00	
2,200.0	3.15	117.83	2,197.1	-49.3	93.4	105.6	0.00	0.00	
2,297.0	3.15	117.83	2,294.0	-51.8	98.2	110.9	0.00	0.00	GARDEN_GULCH_TVD
2,300.0	3.15	117.83	2,297.0	-51.9	98.3	111.1	0.00	0.00	
2,400.0	3.15	117.83	2,396.8	-54.5	103.2	116.6	0.00	0.00	
2,500.0	3.15	117.83	2,496.7	-57.0	108.0	122.1	0.00	0.00	
2,600.0	3.15	117.83	2,596.5	-59.6	112.9	127.5	0.00	0.00	
2,700.0	3.15	117.83	2,696.4	-62.2	117.8	133.0	0.00	0.00	
2,800.0	3.15	117.83	2,796.2	-64.7	122.6	138.5	0.00	0.00	
2,900.0	3.15	117.83	2,896.1	-67.3	127.5	144.0	0.00	0.00	
3,000.0	3.15	117.83	2,995.9	-69.9	132.3	149.5	0.00	0.00	
3,100.0	3.15	117.83	3,095.8	-72.4	137.2	155.0	0.00	0.00	
3,200.0	3.15	117.83	3,195.6	-75.0	142.1	160.5	0.00	0.00	
3,300.0	3.15	117.83	3,295.5	-77.6	146.9	166.0	0.00	0.00	
3,335.6	3.15	117.83	3,331.0	-78.5	148.7	168.0	0.00	0.00	WASATCH_FM_TVD
3,400.0	3.15	117.83	3,395.3	-80.1	151.8	171.5	0.00	0.00	
3,500.0	3.15	117.83	3,495.2	-82.7	156.7	177.0	0.00	0.00	
3,600.0	3.15	117.83	3,595.0	-85.3	161.5	182.5	0.00	0.00	
3,700.0	3.15	117.83	3,694.9	-87.8	166.4	188.0	0.00	0.00	
3,800.0	3.15	117.83	3,794.7	-90.4	171.2	193.5	0.00	0.00	
3,900.0	3.15	117.83	3,894.6	-93.0	176.1	199.0	0.00	0.00	
4,000.0	3.15	117.83	3,994.4	-95.5	181.0	204.5	0.00	0.00	
4,100.0	3.15	117.83	4,094.3	-98.1	185.8	210.0	0.00	0.00	
4,200.0	3.15	117.83	4,194.1	-100.7	190.7	215.5	0.00	0.00	
4,300.0	3.15	117.83	4,294.0	-103.2	195.6	221.0	0.00	0.00	
4,400.0	3.15	117.83	4,393.8	-105.8	200.4	226.5	0.00	0.00	
4,500.0	3.15	117.83	4,493.7	-108.4	205.3	232.0	0.00	0.00	

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Site:	S33-T4S-R96W (E34 496)	North Reference:	True
Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,600.0	3.15	117.83	4,593.5	-110.9	210.2	237.4	0.00	0.00	
4,700.0	3.15	117.83	4,693.3	-113.5	215.0	242.9	0.00	0.00	
4,800.0	3.15	117.83	4,793.2	-116.1	219.9	248.4	0.00	0.00	
4,900.0	3.15	117.83	4,893.0	-118.6	224.7	253.9	0.00	0.00	
5,000.0	3.15	117.83	4,992.9	-121.2	229.6	259.4	0.00	0.00	
5,100.0	3.15	117.83	5,092.7	-123.8	234.5	264.9	0.00	0.00	
5,200.0	3.15	117.83	5,192.6	-126.3	239.3	270.4	0.00	0.00	
5,300.0	3.15	117.83	5,292.4	-128.9	244.2	275.9	0.00	0.00	
5,400.0	3.15	117.83	5,392.3	-131.5	249.1	281.4	0.00	0.00	
5,464.8	3.15	117.83	5,457.0	-133.1	252.2	285.0	0.00	0.00	WASATCH_G_TVD
5,500.0	3.15	117.83	5,492.1	-134.1	253.9	286.9	0.00	0.00	
5,600.0	3.15	117.83	5,592.0	-136.6	258.8	292.4	0.00	0.00	
5,700.0	3.15	117.83	5,691.8	-139.2	263.7	297.9	0.00	0.00	
5,800.0	3.15	117.83	5,791.7	-141.8	268.5	303.4	0.00	0.00	
5,900.0	3.15	117.83	5,891.5	-144.3	273.4	308.9	0.00	0.00	
6,000.0	3.15	117.83	5,991.4	-146.9	278.2	314.4	0.00	0.00	
6,100.0	3.15	117.83	6,091.2	-149.5	283.1	319.9	0.00	0.00	
6,200.0	3.15	117.83	6,191.1	-152.0	288.0	325.4	0.00	0.00	
6,300.0	3.15	117.83	6,290.9	-154.6	292.8	330.9	0.00	0.00	
6,400.0	3.15	117.83	6,390.8	-157.2	297.7	336.4	0.00	0.00	
6,500.0	3.15	117.83	6,490.6	-159.7	302.6	341.8	0.00	0.00	
6,600.0	3.15	117.83	6,590.5	-162.3	307.4	347.3	0.00	0.00	
6,700.0	3.15	117.83	6,690.3	-164.9	312.3	352.8	0.00	0.00	
6,800.0	3.15	117.83	6,790.2	-167.4	317.1	358.3	0.00	0.00	
6,900.0	3.15	117.83	6,890.0	-170.0	322.0	363.8	0.00	0.00	
7,000.0	3.15	117.83	6,989.9	-172.6	326.9	369.3	0.00	0.00	
7,100.0	3.15	117.83	7,089.7	-175.1	331.7	374.8	0.00	0.00	
7,200.0	3.15	117.83	7,189.6	-177.7	336.6	380.3	0.00	0.00	
7,300.0	3.15	117.83	7,289.4	-180.3	341.5	385.8	0.00	0.00	
7,400.0	3.15	117.83	7,389.3	-182.8	346.3	391.3	0.00	0.00	
7,456.3	3.15	117.83	7,445.5	-184.3	349.1	394.4	0.00	0.00	Start Drop -2.00
7,500.0	2.28	117.83	7,489.1	-185.2	350.9	396.5	2.00	-2.00	
7,600.0	0.28	117.83	7,589.1	-186.3	352.9	398.7	2.00	-2.00	
7,613.9	0.00	0.00	7,603.0	-186.3	352.9	398.7	2.00	-2.00	EOD; Inc=0° - WILLIAMS_FORK_TVD - E34 496
7,658.4	0.22	236.44	7,647.5	-186.3	352.8	398.7	0.50	0.50	
7,700.0	0.22	236.44	7,689.1	-186.4	352.7	398.6	0.00	0.00	
7,800.0	0.22	236.44	7,789.1	-186.7	352.4	398.4	0.00	0.00	
7,900.0	0.22	236.44	7,889.1	-186.9	352.0	398.3	0.00	0.00	
8,000.0	0.22	236.44	7,989.1	-187.1	351.7	398.1	0.00	0.00	
8,100.0	0.22	236.44	8,089.1	-187.3	351.4	397.9	0.00	0.00	
8,200.0	0.22	236.44	8,189.1	-187.5	351.1	397.8	0.00	0.00	
8,300.0	0.22	236.44	8,289.1	-187.7	350.8	397.6	0.00	0.00	
8,400.0	0.22	236.44	8,389.1	-187.9	350.4	397.4	0.00	0.00	
8,500.0	0.22	236.44	8,489.1	-188.2	350.1	397.2	0.00	0.00	
8,600.0	0.22	236.44	8,589.1	-188.4	349.8	397.1	0.00	0.00	
8,700.0	0.22	236.44	8,689.1	-188.6	349.5	396.9	0.00	0.00	
8,800.0	0.22	236.44	8,789.1	-188.8	349.1	396.7	0.00	0.00	
8,900.0	0.22	236.44	8,889.1	-189.0	348.8	396.6	0.00	0.00	
9,000.0	0.22	236.44	8,989.1	-189.2	348.5	396.4	0.00	0.00	
9,100.0	0.22	236.44	9,089.1	-189.4	348.2	396.2	0.00	0.00	
9,200.0	0.22	236.44	9,189.1	-189.7	347.8	396.0	0.00	0.00	
9,300.0	0.22	236.44	9,289.1	-189.9	347.5	395.9	0.00	0.00	

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Project:	Story Gulch	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site:	S33-T4S-R96W (E34 496)	North Reference:	True
Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
9,400.0	0.22	236.44	9,389.1	-190.1	347.2	395.7	0.00	0.00	
9,500.0	0.22	236.44	9,489.1	-190.3	346.9	395.5	0.00	0.00	
9,600.0	0.22	236.44	9,589.1	-190.5	346.5	395.3	0.00	0.00	
9,700.0	0.22	236.44	9,689.1	-190.7	346.2	395.2	0.00	0.00	
9,800.0	0.22	236.44	9,789.1	-190.9	345.9	395.0	0.00	0.00	
9,900.0	0.22	236.44	9,889.1	-191.2	345.6	394.8	0.00	0.00	
10,000.0	0.22	236.44	9,989.1	-191.4	345.2	394.7	0.00	0.00	
10,100.0	0.22	236.44	10,089.1	-191.6	344.9	394.5	0.00	0.00	
10,200.0	0.22	236.44	10,189.1	-191.8	344.6	394.3	0.00	0.00	
10,300.0	0.22	236.44	10,289.1	-192.0	344.3	394.1	0.00	0.00	
10,400.0	0.22	236.44	10,389.1	-192.2	344.0	394.0	0.00	0.00	
10,500.0	0.22	236.44	10,489.1	-192.5	343.6	393.8	0.00	0.00	
10,600.0	0.22	236.44	10,589.1	-192.7	343.3	393.6	0.00	0.00	
10,700.0	0.22	236.44	10,689.1	-192.9	343.0	393.5	0.00	0.00	
10,800.0	0.22	236.44	10,789.1	-193.1	342.7	393.3	0.00	0.00	
10,900.0	0.22	236.44	10,889.1	-193.3	342.3	393.1	0.00	0.00	
10,901.9	0.22	236.44	10,891.0	-193.3	342.3	393.1	0.00	0.00	CAMEO_TVD
11,000.0	0.22	236.44	10,989.1	-193.5	342.0	392.9	0.00	0.00	
11,100.0	0.22	236.44	11,089.1	-193.7	341.7	392.8	0.00	0.00	
11,200.0	0.22	236.44	11,189.1	-194.0	341.4	392.6	0.00	0.00	
11,265.9	0.22	236.44	11,255.0	-194.1	341.1	392.5	0.00	0.00	ROLLINS_TVD
11,300.0	0.22	236.44	11,289.1	-194.2	341.0	392.4	0.00	0.00	
11,400.0	0.22	236.44	11,389.1	-194.4	340.7	392.3	0.00	0.00	
11,491.9	0.22	236.44	11,481.0	-194.6	340.4	392.1	0.00	0.00	COZZETTE_TVD
11,500.0	0.22	236.44	11,489.1	-194.6	340.4	392.1	0.00	0.00	
11,600.0	0.22	236.44	11,589.1	-194.8	340.1	391.9	0.00	0.00	
11,679.9	0.22	236.44	11,669.0	-195.0	339.8	391.8	0.00	0.00	CORCORAN_TVD
11,700.0	0.22	236.44	11,689.1	-195.0	339.7	391.7	0.00	0.00	
11,800.0	0.22	236.44	11,789.1	-195.2	339.4	391.6	0.00	0.00	
11,900.0	0.22	236.44	11,889.1	-195.5	339.1	391.4	0.00	0.00	
11,982.9	0.22	236.44	11,972.0	-195.6	338.8	391.2	0.00	0.00	UPPER_SEGO_TVD
12,000.0	0.22	236.44	11,989.1	-195.7	338.8	391.2	0.00	0.00	
12,100.0	0.22	236.44	12,089.1	-195.9	338.4	391.0	0.00	0.00	
12,132.9	0.22	236.44	12,122.0	-196.0	338.3	391.0	0.00	0.00	SEGO_BASE_TARGET_TVD
12,200.0	0.22	236.44	12,189.1	-196.1	338.1	390.9	0.00	0.00	
12,282.9	0.22	236.44	12,272.0	-196.3	337.9	390.7	0.00	0.00	Drillers TD @ 12,282' MD - E34 496 8506E-34E
12,300.0	0.22	236.44	12,289.1	-196.3	337.8	390.7	0.00	0.00	
12,400.0	0.22	236.44	12,389.1	-196.5	337.5	390.5	0.00	0.00	
12,432.9	0.22	236.44	12,422.0	-196.6	337.4	390.5	0.00	0.00	Permit TD @12,432' MD

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site:	S33-T4S-R96W (E34 496)	North Reference:	True
Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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)		
E34 496 8506E-34E PBI	0.00	0.00	12,272.0	-196.3	337.9	1,676,021.65	2,251,375.14	39° 39' 33.790 N	108° 9' 33.770 W
- plan hits target center									
- Rectangle (sides W30.0 H50.0 D0.0)									
E34 496 8506E-34E TG	0.00	0.00	7,603.0	-186.3	352.9	1,676,031.19	2,251,390.48	39° 39' 33.889 N	108° 9' 33.578 W
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
1,193.3	1,192.0	A_GROOVE_TVD				
1,346.6	1,345.0	B_GROOVE_TVD				
1,374.6	1,373.0	B_GROOVE_BASE_TVD				
2,297.0	2,294.0	GARDEN_GULCH_TVD				
3,335.6	3,331.0	WASATCH_FM_TVD				
5,464.8	5,457.0	WASATCH_G_TVD				
7,613.9	7,603.0	WILLIAMS_FORK_TVD				
10,901.9	10,891.0	CAMEO_TVD				
11,265.9	11,255.0	ROLLINS_TVD				
11,491.9	11,481.0	COZZETTE_TVD				
11,679.9	11,669.0	CORCORAN_TVD				
11,982.9	11,972.0	UPPER_SEGO_TVD				
12,132.9	12,122.0	SEGO_BASE_TARGET_TVD				

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP @ 200'
357.6	357.5	-2.0	3.8	EOB; Inc=3.15°
7,456.3	7,445.5	-184.3	349.1	Start Drop -2.00
7,613.9	7,603.0	-186.3	352.9	EOD; Inc=0°
12,282.9	12,272.0	-186.3	352.8	Drillers TD @ 12,282' MD
12,432.9	12,422.0	-196.3	337.9	Permit TD @ 12,432' MD

EnCana Oil & Gas (USA) Inc

Story Gulch

S33-T4S-R96W (E34 496)

8506E-34E 34 496

DD

Plan #1

Anticollision Report

20 June, 2012

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 100.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	6/20/2012		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	12,432.9	Plan #1 (DD)	MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Separation Factor	Warning
S33-T4S-R96W (E34 496)						
8503B-34 E34 496 - DD - Plan #1	200.0	200.0	64.8	64.1	104.819	CC, ES
8503B-34 E34 496 - DD - Plan #1	500.0	487.3	92.8	91.1	55.270	SF
8503C-34 E34 496 - DD - Plan #1	200.0	200.0	56.7	56.0	91.710	CC, ES
8503C-34 E34 496 - DD - Plan #1	500.0	488.6	84.7	83.0	50.274	SF
8503D-34 E34 496 - DD - Plan #1	200.0	200.0	64.3	63.7	104.109	CC, ES
8503D-34 E34 496 - DD - Plan #1	500.0	487.4	91.4	89.7	54.379	SF
8503E-34 E34 496 - DD - Plan #1	200.0	200.0	56.2	55.6	90.957	CC, ES
8503E-34 E34 496 - DD - Plan #1	600.0	589.1	89.8	87.7	43.676	SF
8506A-34 E34 496 - DD - Plan #1	200.0	200.0	36.6	35.9	59.173	CC, ES
8506A-34 E34 496 - DD - Plan #1	500.0	495.2	56.9	55.2	33.430	SF
8506B-34 E34 496 - DD - Plan #1	200.0	200.0	35.7	35.1	57.820	CC, ES
8506B-34 E34 496 - DD - Plan #1	900.0	893.6	96.2	93.0	29.805	SF
8506C-34 E34 496 - DD - Plan #1	200.0	200.0	27.6	27.0	44.668	CC, ES
8506C-34 E34 496 - DD - Plan #1	1,300.0	1,296.2	97.6	92.8	20.363	SF
8506D-34 E34 496 - DD - Plan #1	200.0	200.0	8.2	7.6	13.344	CC, ES
8506D-34 E34 496 - DD - Plan #1	2,800.0	2,798.3	97.4	86.7	9.165	SF
8508D-33 E34 496 - DD - Plan #1	200.0	200.0	29.6	29.0	47.926	CC, ES
8508D-33 E34 496 - DD - Plan #1	400.0	397.8	39.0	37.7	28.853	SF
8508E-33 E34 496 - DD - Plan #1	200.0	200.0	11.0	10.4	17.882	CC, ES
8508E-33 E34 496 - DD - Plan #1	300.0	299.8	13.0	12.1	13.470	SF
8508F-33 E34 496 - DD - Plan #1	200.0	200.0	7.9	7.3	12.763	CC, ES
8508F-33 E34 496 - DD - Plan #1	300.0	299.4	12.0	11.1	12.458	SF
8509A-33 E34 496 - DD - Plan #1	200.0	200.0	20.9	20.2	33.760	CC
8509A-33 E34 496 - DD - Plan #1	227.9	227.9	20.9	20.1	29.128	ES
8509A-33 E34 496 - DD - Plan #1	400.0	398.1	27.2	25.9	20.456	SF
8509B-33 E34 496 - DD - Plan #1	200.0	200.0	28.5	27.9	46.120	CC, ES
8509B-33 E34 496 - DD - Plan #1	400.0	396.7	37.7	36.4	28.188	SF
8509C-33 E34 496 - DD - Plan #1	200.0	200.0	48.6	48.0	78.703	CC, ES
8509C-33 E34 496 - DD - Plan #1	500.0	491.3	68.2	66.5	39.842	SF
8509D-33 E34 496 - DD - Plan #1	200.0	200.0	56.6	56.0	91.646	CC, ES
8509D-33 E34 496 - DD - Plan #1	500.0	490.2	75.6	73.9	44.206	SF
8509E-33 E34 496 - DD - Plan #1	263.5	263.1	75.9	75.0	90.237	CC, ES
8509E-33 E34 496 - DD - Plan #1	500.0	490.5	87.7	86.0	51.498	SF
8511A-34 E34 496 - DD - Plan #1	295.0	294.8	20.1	19.1	21.089	CC
8511A-34 E34 496 - DD - Plan #1	300.0	299.8	20.1	19.1	20.708	ES
8511A-34 E34 496 - DD - Plan #1	2,700.0	2,697.6	99.0	88.7	9.632	SF
8511C-34 E34 496 - DD - Plan #1	200.0	200.0	27.5	26.9	44.506	CC, ES
8511C-34 E34 496 - DD - Plan #1	500.0	497.0	37.2	35.4	21.616	SF
8511D-34 E34 496 - DD - Plan #1	279.3	278.8	47.7	46.8	53.241	CC
8511D-34 E34 496 - DD - Plan #1	300.0	299.2	47.8	46.8	49.299	ES
8511D-34 E34 496 - DD - Plan #1	700.0	691.6	71.9	69.5	29.008	SF
8511E-34 E34 496 - DD - Plan #1	200.0	200.0	56.1	55.5	90.790	CC, ES
8511E-34 E34 496 - DD - Plan #1	700.0	688.1	88.4	85.9	35.738	SF
8514A-34 E34 496 - DD - Plan #1	327.4	326.4	74.7	73.6	69.949	CC, ES
8514A-34 E34 496 - DD - Plan #1	600.0	588.1	91.2	89.2	44.054	SF
8514C-34 E34 496 - DD - Plan #1	266.3	265.7	83.5	82.6	98.171	CC, ES
8514C-34 E34 496 - DD - Plan #1	500.0	489.3	94.7	93.1	56.022	SF
8514D-34 E34 496 - DD - Plan #1						Out of range
8514E-34 E34 496 - DD - Plan #1						Out of range
8516A-33 E34 496 - DD - Plan #1	200.0	200.0	84.1	83.5	136.086	CC, ES
8516A-33 E34 496 - DD - Plan #1	400.0	392.2	91.2	89.9	68.334	SF
8516B-33 E34 496 - DD - Plan #1						Out of range
8516C-33 E34 496 - DD - Plan #1						Out of range

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S33-T4S-R96W (E34 496)						
8516E-33 E34 496 - DD - Plan #1						Out of range
CP01B-33 (Existing) - Existing - Existing						Out of range
CP08B-33 (Existing) - Existing - Existing						Out of range
UWF03A-03 E34 596 - DD - Plan #1						Out of range
UWF03B-03 E34 596 - DD - Plan #1						Out of range
UWF03C-03 E34 596 - DD - Plan #1						Out of range

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S33-T4S-R96W (E34 496) - 8503B-34 E34 496 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	0.69	64.8	0.8	64.8					
100.0	100.0	100.0	100.0	0.1	0.1	0.69	64.8	0.8	64.8	64.5	0.27	240.947		
200.0	200.0	200.0	200.0	0.3	0.3	0.69	64.8	0.8	64.8	64.1	0.62	104.819 CC, ES		
300.0	300.0	296.6	296.6	0.5	0.5	-117.99	67.2	1.2	68.1	67.1	0.96	70.582		
400.0	399.9	392.6	392.2	0.7	0.7	-119.98	74.3	2.6	77.8	76.5	1.32	59.014		
500.0	499.7	487.3	486.2	0.9	1.0	-121.13	86.0	4.8	92.8	91.1	1.68	55.270 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S33-T4S-R96W (E34 496) - 8503C-34 E34 496 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	0.00	56.7	0.0	56.7					
100.0	100.0	100.0	100.0	0.1	0.1	0.00	56.7	0.0	56.7	56.4	0.27	210.813		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	56.7	0.0	56.7	56.0	0.62	91.710 CC, ES		
300.0	300.0	297.1	297.0	0.5	0.5	-118.69	59.1	0.5	60.0	59.0	0.97	62.135		
400.0	399.9	393.4	393.1	0.7	0.7	-120.64	66.2	2.1	69.8	68.4	1.32	52.788		
500.0	499.7	488.6	487.5	0.9	1.0	-121.53	77.9	4.7	84.7	83.0	1.68	50.274 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S33-T4S-R96W (E34 496) - 8503D-34 E34 496 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	7.69	63.7	8.6	64.3					
100.0	100.0	100.0	100.0	0.1	0.1	7.69	63.7	8.6	64.3	64.1	0.27	239.315		
200.0	200.0	200.0	200.0	0.3	0.3	7.69	63.7	8.6	64.3	63.7	0.62	104.109 CC, ES		
300.0	300.0	296.6	296.6	0.5	0.5	-111.19	66.1	9.2	67.5	66.5	0.96	69.932		
400.0	399.9	392.6	392.3	0.7	0.7	-113.67	73.1	11.0	76.8	75.5	1.32	58.183		
500.0	499.7	487.4	486.3	0.9	1.0	-115.33	84.6	14.0	91.4	89.7	1.68	54.379 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													S33-T4S-R96W (E34 496) - 8503E-34 E34 496 - DD - Plan #1		Offset Site Error:		0.0 ft	
Survey Program: 0-MWD															Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance											
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)								
0.0	0.0	0.0	0.0	0.0	0.0	8.00	55.7	7.8	56.2									
100.0	100.0	100.0	100.0	0.1	0.1	8.00	55.7	7.8	56.2	55.9	0.27	209.083						
200.0	200.0	200.0	200.0	0.3	0.3	8.00	55.7	7.8	56.2	55.6	0.62	90.957 CC, ES						
300.0	300.0	298.0	298.0	0.5	0.5	-111.09	57.2	8.3	58.5	57.5	0.97	60.493						
400.0	399.9	395.7	395.5	0.7	0.7	-114.13	62.0	9.9	65.4	64.1	1.33	49.349						
500.0	499.7	492.8	492.3	0.9	0.9	-116.30	69.9	12.4	76.0	74.3	1.69	44.990						
600.0	599.6	589.1	588.0	1.1	1.1	-117.28	80.8	15.9	89.8	87.7	2.06	43.676 SF						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S33-T4S-R96W (E34 496) - 8506A-34 E34 496 - DD - Plan #1												Offset Site Error: 0.0 ft	
Survey Program: 0-MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-4.91	36.4	-3.1	36.6				
100.0	100.0	100.0	100.0	0.1	0.1	-4.91	36.4	-3.1	36.6	36.3	0.27	136.022	
200.0	200.0	200.0	200.0	0.3	0.3	-4.91	36.4	-3.1	36.6	35.9	0.62	59.173 CC, ES	
300.0	300.0	298.8	298.8	0.5	0.5	-123.65	38.0	-2.5	39.0	38.1	0.97	40.311	
400.0	399.9	397.3	397.1	0.7	0.7	-125.55	42.7	-0.5	46.3	45.0	1.33	34.830	
500.0	499.7	495.2	494.7	0.9	0.9	-125.61	50.4	2.8	56.9	55.2	1.70	33.430 SF	
600.0	599.6	593.0	591.8	1.1	1.1	-124.29	61.1	7.4	70.2	68.2	2.08	33.763	
700.0	699.4	692.0	689.9	1.3	1.4	-123.09	72.7	12.3	84.4	82.0	2.46	34.261	
800.0	799.3	790.9	788.1	1.5	1.7	-122.23	84.3	17.2	98.6	95.8	2.85	34.625	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design		S33-T4S-R96W (E34 496) - 8506B-34 E34 496 - DD - Plan #1											Offset Site Error:		0.0 ft			
Survey Program:		0-MWD													Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance											
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning					
0.0	0.0	0.0	0.0	0.0	0.0	7.55	35.4	4.7	35.7									
100.0	100.0	100.0	100.0	0.1	0.1	7.55	35.4	4.7	35.7	35.5	0.27	132.910						
200.0	200.0	200.0	200.0	0.3	0.3	7.55	35.4	4.7	35.7	35.1	0.62	57.820	CC, ES					
300.0	300.0	298.8	298.8	0.5	0.5	-111.65	36.9	5.6	37.9	36.9	0.97	39.140						
400.0	399.9	397.3	397.2	0.7	0.7	-114.62	41.2	8.2	44.5	43.1	1.33	33.392						
500.0	499.7	495.8	495.3	0.9	0.9	-115.67	48.3	12.5	54.2	52.5	1.70	31.813						
600.0	599.6	595.3	594.3	1.1	1.1	-116.02	56.2	17.4	64.7	62.6	2.08	31.076						
700.0	699.4	694.7	693.3	1.3	1.3	-116.28	64.1	22.2	75.2	72.8	2.46	30.537						
800.0	799.3	794.2	792.3	1.5	1.6	-116.47	72.1	27.0	85.7	82.9	2.85	30.127						
900.0	899.1	893.6	891.4	1.7	1.8	-116.62	80.0	31.8	96.2	93.0	3.23	29.805	SF					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S33-T4S-R96W (E34 496) - 8506C-34 E34 496 - DD - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	8.15	27.3	3.9	27.6					
100.0	100.0	100.0	100.0	0.1	0.1	8.15	27.3	3.9	27.6	27.3	0.27	102.678		
200.0	200.0	200.0	200.0	0.3	0.3	8.15	27.3	3.9	27.6	27.0	0.62	44.668	CC, ES	
300.0	300.0	299.2	299.2	0.5	0.5	-110.68	28.5	5.2	29.5	28.6	0.97	30.421		
400.0	399.9	398.3	398.2	0.7	0.7	-112.63	31.9	9.0	35.2	33.9	1.34	26.289		
500.0	499.7	498.1	497.7	0.9	0.9	-113.52	36.3	13.8	42.1	40.4	1.72	24.540		
600.0	599.6	597.8	597.3	1.1	1.1	-114.16	40.6	18.6	49.0	46.9	2.10	23.385		
700.0	699.4	697.6	696.8	1.3	1.3	-114.64	45.0	23.4	56.0	53.5	2.48	22.569		
800.0	799.3	797.4	796.4	1.5	1.5	-115.02	49.4	28.3	62.9	60.0	2.86	21.963		
900.0	899.1	897.1	895.9	1.7	1.7	-115.32	53.7	33.1	69.8	66.6	3.25	21.496		
1,000.0	998.9	996.9	995.5	1.9	1.9	-115.56	58.1	37.9	76.8	73.1	3.63	21.125		
1,100.0	1,098.8	1,096.6	1,095.0	2.1	2.1	-115.77	62.5	42.7	83.7	79.7	4.02	20.823		
1,200.0	1,198.6	1,196.4	1,194.5	2.3	2.3	-115.94	66.8	47.5	90.6	86.2	4.41	20.573		
1,300.0	1,298.5	1,296.2	1,294.1	2.5	2.5	-116.09	71.2	52.3	97.6	92.8	4.79	20.363	SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S33-T4S-R96W (E34 496) - 8506D-34 E34 496 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total	Separation	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	10.94	8.1	1.6	8.2					
100.0	100.0	100.0	100.0	0.1	0.1	10.94	8.1	1.6	8.2	8.0	0.27	30.673		
200.0	200.0	200.0	200.0	0.3	0.3	10.94	8.1	1.6	8.2	7.6	0.62	13.344 CC, ES		
300.0	300.0	299.9	299.9	0.5	0.5	-107.22	8.4	3.3	9.4	8.4	0.97	9.670		
400.0	399.9	399.8	399.6	0.7	0.7	-109.03	9.3	7.8	12.6	11.3	1.35	9.365		
500.0	499.7	499.7	499.5	0.9	0.9	-111.07	10.3	12.6	16.1	14.4	1.73	9.332		
600.0	599.6	599.6	599.3	1.1	1.1	-112.37	11.3	17.5	19.6	17.5	2.11	9.304		
700.0	699.4	699.6	699.1	1.3	1.2	-113.28	12.3	22.3	23.1	20.7	2.49	9.282		
800.0	799.3	799.5	798.9	1.5	1.4	-113.95	13.2	27.1	26.7	23.8	2.88	9.264		
900.0	899.1	899.5	898.7	1.7	1.6	-114.46	14.2	32.0	30.2	26.9	3.26	9.249		
1,000.0	998.9	999.4	998.5	1.9	1.8	-114.86	15.2	36.8	33.7	30.1	3.65	9.237		
1,100.0	1,098.8	1,099.3	1,098.4	2.1	2.0	-115.19	16.1	41.6	37.3	33.2	4.04	9.228		
1,200.0	1,198.6	1,199.3	1,198.2	2.3	2.2	-115.46	17.1	46.4	40.8	36.4	4.42	9.219		
1,300.0	1,298.5	1,299.2	1,298.0	2.5	2.4	-115.69	18.1	51.3	44.3	39.5	4.81	9.212		
1,400.0	1,398.3	1,399.1	1,397.8	2.7	2.6	-115.89	19.0	56.1	47.9	42.7	5.20	9.206		
1,500.0	1,498.2	1,499.1	1,497.6	2.8	2.8	-116.05	20.0	60.9	51.4	45.8	5.59	9.201		
1,600.0	1,598.0	1,599.0	1,597.4	3.0	3.0	-116.20	21.0	65.8	54.9	49.0	5.97	9.196		
1,700.0	1,697.9	1,699.0	1,697.3	3.2	3.2	-116.33	22.0	70.6	58.5	52.1	6.36	9.192		
1,800.0	1,797.7	1,798.9	1,797.1	3.4	3.4	-116.44	22.9	75.4	62.0	55.3	6.75	9.188		
1,900.0	1,897.6	1,898.8	1,896.9	3.6	3.6	-116.54	23.9	80.2	65.5	58.4	7.14	9.185		
2,000.0	1,997.4	1,998.8	1,996.7	3.8	3.8	-116.63	24.9	85.1	69.1	61.5	7.52	9.182		
2,100.0	2,097.3	2,098.7	2,096.5	4.0	4.0	-116.72	25.8	89.9	72.6	64.7	7.91	9.179		
2,200.0	2,197.1	2,198.6	2,196.3	4.2	4.2	-116.79	26.8	94.7	76.1	67.8	8.30	9.177		
2,300.0	2,297.0	2,298.6	2,296.1	4.4	4.4	-116.86	27.8	99.6	79.7	71.0	8.69	9.174		
2,400.0	2,396.8	2,398.5	2,396.0	4.6	4.5	-116.92	28.7	104.4	83.2	74.1	9.07	9.172		
2,500.0	2,496.7	2,498.5	2,495.8	4.8	4.7	-116.98	29.7	109.2	86.8	77.3	9.46	9.170		
2,600.0	2,596.5	2,598.4	2,595.6	5.0	4.9	-117.03	30.7	114.0	90.3	80.4	9.85	9.168		
2,700.0	2,696.4	2,698.3	2,695.4	5.2	5.1	-117.08	31.7	118.9	93.8	83.6	10.24	9.167		
2,800.0	2,796.2	2,798.3	2,795.2	5.4	5.3	-117.12	32.6	123.7	97.4	86.7	10.62	9.165 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													S33-T4S-R96W (E34 496) - 8508D-33 E34 496 - DD - Plan #1		Offset Site Error:		0.0 ft
Survey Program: 0-MWD													Offset Well Error:		0.0 ft		
Reference		Offset		Semi Major Axis			Distance										
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft) +E/-W (ft)		Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning				
0.0	0.0	0.0	0.0	0.0	0.0	-7.59	29.4	-3.9	29.6								
100.0	100.0	100.0	100.0	0.1	0.1	-7.59	29.4	-3.9	29.6	29.3	0.27	110.168					
200.0	200.0	200.0	200.0	0.3	0.3	-7.59	29.4	-3.9	29.6	29.0	0.62	47.926 CC, ES					
300.0	300.0	299.5	299.4	0.5	0.5	-132.58	29.6	-6.5	31.5	30.5	0.98	32.247					
400.0	399.9	397.8	397.5	0.7	0.7	-148.59	30.3	-14.1	39.0	37.7	1.35	28.853 SF					
500.0	499.7	494.6	493.4	0.9	1.0	-162.78	31.5	-26.5	53.0	51.2	1.73	30.690					
600.0	599.6	589.3	586.6	1.1	1.3	-172.73	33.0	-43.3	73.1	71.0	2.09	35.025					
700.0	699.4	681.7	676.6	1.3	1.7	-179.40	35.0	-64.1	98.8	96.4	2.44	40.581					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S33-T4S-R96W (E34 496) - 8508E-33 E34 496 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-34.49	9.1	-6.3	11.0					
100.0	100.0	100.0	100.0	0.1	0.1	-34.49	9.1	-6.3	11.0	10.8	0.27	41.106		
200.0	200.0	200.0	200.0	0.3	0.3	-34.49	9.1	-6.3	11.0	10.4	0.62	17.882 CC, ES		
300.0	300.0	299.8	299.8	0.5	0.5	-158.25	9.1	-6.9	13.0	12.1	0.97	13.470 SF		
400.0	399.9	398.6	398.5	0.7	0.7	-173.70	9.0	-12.0	21.7	20.4	1.32	16.452		
500.0	499.7	496.2	495.5	0.9	0.9	176.06	8.9	-22.1	36.2	34.5	1.67	21.645		
600.0	599.6	591.9	590.1	1.1	1.2	169.98	8.7	-36.8	55.9	53.9	2.02	27.622		
700.0	699.4	685.5	681.8	1.3	1.6	166.17	8.4	-55.7	80.5	78.2	2.37	33.978		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S33-T4S-R96W (E34 496) - 8508F-33 E34 496 - DD - Plan #1												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-82.63	1.0	-7.8	7.9				
100.0	100.0	100.0	100.0	0.1	0.1	-82.63	1.0	-7.8	7.9	7.6	0.27	29.339	
200.0	200.0	200.0	200.0	0.3	0.3	-82.63	1.0	-7.8	7.9	7.3	0.62	12.763 CC, ES	
300.0	300.0	299.4	299.4	0.5	0.5	159.32	0.7	-10.4	12.0	11.1	0.97	12.458 SF	
400.0	399.9	397.8	397.4	0.7	0.7	158.85	-0.3	-18.0	24.2	22.8	1.32	18.353	
500.0	499.7	494.6	493.4	0.9	1.0	157.35	-1.8	-30.3	41.7	40.1	1.67	25.034	
600.0	599.6	589.5	586.8	1.1	1.3	155.85	-3.9	-47.1	64.1	62.1	2.02	31.814	
700.0	699.4	682.0	676.9	1.3	1.7	154.60	-6.5	-67.9	91.3	88.9	2.36	38.634	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S33-T4S-R96W (E34 496) - 8509A-33 E34 496 - DD - Plan #1												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-150.83	-18.2	-10.2	20.9				
100.0	100.0	100.0	100.0	0.1	0.1	-150.83	-18.2	-10.2	20.9	20.6	0.27	77.604	
200.0	200.0	200.0	200.0	0.3	0.3	-150.83	-18.2	-10.2	20.9	20.2	0.62	33.760 CC	
227.9	227.9	227.9	227.9	0.4	0.4	91.72	-18.2	-10.2	20.9	20.1	0.72	29.128 ES	
300.0	300.0	299.6	299.6	0.5	0.5	97.24	-18.4	-10.8	21.5	20.5	0.97	22.110	
400.0	399.9	398.1	397.9	0.7	0.7	114.80	-19.5	-15.8	27.2	25.9	1.33	20.456 SF	
500.0	499.7	495.3	494.7	0.9	0.9	127.90	-21.8	-25.5	40.0	38.3	1.68	23.753	
600.0	599.6	590.9	589.1	1.1	1.2	134.84	-25.1	-39.7	58.8	56.8	2.03	28.986	
700.0	699.4	684.5	680.7	1.3	1.6	138.41	-29.3	-58.1	82.9	80.5	2.37	34.971	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													S33-T4S-R96W (E34 496) - 8509B-33 E34 496 - DD - Plan #1		Offset Site Error:		0.0 ft
Survey Program: 0-MWD													Offset Well Error:		0.0 ft		
Reference		Offset		Semi Major Axis			Distance										
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)							
0.0	0.0	0.0	0.0	0.0	0.0	-157.40	-26.3	-10.9	28.5								
100.0	100.0	100.0	100.0	0.1	0.1	-157.40	-26.3	-10.9	28.5	28.2	0.27	106.016					
200.0	200.0	200.0	200.0	0.3	0.3	-157.40	-26.3	-10.9	28.5	27.9	0.62	46.120	CC, ES				
300.0	300.0	298.8	298.8	0.5	0.5	91.51	-27.2	-13.3	30.3	29.4	0.97	31.190					
400.0	399.9	396.7	396.3	0.7	0.7	106.38	-29.9	-20.4	37.7	36.4	1.34	28.188	SF				
500.0	499.7	493.1	492.0	0.9	1.0	117.98	-34.2	-32.0	52.0	50.3	1.69	30.710					
600.0	599.6	587.7	585.1	1.1	1.3	124.87	-40.1	-47.7	72.3	70.3	2.04	35.508					
700.0	699.4	680.1	675.0	1.3	1.7	128.81	-47.4	-67.1	98.0	95.7	2.38	41.236					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S33-T4S-R96W (E34 496) - 8509C-33 E34 496 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-163.17	-46.5	-14.1	48.6					
100.0	100.0	100.0	100.0	0.1	0.1	-163.17	-46.5	-14.1	48.6	48.4	0.27	180.915		
200.0	200.0	200.0	200.0	0.3	0.3	-163.17	-46.5	-14.1	48.6	48.0	0.62	78.703 CC, ES		
300.0	300.0	298.1	298.1	0.5	0.5	83.01	-47.6	-16.3	50.2	49.2	0.97	51.637		
400.0	399.9	395.4	395.0	0.7	0.7	93.11	-50.9	-23.1	56.1	54.7	1.34	41.761		
500.0	499.7	491.3	490.1	0.9	1.0	103.27	-56.2	-34.0	68.2	66.5	1.71	39.842 SF		
600.0	599.6	585.4	582.7	1.1	1.3	111.05	-63.4	-49.0	86.6	84.5	2.07	41.904		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S33-T4S-R96W (E34 496) - 8509D-33 E34 496 - DD - Plan #1													Offset Site Error: 0.0 ft
Survey Program: 0-MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-164.79	-54.6	-14.9	56.6				
100.0	100.0	100.0	100.0	0.1	0.1	-164.79	-54.6	-14.9	56.6	56.4	0.27	210.667	
200.0	200.0	200.0	200.0	0.3	0.3	-164.79	-54.6	-14.9	56.6	56.0	0.62	91.646 CC, ES	
300.0	300.0	297.8	297.7	0.5	0.5	80.70	-55.9	-17.0	58.2	57.2	0.97	59.966	
400.0	399.9	394.7	394.3	0.7	0.7	89.24	-59.7	-23.4	64.0	62.6	1.34	47.708	
500.0	499.7	490.2	489.1	0.9	1.0	98.19	-65.9	-33.8	75.6	73.9	1.71	44.206 SF	
600.0	599.6	584.1	581.5	1.1	1.3	105.42	-74.4	-47.9	93.5	91.4	2.07	45.150	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													S33-T4S-R96W (E34 496) - 8509E-33 E34 496 - DD - Plan #1		Offset Site Error:		0.0 ft	
Survey Program:													0-MWD		Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance											
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)								
0.0	0.0	0.0	0.0	0.0	0.0	-166.31	-73.9	-18.0	76.0									
100.0	100.0	100.0	100.0	0.1	0.1	-166.31	-73.9	-18.0	76.0	75.8	0.27	282.841						
200.0	200.0	200.0	200.0	0.3	0.3	-166.31	-73.9	-18.0	76.0	75.4	0.62	123.044						
263.5	263.5	263.1	263.1	0.4	0.4	76.39	-73.9	-18.0	75.9	75.0	0.84	90.237	CC, ES					
300.0	300.0	298.5	298.5	0.5	0.5	77.41	-74.2	-18.5	76.1	75.1	0.97	78.608						
400.0	399.9	395.0	394.9	0.7	0.7	82.99	-77.0	-22.5	79.3	78.0	1.33	59.590						
500.0	499.7	490.5	489.8	0.9	0.9	89.95	-82.6	-30.4	87.7	86.0	1.70	51.498	SF					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S33-T4S-R96W (E34 496) - 8511A-34 E34 496 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-173.39	-20.2	-2.3	20.4					
100.0	100.0	100.0	100.0	0.1	0.1	-173.39	-20.2	-2.3	20.4	20.1	0.27	75.811		
200.0	200.0	200.0	200.0	0.3	0.3	-173.39	-20.2	-2.3	20.4	19.8	0.62	32.980		
295.0	295.0	294.8	294.8	0.5	0.5	72.24	-20.5	-2.1	20.1	19.1	0.95	21.089 CC		
300.0	300.0	299.8	299.8	0.5	0.5	72.52	-20.6	-2.1	20.1	19.1	0.97	20.708 ES		
400.0	399.9	399.3	399.2	0.7	0.7	78.07	-23.2	0.1	20.9	19.6	1.34	15.650		
500.0	499.7	498.9	498.6	0.9	0.9	77.44	-28.5	4.5	23.7	22.0	1.72	13.748		
600.0	599.6	598.9	598.3	1.1	1.1	75.25	-34.5	9.5	27.0	24.9	2.11	12.789		
700.0	699.4	698.8	697.9	1.3	1.3	73.54	-40.5	14.4	30.4	27.9	2.50	12.133		
800.0	799.3	798.8	797.5	1.5	1.5	72.17	-46.5	19.4	33.7	30.8	2.89	11.660		
900.0	899.1	898.7	897.2	1.7	1.7	71.05	-52.6	24.4	37.1	33.8	3.28	11.305		
1,000.0	998.9	998.6	996.8	1.9	1.9	70.11	-58.6	29.4	40.5	36.9	3.67	11.030		
1,100.0	1,098.8	1,098.6	1,096.4	2.1	2.2	69.33	-64.6	34.4	43.9	39.9	4.06	10.811		
1,200.0	1,198.6	1,198.5	1,196.1	2.3	2.4	68.65	-70.6	39.4	47.4	42.9	4.45	10.633		
1,300.0	1,298.5	1,298.5	1,295.7	2.5	2.6	68.07	-76.6	44.3	50.8	45.9	4.84	10.485		
1,400.0	1,398.3	1,398.4	1,395.3	2.7	2.8	67.56	-82.7	49.3	54.2	49.0	5.23	10.360		
1,500.0	1,498.2	1,498.3	1,495.0	2.8	3.0	67.11	-88.7	54.3	57.6	52.0	5.62	10.254		
1,600.0	1,598.0	1,598.3	1,594.6	3.0	3.3	66.71	-94.7	59.3	61.1	55.1	6.01	10.163		
1,700.0	1,697.9	1,698.2	1,694.3	3.2	3.5	66.35	-100.7	64.3	64.5	58.1	6.40	10.083		
1,800.0	1,797.7	1,798.2	1,793.9	3.4	3.7	66.03	-106.7	69.3	68.0	61.2	6.79	10.013		
1,900.0	1,897.6	1,898.1	1,893.5	3.6	3.9	65.75	-112.8	74.2	71.4	64.2	7.18	9.951		
2,000.0	1,997.4	1,998.0	1,993.2	3.8	4.1	65.48	-118.8	79.2	74.8	67.3	7.56	9.896		
2,100.0	2,097.3	2,098.0	2,092.8	4.0	4.4	65.24	-124.8	84.2	78.3	70.3	7.95	9.847		
2,200.0	2,197.1	2,197.9	2,192.4	4.2	4.6	65.02	-130.8	89.2	81.7	73.4	8.34	9.802		
2,300.0	2,297.0	2,297.9	2,292.1	4.4	4.8	64.82	-136.8	94.2	85.2	76.5	8.73	9.762		
2,400.0	2,396.8	2,397.8	2,391.7	4.6	5.0	64.64	-142.9	99.1	88.6	79.5	9.11	9.725		
2,500.0	2,496.7	2,497.7	2,491.3	4.8	5.2	64.47	-148.9	104.1	92.1	82.6	9.50	9.691		
2,600.0	2,596.5	2,597.7	2,591.0	5.0	5.5	64.31	-154.9	109.1	95.5	85.7	9.89	9.660		
2,700.0	2,696.4	2,697.6	2,690.6	5.2	5.7	64.16	-160.9	114.1	99.0	88.7	10.28	9.632 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S33-T4S-R96W (E34 496) - 8511C-34 E34 496 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty	Separation		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-173.47	-27.3	-3.1	27.5					
100.0	100.0	100.0	100.0	0.1	0.1	-173.47	-27.3	-3.1	27.5	27.2	0.27	102.306		
200.0	200.0	200.0	200.0	0.3	0.3	-173.47	-27.3	-3.1	27.5	26.9	0.62	44.506	CC, ES	
300.0	300.0	299.1	299.1	0.5	0.5	70.36	-28.9	-2.5	28.4	27.4	0.97	29.304		
400.0	399.9	398.2	398.0	0.7	0.7	74.19	-33.7	-0.7	31.4	30.0	1.34	23.466		
500.0	499.7	497.0	496.5	0.9	0.9	75.14	-41.7	2.3	37.2	35.4	1.72	21.616	SF	
600.0	599.6	595.5	594.2	1.1	1.2	73.43	-52.8	6.5	45.8	43.7	2.11	21.721		
700.0	699.4	694.6	692.3	1.3	1.4	71.06	-66.1	11.5	56.5	54.0	2.50	22.601		
800.0	799.3	794.0	790.7	1.5	1.7	69.41	-79.5	16.5	67.3	64.4	2.89	23.288		
900.0	899.1	893.4	889.1	1.7	2.0	68.22	-92.9	21.6	78.1	74.8	3.28	23.830		
1,000.0	998.9	992.8	987.4	1.9	2.3	67.32	-106.3	26.6	88.9	85.3	3.66	24.267		
1,100.0	1,098.8	1,092.2	1,085.8	2.1	2.6	66.62	-119.7	31.7	99.8	95.7	4.05	24.627		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												S33-T4S-R96W (E34 496) - 8511D-34 E34 496 - DD - Plan #1		Offset Site Error:		0.0 ft	
Survey Program: 0-MWD														Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance										
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty	Separation	Warning				
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor					
0.0	0.0	0.0	0.0	0.0	0.0	-172.51	-47.6	-6.3	48.0								
100.0	100.0	100.0	100.0	0.1	0.1	-172.51	-47.6	-6.3	48.0	47.7	0.27	178.457					
200.0	200.0	200.0	200.0	0.3	0.3	-172.51	-47.6	-6.3	48.0	47.3	0.62	77.634					
279.3	279.3	278.8	278.8	0.4	0.4	70.82	-47.7	-6.2	47.7	46.8	0.90	53.241	CC				
300.0	300.0	299.2	299.2	0.5	0.5	71.40	-48.0	-6.1	47.8	46.8	0.97	49.299	ES				
400.0	399.9	397.7	397.6	0.7	0.7	75.00	-51.2	-5.2	49.4	48.1	1.33	37.102					
500.0	499.7	496.1	495.8	0.9	0.9	77.00	-57.7	-3.2	54.0	52.3	1.70	31.664					
600.0	599.6	594.1	593.3	1.1	1.1	76.96	-67.3	-0.3	61.5	59.4	2.09	29.447					
700.0	699.4	691.6	689.9	1.3	1.4	75.52	-80.1	3.5	71.9	69.5	2.48	29.008	SF				
800.0	799.3	788.9	785.7	1.5	1.7	73.38	-95.9	8.3	85.3	82.4	2.87	29.696					
900.0	899.1	887.8	883.0	1.7	2.0	71.52	-112.9	13.4	99.7	96.4	3.27	30.531					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													S33-T4S-R96W (E34 496) - 8511E-34 E34 496 - DD - Plan #1		Offset Site Error:		0.0 ft
Survey Program: 0-MWD													Offset Well Error:		0.0 ft		
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor					
0.0	0.0	0.0	0.0	0.0	0.0	-172.79	-55.7	-7.0	56.1								
100.0	100.0	100.0	100.0	0.1	0.1	-172.79	-55.7	-7.0	56.1	55.8	0.27	208.698					
200.0	200.0	200.0	200.0	0.3	0.3	-172.79	-55.7	-7.0	56.1	55.5	0.62	90.790	CC, ES				
300.0	300.0	298.2	298.2	0.5	0.5	70.40	-57.3	-6.7	57.1	56.1	0.97	59.015					
400.0	399.9	396.2	396.1	0.7	0.7	72.99	-62.2	-5.6	60.3	59.0	1.33	45.346					
500.0	499.7	494.0	493.5	0.9	0.9	74.56	-70.4	-3.8	66.6	64.9	1.70	39.091					
600.0	599.6	591.4	590.2	1.1	1.2	74.74	-81.7	-1.2	76.0	73.9	2.09	36.425					
700.0	699.4	688.1	685.8	1.3	1.5	73.96	-96.1	2.0	88.4	85.9	2.47	35.738	SF				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												S33-T4S-R96W (E34 496) - 8514A-34 E34 496 - DD - Plan #1		Offset Site Error:		0.0 ft	
Survey Program: 0-MWD														Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance										
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)							
0.0	0.0	0.0	0.0	0.0	0.0	-172.86	-74.9	-9.4	75.5								
100.0	100.0	100.0	100.0	0.1	0.1	-172.86	-74.9	-9.4	75.5	75.2	0.27	280.754					
200.0	200.0	200.0	200.0	0.3	0.3	-172.86	-74.9	-9.4	75.5	74.8	0.62	122.136					
300.0	300.0	300.0	300.0	0.5	0.5	70.57	-74.9	-9.4	74.9	73.9	0.97	77.159					
327.4	327.4	326.4	326.4	0.5	0.5	71.25	-75.1	-9.3	74.7	73.6	1.07	69.949	CC, ES				
400.0	399.9	396.4	396.3	0.7	0.7	73.35	-77.3	-8.9	75.7	74.4	1.33	57.025					
500.0	499.7	492.6	492.2	0.9	0.9	74.99	-84.4	-7.5	81.2	79.5	1.69	47.905					
600.0	599.6	588.1	587.0	1.1	1.1	75.12	-96.2	-5.2	91.2	89.2	2.07	44.054	SF				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													S33-T4S-R96W (E34 496) - 8514C-34 E34 496 - DD - Plan #1		Offset Site Error:		0.0 ft	
Survey Program: 0-MWD															Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance											
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)		+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning				
0.0	0.0	0.0	0.0	0.0	0.0	-172.48	-83.0		-10.9	83.7								
100.0	100.0	100.0	100.0	0.1	0.1	-172.48	-83.0		-10.9	83.7	83.4	0.27	311.367					
200.0	200.0	200.0	200.0	0.3	0.3	-172.48	-83.0		-10.9	83.7	83.1	0.62	135.453					
266.3	266.3	265.7	265.7	0.4	0.4	70.16	-83.0		-10.9	83.5	82.6	0.85	98.171	CC, ES				
300.0	300.0	298.0	298.0	0.5	0.5	70.66	-83.6		-10.9	83.7	82.7	0.97	86.572					
400.0	399.9	393.8	393.7	0.7	0.7	72.62	-88.3		-10.1	86.9	85.6	1.32	65.643					
500.0	499.7	489.3	488.6	0.9	0.9	73.72	-97.8		-8.6	94.7	93.1	1.69	56.022	SF				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8506E-34E 34 496
Project:	Story Gulch	TVD Reference:	WELL @ 8324.0ft (Original Well Elev)
Reference Site:	S33-T4S-R96W (E34 496)	MD Reference:	WELL @ 8324.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	8506E-34E 34 496	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													S33-T4S-R96W (E34 496) - 8516A-33 E34 496 - DD - Plan #1		Offset Site Error:		0.0 ft	
Survey Program: 0-MWD															Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance											
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)								
0.0	0.0	0.0	0.0	0.0	0.0	-167.10	-82.0	-18.8	84.1									
100.0	100.0	100.0	100.0	0.1	0.1	-167.10	-82.0	-18.8	84.1	83.8	0.27	312.820						
200.0	200.0	200.0	200.0	0.3	0.3	-167.10	-82.0	-18.8	84.1	83.5	0.62	136.086	CC, ES					
300.0	300.0	296.5	296.5	0.5	0.5	77.13	-83.5	-20.7	85.7	84.7	0.97	88.577						
400.0	399.9	392.2	391.9	0.7	0.7	82.64	-88.1	-26.3	91.2	89.9	1.33	68.334	SF					

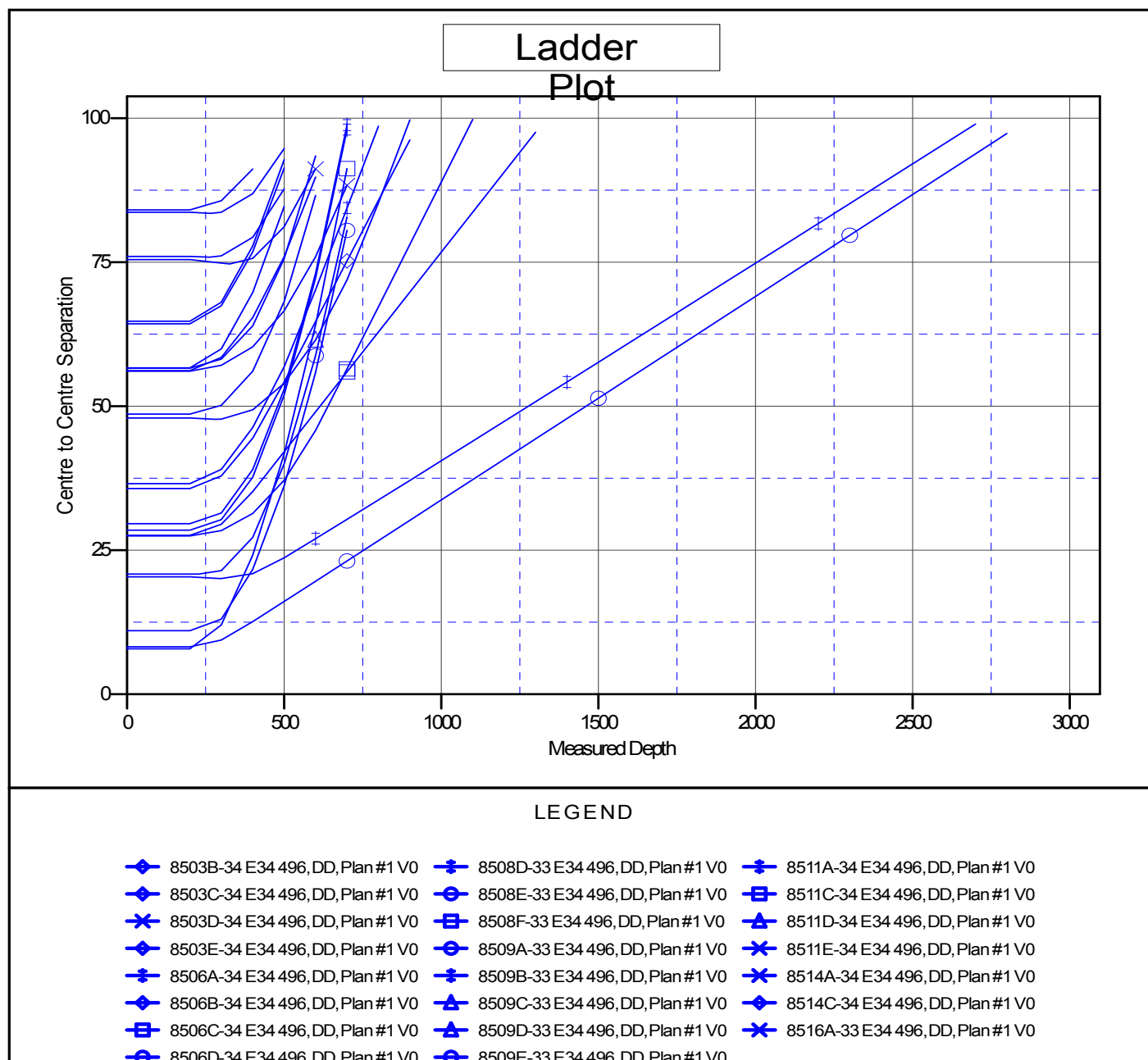
Anticollision Report

Company: EnCana Oil & Gas (USA) Inc
Project: Story Gulch
Reference Site: S33-T4S-R96W (E34 496)
Site Error: 0.0ft
Reference Well: 8506E-34E 34 496
Well Error: 0.0ft
Reference Wellbore DD
Reference Design: Plan #1

Local Co-ordinate Reference: Well 8506E-34E 34 496
TVD Reference: WELL @ 8324.0ft (Original Well Elev)
MD Reference: WELL @ 8324.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: USA EDM 5000 Multi Users DB
Offset TVD Reference: Offset Datum

Reference Depths are relative to WELL @ 8324.0ft (Original Well Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is 105° 30' 0.000 W °

Coordinates are relative to: 8506E-34E 34 496
 Coordinate System is US State Plane 1983, Colorado Central Zone
 Grid Convergence at Surface is: -1.68°



CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation