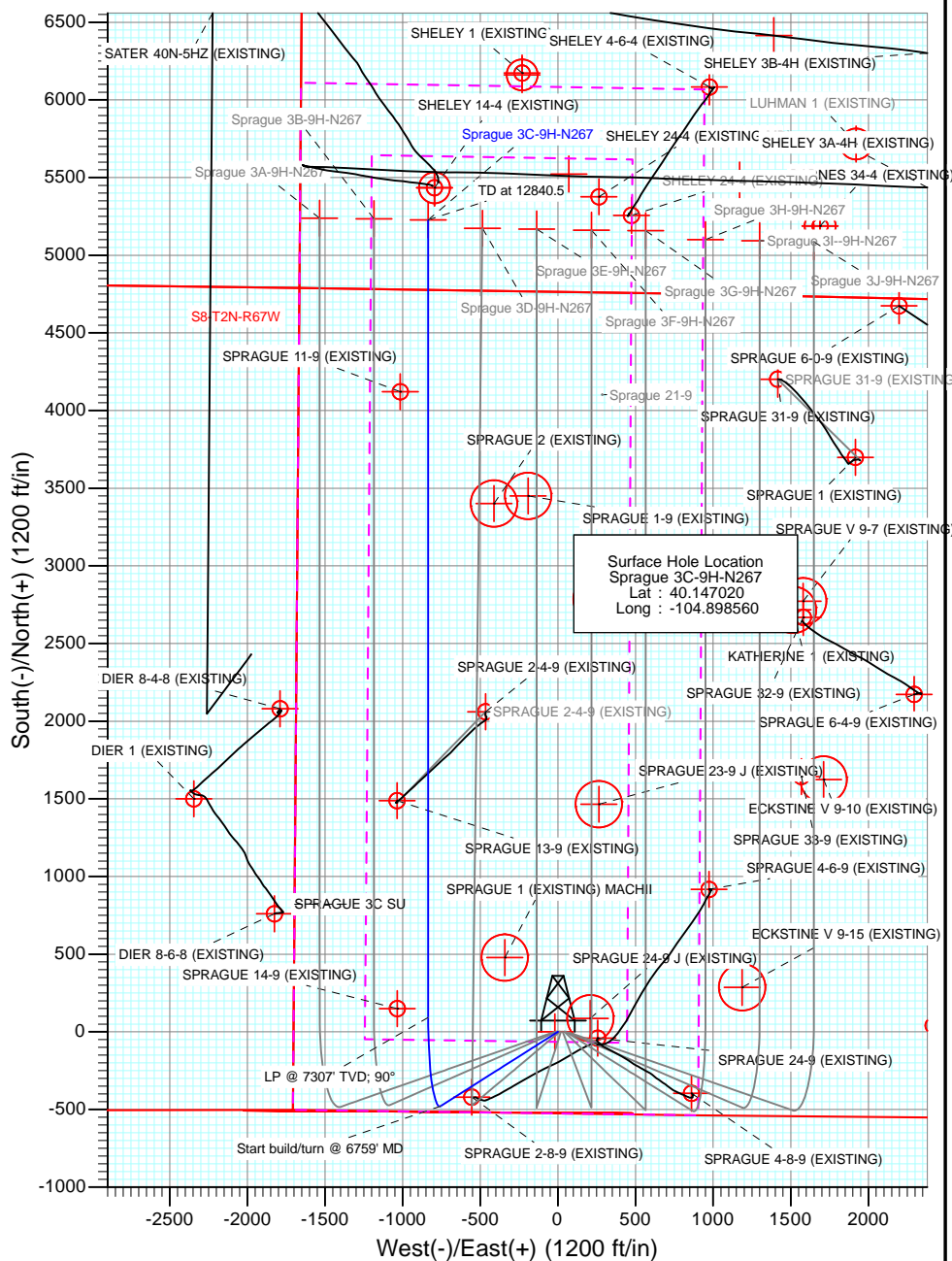
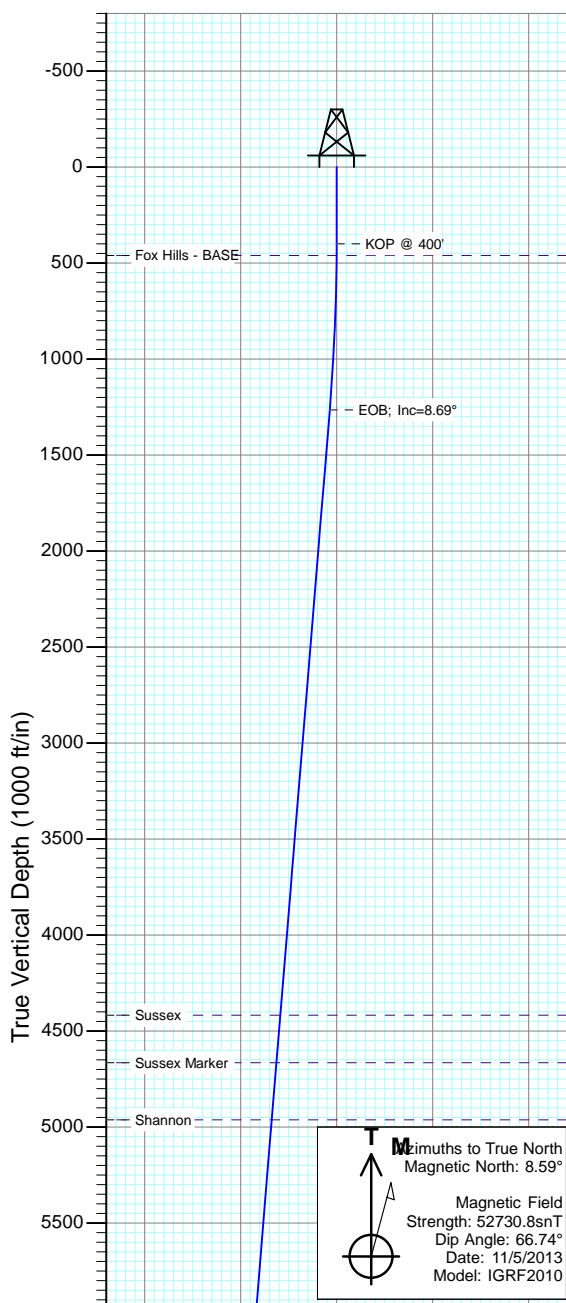


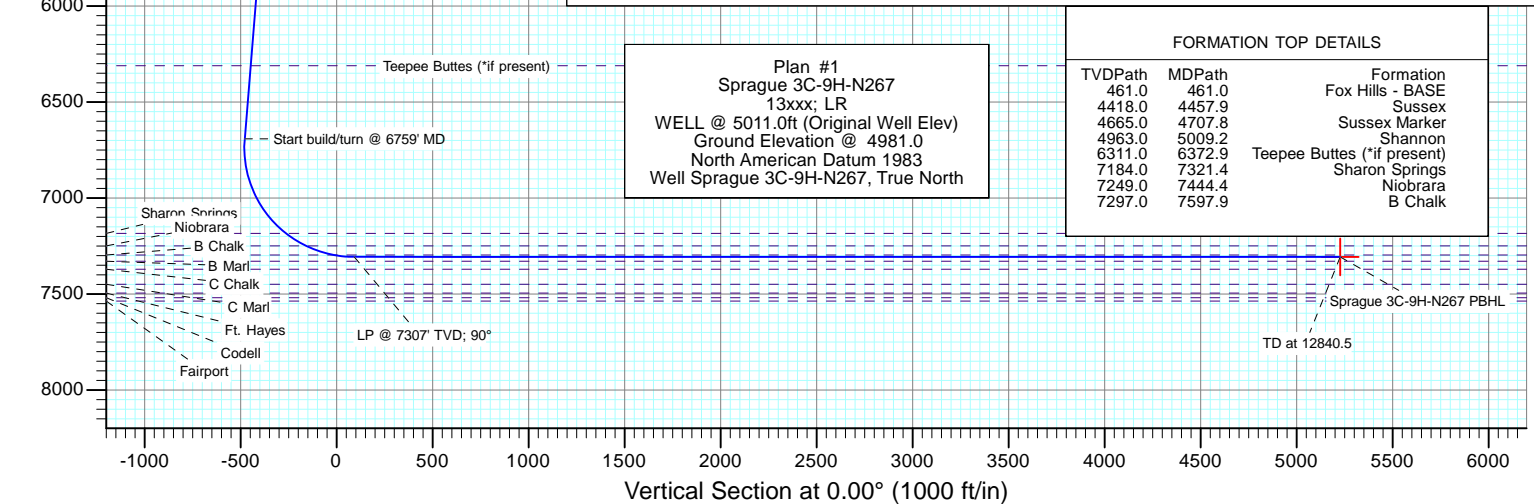


Project: DJ Wattenberg
 Site: S9-T2N-R67W (Sprague)
 Well: Sprague 3C-9H-N267
 Wellbore: Hz
 Design: Plan #1



Plan #1
 Sprague 3C-9H-N267
 13xxx; LR
 WELL @ 5011.0ft (Original Well Elev)
 Ground Elevation @ 4981.0
 North American Datum 1983
 Well Sprague 3C-9H-N267, True North

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
461.0	461.0	Fox Hills - BASE
4418.0	4457.9	Sussex
4665.0	4707.8	Sussex Marker
4963.0	5009.2	Shannon
6311.0	6372.9	Teepee Buttes (*if present)
7184.0	7321.4	Sharon Springs
7249.0	7444.4	Niobrara
7297.0	7597.9	B Chalk



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site:	S9-T2N-R67W (Sprague)	North Reference:	True
Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Project	DJ Wattenberg		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		S9-T2N-R67W (Sprague)			
Site Position:		Northing:	1,298,443.90 ft	Latitude:	40.151070
From:	Lat/Long	Easting:	3,167,093.12 ft	Longitude:	-104.902260
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.39 °

Well	Sprague 3C-9H-N267					
Well Position	+N/-S	0.0 ft	Northing:	1,296,975.56 ft	Latitude:	40.147020
	+E/-W	0.0 ft	Easting:	3,168,137.38 ft	Longitude:	-104.898560
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,981.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/5/2013	8.59	66.74	52,731

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	0.00

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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,268.8	8.69	237.68	1,265.5	-35.2	-55.6	1.00	1.00	0.00	237.68	
6,759.2	8.69	237.68	6,692.9	-478.6	-756.4	0.00	0.00	0.00	0.00	
7,705.5	90.00	0.00	7,307.0	92.5	-835.7	10.00	8.59	12.93	122.03	
12,840.5	90.00	0.00	7,307.0	5,227.5	-835.7	0.00	0.00	0.00	0.00	Sprague 3C-9H-N267

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site:	S9-T2N-R67W (Sprague)	North Reference:	True
Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
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	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	KOP @ 400'
461.0	0.61	237.68	461.0	-0.2	-0.3	-0.2	1.00	1.00	Fox Hills - BASE
500.0	1.00	237.68	500.0	-0.5	-0.7	-0.5	1.00	1.00	
600.0	2.00	237.68	600.0	-1.9	-2.9	-1.9	1.00	1.00	
700.0	3.00	237.68	699.9	-4.2	-6.6	-4.2	1.00	1.00	
800.0	4.00	237.68	799.7	-7.5	-11.8	-7.5	1.00	1.00	
900.0	5.00	237.68	899.4	-11.7	-18.4	-11.7	1.00	1.00	
1,000.0	6.00	237.68	998.9	-16.8	-26.5	-16.8	1.00	1.00	
1,100.0	7.00	237.68	1,098.3	-22.8	-36.1	-22.8	1.00	1.00	
1,200.0	8.00	237.68	1,197.4	-29.8	-47.1	-29.8	1.00	1.00	
1,268.8	8.69	237.68	1,265.5	-35.2	-55.6	-35.2	1.00	1.00	EOB; Inc=8.69°
1,300.0	8.69	237.68	1,296.3	-37.7	-59.5	-37.7	0.00	0.00	
1,400.0	8.69	237.68	1,395.2	-45.8	-72.3	-45.8	0.00	0.00	
1,500.0	8.69	237.68	1,494.0	-53.8	-85.1	-53.8	0.00	0.00	
1,600.0	8.69	237.68	1,592.9	-61.9	-97.8	-61.9	0.00	0.00	
1,700.0	8.69	237.68	1,691.7	-70.0	-110.6	-70.0	0.00	0.00	
1,800.0	8.69	237.68	1,790.6	-78.1	-123.4	-78.1	0.00	0.00	
1,900.0	8.69	237.68	1,889.4	-86.1	-136.1	-86.1	0.00	0.00	
2,000.0	8.69	237.68	1,988.3	-94.2	-148.9	-94.2	0.00	0.00	
2,100.0	8.69	237.68	2,087.1	-102.3	-161.7	-102.3	0.00	0.00	
2,200.0	8.69	237.68	2,186.0	-110.4	-174.4	-110.4	0.00	0.00	
2,300.0	8.69	237.68	2,284.8	-118.4	-187.2	-118.4	0.00	0.00	
2,400.0	8.69	237.68	2,383.7	-126.5	-199.9	-126.5	0.00	0.00	
2,500.0	8.69	237.68	2,482.5	-134.6	-212.7	-134.6	0.00	0.00	
2,600.0	8.69	237.68	2,581.4	-142.7	-225.5	-142.7	0.00	0.00	
2,700.0	8.69	237.68	2,680.3	-150.8	-238.2	-150.8	0.00	0.00	
2,800.0	8.69	237.68	2,779.1	-158.8	-251.0	-158.8	0.00	0.00	
2,900.0	8.69	237.68	2,878.0	-166.9	-263.8	-166.9	0.00	0.00	
3,000.0	8.69	237.68	2,976.8	-175.0	-276.5	-175.0	0.00	0.00	
3,100.0	8.69	237.68	3,075.7	-183.1	-289.3	-183.1	0.00	0.00	
3,200.0	8.69	237.68	3,174.5	-191.1	-302.1	-191.1	0.00	0.00	
3,300.0	8.69	237.68	3,273.4	-199.2	-314.8	-199.2	0.00	0.00	
3,400.0	8.69	237.68	3,372.2	-207.3	-327.6	-207.3	0.00	0.00	
3,500.0	8.69	237.68	3,471.1	-215.4	-340.4	-215.4	0.00	0.00	
3,600.0	8.69	237.68	3,569.9	-223.4	-353.1	-223.4	0.00	0.00	
3,700.0	8.69	237.68	3,668.8	-231.5	-365.9	-231.5	0.00	0.00	
3,800.0	8.69	237.68	3,767.6	-239.6	-378.7	-239.6	0.00	0.00	
3,900.0	8.69	237.68	3,866.5	-247.7	-391.4	-247.7	0.00	0.00	
4,000.0	8.69	237.68	3,965.3	-255.8	-404.2	-255.8	0.00	0.00	
4,100.0	8.69	237.68	4,064.2	-263.8	-416.9	-263.8	0.00	0.00	
4,200.0	8.69	237.68	4,163.0	-271.9	-429.7	-271.9	0.00	0.00	
4,300.0	8.69	237.68	4,261.9	-280.0	-442.5	-280.0	0.00	0.00	
4,400.0	8.69	237.68	4,360.7	-288.1	-455.2	-288.1	0.00	0.00	
4,457.9	8.69	237.68	4,418.0	-292.7	-462.6	-292.7	0.00	0.00	Sussex
4,500.0	8.69	237.68	4,459.6	-296.1	-468.0	-296.1	0.00	0.00	
4,600.0	8.69	237.68	4,558.5	-304.2	-480.8	-304.2	0.00	0.00	
4,700.0	8.69	237.68	4,657.3	-312.3	-493.5	-312.3	0.00	0.00	
4,707.8	8.69	237.68	4,665.0	-312.9	-494.5	-312.9	0.00	0.00	Sussex Marker

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site:	S9-T2N-R67W (Sprague)	North Reference:	True
Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
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
4,800.0	8.69	237.68	4,756.2	-320.4	-506.3	-320.4	0.00	0.00	
4,900.0	8.69	237.68	4,855.0	-328.4	-519.1	-328.4	0.00	0.00	
5,000.0	8.69	237.68	4,953.9	-336.5	-531.8	-336.5	0.00	0.00	
5,009.2	8.69	237.68	4,963.0	-337.3	-533.0	-337.3	0.00	0.00	Shannon
5,100.0	8.69	237.68	5,052.7	-344.6	-544.6	-344.6	0.00	0.00	
5,200.0	8.69	237.68	5,151.6	-352.7	-557.4	-352.7	0.00	0.00	
5,300.0	8.69	237.68	5,250.4	-360.8	-570.1	-360.8	0.00	0.00	
5,400.0	8.69	237.68	5,349.3	-368.8	-582.9	-368.8	0.00	0.00	
5,500.0	8.69	237.68	5,448.1	-376.9	-595.6	-376.9	0.00	0.00	
5,600.0	8.69	237.68	5,547.0	-385.0	-608.4	-385.0	0.00	0.00	
5,700.0	8.69	237.68	5,645.8	-393.1	-621.2	-393.1	0.00	0.00	
5,800.0	8.69	237.68	5,744.7	-401.1	-633.9	-401.1	0.00	0.00	
5,900.0	8.69	237.68	5,843.5	-409.2	-646.7	-409.2	0.00	0.00	
6,000.0	8.69	237.68	5,942.4	-417.3	-659.5	-417.3	0.00	0.00	
6,100.0	8.69	237.68	6,041.2	-425.4	-672.2	-425.4	0.00	0.00	
6,200.0	8.69	237.68	6,140.1	-433.4	-685.0	-433.4	0.00	0.00	
6,300.0	8.69	237.68	6,238.9	-441.5	-697.8	-441.5	0.00	0.00	
6,372.9	8.69	237.68	6,311.0	-447.4	-707.1	-447.4	0.00	0.00	Teepee Buttes (*if present)
6,400.0	8.69	237.68	6,337.8	-449.6	-710.5	-449.6	0.00	0.00	
6,500.0	8.69	237.68	6,436.6	-457.7	-723.3	-457.7	0.00	0.00	
6,600.0	8.69	237.68	6,535.5	-465.8	-736.1	-465.8	0.00	0.00	
6,700.0	8.69	237.68	6,634.4	-473.8	-748.8	-473.8	0.00	0.00	
6,759.2	8.69	237.68	6,692.9	-478.6	-756.4	-478.6	0.00	0.00	Start build/turn @ 6759' MD
6,800.0	7.38	265.70	6,733.3	-480.5	-761.6	-480.5	10.00	-3.21	
6,900.0	11.95	322.42	6,832.0	-472.7	-774.3	-472.7	10.00	4.58	
7,000.0	20.74	340.07	6,928.0	-447.8	-786.7	-447.8	10.00	8.79	
7,100.0	30.27	347.22	7,018.1	-406.5	-798.4	-406.5	10.00	9.53	
7,200.0	40.02	351.15	7,099.8	-350.0	-808.9	-350.0	10.00	9.74	
7,300.0	49.85	353.75	7,170.5	-280.0	-818.1	-280.0	10.00	9.83	
7,321.4	51.96	354.20	7,184.0	-263.5	-819.8	-263.5	10.00	9.86	Sharon Springs
7,400.0	59.73	355.68	7,228.1	-198.8	-825.5	-198.8	10.00	9.88	
7,444.4	64.12	356.41	7,249.0	-159.7	-828.2	-159.7	10.00	9.89	Niobrara
7,500.0	69.63	357.25	7,270.8	-108.7	-831.0	-108.7	10.00	9.90	
7,597.9	79.32	358.61	7,297.0	-14.5	-834.4	-14.5	10.00	9.91	B Chalk
7,600.0	79.54	358.63	7,297.4	-12.4	-834.4	-12.4	10.00	9.91	
7,700.0	89.45	359.93	7,307.0	87.0	-835.7	87.0	10.00	9.92	
7,705.5	90.00	0.00	7,307.0	92.5	-835.7	92.5	10.00	9.92	LP @ 7307' TVD; 90°
7,800.0	90.00	0.00	7,307.0	187.0	-835.7	187.0	0.00	0.00	
7,900.0	90.00	0.00	7,307.0	287.0	-835.7	287.0	0.00	0.00	
8,000.0	90.00	0.00	7,307.0	387.0	-835.7	387.0	0.00	0.00	
8,100.0	90.00	0.00	7,307.0	487.0	-835.7	487.0	0.00	0.00	
8,200.0	90.00	0.00	7,307.0	587.0	-835.7	587.0	0.00	0.00	
8,300.0	90.00	0.00	7,307.0	687.0	-835.7	687.0	0.00	0.00	
8,400.0	90.00	0.00	7,307.0	787.0	-835.7	787.0	0.00	0.00	
8,500.0	90.00	0.00	7,307.0	887.0	-835.7	887.0	0.00	0.00	
8,600.0	90.00	0.00	7,307.0	987.0	-835.7	987.0	0.00	0.00	
8,700.0	90.00	0.00	7,307.0	1,087.0	-835.7	1,087.0	0.00	0.00	
8,800.0	90.00	0.00	7,307.0	1,187.0	-835.7	1,187.0	0.00	0.00	
8,900.0	90.00	0.00	7,307.0	1,287.0	-835.7	1,287.0	0.00	0.00	
9,000.0	90.00	0.00	7,307.0	1,387.0	-835.7	1,387.0	0.00	0.00	
9,100.0	90.00	0.00	7,307.0	1,487.0	-835.7	1,487.0	0.00	0.00	
9,200.0	90.00	0.00	7,307.0	1,587.0	-835.7	1,587.0	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site:	S9-T2N-R67W (Sprague)	North Reference:	True
Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
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
9,300.0	90.00	0.00	7,307.0	1,687.0	-835.7	1,687.0	0.00	0.00	
9,400.0	90.00	0.00	7,307.0	1,787.0	-835.7	1,787.0	0.00	0.00	
9,500.0	90.00	0.00	7,307.0	1,887.0	-835.7	1,887.0	0.00	0.00	
9,600.0	90.00	0.00	7,307.0	1,987.0	-835.7	1,987.0	0.00	0.00	
9,700.0	90.00	0.00	7,307.0	2,087.0	-835.7	2,087.0	0.00	0.00	
9,800.0	90.00	0.00	7,307.0	2,187.0	-835.7	2,187.0	0.00	0.00	
9,900.0	90.00	0.00	7,307.0	2,287.0	-835.7	2,287.0	0.00	0.00	
10,000.0	90.00	0.00	7,307.0	2,387.0	-835.7	2,387.0	0.00	0.00	
10,100.0	90.00	0.00	7,307.0	2,487.0	-835.7	2,487.0	0.00	0.00	
10,200.0	90.00	0.00	7,307.0	2,587.0	-835.7	2,587.0	0.00	0.00	
10,300.0	90.00	0.00	7,307.0	2,687.0	-835.7	2,687.0	0.00	0.00	
10,400.0	90.00	0.00	7,307.0	2,787.0	-835.7	2,787.0	0.00	0.00	
10,500.0	90.00	0.00	7,307.0	2,887.0	-835.7	2,887.0	0.00	0.00	
10,600.0	90.00	0.00	7,307.0	2,987.0	-835.7	2,987.0	0.00	0.00	
10,700.0	90.00	0.00	7,307.0	3,087.0	-835.7	3,087.0	0.00	0.00	
10,800.0	90.00	0.00	7,307.0	3,187.0	-835.7	3,187.0	0.00	0.00	
10,900.0	90.00	0.00	7,307.0	3,287.0	-835.7	3,287.0	0.00	0.00	
11,000.0	90.00	0.00	7,307.0	3,387.0	-835.7	3,387.0	0.00	0.00	
11,100.0	90.00	0.00	7,307.0	3,487.0	-835.7	3,487.0	0.00	0.00	
11,200.0	90.00	0.00	7,307.0	3,587.0	-835.7	3,587.0	0.00	0.00	
11,300.0	90.00	0.00	7,307.0	3,687.0	-835.7	3,687.0	0.00	0.00	
11,400.0	90.00	0.00	7,307.0	3,787.0	-835.7	3,787.0	0.00	0.00	
11,500.0	90.00	0.00	7,307.0	3,887.0	-835.7	3,887.0	0.00	0.00	
11,600.0	90.00	0.00	7,307.0	3,987.0	-835.7	3,987.0	0.00	0.00	
11,700.0	90.00	0.00	7,307.0	4,087.0	-835.7	4,087.0	0.00	0.00	
11,800.0	90.00	0.00	7,307.0	4,187.0	-835.7	4,187.0	0.00	0.00	
11,900.0	90.00	0.00	7,307.0	4,287.0	-835.7	4,287.0	0.00	0.00	
12,000.0	90.00	0.00	7,307.0	4,387.0	-835.7	4,387.0	0.00	0.00	
12,100.0	90.00	0.00	7,307.0	4,487.0	-835.7	4,487.0	0.00	0.00	
12,200.0	90.00	0.00	7,307.0	4,587.0	-835.7	4,587.0	0.00	0.00	
12,300.0	90.00	0.00	7,307.0	4,687.0	-835.7	4,687.0	0.00	0.00	
12,400.0	90.00	0.00	7,307.0	4,787.0	-835.7	4,787.0	0.00	0.00	
12,500.0	90.00	0.00	7,307.0	4,887.0	-835.7	4,887.0	0.00	0.00	
12,600.0	90.00	0.00	7,307.0	4,987.0	-835.7	4,987.0	0.00	0.00	
12,700.0	90.00	0.00	7,307.0	5,087.0	-835.7	5,087.0	0.00	0.00	
12,800.0	90.00	0.00	7,307.0	5,187.0	-835.7	5,187.0	0.00	0.00	
12,840.5	90.00	0.00	7,307.0	5,227.5	-835.7	5,227.5	0.00	0.00	TD at 12840.5 - Sprague 3C-9H-N267 PBHL

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Sprague 3C-9H-N267 PI	0.00	0.00	7,307.0	5,227.5	-835.7	1,302,197.25	3,167,266.26	40.161370	-104.901550
- plan hits target center									
- Point									

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site:	S9-T2N-R67W (Sprague)	North Reference:	True
Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
461.0	461.0	Fox Hills - BASE				
4,457.9	4,418.0	Sussex				
4,707.8	4,665.0	Sussex Marker				
5,009.2	4,963.0	Shannon				
6,372.9	6,311.0	Teepee Buttes (*if present)				
7,321.4	7,184.0	Sharon Springs				
7,444.4	7,249.0	Niobrara				
7,597.9	7,297.0	B Chalk				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
400.0	400.0	0.0	0.0	KOP @ 400'	
1,268.8	1,265.5	-35.2	-55.6	EOB; Inc=8.69°	
6,759.2	6,692.9	-478.6	-756.4	Start build/turn @ 6759' MD	
7,705.5	7,307.0	92.5	-835.7	LP @ 7307' TVD; 90°	
12,840.5	7,307.0	5,227.5	-835.7	TD at 12840.5	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S9-T2N-R67W (Sprague)

Sprague 3C-9H-N267

Hz

Plan #1

Anticollision Report

20 November, 2013

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	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:	Stations	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 500.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	11/20/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	12,840.5	Plan #1 (Hz)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	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
Offset Well - Wellbore - Design						
S9-T2N-R67W (Sprague)						
BARNES 34-4 (EXISTING) - ENCANA WELL - ENCANA						Out of range
DIER 1 (EXISTING) - ENCANA WELL - NO SURVEYS						Out of range
DIER 8-4-8 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
DIER 8-6-8 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
ECKSTINE V 9-10 (EXISTING) - NOBLE WELL - NO SU						Out of range
ECKSTINE V 9-15 (EXISTING) - NOBLE WELL - NO SU						Out of range
ECKSTINE V 9-16 (EXISTING) - NOBLE WELL - NO SU						Out of range
KATHERINE 1 (EXISTING) - MACEY-MERSHON WELL						Out of range
LUHMAN 1 (EXISTING) - ENCANA WELL - Existing						Out of range
LUHMAN 44-4 (EXISTING) - ENCANA WELL - NO SURV						Out of range
SATER 40N-5HZ (EXISTING) - KERR-MCGEE WELL - S						Out of range
SHELEY 1 (EXISTING) - ENCANA WELL - NO SURVEY						Out of range
SHELEY 14-4 (EXISTING) - ENCANA WELL - NO SURV	12,840.5	7,206.0	210.8	103.9	1.972	CC, ES, SF
SHELEY 24-4 (EXISTING MR) - MACHII-ROSS WELL -						Out of range
SHELEY 24-4 (EXISTING) - ENCANA WELL - NO SURV						Out of range
SHELEY 3A-4H (EXISTING) - ENCANA WELL - SURVE	12,840.5	7,780.5	308.9	206.1	3.005	CC, ES, SF
SHELEY 3B-4H (EXISTING) - ENCANA WELL - Plan #4						Out of range
SHELEY 3B-4H (EXISTING) - ENCANA WELL - SURVE						Out of range
SHELEY 4-6-4 (EXISTING) - ENCANA WELL - SURVEY						Out of range
SPRAGUE 1 (EXISTING) - ENCANA WELL - NO SURVE						Out of range
SPRAGUE 1 (EXISTING) MACHII - MACHII-ROSS WEL	8,090.6	7,270.0	493.0	463.7	16.867	CC
SPRAGUE 1 (EXISTING) MACHII - MACHII-ROSS WEL	8,100.0	7,270.0	493.0	463.7	16.815	ES, SF
SPRAGUE 11-9 (EXISTING) - ENCANA WELL - NO SUR	11,733.8	7,238.0	179.5	91.7	2.045	CC, ES, SF
SPRAGUE 13-9 (EXISTING) - ENCANA WELL - NO SUR	9,101.2	7,268.0	200.6	157.1	4.618	CC, ES, SF
SPRAGUE 14-9 (EXISTING) - ENCANA WELL - NO SUR	7,762.4	7,266.0	198.7	172.1	7.496	CC, ES, SF
SPRAGUE 1-9 (EXISTING) - MACHII-ROSS WELL - NO						Out of range
SPRAGUE 2 (EXISTING) - MACHII-ROSS WELL - NO S	11,014.4	7,270.0	423.7	348.2	5.616	CC, ES, SF
Sprague 21-9 - DD - Plan #1						Out of range
SPRAGUE 22-9 J (EXISTING) - MACHII-ROSS WELL -						Out of range
SPRAGUE 23-9 J (EXISTING) - MACHII-ROSS WELL -						Out of range
SPRAGUE 24-9 (EXISTING) - ENCANA WELL - NO SUR	400.0	369.0	259.4	258.1	201.051	CC, ES
SPRAGUE 24-9 (EXISTING) - ENCANA WELL - NO SUR	2,600.0	2,550.4	492.1	482.9	53.377	SF
SPRAGUE 2-4-9 (EXISTING) - ENCANA WELL - Plan #1	9,673.6	7,348.4	369.7	313.3	6.549	CC, ES
SPRAGUE 2-4-9 (EXISTING) - ENCANA WELL - Plan #1	9,700.0	7,348.4	370.7	313.8	6.516	SF
SPRAGUE 2-4-9 (EXISTING) - ENCANA WELL - SURVE	9,643.2	7,360.8	374.3	318.7	6.730	CC, ES
SPRAGUE 2-4-9 (EXISTING) - ENCANA WELL - SURVE	9,700.0	7,362.3	378.6	322.0	6.694	SF
SPRAGUE 24-9 J (EXISTING) - MACHII-ROSS WELL -	400.0	376.0	226.5	225.2	173.942	CC, ES
SPRAGUE 24-9 J (EXISTING) - MACHII-ROSS WELL -	2,600.0	2,557.4	491.6	482.6	55.024	SF
SPRAGUE 2-8-9 (EXISTING) - ENCANA WELL - SURVE	5,200.0	5,222.3	116.4	84.9	3.691	SF
SPRAGUE 2-8-9 (EXISTING) - ENCANA WELL - SURVE	5,217.7	5,239.8	116.4	84.9	3.692	CC, ES
SPRAGUE 31-9 (EXISTING) - ENCANA WELL - Plan #3						Out of range
SPRAGUE 31-9 (EXISTING) - ENCANA WELL - SURVE						Out of range
SPRAGUE 32-9 (EXISTING) - ENCANA WELL - NO SUR						Out of range
SPRAGUE 33-9 (EXISTING) - ENCANA WELL - NO SUR						Out of range
SPRAGUE 34-9 (EXISTING) - ENCANA WELL - NO SUR						Out of range
SPRAGUE 3-9 (EXISTING) - ENCANA WELL - NO SUR						Out of range
Sprague 3A-9H-N267 - Hz - Plan #1	200.0	200.0	19.6	19.0	32.976	CC, ES
Sprague 3A-9H-N267 - Hz - Plan #1	400.0	398.4	26.2	24.9	20.148	SF
Sprague 3B-9H-N267 - Hz - Plan #1	300.0	300.0	8.4	7.4	8.898	CC, ES
Sprague 3B-9H-N267 - Hz - Plan #1	12,840.5	13,098.2	413.9	253.3	2.578	SF
Sprague 3D-9H-N267 - Hz - Plan #1	400.0	400.0	11.2	9.9	8.658	CC, ES
Sprague 3D-9H-N267 - Hz - Plan #1	12,800.0	12,979.6	414.2	254.6	2.596	SF
Sprague 3E-9H-N267 - Hz - Plan #1	426.4	426.6	18.7	17.3	13.442	CC, ES

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 Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	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						
S9-T2N-R67W (Sprague)						
Sprague 3E-9H-N267 - Hz - Plan #1	700.0	699.6	25.6	23.2	10.570	SF
Sprague 3F-9H-N267 - Hz - Plan #1	400.0	400.0	30.8	29.5	23.809	CC, ES
Sprague 3F-9H-N267 - Hz - Plan #1	700.0	699.5	38.6	36.3	16.483	SF
Sprague 3G-9H-N267 - Hz - Plan #1	400.0	400.0	41.9	40.6	32.467	CC, ES
Sprague 3G-9H-N267 - Hz - Plan #1	700.0	697.9	54.2	51.8	23.114	SF
Sprague 3H-9H-N267 - Hz - Plan #1	400.0	400.0	50.3	49.0	38.960	CC, ES
Sprague 3H-9H-N267 - Hz - Plan #1	600.0	596.6	59.1	57.1	29.731	SF
Sprague 3I--9H-N267 - Hz - Plan #1	300.0	300.0	61.6	60.7	65.368	CC, ES
Sprague 3I--9H-N267 - Hz - Plan #1	600.0	592.8	78.9	76.9	39.789	SF
Sprague 3J-9H-N267 - Hz - Plan #1	200.0	200.0	70.0	69.4	117.931	CC, ES
Sprague 3J-9H-N267 - Hz - Plan #1	600.0	588.1	99.0	97.1	50.069	SF
SPRAGUE 41-9 (EXISTING) - ENCANA WELL - SURVE						Out of range
SPRAGUE 42-9 (EXISTING) - ENCANA WELL - NO SUR						Out of range
SPRAGUE 43-9 (EXISTING) - ENCANA WELL - GYRO						Out of range
SPRAGUE 44-9 (EXISTING) - ENCANA WELL - NO SUR						Out of range
SPRAGUE 4-6-9 (EXISTING) - ENCANA WELL - SURVE	168.7	151.1	265.3	264.8	542.798	CC
SPRAGUE 4-6-9 (EXISTING) - ENCANA WELL - SURVE	200.0	181.6	265.4	264.8	444.835	ES
SPRAGUE 4-6-9 (EXISTING) - ENCANA WELL - SURVE	1,500.0	1,374.5	498.8	493.3	90.945	SF
SPRAGUE 4-8-9 (EXISTING) - ENCANA WELL - SURVE	437.4	421.0	258.6	257.2	180.291	CC, ES
SPRAGUE 4-8-9 (EXISTING) - ENCANA WELL - SURVE	1,500.0	1,429.2	366.5	361.1	68.003	SF
SPRAGUE 6-0-9 (EXISTING) - ENCANA WELL - PLAN O						Out of range
SPRAGUE 6-4-9 (EXISTING) - ENCANA WELL - SURVE						Out of range
SPRAGUE 8-6-9 (EXISTING) - ENCANA WELL - SURVE						Out of range
SPRAGUE V 9-1 (EXISTING) - NOBLE WELL - NO SUR						Out of range
SPRAGUE V 9-7 (EXISTING) - NOBLE WELL - NO SUR						Out of range
SPRAGUE V 9-8 (EXISTING) - NOBLE WELL - NO SUR						Out of range

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design											S9-T2N-R67W (Sprague) - SHELEY 14-4 (EXISTING) - ENCANA WELL - NO SURVEYS		Offset Site Error:		0.0 ft	
Survey Program: 8030-Geolink 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			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor				
12,600.0	7,307.0	7,206.0	7,206.0	91.3	12.6	90.00	5,434.4	-795.1	449.3	346.5	102.71	4.374				
12,700.0	7,307.0	7,206.0	7,206.0	93.0	12.6	90.00	5,434.4	-795.1	349.8	245.3	104.45	3.349				
12,800.0	7,307.0	7,206.0	7,206.0	94.8	12.6	90.00	5,434.4	-795.1	250.7	144.5	106.19	2.361				
12,840.5	7,307.0	7,206.0	7,206.0	95.4	12.6	90.00	5,434.4	-795.1	210.8	103.9	106.89	1.972 CC, ES, SF				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - SHELEY 3A-4H (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error: 0.0 ft
Survey Program: 162-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
12,700.0	7,307.0	7,784.6	7,224.7	93.0	16.3	104.44	5,536.0	-821.2	449.3	346.7	102.57	4.380	
12,800.0	7,307.0	7,781.8	7,224.6	94.8	16.3	107.24	5,536.1	-824.1	349.4	246.4	102.97	3.393	
12,840.5	7,307.0	7,780.5	7,224.5	95.4	16.3	108.84	5,536.2	-825.3	308.9	206.1	102.80	3.005 CC, ES, SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - SPRAGUE 1 (EXISTING) MACHII - MACHII-ROSS WELL - NO SURVEYS													Offset Site Error: 0.0 ft
Survey Program: 8036-Geolink 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 +N/-S	+E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)			
8,090.6	7,307.0	7,270.0	7,270.0	22.1	12.7	90.00	477.6	-342.7	493.0	463.7	29.23	16.867 CC	
8,100.0	7,307.0	7,270.0	7,270.0	22.2	12.7	90.00	477.6	-342.7	493.0	463.7	29.32	16.815 ES, SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - SPRAGUE 11-9 (EXISTING) - ENCANA WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8053-Geolink 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		
11,300.0	7,307.0	7,238.0	7,238.0	69.2	12.6	-90.00	4,120.8	-1,015.2	469.5	389.2	80.29	5.847		
11,400.0	7,307.0	7,238.0	7,238.0	70.9	12.6	-90.00	4,120.8	-1,015.2	379.0	297.0	82.01	4.621		
11,500.0	7,307.0	7,238.0	7,238.0	72.6	12.6	-90.00	4,120.8	-1,015.2	294.8	211.0	83.73	3.520		
11,600.0	7,307.0	7,238.0	7,238.0	74.3	12.6	-90.00	4,120.8	-1,015.2	223.9	138.4	85.46	2.620		
11,700.0	7,307.0	7,238.0	7,238.0	76.0	12.6	-90.00	4,120.8	-1,015.2	182.6	95.5	87.19	2.095		
11,733.8	7,307.0	7,238.0	7,238.0	76.6	12.6	-90.00	4,120.8	-1,015.2	179.5	91.7	87.77	2.045	CC, ES, SF	
11,800.0	7,307.0	7,238.0	7,238.0	77.7	12.6	-90.00	4,120.8	-1,015.2	191.3	102.4	88.91	2.151		
11,900.0	7,307.0	7,238.0	7,238.0	79.4	12.6	-90.00	4,120.8	-1,015.2	244.6	154.0	90.64	2.699		
12,000.0	7,307.0	7,238.0	7,238.0	81.1	12.6	-90.00	4,120.8	-1,015.2	321.0	228.7	92.37	3.475		
12,100.0	7,307.0	7,238.0	7,238.0	82.8	12.6	-90.00	4,120.8	-1,015.2	407.8	313.7	94.10	4.334		
12,200.0	7,307.0	7,238.0	7,238.0	84.5	12.6	-90.00	4,120.8	-1,015.2	499.5	403.7	95.83	5.213		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - SPRAGUE 13-9 (EXISTING) - ENCANA WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8083-Geolink 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		
8,700.0	7,307.0	7,268.0	7,268.0	28.6	12.7	-90.00	1,488.1	-1,036.2	448.5	411.3	37.24	12.042		
8,800.0	7,307.0	7,268.0	7,268.0	29.9	12.7	-90.00	1,488.1	-1,036.2	361.8	323.1	38.74	9.339		
8,900.0	7,307.0	7,268.0	7,268.0	31.3	12.7	-90.00	1,488.1	-1,036.2	284.1	243.8	40.27	7.053		
9,000.0	7,307.0	7,268.0	7,268.0	32.6	12.7	-90.00	1,488.1	-1,036.2	224.6	182.8	41.83	5.370		
9,100.0	7,307.0	7,268.0	7,268.0	34.1	12.7	-90.00	1,488.1	-1,036.2	200.6	157.1	43.41	4.620		
9,101.2	7,307.0	7,268.0	7,268.0	34.1	12.7	-90.00	1,488.1	-1,036.2	200.6	157.1	43.43	4.618	CC, ES, SF	
9,200.0	7,307.0	7,268.0	7,268.0	35.5	12.7	-90.00	1,488.1	-1,036.2	223.6	178.6	45.00	4.968		
9,300.0	7,307.0	7,268.0	7,268.0	37.0	12.7	-90.00	1,488.1	-1,036.2	282.4	235.8	46.61	6.059		
9,400.0	7,307.0	7,268.0	7,268.0	38.5	12.7	-90.00	1,488.1	-1,036.2	359.9	311.7	48.24	7.461		
9,500.0	7,307.0	7,268.0	7,268.0	40.0	12.7	-90.00	1,488.1	-1,036.2	446.4	396.5	49.87	8.951		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - SPRAGUE 14-9 (EXISTING) - ENCANA WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8076-Geolink 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)						
7,300.0	7,170.5	7,129.5	7,129.5	19.8	12.4	-30.08	149.4	-1,034.3	480.8	455.6	25.22	19.063		
7,350.0	7,201.1	7,160.1	7,160.1	19.8	12.5	-36.80	149.4	-1,034.3	444.1	419.5	24.58	18.071		
7,400.0	7,228.1	7,187.1	7,187.1	19.7	12.5	-44.85	149.4	-1,034.3	406.0	381.7	24.29	16.712		
7,450.0	7,251.4	7,210.4	7,210.4	19.7	12.6	-54.11	149.4	-1,034.3	367.2	342.7	24.44	15.024		
7,500.0	7,270.8	7,229.8	7,229.8	19.7	12.6	-63.97	149.4	-1,034.3	328.5	303.6	24.90	13.194		
7,550.0	7,286.2	7,245.2	7,245.2	19.7	12.6	-73.37	149.4	-1,034.3	291.3	265.9	25.42	11.458		
7,600.0	7,297.4	7,256.4	7,256.4	19.8	12.7	-81.23	149.4	-1,034.3	257.2	231.4	25.80	9.967		
7,650.0	7,304.3	7,263.3	7,263.3	19.9	12.7	-86.81	149.4	-1,034.3	228.5	202.5	26.02	8.781		
7,700.0	7,307.0	7,266.0	7,266.0	20.0	12.7	-89.83	149.4	-1,034.3	208.2	182.1	26.18	7.954		
7,705.5	7,307.0	7,266.0	7,266.0	20.0	12.7	-90.00	149.4	-1,034.3	206.6	180.4	26.20	7.887		
7,762.4	7,307.0	7,266.0	7,266.0	20.2	12.7	-90.00	149.4	-1,034.3	198.7	172.1	26.50	7.496 CC, ES, SF		
7,800.0	7,307.0	7,266.0	7,266.0	20.4	12.7	-90.00	149.4	-1,034.3	202.2	175.5	26.70	7.572		
7,900.0	7,307.0	7,266.0	7,266.0	20.8	12.7	-90.00	149.4	-1,034.3	241.6	214.2	27.41	8.814		
8,000.0	7,307.0	7,266.0	7,266.0	21.5	12.7	-90.00	149.4	-1,034.3	309.7	281.4	28.30	10.945		
8,100.0	7,307.0	7,266.0	7,266.0	22.2	12.7	-90.00	149.4	-1,034.3	391.7	362.4	29.31	13.361		
8,200.0	7,307.0	7,266.0	7,266.0	23.1	12.7	-90.00	149.4	-1,034.3	480.6	450.1	30.45	15.782		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design											S9-T2N-R67W (Sprague) - SPRAGUE 2 (EXISTING) - MACHII-ROSS WELL - NO SURVEYS		Offset Site Error:		0.0 ft	
Survey Program:											8100-Geolink 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			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor				
10,800.0	7,307.0	7,270.0	7,270.0	60.9	12.7	90.00	3,401.3	-412.0	474.8	403.0	71.77	6.616				
10,900.0	7,307.0	7,270.0	7,270.0	62.5	12.7	90.00	3,401.3	-412.0	438.8	365.4	73.48	5.972				
11,000.0	7,307.0	7,270.0	7,270.0	64.2	12.7	90.00	3,401.3	-412.0	423.9	348.7	75.19	5.638				
11,014.4	7,307.0	7,270.0	7,270.0	64.4	12.7	90.00	3,401.3	-412.0	423.7	348.2	75.44	5.616	CC, ES, SF			
11,100.0	7,307.0	7,270.0	7,270.0	65.9	12.7	90.00	3,401.3	-412.0	432.2	355.3	76.91	5.620				
11,200.0	7,307.0	7,270.0	7,270.0	67.6	12.7	90.00	3,401.3	-412.0	462.6	383.9	78.63	5.883				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - SPRAGUE 24-9 (EXISTING) - ENCANA WELL - NO SURVEYS														Offset Site Error:	0.0 ft
Survey Program: 8116-Geolink 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	99.13	-41.1	256.1	261.2						
100.0	100.0	69.0	69.0	0.1	0.1	99.13	-41.1	256.1	259.4	259.1	0.24	1,068.182			
200.0	200.0	169.0	169.0	0.3	0.3	99.13	-41.1	256.1	259.4	258.8	0.59	438.199			
300.0	300.0	269.0	269.0	0.5	0.5	99.13	-41.1	256.1	259.4	258.4	0.94	275.637			
400.0	400.0	369.0	369.0	0.6	0.6	99.13	-41.1	256.1	259.4	258.1	1.29	201.051 CC, ES			
500.0	500.0	469.0	469.0	0.8	0.8	-138.67	-41.1	256.1	260.0	258.4	1.64	158.619			
600.0	600.0	569.0	569.0	1.0	1.0	-139.03	-41.1	256.1	262.0	260.0	1.99	131.685			
700.0	699.9	668.9	668.9	1.2	1.2	-139.63	-41.1	256.1	265.3	262.9	2.34	113.279			
800.0	799.7	768.7	768.7	1.4	1.3	-140.44	-41.1	256.1	270.0	267.3	2.70	100.079			
900.0	899.4	868.4	868.4	1.6	1.5	-141.44	-41.1	256.1	276.1	273.0	3.06	90.303			
1,000.0	998.9	967.9	967.9	1.8	1.7	-142.60	-41.1	256.1	283.6	280.2	3.42	82.915			
1,100.0	1,098.3	1,067.3	1,067.3	2.1	1.9	-143.89	-41.1	256.1	292.7	288.9	3.79	77.270			
1,200.0	1,197.4	1,166.4	1,166.4	2.3	2.0	-145.27	-41.1	256.1	303.4	299.2	4.16	72.946			
1,268.8	1,265.5	1,234.5	1,234.5	2.5	2.2	-146.27	-41.1	256.1	311.7	307.3	4.42	70.594			
1,300.0	1,296.3	1,265.3	1,265.3	2.6	2.2	-146.74	-41.1	256.1	315.6	311.1	4.53	69.644			
1,400.0	1,395.2	1,364.2	1,364.2	2.9	2.4	-148.18	-41.1	256.1	328.4	323.5	4.91	66.952			
1,500.0	1,494.0	1,463.0	1,463.0	3.2	2.6	-149.52	-41.1	256.1	341.4	336.1	5.28	64.705			
1,600.0	1,592.9	1,561.9	1,561.9	3.5	2.7	-150.75	-41.1	256.1	354.5	348.9	5.64	62.810			
1,700.0	1,691.7	1,660.7	1,660.7	3.8	2.9	-151.90	-41.1	256.1	367.8	361.8	6.01	61.197			
1,800.0	1,790.6	1,759.6	1,759.6	4.1	3.1	-152.96	-41.1	256.1	381.2	374.8	6.37	59.812			
1,900.0	1,889.4	1,858.4	1,858.4	4.4	3.2	-153.96	-41.1	256.1	394.8	388.0	6.74	58.614			
2,000.0	1,988.3	1,957.3	1,957.3	4.7	3.4	-154.89	-41.1	256.1	408.4	401.3	7.09	57.568			
2,100.0	2,087.1	2,056.1	2,056.1	5.0	3.6	-155.76	-41.1	256.1	422.2	414.7	7.45	56.650			
2,200.0	2,186.0	2,155.0	2,155.0	5.3	3.8	-156.57	-41.1	256.1	436.0	428.2	7.81	55.840			
2,300.0	2,284.8	2,253.8	2,253.8	5.6	3.9	-157.33	-41.1	256.1	449.9	441.8	8.16	55.119			
2,400.0	2,383.7	2,352.7	2,352.7	6.0	4.1	-158.05	-41.1	256.1	463.9	455.4	8.52	54.476			
2,500.0	2,482.5	2,451.5	2,451.5	6.3	4.3	-158.73	-41.1	256.1	478.0	469.1	8.87	53.898			
2,600.0	2,581.4	2,550.4	2,550.4	6.6	4.5	-159.36	-41.1	256.1	492.1	482.9	9.22	53.377 SF			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - SPRAGUE 2-4-9 (EXISTING) - ENCANA WELL - 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
9,400.0	7,307.0	7,348.4	7,285.0	38.5	19.2	90.00	2,060.6	-465.9	460.0	408.0	51.95	8.854	
9,500.0	7,307.0	7,348.4	7,285.0	40.0	19.2	90.00	2,060.6	-465.9	408.5	354.9	53.59	7.622	
9,600.0	7,307.0	7,348.4	7,285.0	41.5	19.2	90.00	2,060.6	-465.9	377.0	321.7	55.23	6.825	
9,673.6	7,307.0	7,348.4	7,285.0	42.7	19.2	90.00	2,060.6	-465.9	369.7	313.3	56.45	6.549 CC, ES	
9,700.0	7,307.0	7,348.4	7,285.0	43.1	19.2	90.00	2,060.6	-465.9	370.7	313.8	56.89	6.516 SF	
9,800.0	7,307.0	7,348.4	7,285.0	44.6	19.2	90.00	2,060.6	-465.9	390.7	332.2	58.55	6.673	
9,900.0	7,307.0	7,348.4	7,285.0	46.2	19.2	90.00	2,060.6	-465.9	433.5	373.3	60.22	7.199	
10,000.0	7,307.0	7,348.4	7,285.0	47.8	19.2	90.00	2,060.6	-465.9	493.2	431.3	61.90	7.968	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - SPRAGUE 2-4-9 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error: 0.0 ft
Survey Program: 488-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
9,400.0	7,307.0	7,354.1	7,287.3	38.5	18.9	90.35	2,030.0	-461.3	446.3	394.7	51.62	8.645	
9,500.0	7,307.0	7,356.8	7,290.1	40.0	18.9	90.77	2,030.0	-461.4	400.7	347.5	53.26	7.524	
9,600.0	7,307.0	7,359.6	7,292.8	41.5	18.9	91.19	2,030.1	-461.5	376.8	321.9	54.90	6.862	
9,643.2	7,307.0	7,360.8	7,294.0	42.2	18.9	91.38	2,030.1	-461.5	374.3	318.7	55.62	6.730 CC, ES	
9,700.0	7,307.0	7,362.3	7,295.6	43.1	19.0	91.62	2,030.2	-461.5	378.6	322.0	56.55	6.694 SF	
9,800.0	7,307.0	7,365.1	7,298.3	44.6	19.0	92.04	2,030.3	-461.6	405.8	347.6	58.21	6.971	
9,900.0	7,307.0	7,367.8	7,301.1	46.2	19.0	92.46	2,030.3	-461.7	453.9	394.0	59.86	7.582	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - SPRAGUE 24-9 J (EXISTING) - MACHII-ROSS WELL - NO SURVEYS														Offset Site Error:	0.0 ft
Survey Program: 8120-Geolink 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	67.39	87.1	209.1	227.8						
100.0	100.0	76.0	76.0	0.1	0.1	67.39	87.1	209.1	226.5	0.26	888.213				
200.0	200.0	176.0	176.0	0.3	0.3	67.39	87.1	209.1	226.5	0.60	374.965				
300.0	300.0	276.0	276.0	0.5	0.5	67.39	87.1	209.1	226.5	0.95	237.644				
400.0	400.0	376.0	376.0	0.6	0.7	67.39	87.1	209.1	226.5	1.30	173.942 CC, ES				
500.0	500.0	476.0	476.0	0.8	0.8	-170.32	87.1	209.1	227.4	1.65	137.706				
600.0	600.0	576.0	576.0	1.0	1.0	-170.43	87.1	209.1	229.9	2.00	114.993				
700.0	699.9	675.9	675.9	1.2	1.2	-170.60	87.1	209.1	234.3	2.35	99.774				
800.0	799.7	775.7	775.7	1.4	1.4	-170.82	87.1	209.1	240.3	2.70	89.143				
900.0	899.4	875.4	875.4	1.6	1.5	-171.10	87.1	209.1	248.0	3.04	81.524				
1,000.0	998.9	974.9	974.9	1.8	1.7	-171.42	87.1	209.1	257.5	3.39	75.994				
1,100.0	1,098.3	1,074.3	1,074.3	2.1	1.9	-171.76	87.1	209.1	268.7	3.73	71.970				
1,200.0	1,197.4	1,173.4	1,173.4	2.3	2.0	-172.12	87.1	209.1	281.6	4.08	69.071				
1,268.8	1,265.5	1,241.5	1,241.5	2.5	2.2	-172.38	87.1	209.1	291.5	4.31	67.591				
1,300.0	1,296.3	1,272.3	1,272.3	2.6	2.2	-172.50	87.1	209.1	296.2	4.42	66.988				
1,400.0	1,395.2	1,371.2	1,371.2	2.9	2.4	-172.86	87.1	209.1	311.2	4.77	65.242				
1,500.0	1,494.0	1,470.0	1,470.0	3.2	2.6	-173.19	87.1	209.1	326.2	5.12	63.739				
1,600.0	1,592.9	1,568.9	1,568.9	3.5	2.7	-173.49	87.1	209.1	341.2	5.46	62.430				
1,700.0	1,691.7	1,667.7	1,667.7	3.8	2.9	-173.77	87.1	209.1	356.2	5.81	61.282				
1,800.0	1,790.6	1,766.6	1,766.6	4.1	3.1	-174.02	87.1	209.1	371.2	6.16	60.266				
1,900.0	1,889.4	1,865.4	1,865.4	4.4	3.3	-174.25	87.1	209.1	386.2	6.51	59.361				
2,000.0	1,988.3	1,964.3	1,964.3	4.7	3.4	-174.47	87.1	209.1	401.3	6.85	58.549				
2,100.0	2,087.1	2,063.1	2,063.1	5.0	3.6	-174.67	87.1	209.1	416.3	7.20	57.817				
2,200.0	2,186.0	2,162.0	2,162.0	5.3	3.8	-174.86	87.1	209.1	431.4	7.55	57.154				
2,300.0	2,284.8	2,260.8	2,260.8	5.6	3.9	-175.03	87.1	209.1	446.4	7.89	56.550				
2,400.0	2,383.7	2,359.7	2,359.7	6.0	4.1	-175.19	87.1	209.1	461.5	8.24	55.998				
2,500.0	2,482.5	2,458.5	2,458.5	6.3	4.3	-175.35	87.1	209.1	476.5	8.59	55.491				
2,600.0	2,581.4	2,557.4	2,557.4	6.6	4.5	-175.49	87.1	209.1	491.6	8.93	55.024 SF				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - SPRAGUE 2-8-9 (EXISTING) - ENCANA WELL - SURVEYS														Offset Site Error:	0.0 ft
Survey Program: 79-Geolink 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	106.09	-73.2	253.8	264.8						
100.0	100.0	83.6	83.6	0.1	0.1	106.14	-73.4	253.6	264.0	263.7	0.25	1,051.761			
200.0	200.0	182.7	182.7	0.3	0.3	106.27	-73.9	253.2	263.7	263.1	0.60	440.563			
300.0	300.0	284.2	284.2	0.5	0.5	106.54	-75.0	252.5	263.4	262.4	0.95	277.191			
400.0	400.0	389.8	389.8	0.6	0.7	106.84	-75.9	250.6	261.9	260.6	1.31	199.958			
500.0	500.0	500.6	500.4	0.8	0.9	-130.81	-75.3	245.1	257.6	256.0	1.68	153.208			
600.0	600.0	608.7	608.1	1.0	1.1	-130.90	-74.4	235.5	250.5	248.5	2.05	122.087			
700.0	699.9	714.1	712.7	1.2	1.4	-130.54	-75.9	222.3	241.9	239.4	2.44	99.264			
800.0	799.7	814.4	811.6	1.4	1.7	-129.38	-81.3	207.3	233.1	230.3	2.85	81.835			
900.0	899.4	917.7	913.1	1.6	2.1	-127.62	-89.6	190.1	224.8	221.5	3.32	67.680			
1,000.0	998.9	1,021.3	1,014.3	1.8	2.5	-125.46	-99.5	170.0	215.7	211.9	3.86	55.871			
1,100.0	1,098.3	1,121.1	1,111.3	2.1	2.9	-123.26	-109.6	149.2	206.9	202.4	4.45	46.532			
1,200.0	1,197.4	1,219.4	1,206.9	2.3	3.3	-121.02	-120.6	128.5	199.5	194.4	5.09	39.195			
1,268.8	1,265.5	1,286.9	1,272.3	2.5	3.6	-119.44	-128.9	114.2	195.5	190.0	5.57	35.121			
1,300.0	1,296.3	1,317.8	1,302.3	2.6	3.8	-118.69	-132.9	107.8	193.9	188.1	5.79	33.482			
1,400.0	1,395.2	1,416.7	1,398.1	2.9	4.2	-116.15	-145.8	87.1	189.3	182.8	6.54	28.955			
1,500.0	1,494.0	1,515.5	1,494.0	3.2	4.6	-113.54	-158.8	66.8	185.5	178.2	7.31	25.374			
1,600.0	1,592.9	1,617.5	1,593.1	3.5	5.1	-111.08	-171.2	46.3	181.7	173.6	8.09	22.472			
1,700.0	1,691.7	1,718.8	1,691.6	3.8	5.5	-108.85	-181.8	25.4	176.9	168.0	8.87	19.942			
1,800.0	1,790.6	1,817.9	1,787.9	4.1	6.0	-106.39	-192.4	4.4	172.1	162.4	9.68	17.789			
1,900.0	1,889.4	1,916.7	1,884.0	4.4	6.4	-103.92	-203.1	-15.9	168.2	157.7	10.48	16.051			
2,000.0	1,988.3	2,017.6	1,982.2	4.7	6.9	-101.43	-213.6	-36.4	164.5	153.2	11.30	14.558			
2,100.0	2,087.1	2,117.0	2,078.9	5.0	7.3	-98.72	-223.7	-57.4	160.3	148.2	12.11	13.234			
2,200.0	2,186.0	2,215.4	2,174.8	5.3	7.7	-96.41	-233.5	-76.6	157.4	144.5	12.89	12.211			
2,300.0	2,284.8	2,316.3	2,273.4	5.6	8.1	-94.18	-243.3	-95.8	154.9	141.2	13.68	11.323			
2,400.0	2,383.7	2,416.2	2,370.8	6.0	8.6	-91.61	-253.0	-115.7	152.0	137.6	14.47	10.510			
2,500.0	2,482.5	2,515.5	2,467.8	6.3	9.0	-89.11	-262.4	-135.2	149.5	134.3	15.23	9.815			
2,600.0	2,581.4	2,613.3	2,563.1	6.6	9.4	-86.27	-272.8	-154.6	148.2	132.2	15.99	9.268			
2,641.3	2,622.2	2,654.0	2,602.7	6.7	9.6	-85.06	-277.4	-162.5	148.1	131.8	16.29	9.089			
2,700.0	2,680.3	2,712.6	2,659.8	6.9	9.9	-83.32	-284.2	-173.9	148.2	131.5	16.73	8.857			
2,800.0	2,779.1	2,812.5	2,756.8	7.2	10.3	-79.88	-296.0	-194.6	148.4	131.0	17.44	8.510			
2,900.0	2,878.0	2,911.9	2,853.5	7.5	10.8	-76.70	-307.6	-214.6	149.3	131.2	18.09	8.249			
3,000.0	2,976.8	3,012.0	2,951.0	7.8	11.2	-73.76	-319.2	-234.2	150.5	131.8	18.70	8.049			
3,100.0	3,075.7	3,113.0	3,049.5	8.2	11.6	-71.04	-330.1	-253.7	151.6	132.3	19.27	7.864			
3,200.0	3,174.5	3,212.2	3,146.1	8.5	12.1	-68.16	-340.7	-273.4	152.6	132.8	19.80	7.709			
3,300.0	3,273.4	3,311.3	3,242.7	8.8	12.5	-65.63	-351.7	-292.4	154.7	134.4	20.27	7.629			
3,400.0	3,372.2	3,412.4	3,341.7	9.1	12.9	-63.79	-362.4	-309.9	156.7	135.9	20.77	7.545			
3,500.0	3,471.1	3,512.6	3,439.8	9.4	13.3	-61.79	-372.3	-328.0	158.0	136.8	21.22	7.444			
3,600.0	3,569.9	3,612.2	3,537.3	9.7	13.7	-59.97	-382.4	-345.6	159.8	138.1	21.65	7.380			
3,700.0	3,668.8	3,710.8	3,633.9	10.0	14.1	-58.29	-392.6	-362.7	162.0	139.9	22.08	7.337			
3,800.0	3,767.6	3,813.7	3,734.5	10.4	14.5	-56.27	-402.9	-381.6	164.1	141.6	22.45	7.309			
3,900.0	3,866.5	3,916.1	3,835.1	10.7	14.8	-54.81	-411.4	-398.8	164.5	141.6	22.84	7.202			
4,000.0	3,965.3	4,018.5	3,936.1	11.0	15.2	-54.13	-418.6	-413.7	163.5	140.2	23.30	7.017			
4,100.0	4,064.2	4,120.0	4,036.6	11.3	15.5	-54.13	-424.4	-426.5	161.1	137.3	23.84	6.758			
4,200.0	4,163.0	4,220.8	4,136.7	11.6	15.7	-54.77	-429.7	-437.5	158.2	133.8	24.47	6.467			
4,300.0	4,261.9	4,323.8	4,239.2	11.9	15.9	-56.16	-434.0	-446.7	154.2	129.0	25.20	6.119			
4,400.0	4,360.7	4,424.1	4,339.2	12.3	16.1	-58.33	-436.8	-453.8	148.8	122.8	26.01	5.722			
4,500.0	4,459.6	4,525.3	4,440.2	12.6	16.3	-61.74	-438.9	-458.3	143.1	116.1	26.96	5.306			
4,600.0	4,558.5	4,625.0	4,539.9	12.9	16.4	-65.86	-440.2	-461.7	137.3	109.4	27.95	4.913			
4,700.0	4,657.3	4,724.6	4,639.5	13.2	16.5	-70.40	-441.2	-464.9	132.1	103.2	28.90	4.570			
4,800.0	4,756.2	4,824.2	4,739.0	13.5	16.7	-75.35	-442.0	-468.0	127.5	97.7	29.77	4.283			
4,900.0	4,855.0	4,924.5	4,839.2	13.8	16.8	-80.55	-442.4	-471.5	123.5	93.0	30.51	4.048			

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 Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - SPRAGUE 2-8-9 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 79-Geolink 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		
5,000.0	4,953.9	5,024.0	4,938.6	14.2	17.0	-86.01	-442.3	-475.3	119.9	88.8	31.09	3.857		
5,100.0	5,052.7	5,123.2	5,037.8	14.5	17.1	-91.86	-442.0	-478.9	117.5	86.0	31.45	3.736		
5,200.0	5,151.6	5,222.3	5,136.8	14.8	17.2	-98.19	-441.3	-481.9	116.4	84.9	31.54	3.691 SF		
5,217.7	5,169.0	5,239.8	5,154.3	14.9	17.2	-99.33	-441.2	-482.4	116.4	84.9	31.53	3.692 CC, ES		
5,300.0	5,250.4	5,321.3	5,235.8	15.1	17.3	-104.62	-440.6	-484.8	116.9	85.6	31.36	3.729		
5,400.0	5,349.3	5,420.4	5,334.9	15.4	17.5	-110.88	-440.0	-487.7	119.0	88.0	30.95	3.844		
5,500.0	5,448.1	5,519.6	5,434.0	15.7	17.6	-116.91	-439.4	-490.5	122.3	92.0	30.34	4.032		
5,600.0	5,547.0	5,618.7	5,533.1	16.1	17.7	-122.59	-438.6	-493.4	127.0	97.4	29.62	4.287		
5,700.0	5,645.8	5,717.8	5,632.1	16.4	17.8	-127.79	-438.0	-496.2	132.8	104.0	28.87	4.601		
5,800.0	5,744.7	5,817.2	5,731.5	16.7	18.0	-132.51	-437.3	-499.2	139.6	111.5	28.14	4.961		
5,900.0	5,843.5	5,916.5	5,830.7	17.0	18.1	-136.73	-436.8	-502.3	147.0	119.6	27.48	5.351		
6,000.0	5,942.4	6,014.9	5,929.1	17.3	18.2	-140.49	-436.3	-505.3	155.4	128.5	26.91	5.777		
6,100.0	6,041.2	6,113.4	6,027.5	17.7	18.4	-143.87	-435.8	-507.7	164.9	138.5	26.43	6.240		
6,200.0	6,140.1	6,212.0	6,126.1	18.0	18.5	-146.97	-435.0	-509.9	175.2	149.2	26.02	6.732		
6,300.0	6,238.9	6,310.7	6,224.8	18.3	18.6	-149.83	-433.9	-511.8	186.1	160.4	25.70	7.244		
6,400.0	6,337.8	6,409.5	6,323.5	18.6	18.7	-152.45	-432.4	-513.7	197.6	172.2	25.45	7.766		
6,500.0	6,436.6	6,508.6	6,422.6	18.9	18.8	-154.86	-430.8	-515.5	209.5	184.2	25.28	8.289		
6,600.0	6,535.5	6,607.9	6,521.9	19.2	18.9	-157.04	-429.0	-517.6	221.6	196.4	25.18	8.800		
6,700.0	6,634.4	6,708.6	6,622.6	19.6	19.1	-159.08	-427.1	-520.1	233.5	208.3	25.15	9.284		
6,759.2	6,692.9	6,768.3	6,682.2	19.7	19.2	-160.22	-425.9	-522.0	240.3	215.2	25.16	9.552		
6,800.0	6,733.3	6,809.2	6,723.1	19.9	19.2	171.18	-425.1	-523.4	244.6	219.5	25.15	9.728		
6,850.0	6,782.8	6,859.4	6,773.3	20.0	19.3	135.92	-424.2	-525.3	248.9	223.6	25.28	9.845		
6,900.0	6,832.0	6,909.4	6,823.1	20.0	19.4	116.14	-423.2	-527.2	252.2	226.7	25.58	9.862		
6,950.0	6,880.5	6,958.5	6,872.3	20.1	19.4	107.31	-422.4	-529.1	254.8	228.8	26.02	9.794		
7,000.0	6,928.0	7,005.9	6,919.6	20.1	19.5	103.96	-421.8	-530.9	257.3	230.7	26.61	9.669		
7,050.0	6,973.9	7,051.6	6,965.3	20.1	19.6	103.57	-421.5	-532.6	260.4	233.1	27.30	9.536		
7,100.0	7,018.1	7,095.3	7,008.9	20.0	19.7	104.84	-421.6	-534.0	264.9	236.9	28.01	9.457		
7,150.0	7,060.2	7,136.6	7,050.2	20.0	19.7	106.99	-421.9	-535.3	271.9	243.3	28.62	9.499		
7,200.0	7,099.8	7,175.5	7,089.1	19.9	19.8	109.45	-422.2	-536.4	282.0	253.0	29.02	9.718		
7,250.0	7,136.7	7,211.8	7,125.4	19.9	19.8	111.80	-422.4	-537.3	296.0	266.8	29.15	10.154		
7,300.0	7,170.5	7,245.2	7,158.7	19.8	19.9	113.73	-422.6	-538.2	314.2	285.2	29.02	10.828		
7,350.0	7,201.1	7,275.3	7,188.8	19.8	19.9	115.01	-422.8	-538.8	336.7	308.0	28.67	11.743		
7,400.0	7,228.1	7,301.9	7,215.5	19.7	19.9	115.47	-422.9	-539.4	363.5	335.2	28.22	12.881		
7,450.0	7,251.4	7,325.3	7,238.9	19.7	20.0	115.00	-423.0	-539.9	394.1	366.3	27.77	14.194		
7,500.0	7,270.8	7,344.8	7,258.3	19.7	20.0	113.37	-423.1	-540.3	428.2	400.8	27.43	15.610		
7,550.0	7,286.2	7,360.1	7,273.6	19.7	20.0	110.39	-423.1	-540.7	465.3	438.0	27.30	17.044		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - Sprague 3A-9H-N267 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	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)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.95	0.0	-19.6	19.6					
100.0	100.0	100.0	100.0	0.1	0.1	-89.95	0.0	-19.6	19.6	19.3	0.24	80.085		
200.0	200.0	200.0	200.0	0.3	0.3	-89.95	0.0	-19.6	19.6	19.0	0.59	32.976 CC, ES		
300.0	300.0	299.3	299.3	0.5	0.5	-91.49	-0.6	-21.2	21.2	20.3	0.94	22.497		
400.0	400.0	398.4	398.2	0.6	0.7	-94.94	-2.3	-26.1	26.2	24.9	1.30	20.148 SF		
500.0	500.0	497.1	496.6	0.8	0.9	24.44	-5.1	-34.1	33.8	32.2	1.64	20.654		
600.0	600.0	595.3	594.1	1.0	1.2	22.69	-9.0	-45.3	43.3	41.3	1.99	21.796		
700.0	699.9	693.1	690.6	1.2	1.5	21.70	-14.0	-59.5	54.6	52.2	2.34	23.350		
800.0	799.7	790.2	786.0	1.4	1.8	21.16	-20.0	-76.7	67.5	64.9	2.69	25.134		
900.0	899.4	887.2	880.6	1.6	2.2	20.89	-27.0	-96.9	82.2	79.1	3.04	27.020		
1,000.0	998.9	986.2	976.9	1.8	2.6	20.97	-34.6	-118.5	96.2	92.8	3.40	28.274		
1,100.0	1,098.3	1,085.4	1,073.5	2.1	3.1	21.36	-42.1	-140.1	108.6	104.8	3.77	28.806		
1,200.0	1,197.4	1,184.8	1,170.2	2.3	3.5	21.97	-49.7	-161.7	119.4	115.3	4.15	28.788		
1,268.8	1,265.5	1,253.3	1,236.8	2.5	3.8	22.51	-54.9	-176.6	125.9	121.5	4.42	28.522		
1,300.0	1,296.3	1,284.3	1,267.1	2.6	3.9	22.78	-57.3	-183.4	128.7	124.2	4.54	28.360		
1,400.0	1,395.2	1,383.9	1,364.0	2.9	4.4	23.56	-64.9	-205.0	137.7	132.7	4.94	27.872		
1,500.0	1,494.0	1,483.5	1,460.9	3.2	4.8	24.25	-72.5	-226.7	146.7	141.3	5.35	27.429		
1,600.0	1,592.9	1,583.1	1,557.8	3.5	5.3	24.86	-80.0	-248.4	155.7	149.9	5.76	27.027		
1,700.0	1,691.7	1,682.7	1,654.7	3.8	5.7	25.41	-87.6	-270.1	164.7	158.5	6.18	26.661		
1,800.0	1,790.6	1,782.2	1,751.6	4.1	6.1	25.90	-95.2	-291.7	173.7	167.1	6.60	26.325		
1,900.0	1,889.4	1,881.8	1,848.5	4.4	6.6	26.34	-102.8	-313.4	182.7	175.7	7.02	26.018		
2,000.0	1,988.3	1,981.4	1,945.4	4.7	7.0	26.73	-110.4	-335.1	191.8	184.3	7.45	25.736		
2,100.0	2,087.1	2,081.0	2,042.3	5.0	7.5	27.10	-117.9	-356.8	200.8	192.9	7.88	25.477		
2,200.0	2,186.0	2,180.6	2,139.2	5.3	7.9	27.43	-125.5	-378.4	209.9	201.6	8.32	25.237		
2,300.0	2,284.8	2,280.2	2,236.1	5.6	8.4	27.73	-133.1	-400.1	218.9	210.2	8.75	25.016		
2,400.0	2,383.7	2,379.7	2,333.0	6.0	8.8	28.01	-140.7	-421.8	228.0	218.8	9.19	24.810		
2,500.0	2,482.5	2,479.3	2,429.9	6.3	9.2	28.27	-148.3	-443.5	237.1	227.5	9.63	24.619		
2,600.0	2,581.4	2,578.9	2,526.8	6.6	9.7	28.51	-155.9	-465.1	246.2	236.1	10.07	24.441		
2,700.0	2,680.3	2,678.5	2,623.7	6.9	10.1	28.73	-163.4	-486.8	255.2	244.7	10.51	24.276		
2,800.0	2,779.1	2,778.1	2,720.6	7.2	10.6	28.94	-171.0	-508.5	264.3	253.4	10.96	24.121		
2,900.0	2,878.0	2,877.6	2,817.5	7.5	11.0	29.13	-178.6	-530.2	273.4	262.0	11.40	23.976		
3,000.0	2,976.8	2,977.2	2,914.4	7.8	11.5	29.31	-186.2	-551.8	282.5	270.7	11.85	23.839		
3,100.0	3,075.7	3,076.8	3,011.2	8.2	11.9	29.48	-193.8	-573.5	291.6	279.3	12.30	23.711		
3,200.0	3,174.5	3,176.4	3,108.1	8.5	12.4	29.64	-201.4	-595.2	300.7	288.0	12.75	23.591		
3,300.0	3,273.4	3,276.0	3,205.0	8.8	12.8	29.79	-208.9	-616.9	309.8	296.6	13.20	23.477		
3,400.0	3,372.2	3,375.6	3,301.9	9.1	13.2	29.93	-216.5	-638.5	318.9	305.3	13.65	23.370		
3,500.0	3,471.1	3,475.1	3,398.8	9.4	13.7	30.06	-224.1	-660.2	328.0	313.9	14.10	23.268		
3,600.0	3,569.9	3,574.7	3,495.7	9.7	14.1	30.19	-231.7	-681.9	337.1	322.6	14.55	23.172		
3,700.0	3,668.8	3,674.3	3,592.6	10.0	14.6	30.31	-239.3	-703.6	346.2	331.2	15.00	23.081		
3,800.0	3,767.6	3,773.9	3,689.5	10.4	15.0	30.42	-246.9	-725.2	355.3	339.9	15.45	22.995		
3,900.0	3,866.5	3,873.5	3,786.4	10.7	15.5	30.53	-254.4	-746.9	364.5	348.6	15.91	22.912		
4,000.0	3,965.3	3,973.0	3,883.3	11.0	15.9	30.63	-262.0	-768.6	373.6	357.2	16.36	22.834		
4,100.0	4,064.2	4,072.6	3,980.2	11.3	16.4	30.73	-269.6	-790.3	382.7	365.9	16.81	22.760		
4,200.0	4,163.0	4,172.2	4,077.1	11.6	16.8	30.82	-277.2	-811.9	391.8	374.5	17.27	22.689		
4,300.0	4,261.9	4,271.8	4,174.0	11.9	17.3	30.91	-284.8	-833.6	400.9	383.2	17.72	22.621		
4,400.0	4,360.7	4,371.4	4,270.9	12.3	17.7	31.00	-292.4	-855.3	410.0	391.8	18.18	22.556		
4,500.0	4,459.6	4,471.0	4,367.8	12.6	18.1	31.08	-299.9	-877.0	419.1	400.5	18.63	22.494		
4,600.0	4,558.5	4,570.5	4,464.7	12.9	18.6	31.16	-307.5	-898.6	428.3	409.2	19.09	22.434		
4,700.0	4,657.3	4,670.1	4,561.6	13.2	19.0	31.23	-315.1	-920.3	437.4	417.8	19.55	22.377		
4,800.0	4,756.2	4,769.7	4,658.5	13.5	19.5	31.30	-322.7	-942.0	446.5	426.5	20.00	22.323		
4,900.0	4,855.0	4,869.3	4,755.4	13.8	19.9	31.37	-330.3	-963.7	455.6	435.2	20.46	22.270		
5,000.0	4,953.9	4,968.9	4,852.3	14.2	20.4	31.44	-337.9	-985.3	464.7	443.8	20.92	22.220		

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 Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													S9-T2N-R67W (Sprague) - Sprague 3A-9H-N267 - Hz - Plan #1		Offset Site Error:		0.0 ft
Survey Program:													0-Geolink 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				
5,100.0	5,052.7	5,068.4	4,949.2	14.5	20.8	31.50	-345.4	-1,007.0	473.9	452.5	21.37	22.171					
5,200.0	5,151.6	5,168.0	5,046.1	14.8	21.3	31.56	-353.0	-1,028.7	483.0	461.2	21.83	22.125					
5,300.0	5,250.4	5,267.6	5,143.0	15.1	21.7	31.62	-360.6	-1,050.4	492.1	469.8	22.29	22.080					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - Sprague 3B-9H-N267 - Hz - Plan #1														Offset Site Error:	0.0 ft
Survey Program: O-Geolink 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	-89.94	0.0	-8.4	8.4						
100.0	100.0	100.0	100.0	0.1	0.1	-89.94	0.0	-8.4	8.4	8.1	0.24	34.322			
200.0	200.0	200.0	200.0	0.3	0.3	-89.94	0.0	-8.4	8.4	7.8	0.59	14.133			
300.0	300.0	300.0	300.0	0.5	0.5	-89.94	0.0	-8.4	8.4	7.4	0.94	8.898	CC, ES		
400.0	400.0	399.7	399.7	0.6	0.6	-93.95	-0.7	-10.0	10.0	8.7	1.29	7.742			
500.0	500.0	499.2	499.0	0.8	0.8	22.93	-2.8	-14.7	14.2	12.6	1.64	8.661			
600.0	600.0	598.4	597.9	1.0	1.1	19.74	-6.2	-22.6	20.2	18.3	1.99	10.173			
700.0	699.9	697.3	696.0	1.2	1.3	17.95	-11.0	-33.6	28.1	25.7	2.34	11.994			
800.0	799.7	795.7	793.3	1.4	1.6	16.95	-17.2	-47.6	37.6	34.9	2.69	13.988			
900.0	899.4	894.8	890.7	1.6	1.9	16.51	-24.4	-63.9	48.0	45.0	3.04	15.781			
1,000.0	998.9	994.4	988.7	1.8	2.3	16.70	-31.6	-80.5	56.9	53.5	3.40	16.728			
1,100.0	1,098.3	1,094.2	1,086.8	2.1	2.6	17.29	-38.9	-97.0	64.0	60.3	3.76	17.027			
1,200.0	1,197.4	1,194.0	1,185.0	2.3	3.0	18.20	-46.2	-113.6	69.6	65.5	4.13	16.841			
1,268.8	1,265.5	1,262.7	1,252.5	2.5	3.2	19.01	-51.2	-125.0	72.4	68.1	4.39	16.489			
1,300.0	1,296.3	1,293.9	1,283.2	2.6	3.3	19.41	-53.5	-130.2	73.6	69.1	4.51	16.296			
1,400.0	1,395.2	1,393.8	1,381.5	2.9	3.7	20.60	-60.8	-146.8	77.2	72.3	4.91	15.725			
1,500.0	1,494.0	1,493.8	1,479.7	3.2	4.1	21.69	-68.0	-163.4	80.9	75.6	5.31	15.222			
1,600.0	1,592.9	1,593.7	1,578.0	3.5	4.4	22.68	-75.3	-180.0	84.6	78.8	5.72	14.775			
1,700.0	1,691.7	1,693.6	1,676.3	3.8	4.8	23.59	-82.6	-196.6	88.3	82.1	6.14	14.375			
1,800.0	1,790.6	1,793.5	1,774.5	4.1	5.1	24.42	-89.9	-213.2	92.0	85.4	6.56	14.015			
1,900.0	1,889.4	1,893.5	1,872.8	4.4	5.5	25.19	-97.2	-229.8	95.7	88.8	6.99	13.689			
2,000.0	1,988.3	1,993.4	1,971.1	4.7	5.9	25.91	-104.5	-246.4	99.5	92.1	7.43	13.394			
2,100.0	2,087.1	2,093.3	2,069.3	5.0	6.2	26.57	-111.8	-263.0	103.3	95.4	7.87	13.124			
2,200.0	2,186.0	2,193.2	2,167.6	5.3	6.6	27.18	-119.0	-279.6	107.1	98.8	8.32	12.878			
2,300.0	2,284.8	2,293.1	2,265.9	5.6	6.9	27.75	-126.3	-296.2	110.9	102.1	8.77	12.651			
2,400.0	2,383.7	2,393.1	2,364.1	6.0	7.3	28.28	-133.6	-312.7	114.7	105.5	9.22	12.443			
2,500.0	2,482.5	2,493.0	2,462.4	6.3	7.7	28.78	-140.9	-329.3	118.5	108.9	9.67	12.251			
2,600.0	2,581.4	2,592.9	2,560.6	6.6	8.0	29.25	-148.2	-345.9	122.4	112.2	10.13	12.073			
2,700.0	2,680.3	2,692.8	2,658.9	6.9	8.4	29.69	-155.5	-362.5	126.2	115.6	10.60	11.908			
2,800.0	2,779.1	2,792.8	2,757.2	7.2	8.8	30.10	-162.8	-379.1	130.0	119.0	11.06	11.755			
2,900.0	2,878.0	2,892.7	2,855.4	7.5	9.1	30.49	-170.1	-395.7	133.9	122.4	11.53	11.612			
3,000.0	2,976.8	2,992.6	2,953.7	7.8	9.5	30.86	-177.3	-412.3	137.8	125.8	12.00	11.479			
3,100.0	3,075.7	3,092.5	3,052.0	8.2	9.8	31.21	-184.6	-428.9	141.6	129.2	12.47	11.354			
3,200.0	3,174.5	3,192.4	3,150.2	8.5	10.2	31.54	-191.9	-445.5	145.5	132.5	12.95	11.237			
3,300.0	3,273.4	3,292.4	3,248.5	8.8	10.6	31.85	-199.2	-462.1	149.4	135.9	13.42	11.128			
3,400.0	3,372.2	3,392.3	3,346.8	9.1	10.9	32.15	-206.5	-478.7	153.2	139.3	13.90	11.024			
3,500.0	3,471.1	3,492.2	3,445.0	9.4	11.3	32.43	-213.8	-495.3	157.1	142.7	14.38	10.927			
3,600.0	3,569.9	3,592.1	3,543.3	9.7	11.7	32.70	-221.1	-511.9	161.0	146.2	14.86	10.835			
3,700.0	3,668.8	3,692.0	3,641.6	10.0	12.0	32.95	-228.3	-528.5	164.9	149.6	15.34	10.749			
3,800.0	3,767.6	3,792.0	3,739.8	10.4	12.4	33.20	-235.6	-545.1	168.8	153.0	15.82	10.667			
3,900.0	3,866.5	3,891.9	3,838.1	10.7	12.8	33.43	-242.9	-561.7	172.7	156.4	16.31	10.589			
4,000.0	3,965.3	3,991.8	3,936.3	11.0	13.1	33.65	-250.2	-578.3	176.6	159.8	16.79	10.515			
4,100.0	4,064.2	4,091.7	4,034.6	11.3	13.5	33.87	-257.5	-594.9	180.5	163.2	17.28	10.445			
4,200.0	4,163.0	4,191.7	4,132.9	11.6	13.9	34.07	-264.8	-611.5	184.4	166.6	17.77	10.379			
4,300.0	4,261.9	4,291.6	4,231.1	11.9	14.2	34.26	-272.1	-628.1	188.3	170.0	18.25	10.315			
4,400.0	4,360.7	4,391.5	4,329.4	12.3	14.6	34.45	-279.3	-644.7	192.2	173.5	18.74	10.255			
4,500.0	4,459.6	4,491.4	4,427.7	12.6	15.0	34.63	-286.6	-661.3	196.1	176.9	19.23	10.197			
4,600.0	4,558.5	4,591.3	4,525.9	12.9	15.3	34.81	-293.9	-677.9	200.0	180.3	19.72	10.142			
4,700.0	4,657.3	4,691.3	4,624.2	13.2	15.7	34.97	-301.2	-694.5	203.9	183.7	20.21	10.089			
4,800.0	4,756.2	4,791.2	4,722.5	13.5	16.0	35.13	-308.5	-711.0	207.8	187.1	20.70	10.039			
4,900.0	4,855.0	4,891.1	4,820.7	13.8	16.4	35.29	-315.8	-727.6	211.8	190.6	21.20	9.991			
5,000.0	4,953.9	4,991.0	4,919.0	14.2	16.8	35.43	-323.1	-744.2	215.7	194.0	21.69	9.945			

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 Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - Sprague 3B-9H-N267 - Hz - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink 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		
5,100.0	5,052.7	5,091.0	5,017.2	14.5	17.1	35.58	-330.4	-760.8	219.6	197.4	22.18	9.900		
5,200.0	5,151.6	5,190.9	5,115.5	14.8	17.5	35.72	-337.6	-777.4	223.5	200.8	22.67	9.858		
5,300.0	5,250.4	5,290.8	5,213.8	15.1	17.9	35.85	-344.9	-794.0	227.4	204.3	23.17	9.817		
5,400.0	5,349.3	5,390.7	5,312.0	15.4	18.2	35.98	-352.2	-810.6	231.4	207.7	23.66	9.778		
5,500.0	5,448.1	5,490.6	5,410.3	15.7	18.6	36.10	-359.5	-827.2	235.3	211.1	24.16	9.740		
5,600.0	5,547.0	5,590.6	5,508.6	16.1	19.0	36.22	-366.8	-843.8	239.2	214.6	24.65	9.703		
5,700.0	5,645.8	5,690.5	5,606.8	16.4	19.3	36.34	-374.1	-860.4	243.1	218.0	25.15	9.668		
5,800.0	5,744.7	5,790.4	5,705.1	16.7	19.7	36.45	-381.4	-877.0	247.1	221.4	25.64	9.634		
5,900.0	5,843.5	5,890.3	5,803.4	17.0	20.1	36.56	-388.6	-893.6	251.0	224.8	26.14	9.602		
6,000.0	5,942.4	5,990.2	5,901.6	17.3	20.4	36.67	-395.9	-910.2	254.9	228.3	26.64	9.570		
6,100.0	6,041.2	6,090.2	5,999.9	17.7	20.8	36.77	-403.2	-926.8	258.8	231.7	27.13	9.540		
6,200.0	6,140.1	6,190.1	6,098.2	18.0	21.2	36.87	-410.5	-943.4	262.8	235.1	27.63	9.510		
6,300.0	6,238.9	6,290.0	6,196.4	18.3	21.5	36.97	-417.8	-960.0	266.7	238.6	28.13	9.482		
6,400.0	6,337.8	6,389.9	6,294.7	18.6	21.9	37.06	-425.1	-976.6	270.6	242.0	28.63	9.454		
6,500.0	6,436.6	6,489.9	6,392.9	18.9	22.2	37.15	-432.4	-993.2	274.6	245.4	29.12	9.428		
6,600.0	6,535.5	6,589.8	6,491.2	19.2	22.6	37.24	-439.6	-1,009.8	278.5	248.9	29.62	9.402		
6,700.0	6,634.4	6,689.7	6,589.5	19.6	23.0	37.33	-446.9	-1,026.4	282.4	252.3	30.12	9.377		
6,759.2	6,692.9	6,748.8	6,647.6	19.7	23.2	37.38	-451.2	-1,036.2	284.8	254.3	30.42	9.363		
6,800.0	6,733.3	6,789.6	6,687.7	19.9	23.3	9.51	-454.2	-1,043.0	286.2	255.7	30.54	9.374		
6,850.0	6,782.8	6,839.3	6,736.6	20.0	23.5	-26.69	-457.8	-1,051.2	287.7	257.4	30.36	9.478		
6,900.0	6,832.0	6,888.3	6,784.7	20.0	23.7	-49.26	-461.4	-1,059.3	289.1	259.3	29.86	9.681		
6,950.0	6,880.5	6,936.2	6,831.9	20.1	23.9	-62.56	-464.9	-1,067.3	290.8	261.7	29.14	9.980		
7,000.0	6,928.0	6,982.8	6,877.7	20.1	24.0	-71.75	-468.3	-1,075.1	293.4	265.1	28.29	10.371		
7,050.0	6,973.9	7,027.7	6,921.8	20.1	24.2	-79.01	-471.6	-1,082.5	297.5	270.1	27.43	10.845		
7,100.0	7,018.1	7,076.0	6,969.4	20.0	24.4	-85.39	-473.2	-1,090.5	303.6	277.0	26.60	11.414		
7,150.0	7,060.2	7,126.7	7,019.4	20.0	24.5	-90.92	-470.4	-1,099.0	311.4	285.5	25.92	12.013		
7,200.0	7,099.8	7,180.1	7,071.5	19.9	24.6	-95.83	-462.7	-1,107.8	320.7	295.3	25.39	12.628		
7,250.0	7,136.7	7,236.7	7,125.6	19.9	24.7	-100.27	-449.2	-1,116.9	331.2	306.2	24.98	13.256		
7,300.0	7,170.5	7,296.9	7,181.5	19.8	24.8	-104.30	-429.0	-1,126.4	342.6	317.9	24.66	13.894		
7,350.0	7,201.1	7,361.1	7,238.4	19.8	24.8	-107.97	-401.1	-1,136.0	354.5	330.2	24.39	14.538		
7,400.0	7,228.1	7,429.9	7,295.6	19.7	24.8	-111.29	-364.1	-1,145.6	366.6	342.4	24.14	15.183		
7,450.0	7,251.4	7,503.7	7,351.6	19.7	24.8	-114.26	-317.1	-1,155.1	378.3	354.3	23.92	15.816		
7,500.0	7,270.8	7,582.7	7,404.5	19.7	24.8	-116.85	-259.1	-1,164.0	389.1	365.3	23.72	16.402		
7,550.0	7,286.2	7,667.1	7,451.6	19.7	24.8	-119.01	-189.7	-1,172.0	398.5	374.9	23.57	16.908		
7,600.0	7,297.4	7,756.4	7,490.0	19.8	24.8	-120.69	-109.4	-1,178.5	406.0	382.5	23.49	17.284		
7,650.0	7,304.3	7,849.7	7,516.5	19.9	24.9	-121.84	-20.1	-1,182.9	411.2	387.7	23.53	17.479		
7,700.0	7,307.0	7,945.7	7,528.5	20.0	25.1	-122.39	75.0	-1,185.0	413.8	390.0	23.71	17.448		
7,705.5	7,307.0	7,956.4	7,528.8	20.0	25.1	-122.42	85.6	-1,185.0	413.9	390.1	23.74	17.430		
7,800.0	7,307.0	8,057.7	7,529.0	20.4	25.4	-122.43	187.0	-1,185.0	413.9	389.2	24.71	16.755		
7,900.0	7,307.0	8,157.7	7,529.0	20.8	25.8	-122.43	287.0	-1,185.0	413.9	388.0	25.97	15.938		
8,000.0	7,307.0	8,257.7	7,529.0	21.5	26.3	-122.43	387.0	-1,185.0	413.9	386.4	27.50	15.051		
8,100.0	7,307.0	8,357.7	7,529.0	22.2	26.9	-122.43	487.0	-1,185.0	413.9	384.7	29.25	14.150		
8,200.0	7,307.0	8,457.7	7,529.0	23.1	27.6	-122.43	587.0	-1,185.0	413.9	382.7	31.19	13.271		
8,300.0	7,307.0	8,557.7	7,529.0	24.0	28.4	-122.43	687.0	-1,185.0	413.9	380.7	33.28	12.438		
8,400.0	7,307.0	8,657.7	7,529.0	25.1	29.3	-122.43	787.0	-1,185.0	413.9	378.4	35.49	11.662		
8,500.0	7,307.0	8,757.7	7,529.0	26.2	30.2	-122.43	887.0	-1,185.0	413.9	376.1	37.81	10.947		
8,600.0	7,307.0	8,857.7	7,529.0	27.4	31.3	-122.43	987.0	-1,185.0	413.9	373.7	40.22	10.293		
8,700.0	7,307.0	8,957.7	7,529.0	28.6	32.4	-122.43	1,087.0	-1,185.0	413.9	371.2	42.69	9.696		
8,800.0	7,307.0	9,057.7	7,529.0	29.9	33.5	-122.43	1,187.0	-1,185.0	413.9	368.7	45.23	9.153		
8,900.0	7,307.0	9,157.7	7,529.0	31.3	34.7	-122.43	1,287.0	-1,185.0	413.9	366.1	47.81	8.658		
9,000.0	7,307.0	9,257.7	7,529.0	32.6	36.0	-122.43	1,387.0	-1,185.0	413.9	363.5	50.44	8.207		
9,100.0	7,307.0	9,357.7	7,529.0	34.1	37.2	-122.43	1,487.0	-1,185.0	413.9	360.8	53.10	7.795		

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 Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - Sprague 3B-9H-N267 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	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)				
9,200.0	7,307.0	9,457.7	7,529.0	35.5	38.6	-122.43	1,587.0	-1,185.0	413.9	358.1	55.79	7.419		
9,300.0	7,307.0	9,557.7	7,529.0	37.0	39.9	-122.43	1,687.0	-1,185.0	413.9	355.4	58.51	7.074		
9,400.0	7,307.0	9,657.7	7,529.0	38.5	41.3	-122.43	1,787.0	-1,185.0	413.9	352.7	61.26	6.757		
9,500.0	7,307.0	9,757.7	7,529.0	40.0	42.7	-122.43	1,887.0	-1,185.0	413.9	349.9	64.02	6.466		
9,600.0	7,307.0	9,857.7	7,529.0	41.5	44.2	-122.43	1,987.0	-1,185.0	413.9	347.1	66.80	6.197		
9,700.0	7,307.0	9,957.7	7,529.0	43.1	45.6	-122.43	2,087.0	-1,185.0	413.9	344.3	69.60	5.948		
9,800.0	7,307.0	10,057.7	7,529.0	44.6	47.1	-122.43	2,187.0	-1,185.0	413.9	341.5	72.41	5.717		
9,900.0	7,307.0	10,157.7	7,529.0	46.2	48.6	-122.43	2,287.0	-1,185.0	413.9	338.7	75.23	5.502		
10,000.0	7,307.0	10,257.7	7,529.0	47.8	50.1	-122.43	2,387.0	-1,185.0	413.9	335.9	78.06	5.303		
10,100.0	7,307.0	10,357.7	7,529.0	49.4	51.7	-122.43	2,487.0	-1,185.0	413.9	333.0	80.91	5.116		
10,200.0	7,307.0	10,457.7	7,529.0	51.0	53.2	-122.43	2,587.0	-1,185.0	413.9	330.2	83.76	4.942		
10,300.0	7,307.0	10,557.7	7,529.0	52.7	54.8	-122.43	2,687.0	-1,185.0	413.9	327.3	86.62	4.779		
10,400.0	7,307.0	10,657.7	7,529.0	54.3	56.3	-122.43	2,787.0	-1,185.0	413.9	324.4	89.48	4.626		
10,500.0	7,307.0	10,757.7	7,529.0	55.9	57.9	-122.43	2,887.0	-1,185.0	413.9	321.6	92.36	4.482		
10,600.0	7,307.0	10,857.7	7,529.0	57.6	59.5	-122.43	2,987.0	-1,185.0	413.9	318.7	95.23	4.346		
10,700.0	7,307.0	10,957.7	7,529.0	59.2	61.1	-122.43	3,087.0	-1,185.0	413.9	315.8	98.12	4.219		
10,800.0	7,307.0	11,057.7	7,529.0	60.9	62.7	-122.43	3,187.0	-1,185.0	413.9	312.9	101.01	4.098		
10,900.0	7,307.0	11,157.7	7,529.0	62.5	64.3	-122.43	3,287.0	-1,185.0	413.9	310.0	103.90	3.984		
11,000.0	7,307.0	11,257.7	7,529.0	64.2	66.0	-122.43	3,387.0	-1,185.0	413.9	307.1	106.80	3.876		
11,100.0	7,307.0	11,357.7	7,529.0	65.9	67.6	-122.43	3,487.0	-1,185.0	413.9	304.2	109.70	3.773		
11,200.0	7,307.0	11,457.7	7,529.0	67.6	69.2	-122.43	3,587.0	-1,185.0	413.9	301.3	112.61	3.676		
11,300.0	7,307.0	11,557.7	7,529.0	69.2	70.9	-122.43	3,687.0	-1,185.0	413.9	298.4	115.51	3.583		
11,400.0	7,307.0	11,657.7	7,529.0	70.9	72.5	-122.43	3,787.0	-1,185.0	413.9	295.5	118.42	3.495		
11,500.0	7,307.0	11,757.7	7,529.0	72.6	74.2	-122.43	3,887.0	-1,185.0	413.9	292.6	121.34	3.411		
11,600.0	7,307.0	11,857.7	7,529.0	74.3	75.8	-122.43	3,987.0	-1,185.0	413.9	289.7	124.25	3.331		
11,700.0	7,307.0	11,957.7	7,529.0	76.0	77.5	-122.43	4,087.0	-1,185.0	413.9	286.8	127.17	3.255		
11,800.0	7,307.0	12,057.7	7,529.0	77.7	79.1	-122.43	4,187.0	-1,185.0	413.9	283.8	130.09	3.182		
11,900.0	7,307.0	12,157.7	7,529.0	79.4	80.8	-122.43	4,287.0	-1,185.0	413.9	280.9	133.02	3.112		
12,000.0	7,307.0	12,257.7	7,529.0	81.1	82.5	-122.43	4,387.0	-1,185.0	413.9	278.0	135.94	3.045		
12,100.0	7,307.0	12,357.7	7,529.0	82.8	84.2	-122.43	4,487.0	-1,185.0	413.9	275.1	138.87	2.981		
12,200.0	7,307.0	12,457.7	7,529.0	84.5	85.8	-122.43	4,587.0	-1,185.0	413.9	272.1	141.80	2.919		
12,300.0	7,307.0	12,557.7	7,529.0	86.2	87.5	-122.43	4,687.0	-1,185.0	413.9	269.2	144.73	2.860		
12,400.0	7,307.0	12,657.7	7,529.0	87.9	89.2	-122.43	4,787.0	-1,185.0	413.9	266.3	147.66	2.803		
12,500.0	7,307.0	12,757.7	7,529.0	89.6	90.9	-122.43	4,887.0	-1,185.0	413.9	263.3	150.59	2.749		
12,600.0	7,307.0	12,857.7	7,529.0	91.3	92.6	-122.43	4,987.0	-1,185.0	413.9	260.4	153.53	2.696		
12,700.0	7,307.0	12,957.7	7,529.0	93.0	94.3	-122.43	5,087.0	-1,185.0	413.9	257.5	156.46	2.646		
12,800.0	7,307.0	13,057.7	7,529.0	94.8	96.0	-122.43	5,187.0	-1,185.0	413.9	254.5	159.40	2.597		
12,840.5	7,307.0	13,098.2	7,529.0	95.4	96.7	-122.43	5,227.5	-1,185.0	413.9	253.3	160.59	2.578 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - Sprague 3D-9H-N267 - Hz - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink 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	90.04	0.0	11.2	11.2					
100.0	100.0	100.0	100.0	0.1	0.1	90.04	0.0	11.2	11.2	10.9	0.24	45.763		
200.0	200.0	200.0	200.0	0.3	0.3	90.04	0.0	11.2	11.2	10.6	0.59	18.844		
300.0	300.0	300.0	300.0	0.5	0.5	90.04	0.0	11.2	11.2	10.2	0.94	11.864		
400.0	400.0	400.0	400.0	0.6	0.6	90.04	0.0	11.2	11.2	9.9	1.29	8.658 CC, ES		
500.0	500.0	500.0	500.0	0.8	0.8	-149.87	0.0	11.2	11.9	10.3	1.64	7.271		
600.0	600.0	600.2	600.2	1.0	1.0	-153.17	-0.6	10.5	13.5	11.5	1.99	6.795		
700.0	699.9	700.4	700.3	1.2	1.2	-154.98	-2.3	8.5	15.3	12.9	2.34	6.519		
800.0	799.7	800.6	800.4	1.4	1.4	-155.72	-5.1	5.1	17.1	14.4	2.70	6.352		
900.0	899.4	900.8	900.5	1.6	1.6	-155.68	-9.0	0.4	19.1	16.0	3.05	6.249		
1,000.0	998.9	1,001.1	1,000.5	1.8	1.8	-155.09	-14.1	-5.6	21.2	17.7	3.42	6.185		
1,100.0	1,098.3	1,101.4	1,100.3	2.1	2.0	-154.09	-20.3	-13.0	23.3	19.5	3.80	6.143		
1,200.0	1,197.4	1,201.7	1,200.0	2.3	2.2	-152.81	-27.6	-21.7	25.6	21.5	4.20	6.113		
1,268.8	1,265.5	1,270.8	1,268.4	2.5	2.4	-151.80	-33.3	-28.5	27.3	22.8	4.48	6.094		
1,300.0	1,296.3	1,302.1	1,299.5	2.6	2.5	-151.24	-36.0	-31.8	28.0	23.4	4.61	6.069		
1,400.0	1,395.2	1,402.0	1,398.5	2.9	2.7	-149.35	-45.0	-42.4	30.1	25.0	5.06	5.948		
1,500.0	1,494.0	1,502.0	1,497.5	3.2	3.0	-147.71	-53.9	-53.1	32.2	26.7	5.51	5.836		
1,600.0	1,592.9	1,602.0	1,596.5	3.5	3.3	-146.26	-62.9	-63.7	34.3	28.3	5.98	5.733		
1,700.0	1,691.7	1,702.0	1,695.5	3.8	3.6	-144.99	-71.8	-74.4	36.4	30.0	6.46	5.639		
1,800.0	1,790.6	1,801.9	1,794.5	4.1	3.9	-143.86	-80.8	-85.0	38.6	31.7	6.95	5.552		
1,900.0	1,889.4	1,901.9	1,893.5	4.4	4.2	-142.84	-89.7	-95.7	40.8	33.3	7.45	5.473		
2,000.0	1,988.3	2,001.9	1,992.5	4.7	4.4	-141.93	-98.6	-106.4	43.0	35.0	7.95	5.401		
2,100.0	2,087.1	2,101.9	2,091.5	5.0	4.7	-141.11	-107.6	-117.0	45.2	36.7	8.46	5.335		
2,200.0	2,186.0	2,201.8	2,190.5	5.3	5.0	-140.37	-116.5	-127.7	47.4	38.4	8.98	5.275		
2,300.0	2,284.8	2,301.8	2,289.5	5.6	5.3	-139.69	-125.5	-138.3	49.6	40.1	9.50	5.220		
2,400.0	2,383.7	2,401.8	2,388.5	6.0	5.6	-139.07	-134.4	-149.0	51.8	41.8	10.02	5.169		
2,500.0	2,482.5	2,501.8	2,487.5	6.3	5.9	-138.50	-143.4	-159.7	54.0	43.5	10.54	5.122		
2,600.0	2,581.4	2,601.7	2,586.5	6.6	6.2	-137.97	-152.3	-170.3	56.2	45.2	11.07	5.079		
2,700.0	2,680.3	2,701.7	2,685.5	6.9	6.5	-137.49	-161.2	-181.0	58.5	46.9	11.60	5.039		
2,800.0	2,779.1	2,801.7	2,784.5	7.2	6.8	-137.04	-170.2	-191.6	60.7	48.6	12.13	5.002		
2,900.0	2,878.0	2,901.7	2,883.5	7.5	7.1	-136.62	-179.1	-202.3	62.9	50.3	12.67	4.968		
3,000.0	2,976.8	3,001.6	2,982.5	7.8	7.4	-136.23	-188.1	-212.9	65.2	52.0	13.20	4.936		
3,100.0	3,075.7	3,101.6	3,081.5	8.2	7.7	-135.87	-197.0	-223.6	67.4	53.7	13.74	4.906		
3,200.0	3,174.5	3,201.6	3,180.5	8.5	8.0	-135.53	-206.0	-234.3	69.7	55.4	14.28	4.878		
3,300.0	3,273.4	3,301.6	3,279.5	8.8	8.3	-135.21	-214.9	-244.9	71.9	57.1	14.82	4.852		
3,400.0	3,372.2	3,401.5	3,378.5	9.1	8.6	-134.92	-223.9	-255.6	74.2	58.8	15.36	4.828		
3,500.0	3,471.1	3,501.5	3,477.5	9.4	8.9	-134.63	-232.8	-266.2	76.4	60.5	15.90	4.805		
3,600.0	3,569.9	3,601.5	3,576.5	9.7	9.2	-134.37	-241.7	-276.9	78.7	62.2	16.45	4.783		
3,700.0	3,668.8	3,701.4	3,675.5	10.0	9.5	-134.12	-250.7	-287.6	80.9	63.9	16.99	4.763		
3,800.0	3,767.6	3,801.4	3,774.5	10.4	9.8	-133.88	-259.6	-298.2	83.2	65.6	17.53	4.744		
3,900.0	3,866.5	3,901.4	3,873.5	10.7	10.1	-133.66	-268.6	-308.9	85.4	67.4	18.08	4.725		
4,000.0	3,965.3	4,001.4	3,972.5	11.0	10.4	-133.45	-277.5	-319.5	87.7	69.1	18.63	4.708		
4,100.0	4,064.2	4,101.3	4,071.5	11.3	10.7	-133.24	-286.5	-330.2	90.0	70.8	19.17	4.692		
4,200.0	4,163.0	4,201.3	4,170.5	11.6	11.0	-133.05	-295.4	-340.8	92.2	72.5	19.72	4.677		
4,300.0	4,261.9	4,301.3	4,269.5	11.9	11.3	-132.87	-304.3	-351.5	94.5	74.2	20.27	4.662		
4,400.0	4,360.7	4,401.3	4,368.5	12.3	11.6	-132.69	-313.3	-362.2	96.7	75.9	20.81	4.648		
4,500.0	4,459.6	4,501.2	4,467.5	12.6	11.8	-132.53	-322.2	-372.8	99.0	77.6	21.36	4.635		
4,600.0	4,558.5	4,601.2	4,566.5	12.9	12.1	-132.37	-331.2	-383.5	101.3	79.4	21.91	4.622		
4,700.0	4,657.3	4,701.2	4,665.5	13.2	12.4	-132.22	-340.1	-394.1	103.5	81.1	22.46	4.610		
4,800.0	4,756.2	4,801.2	4,764.5	13.5	12.7	-132.07	-349.1	-404.8	105.8	82.8	23.01	4.598		
4,900.0	4,855.0	4,901.1	4,863.5	13.8	13.0	-131.93	-358.0	-415.5	108.1	84.5	23.56	4.587		
5,000.0	4,953.9	5,001.1	4,962.5	14.2	13.3	-131.80	-366.9	-426.1	110.3	86.2	24.11	4.577		

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 Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - Sprague 3D-9H-N267 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink 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	
5,100.0	5,052.7	5,101.1	5,061.5	14.5	13.6	-131.67	-375.9	-436.8	112.6	87.9	24.66	4.567		
5,200.0	5,151.6	5,201.1	5,160.5	14.8	13.9	-131.55	-384.8	-447.4	114.9	89.7	25.21	4.557		
5,300.0	5,250.4	5,301.0	5,259.5	15.1	14.2	-131.43	-393.8	-458.1	117.1	91.4	25.76	4.548		
5,400.0	5,349.3	5,401.0	5,358.5	15.4	14.5	-131.32	-402.7	-468.8	119.4	93.1	26.31	4.539		
5,500.0	5,448.1	5,501.0	5,457.5	15.7	14.8	-131.21	-411.7	-479.4	121.7	94.8	26.86	4.530		
5,600.0	5,547.0	5,601.0	5,556.5	16.1	15.1	-131.10	-420.6	-490.1	124.0	96.5	27.41	4.522		
5,700.0	5,645.8	5,700.9	5,655.5	16.4	15.4	-131.00	-429.6	-500.7	126.2	98.3	27.96	4.514		
5,800.0	5,744.7	5,800.9	5,754.5	16.7	15.7	-130.90	-438.5	-511.4	128.5	100.0	28.51	4.506		
5,900.0	5,843.5	5,900.0	5,852.8	17.0	16.0	-131.12	-446.8	-521.3	131.3	102.3	28.98	4.528		
6,000.0	5,942.4	5,998.3	5,950.4	17.3	16.3	-131.94	-454.0	-529.8	135.0	105.7	29.32	4.604		
6,100.0	6,041.2	6,096.7	6,048.4	17.7	16.5	-133.27	-460.1	-537.1	139.7	110.2	29.51	4.734		
6,200.0	6,140.1	6,195.0	6,146.4	18.0	16.7	-135.05	-465.1	-543.0	145.6	116.0	29.59	4.920		
6,300.0	6,238.9	6,293.0	6,244.2	18.3	16.9	-137.18	-469.0	-547.7	152.6	123.1	29.55	5.165		
6,400.0	6,337.8	6,390.7	6,341.7	18.6	17.0	-139.56	-471.8	-551.1	161.0	131.6	29.42	5.473		
6,500.0	6,436.6	6,488.0	6,439.0	18.9	17.2	-142.10	-473.6	-553.2	170.9	141.7	29.23	5.847		
6,600.0	6,535.5	6,584.8	6,535.9	19.2	17.3	-144.70	-474.2	-554.0	182.3	153.3	28.98	6.288		
6,700.0	6,634.4	6,683.3	6,634.4	19.6	17.4	-147.25	-474.3	-554.0	194.8	166.1	28.75	6.776		
6,759.2	6,692.9	6,741.9	6,692.9	19.7	17.5	-148.61	-474.3	-554.0	202.4	173.8	28.64	7.067		
6,800.0	6,733.3	6,782.3	6,733.3	19.9	17.5	-177.39	-474.3	-554.0	207.7	179.2	28.53	7.280		
6,850.0	6,782.8	6,831.8	6,782.8	20.0	17.6	147.22	-474.3	-554.0	214.0	185.4	28.61	7.482		
6,900.0	6,832.0	6,881.0	6,832.0	20.0	17.6	127.37	-474.3	-554.0	220.4	191.5	28.90	7.626		
6,950.0	6,880.5	6,929.5	6,880.5	20.1	17.7	118.45	-474.3	-554.0	226.9	197.6	29.33	7.736		
7,000.0	6,928.0	6,976.9	6,928.0	20.1	17.7	114.92	-474.3	-554.0	234.2	204.4	29.85	7.848		
7,050.0	6,973.9	7,024.3	6,975.4	20.1	17.8	114.24	-473.9	-554.0	242.8	212.5	30.33	8.007		
7,100.0	7,018.1	7,074.7	7,025.5	20.0	17.8	114.87	-470.0	-554.0	252.7	222.0	30.62	8.252		
7,150.0	7,060.2	7,127.0	7,077.1	20.0	17.8	116.01	-461.3	-553.8	263.4	232.8	30.64	8.596		
7,200.0	7,099.8	7,181.6	7,129.8	19.9	17.7	117.40	-447.3	-553.7	274.8	244.4	30.41	9.037		
7,250.0	7,136.7	7,238.6	7,183.2	19.9	17.6	118.88	-427.3	-553.4	286.6	256.7	29.94	9.575		
7,300.0	7,170.5	7,298.2	7,236.6	19.8	17.5	120.36	-400.9	-553.1	298.6	269.3	29.26	10.205		
7,350.0	7,201.1	7,360.8	7,289.4	19.8	17.3	121.79	-367.3	-552.7	310.4	282.0	28.42	10.920		
7,400.0	7,228.1	7,426.4	7,340.4	19.7	17.1	123.11	-326.2	-552.2	321.8	294.3	27.50	11.702		
7,450.0	7,251.4	7,495.1	7,388.5	19.7	17.0	124.31	-277.1	-551.6	332.3	305.8	26.55	12.517		
7,500.0	7,270.8	7,567.1	7,432.2	19.7	16.8	125.35	-220.0	-551.0	341.9	316.2	25.68	13.311		
7,550.0	7,286.2	7,642.0	7,469.7	19.7	16.7	126.22	-155.2	-550.2	350.0	325.0	24.98	14.009		
7,600.0	7,297.4	7,719.5	7,499.2	19.8	16.7	126.89	-83.6	-549.3	356.5	331.9	24.56	14.516		
7,650.0	7,304.3	7,799.2	7,519.3	19.9	16.7	127.34	-6.5	-548.4	361.1	336.7	24.49	14.746		
7,700.0	7,307.0	7,880.3	7,528.5	20.0	16.9	127.56	73.9	-547.4	363.7	338.9	24.83	14.648		
7,705.5	7,307.0	7,889.3	7,528.8	20.0	16.9	127.57	82.9	-547.3	363.9	339.0	24.89	14.618		
7,800.0	7,307.0	7,989.9	7,529.0	20.4	17.4	127.48	183.5	-546.1	364.9	339.1	25.75	14.168		
7,900.0	7,307.0	8,089.9	7,529.0	20.8	17.9	127.36	283.5	-544.9	365.8	338.9	26.90	13.600		
8,000.0	7,307.0	8,189.9	7,529.0	21.5	18.6	127.25	383.5	-543.7	366.8	338.5	28.28	12.970		
8,100.0	7,307.0	8,289.8	7,529.0	22.2	19.5	127.14	483.4	-542.5	367.7	337.9	29.87	12.312		
8,200.0	7,307.0	8,389.8	7,529.0	23.1	20.5	127.02	583.4	-541.3	368.7	337.1	31.63	11.656		
8,300.0	7,307.0	8,489.8	7,529.0	24.0	21.5	126.91	683.4	-540.1	369.7	336.1	33.55	11.019		
8,400.0	7,307.0	8,589.8	7,529.0	25.1	22.7	126.80	783.4	-538.9	370.6	335.0	35.59	10.413		
8,500.0	7,307.0	8,689.8	7,529.0	26.2	23.9	126.69	883.4	-537.7	371.6	333.8	37.75	9.844		
8,600.0	7,307.0	8,789.8	7,529.0	27.4	25.2	126.58	983.4	-536.5	372.5	332.5	39.99	9.315		
8,700.0	7,307.0	8,889.8	7,529.0	28.6	26.5	126.47	1,083.4	-535.3	373.5	331.2	42.32	8.826		
8,800.0	7,307.0	8,989.8	7,529.0	29.9	27.9	126.36	1,183.3	-534.1	374.5	329.8	44.71	8.375		
8,900.0	7,307.0	9,089.8	7,529.0	31.3	29.3	126.25	1,283.3	-532.9	375.4	328.3	47.17	7.959		
9,000.0	7,307.0	9,189.8	7,529.0	32.6	30.8	126.14	1,383.3	-531.7	376.4	326.7	49.68	7.577		
9,100.0	7,307.0	9,289.8	7,529.0	34.1	32.3	126.04	1,483.3	-530.5	377.4	325.1	52.23	7.225		

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 Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - Sprague 3D-9H-N267 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	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)				
9,200.0	7,307.0	9,389.8	7,529.0	35.5	33.8	125.93	1,583.3	-529.3	378.3	323.5	54.82	6.901		
9,300.0	7,307.0	9,489.8	7,529.0	37.0	35.4	125.82	1,683.3	-528.1	379.3	321.9	57.45	6.602		
9,400.0	7,307.0	9,589.8	7,529.0	38.5	36.9	125.72	1,783.3	-526.9	380.3	320.2	60.12	6.326		
9,500.0	7,307.0	9,689.7	7,529.0	40.0	38.5	125.61	1,883.2	-525.7	381.3	318.4	62.81	6.070		
9,600.0	7,307.0	9,789.7	7,529.0	41.5	40.1	125.51	1,983.2	-524.5	382.2	316.7	65.52	5.834		
9,700.0	7,307.0	9,889.7	7,529.0	43.1	41.7	125.40	2,083.2	-523.3	383.2	314.9	68.26	5.614		
9,800.0	7,307.0	9,989.7	7,529.0	44.6	43.3	125.30	2,183.2	-522.2	384.2	313.2	71.03	5.409		
9,900.0	7,307.0	10,089.7	7,529.0	46.2	44.9	125.20	2,283.2	-521.0	385.2	311.4	73.81	5.218		
10,000.0	7,307.0	10,189.7	7,529.0	47.8	46.5	125.10	2,383.2	-519.8	386.1	309.5	76.61	5.040		
10,100.0	7,307.0	10,289.7	7,529.0	49.4	48.2	124.99	2,483.2	-518.6	387.1	307.7	79.43	4.874		
10,200.0	7,307.0	10,389.7	7,529.0	51.0	49.8	124.89	2,583.1	-517.4	388.1	305.8	82.27	4.718		
10,300.0	7,307.0	10,489.7	7,529.0	52.7	51.5	124.79	2,683.1	-516.2	389.1	304.0	85.12	4.571		
10,400.0	7,307.0	10,589.7	7,529.0	54.3	53.2	124.69	2,783.1	-515.0	390.1	302.1	87.98	4.434		
10,500.0	7,307.0	10,689.7	7,529.0	55.9	54.8	124.59	2,883.1	-513.8	391.1	300.2	90.86	4.304		
10,600.0	7,307.0	10,789.7	7,529.0	57.6	56.5	124.49	2,983.1	-512.6	392.0	298.3	93.75	4.182		
10,700.0	7,307.0	10,889.7	7,529.0	59.2	58.2	124.39	3,083.1	-511.4	393.0	296.4	96.65	4.066		
10,800.0	7,307.0	10,989.7	7,529.0	60.9	59.9	124.29	3,183.1	-510.2	394.0	294.5	99.57	3.957		
10,900.0	7,307.0	11,089.6	7,529.0	62.5	61.5	124.20	3,283.0	-509.0	395.0	292.5	102.50	3.854		
11,000.0	7,307.0	11,189.6	7,529.0	64.2	63.2	124.10	3,383.0	-507.8	396.0	290.6	105.43	3.756		
11,100.0	7,307.0	11,289.6	7,529.0	65.9	64.9	124.00	3,483.0	-506.6	397.0	288.6	108.38	3.663		
11,200.0	7,307.0	11,389.6	7,529.0	67.6	66.6	123.91	3,583.0	-505.4	398.0	286.7	111.33	3.575		
11,300.0	7,307.0	11,489.6	7,529.0	69.2	68.3	123.81	3,683.0	-504.2	399.0	284.7	114.30	3.491		
11,400.0	7,307.0	11,589.6	7,529.0	70.9	70.0	123.71	3,783.0	-503.0	400.0	282.7	117.27	3.411		
11,500.0	7,307.0	11,689.6	7,529.0	72.6	71.7	123.62	3,883.0	-501.8	401.0	280.7	120.26	3.334		
11,600.0	7,307.0	11,789.6	7,529.0	74.3	73.4	123.52	3,982.9	-500.6	402.0	278.7	123.25	3.262		
11,700.0	7,307.0	11,889.6	7,529.0	76.0	75.1	123.43	4,082.9	-499.4	403.0	276.7	126.25	3.192		
11,800.0	7,307.0	11,989.6	7,529.0	77.7	76.9	123.34	4,182.9	-498.2	404.0	274.7	129.26	3.125		
11,900.0	7,307.0	12,089.6	7,529.0	79.4	78.6	123.24	4,282.9	-497.0	405.0	272.7	132.27	3.062		
12,000.0	7,307.0	12,189.6	7,529.0	81.1	80.3	123.15	4,382.9	-495.8	406.0	270.7	135.29	3.001		
12,100.0	7,307.0	12,289.6	7,529.0	82.8	82.0	123.06	4,482.9	-494.6	407.0	268.7	138.32	2.942		
12,200.0	7,307.0	12,389.5	7,529.0	84.5	83.7	122.97	4,582.9	-493.4	408.0	266.6	141.36	2.886		
12,300.0	7,307.0	12,489.5	7,529.0	86.2	85.4	122.87	4,682.8	-492.2	409.0	264.6	144.41	2.832		
12,400.0	7,307.0	12,589.5	7,529.0	87.9	87.2	122.78	4,782.8	-491.0	410.0	262.6	147.46	2.781		
12,500.0	7,307.0	12,689.5	7,529.0	89.6	88.9	122.69	4,882.8	-489.8	411.0	260.5	150.51	2.731		
12,600.0	7,307.0	12,789.5	7,529.0	91.3	90.6	122.60	4,982.8	-488.6	412.0	258.5	153.58	2.683		
12,700.0	7,307.0	12,889.5	7,529.0	93.0	92.3	122.51	5,082.8	-487.4	413.0	256.4	156.65	2.637		
12,800.0	7,307.0	12,979.6	7,529.0	94.8	93.9	122.43	5,172.8	-486.3	414.2	254.6	159.56	2.596 SF		
12,840.5	7,307.0	12,979.6	7,529.0	95.4	93.9	122.43	5,172.8	-486.3	417.5	257.4	160.16	2.607		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - Sprague 3E-9H-N267 - Hz - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink 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	90.05	0.0	19.6	19.6					
100.0	100.0	100.0	100.0	0.1	0.1	90.05	0.0	19.6	19.6	19.3	0.24	80.085		
200.0	200.0	200.0	200.0	0.3	0.3	90.05	0.0	19.6	19.6	19.0	0.59	32.976		
300.0	300.0	300.1	300.1	0.5	0.5	92.52	-0.8	19.3	19.3	18.4	0.94	20.494		
400.0	400.0	400.1	400.1	0.6	0.7	100.25	-3.3	18.5	18.8	17.5	1.29	14.541		
426.4	426.4	426.6	426.5	0.7	0.7	-134.57	-4.3	18.2	18.7	17.3	1.39	13.442 CC, ES		
500.0	500.0	500.1	499.9	0.8	0.8	-126.23	-7.5	17.2	19.2	17.6	1.66	11.580		
600.0	600.0	599.9	599.6	1.0	1.0	-115.57	-13.3	15.3	21.5	19.5	2.04	10.583		
700.0	699.9	699.6	699.0	1.2	1.3	-107.31	-20.7	12.9	25.6	23.2	2.42	10.570 SF		
800.0	799.7	799.2	798.1	1.4	1.5	-101.72	-29.8	10.0	31.3	28.4	2.83	11.040		
900.0	899.4	898.7	896.9	1.6	1.7	-98.21	-40.5	6.6	38.3	35.0	3.26	11.723		
1,000.0	998.9	997.9	995.3	1.8	2.0	-96.13	-52.8	2.6	46.5	42.8	3.73	12.480		
1,100.0	1,098.3	1,097.0	1,093.3	2.1	2.3	-94.97	-66.7	-1.9	55.9	51.7	4.22	13.238		
1,200.0	1,197.4	1,195.8	1,190.8	2.3	2.6	-94.40	-82.2	-6.8	66.4	61.7	4.76	13.960		
1,268.8	1,265.5	1,264.1	1,258.1	2.5	2.9	-94.46	-93.5	-10.4	74.1	69.0	5.15	14.402		
1,300.0	1,296.3	1,295.2	1,288.6	2.6	3.0	-94.65	-98.6	-12.1	77.6	72.3	5.33	14.574		
1,400.0	1,395.2	1,394.5	1,386.5	2.9	3.3	-95.16	-115.1	-17.4	88.9	83.0	5.91	15.039		
1,500.0	1,494.0	1,493.9	1,484.3	3.2	3.6	-95.56	-131.5	-22.6	100.1	93.6	6.50	15.402		
1,600.0	1,592.9	1,593.2	1,582.2	3.5	4.0	-95.88	-147.9	-27.9	111.4	104.3	7.10	15.691		
1,700.0	1,691.7	1,692.6	1,680.1	3.8	4.3	-96.14	-164.3	-33.2	122.6	114.9	7.70	15.927		
1,800.0	1,790.6	1,792.0	1,777.9	4.1	4.6	-96.35	-180.8	-38.5	133.9	125.6	8.30	16.121		
1,900.0	1,889.4	1,891.3	1,875.8	4.4	5.0	-96.53	-197.2	-43.7	145.1	136.2	8.91	16.284		
2,000.0	1,988.3	1,990.7	1,973.6	4.7	5.3	-96.69	-213.6	-49.0	156.4	146.8	9.52	16.423		
2,100.0	2,087.1	2,090.1	2,071.5	5.0	5.7	-96.82	-230.1	-54.3	167.6	157.5	10.13	16.541		
2,200.0	2,186.0	2,189.4	2,169.3	5.3	6.0	-96.94	-246.5	-59.6	178.9	168.1	10.75	16.644		
2,300.0	2,284.8	2,288.8	2,267.2	5.6	6.3	-97.04	-262.9	-64.8	190.1	178.8	11.36	16.734		
2,400.0	2,383.7	2,388.2	2,365.0	6.0	6.7	-97.14	-279.3	-70.1	201.4	189.4	11.98	16.813		
2,500.0	2,482.5	2,487.5	2,462.9	6.3	7.0	-97.22	-295.8	-75.4	212.7	200.1	12.60	16.883		
2,600.0	2,581.4	2,586.9	2,560.7	6.6	7.4	-97.29	-312.2	-80.7	223.9	210.7	13.21	16.946		
2,700.0	2,680.3	2,686.2	2,658.6	6.9	7.7	-97.36	-328.6	-85.9	235.2	221.3	13.83	17.002		
2,800.0	2,779.1	2,785.6	2,756.5	7.2	8.1	-97.42	-345.1	-91.2	246.4	232.0	14.45	17.053		
2,900.0	2,878.0	2,885.0	2,854.3	7.5	8.4	-97.48	-361.5	-96.5	257.7	242.6	15.07	17.098		
3,000.0	2,976.8	2,984.3	2,952.2	7.8	8.8	-97.53	-377.9	-101.8	268.9	253.3	15.69	17.140		
3,100.0	3,075.7	3,083.7	3,050.0	8.2	9.1	-97.57	-394.3	-107.0	280.2	263.9	16.31	17.178		
3,200.0	3,174.5	3,184.0	3,148.8	8.5	9.5	-97.64	-410.8	-112.3	291.4	274.5	16.93	17.210		
3,300.0	3,273.4	3,286.2	3,249.7	8.8	9.8	-97.92	-426.3	-117.3	301.9	284.4	17.55	17.205		
3,400.0	3,372.2	3,388.5	3,351.0	9.1	10.1	-98.48	-440.1	-121.7	311.5	293.3	18.15	17.158		
3,500.0	3,471.1	3,490.9	3,452.6	9.4	10.3	-99.28	-452.1	-125.6	320.2	301.4	18.75	17.077		
3,600.0	3,569.9	3,593.3	3,554.4	9.7	10.6	-100.32	-462.4	-128.9	328.1	308.8	19.33	16.970		
3,700.0	3,668.8	3,695.6	3,656.3	10.0	10.8	-101.59	-471.0	-131.7	335.2	315.3	19.90	16.847		
3,800.0	3,767.6	3,797.8	3,758.3	10.4	11.0	-103.07	-477.9	-133.9	341.7	321.3	20.45	16.715		
3,900.0	3,866.5	3,899.8	3,860.1	10.7	11.2	-104.76	-483.0	-135.5	347.7	326.7	20.96	16.586		
4,000.0	3,965.3	4,001.5	3,961.8	11.0	11.3	-106.66	-486.3	-136.6	353.3	331.8	21.45	16.468		
4,100.0	4,064.2	4,102.9	4,063.1	11.3	11.4	-108.75	-488.0	-137.1	358.6	336.7	21.90	16.371		
4,200.0	4,163.0	4,202.8	4,163.0	11.6	11.6	-110.98	-488.2	-137.2	363.8	341.5	22.32	16.302		
4,300.0	4,261.9	4,301.7	4,261.9	11.9	11.7	-113.15	-488.2	-137.2	369.5	346.8	22.71	16.274		
4,400.0	4,360.7	4,400.5	4,360.7	12.3	11.8	-115.24	-488.2	-137.2	375.8	352.7	23.08	16.285		
4,500.0	4,459.6	4,499.4	4,459.6	12.6	11.9	-117.27	-488.2	-137.2	382.5	359.1	23.43	16.330		
4,600.0	4,558.5	4,598.2	4,558.5	12.9	12.0	-119.23	-488.2	-137.2	389.8	366.0	23.75	16.407		
4,700.0	4,657.3	4,697.1	4,657.3	13.2	12.1	-121.11	-488.2	-137.2	397.4	373.3	24.07	16.512		
4,800.0	4,756.2	4,795.9	4,756.2	13.5	12.2	-122.93	-488.2	-137.2	405.5	381.1	24.37	16.641		
4,900.0	4,855.0	4,894.8	4,855.0	13.8	12.3	-124.67	-488.2	-137.2	414.0	389.3	24.65	16.792		

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 Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													S9-T2N-R67W (Sprague) - Sprague 3E-9H-N267 - Hz - Plan #1		Offset Site Error:		0.0 ft	
Survey Program:													0-Geolink 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					
5,000.0	4,953.9	4,993.6	4,953.9	14.2	12.5	-126.34	-488.2	-137.2	422.8	397.9	24.93	16.962						
5,100.0	5,052.7	5,092.5	5,052.7	14.5	12.6	-127.94	-488.2	-137.2	432.0	406.8	25.19	17.149						
5,200.0	5,151.6	5,191.3	5,151.6	14.8	12.7	-129.48	-488.2	-137.2	441.5	416.1	25.45	17.350						
5,300.0	5,250.4	5,290.2	5,250.4	15.1	12.8	-130.95	-488.2	-137.2	451.3	425.6	25.70	17.564						
5,400.0	5,349.3	5,389.0	5,349.3	15.4	13.0	-132.36	-488.2	-137.2	461.4	435.5	25.94	17.788						
5,500.0	5,448.1	5,487.9	5,448.1	15.7	13.1	-133.70	-488.2	-137.2	471.8	445.6	26.18	18.022						
5,600.0	5,547.0	5,586.7	5,547.0	16.1	13.2	-134.99	-488.2	-137.2	482.4	456.0	26.42	18.263						
5,700.0	5,645.8	5,685.6	5,645.8	16.4	13.3	-136.23	-488.2	-137.2	493.3	466.6	26.65	18.510						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - Sprague 3F-9H-N267 - Hz - Plan #1														Offset Site Error:	0.0 ft
Survey Program: 0-Geolink 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	90.05	0.0	30.8	30.8						
100.0	100.0	100.0	100.0	0.1	0.1	90.05	0.0	30.8	30.8	30.5	0.24	125.848			
200.0	200.0	200.0	200.0	0.3	0.3	90.05	0.0	30.8	30.8	30.2	0.59	51.820			
300.0	300.0	300.0	300.0	0.5	0.5	90.05	0.0	30.8	30.8	29.8	0.94	32.627			
400.0	400.0	400.0	400.0	0.6	0.6	90.05	0.0	30.8	30.8	29.5	1.29	23.809 CC, ES			
500.0	500.0	500.0	500.0	0.8	0.8	-148.48	0.0	30.8	31.5	29.9	1.64	19.194			
600.0	600.0	599.8	599.8	1.0	1.0	-149.39	-0.8	31.1	34.0	32.0	1.99	17.095			
700.0	699.9	699.5	699.4	1.2	1.2	-149.00	-3.3	32.0	38.6	36.3	2.34	16.483 SF			
800.0	799.7	799.0	798.8	1.4	1.4	-147.75	-7.3	33.5	45.3	42.6	2.70	16.757			
900.0	899.4	898.3	897.9	1.6	1.5	-146.11	-13.0	35.6	54.1	51.0	3.08	17.586			
1,000.0	998.9	997.3	996.6	1.8	1.7	-144.39	-20.2	38.4	65.0	61.6	3.46	18.769			
1,100.0	1,098.3	1,095.9	1,094.8	2.1	2.0	-142.76	-29.0	41.7	78.1	74.2	3.87	20.167			
1,200.0	1,197.4	1,194.0	1,192.3	2.3	2.2	-141.29	-39.3	45.6	93.3	89.0	4.30	21.683			
1,268.8	1,265.5	1,261.3	1,259.0	2.5	2.4	-140.38	-47.3	48.6	105.1	100.4	4.62	22.753			
1,300.0	1,296.3	1,291.7	1,289.2	2.6	2.5	-140.00	-51.1	50.1	110.6	105.9	4.76	23.238			
1,400.0	1,395.2	1,389.9	1,386.5	2.9	2.7	-138.84	-63.9	54.9	128.8	123.5	5.23	24.600			
1,500.0	1,494.0	1,488.3	1,483.8	3.2	3.0	-137.97	-76.7	59.7	146.9	141.2	5.72	25.707			
1,600.0	1,592.9	1,586.6	1,581.2	3.5	3.3	-137.29	-89.5	64.6	165.1	158.9	6.20	26.619			
1,700.0	1,691.7	1,684.9	1,678.5	3.8	3.5	-136.74	-102.3	69.4	183.3	176.6	6.70	27.382			
1,800.0	1,790.6	1,783.2	1,775.9	4.1	3.8	-136.29	-115.1	74.2	201.6	194.4	7.19	28.027			
1,900.0	1,889.4	1,881.5	1,873.3	4.4	4.1	-135.92	-127.9	79.1	219.8	212.1	7.69	28.579			
2,000.0	1,988.3	1,979.8	1,970.6	4.7	4.4	-135.60	-140.7	83.9	238.0	229.9	8.19	29.055			
2,100.0	2,087.1	2,078.1	2,068.0	5.0	4.7	-135.33	-153.5	88.7	256.3	247.6	8.70	29.471			
2,200.0	2,186.0	2,176.5	2,165.3	5.3	4.9	-135.09	-166.3	93.6	274.5	265.3	9.20	29.835			
2,300.0	2,284.8	2,274.8	2,262.7	5.6	5.2	-134.89	-179.1	98.4	292.8	283.1	9.71	30.158			
2,400.0	2,383.7	2,373.1	2,360.0	6.0	5.5	-134.71	-191.9	103.2	311.1	300.8	10.22	30.445			
2,500.0	2,482.5	2,471.4	2,457.4	6.3	5.8	-134.55	-204.7	108.1	329.3	318.6	10.73	30.703			
2,600.0	2,581.4	2,569.7	2,554.8	6.6	6.1	-134.40	-217.5	112.9	347.6	336.4	11.24	30.934			
2,700.0	2,680.3	2,668.0	2,652.1	6.9	6.4	-134.27	-230.3	117.8	365.9	354.1	11.75	31.144			
2,800.0	2,779.1	2,766.3	2,749.5	7.2	6.7	-134.15	-243.1	122.6	384.1	371.9	12.26	31.334			
2,900.0	2,878.0	2,864.6	2,846.8	7.5	7.0	-134.05	-255.9	127.4	402.4	389.6	12.77	31.508			
3,000.0	2,976.8	2,963.0	2,944.2	7.8	7.3	-133.95	-268.7	132.3	420.7	407.4	13.28	31.667			
3,100.0	3,075.7	3,061.3	3,041.5	8.2	7.5	-133.86	-281.5	137.1	438.9	425.1	13.80	31.814			
3,200.0	3,174.5	3,159.6	3,138.9	8.5	7.8	-133.78	-294.3	141.9	457.2	442.9	14.31	31.949			
3,300.0	3,273.4	3,257.9	3,236.3	8.8	8.1	-133.70	-307.1	146.8	475.5	460.7	14.83	32.074			
3,400.0	3,372.2	3,356.2	3,333.6	9.1	8.4	-133.63	-319.9	151.6	493.8	478.4	15.34	32.189			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - Sprague 3G-9H-N267 - Hz - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink 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	90.05	0.0	41.9	41.9					
100.0	100.0	100.0	100.0	0.1	0.1	90.05	0.0	41.9	41.9	41.7	0.24	171.611		
200.0	200.0	200.0	200.0	0.3	0.3	90.05	0.0	41.9	41.9	41.3	0.59	70.663		
300.0	300.0	300.0	300.0	0.5	0.5	90.05	0.0	41.9	41.9	41.0	0.94	44.492		
400.0	400.0	400.0	400.0	0.6	0.6	90.05	0.0	41.9	41.9	40.6	1.29	32.467 CC, ES		
500.0	500.0	499.5	499.5	0.8	0.8	-147.44	-0.6	42.6	43.3	41.7	1.64	26.399		
600.0	600.0	598.8	598.8	1.0	1.0	-146.95	-2.4	44.4	47.4	45.4	1.99	23.807		
700.0	699.9	697.9	697.8	1.2	1.2	-146.29	-5.4	47.5	54.2	51.8	2.34	23.114 SF		
800.0	799.7	796.7	796.4	1.4	1.4	-145.60	-9.6	51.8	63.7	61.0	2.71	23.556		
900.0	899.4	895.1	894.5	1.6	1.6	-144.95	-14.9	57.3	76.0	72.9	3.07	24.707		
1,000.0	998.9	992.9	991.8	1.8	1.8	-144.38	-21.3	64.0	90.9	87.4	3.45	26.310		
1,100.0	1,098.3	1,090.0	1,088.4	2.1	2.0	-143.90	-28.9	71.8	108.5	104.6	3.85	28.197		
1,200.0	1,197.4	1,186.4	1,184.0	2.3	2.3	-143.48	-37.5	80.7	128.7	124.5	4.26	30.254		
1,268.8	1,265.5	1,253.3	1,250.2	2.5	2.5	-143.30	-43.9	87.4	144.0	139.5	4.54	31.694		
1,300.0	1,296.3	1,283.7	1,280.3	2.6	2.5	-143.30	-46.9	90.4	151.1	146.4	4.68	32.305		
1,400.0	1,395.2	1,381.1	1,376.7	2.9	2.8	-143.31	-56.3	100.2	173.8	168.7	5.11	34.017		
1,500.0	1,494.0	1,478.5	1,473.2	3.2	3.1	-143.32	-65.7	109.9	196.5	190.9	5.54	35.433		
1,600.0	1,592.9	1,575.9	1,569.6	3.5	3.4	-143.33	-75.1	119.7	219.1	213.2	5.98	36.620		
1,700.0	1,691.7	1,673.2	1,666.0	3.8	3.6	-143.34	-84.5	129.4	241.8	235.4	6.43	37.627		
1,800.0	1,790.6	1,770.6	1,762.5	4.1	3.9	-143.34	-93.9	139.2	264.5	257.6	6.87	38.492		
1,900.0	1,889.4	1,868.0	1,858.9	4.4	4.2	-143.35	-103.4	148.9	287.2	279.9	7.32	39.240		
2,000.0	1,988.3	1,965.4	1,955.4	4.7	4.5	-143.35	-112.8	158.7	309.9	302.1	7.77	39.895		
2,100.0	2,087.1	2,062.8	2,051.8	5.0	4.8	-143.36	-122.2	168.4	332.6	324.3	8.22	40.471		
2,200.0	2,186.0	2,160.2	2,148.3	5.3	5.1	-143.36	-131.6	178.2	355.2	346.6	8.67	40.983		
2,300.0	2,284.8	2,257.6	2,244.7	5.6	5.4	-143.36	-141.0	187.9	377.9	368.8	9.12	41.439		
2,400.0	2,383.7	2,355.0	2,341.2	6.0	5.6	-143.36	-150.4	197.7	400.6	391.0	9.57	41.849		
2,500.0	2,482.5	2,452.4	2,437.6	6.3	5.9	-143.37	-159.8	207.4	423.3	413.3	10.03	42.219		
2,600.0	2,581.4	2,549.8	2,534.1	6.6	6.2	-143.37	-169.3	217.2	446.0	435.5	10.48	42.554		
2,700.0	2,680.3	2,647.2	2,630.5	6.9	6.5	-143.37	-178.7	226.9	468.7	457.7	10.93	42.859		
2,800.0	2,779.1	2,744.6	2,726.9	7.2	6.8	-143.37	-188.1	236.7	491.3	479.9	11.39	43.138		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - Sprague 3H-9H-N267 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink 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	90.05	0.0	50.3	50.3					
100.0	100.0	100.0	100.0	0.1	0.1	90.05	0.0	50.3	50.3	50.1	0.24	205.933		
200.0	200.0	200.0	200.0	0.3	0.3	90.05	0.0	50.3	50.3	49.7	0.59	84.796		
300.0	300.0	300.0	300.0	0.5	0.5	90.05	0.0	50.3	50.3	49.4	0.94	53.390		
400.0	400.0	400.0	400.0	0.6	0.6	90.05	0.0	50.3	50.3	49.0	1.29	38.960 CC, ES		
500.0	500.0	498.5	498.5	0.8	0.8	-147.14	-0.9	51.8	52.5	50.9	1.64	32.050		
600.0	600.0	596.6	596.5	1.0	1.0	-145.90	-3.6	56.0	59.1	57.1	1.99	29.731 SF		
700.0	699.9	694.1	693.6	1.2	1.2	-144.35	-8.0	63.1	70.1	67.8	2.34	29.923		
800.0	799.7	790.5	789.3	1.4	1.5	-142.83	-14.1	72.9	85.6	82.8	2.71	31.605		
900.0	899.4	887.4	885.1	1.6	1.7	-141.61	-21.7	85.0	104.9	101.8	3.08	34.075		
1,000.0	998.9	985.1	981.7	1.8	2.0	-141.15	-29.5	97.6	126.0	122.5	3.46	36.388		
1,100.0	1,098.3	1,082.6	1,078.0	2.1	2.3	-141.20	-37.3	110.2	148.4	144.5	3.85	38.493		
1,200.0	1,197.4	1,179.7	1,174.0	2.3	2.6	-141.57	-45.1	122.7	172.1	167.8	4.26	40.426		
1,268.8	1,265.5	1,246.3	1,239.9	2.5	2.8	-141.93	-50.5	131.2	189.2	184.6	4.54	41.681		
1,300.0	1,296.3	1,276.5	1,269.7	2.6	2.9	-142.16	-52.9	135.1	197.1	192.4	4.67	42.209		
1,400.0	1,395.2	1,373.2	1,365.3	2.9	3.2	-142.77	-60.7	147.6	222.4	217.3	5.09	43.700		
1,500.0	1,494.0	1,469.9	1,460.9	3.2	3.5	-143.25	-68.4	160.0	247.7	242.2	5.51	44.942		
1,600.0	1,592.9	1,566.6	1,556.5	3.5	3.8	-143.65	-76.2	172.5	273.1	267.2	5.94	45.992		
1,700.0	1,691.7	1,663.4	1,652.1	3.8	4.1	-143.97	-83.9	184.9	298.5	292.1	6.37	46.890		
1,800.0	1,790.6	1,760.1	1,747.7	4.1	4.4	-144.25	-91.7	197.4	323.9	317.1	6.79	47.666		
1,900.0	1,889.4	1,856.8	1,843.3	4.4	4.7	-144.49	-99.5	209.8	349.3	342.0	7.22	48.342		
2,000.0	1,988.3	1,953.5	1,938.9	4.7	5.0	-144.69	-107.2	222.3	374.7	367.0	7.66	48.937		
2,100.0	2,087.1	2,050.2	2,034.5	5.0	5.3	-144.87	-115.0	234.7	400.1	392.0	8.09	49.464		
2,200.0	2,186.0	2,146.9	2,130.1	5.3	5.6	-145.03	-122.7	247.2	425.5	416.9	8.52	49.934		
2,300.0	2,284.8	2,243.6	2,225.7	5.6	5.9	-145.17	-130.5	259.6	450.9	441.9	8.95	50.356		
2,400.0	2,383.7	2,340.4	2,321.3	6.0	6.2	-145.29	-138.2	272.1	476.3	466.9	9.39	50.736		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - Sprague 3I--9H-N267 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink 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	93.37	-3.6	61.5	61.6					
100.0	100.0	100.0	100.0	0.1	0.1	93.37	-3.6	61.5	61.6	61.4	0.24	252.133		
200.0	200.0	200.0	200.0	0.3	0.3	93.37	-3.6	61.5	61.6	61.0	0.59	103.820		
300.0	300.0	300.0	300.0	0.5	0.5	93.37	-3.6	61.5	61.6	60.7	0.94	65.368 CC, ES		
400.0	400.0	398.0	398.0	0.6	0.6	93.89	-4.3	63.0	63.2	61.9	1.29	48.981		
500.0	500.0	495.7	495.5	0.8	0.8	-142.78	-6.3	67.6	68.8	67.1	1.64	42.055		
600.0	600.0	592.8	592.3	1.0	1.0	-141.93	-9.5	75.2	78.9	76.9	1.98	39.789 SF		
700.0	699.9	688.9	687.7	1.2	1.3	-141.30	-14.0	85.7	93.7	91.3	2.34	40.104		
800.0	799.7	783.8	781.5	1.4	1.6	-140.87	-19.7	98.9	112.9	110.2	2.69	41.937		
900.0	899.4	877.6	873.7	1.6	1.9	-140.58	-26.6	114.8	136.5	133.4	3.05	44.699		
1,000.0	998.9	974.1	968.3	1.8	2.2	-140.58	-34.1	132.2	162.6	159.1	3.43	47.414		
1,100.0	1,098.3	1,070.2	1,062.6	2.1	2.6	-140.87	-41.5	149.6	190.0	186.2	3.81	49.823		
1,200.0	1,197.4	1,166.0	1,156.5	2.3	3.0	-141.33	-49.0	166.9	218.7	214.5	4.21	51.984		
1,268.8	1,265.5	1,231.6	1,220.8	2.5	3.2	-141.71	-54.1	178.7	239.2	234.8	4.48	53.362		
1,300.0	1,296.3	1,261.4	1,250.0	2.6	3.3	-141.94	-56.4	184.1	248.7	244.1	4.61	53.928		
1,400.0	1,395.2	1,356.6	1,343.3	2.9	3.7	-142.58	-63.8	201.3	279.0	274.0	5.03	55.526		
1,500.0	1,494.0	1,451.8	1,436.7	3.2	4.0	-143.10	-71.2	218.5	309.4	304.0	5.44	56.853		
1,600.0	1,592.9	1,547.1	1,530.1	3.5	4.4	-143.52	-78.6	235.7	339.8	333.9	5.86	57.972		
1,700.0	1,691.7	1,642.3	1,623.5	3.8	4.8	-143.87	-86.0	252.9	370.2	363.9	6.28	58.926		
1,800.0	1,790.6	1,737.6	1,716.9	4.1	5.1	-144.17	-93.4	270.1	400.6	393.9	6.70	59.749		
1,900.0	1,889.4	1,832.8	1,810.3	4.4	5.5	-144.43	-100.8	287.3	431.0	423.9	7.13	60.465		
2,000.0	1,988.3	1,928.1	1,903.7	4.7	5.9	-144.66	-108.2	304.5	461.4	453.9	7.55	61.094		
2,100.0	2,087.1	2,023.3	1,997.1	5.0	6.2	-144.85	-115.6	321.7	491.8	483.9	7.98	61.650		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - Sprague 3J-9H-N267 - Hz - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink 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	92.98	-3.6	69.9	70.0					
100.0	100.0	100.0	100.0	0.1	0.1	92.98	-3.6	69.9	70.0	69.7	0.24	286.405		
200.0	200.0	200.0	200.0	0.3	0.3	92.98	-3.6	69.9	70.0	69.4	0.59	117.931	CC, ES	
300.0	300.0	297.7	297.7	0.5	0.5	93.35	-4.2	71.5	71.6	70.7	0.94	76.037		
400.0	400.0	395.1	395.0	0.6	0.7	94.37	-5.8	76.2	76.5	75.2	1.31	58.651		
500.0	500.0	492.0	491.5	0.8	0.9	-142.18	-8.5	83.9	85.5	83.8	1.63	52.405		
600.0	600.0	588.1	586.9	1.0	1.1	-141.42	-12.3	94.7	99.0	97.1	1.98	50.069	SF	
700.0	699.9	683.0	680.7	1.2	1.4	-140.97	-17.0	108.2	117.2	114.8	2.33	50.354		
800.0	799.7	776.3	772.4	1.4	1.8	-140.76	-22.6	124.4	139.8	137.1	2.68	52.174		
900.0	899.4	867.8	861.8	1.6	2.1	-140.67	-29.1	143.1	166.7	163.7	3.03	54.949		
1,000.0	998.9	963.0	954.3	1.8	2.6	-140.77	-36.4	164.0	196.6	193.2	3.40	57.755		
1,100.0	1,098.3	1,058.0	1,046.7	2.1	3.0	-141.07	-43.6	184.8	227.8	224.0	3.78	60.217		
1,200.0	1,197.4	1,152.5	1,138.7	2.3	3.4	-141.49	-50.9	205.6	260.3	256.1	4.17	62.404		
1,268.8	1,265.5	1,217.3	1,201.6	2.5	3.7	-141.82	-55.8	219.8	283.4	279.0	4.44	63.788		
1,300.0	1,296.3	1,246.6	1,230.2	2.6	3.8	-142.04	-58.1	226.3	294.1	289.5	4.57	64.343		
1,400.0	1,395.2	1,340.5	1,321.5	2.9	4.2	-142.65	-65.2	246.9	328.2	323.2	4.98	65.904		
1,500.0	1,494.0	1,434.5	1,412.9	3.2	4.6	-143.14	-72.4	267.6	362.3	356.9	5.39	67.194		
1,600.0	1,592.9	1,528.4	1,504.3	3.5	5.0	-143.55	-79.6	288.2	396.5	390.6	5.81	68.277		
1,700.0	1,691.7	1,622.4	1,595.7	3.8	5.5	-143.90	-86.8	308.8	430.6	424.4	6.22	69.197		
1,800.0	1,790.6	1,716.3	1,687.0	4.1	5.9	-144.19	-94.0	329.5	464.8	458.1	6.64	69.988		
1,900.0	1,889.4	1,810.3	1,778.4	4.4	6.3	-144.44	-101.1	350.1	499.0	491.9	7.06	70.674		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - SPRAGUE 4-6-9 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 136-Geolink 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	108.40	-83.8	251.9	266.0					
100.0	100.0	82.7	82.7	0.1	0.1	108.40	-83.8	251.8	265.4	265.1	0.26	1,036.558		
168.7	168.7	151.1	151.1	0.2	0.2	108.41	-83.8	251.7	265.3	264.8	0.49	542.798 CC		
200.0	200.0	181.6	181.6	0.3	0.3	108.42	-83.9	251.8	265.4	264.8	0.60	444.835 ES		
300.0	300.0	279.7	279.7	0.5	0.5	108.45	-84.2	252.4	266.1	265.2	0.94	282.290		
400.0	400.0	378.3	378.3	0.6	0.6	108.21	-83.6	253.9	267.3	266.1	1.29	207.290		
500.0	500.0	469.5	469.4	0.8	0.8	-130.17	-81.6	257.1	270.6	269.0	1.63	166.240		
600.0	600.0	556.8	556.4	1.0	1.0	-131.00	-81.0	263.8	279.4	277.5	1.96	142.587		
700.0	699.9	646.9	646.0	1.2	1.2	-131.93	-81.6	274.0	293.4	291.1	2.30	127.506		
800.0	799.7	742.7	740.8	1.4	1.5	-133.40	-81.0	287.1	310.6	307.9	2.66	116.657		
900.0	899.4	838.1	835.2	1.6	1.8	-135.39	-77.7	301.1	329.6	326.5	3.04	108.578		
1,000.0	998.9	931.3	927.0	1.8	2.1	-137.63	-72.6	316.0	351.3	347.9	3.42	102.788		
1,100.0	1,098.3	1,025.3	1,019.1	2.1	2.4	-140.45	-63.4	332.4	375.8	371.9	3.82	98.331		
1,200.0	1,197.4	1,124.0	1,115.3	2.3	2.8	-143.80	-49.5	349.5	402.3	398.1	4.25	94.627		
1,268.8	1,265.5	1,185.6	1,175.1	2.5	3.1	-146.06	-38.5	359.7	421.6	417.0	4.54	92.849		
1,300.0	1,296.3	1,210.7	1,199.2	2.6	3.2	-147.03	-33.6	364.1	431.0	426.3	4.66	92.395		
1,400.0	1,395.2	1,295.1	1,280.1	2.9	3.6	-150.31	-15.4	379.8	463.5	458.4	5.08	91.188		
1,500.0	1,494.0	1,374.5	1,355.3	3.2	4.0	-153.42	5.0	395.2	498.8	493.3	5.48	90.945 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S9-T2N-R67W (Sprague) - SPRAGUE 4-8-9 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 74-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	99.13	-41.1	256.1	260.0					
100.0	100.0	82.5	82.5	0.1	0.1	99.15	-41.2	256.0	259.3	259.1	0.25	1,041.285		
200.0	200.0	182.8	182.8	0.3	0.3	99.26	-41.7	255.9	259.3	258.7	0.60	433.025		
300.0	300.0	283.1	283.1	0.5	0.5	99.49	-42.7	255.5	259.0	258.1	0.95	273.081		
400.0	400.0	383.4	383.4	0.6	0.7	99.85	-44.3	254.9	258.7	257.4	1.30	199.249		
437.4	437.4	421.0	421.0	0.7	0.7	-137.66	-45.0	254.6	258.6	257.2	1.43	180.291 CC, ES		
500.0	500.0	483.8	483.8	0.8	0.8	-137.42	-46.6	254.0	258.9	257.2	1.66	156.238		
600.0	600.0	583.5	583.4	1.0	1.0	-137.16	-49.3	253.0	260.3	258.3	2.01	129.405		
700.0	699.9	683.0	682.9	1.2	1.2	-137.36	-51.2	252.3	263.2	260.8	2.37	111.225		
800.0	799.7	783.1	783.0	1.4	1.4	-137.90	-52.6	251.8	267.5	264.8	2.72	98.159		
900.0	899.4	882.9	882.8	1.6	1.5	-138.75	-53.6	251.3	273.0	269.9	3.09	88.432		
1,000.0	998.9	982.3	982.1	1.8	1.7	-139.78	-54.5	250.6	279.7	276.3	3.45	80.973		
1,100.0	1,098.3	1,073.3	1,073.1	2.1	1.9	-140.55	-57.1	251.3	289.5	285.7	3.82	75.787		
1,200.0	1,197.4	1,163.0	1,162.6	2.3	2.1	-141.13	-61.5	254.7	304.0	299.8	4.20	72.447		
1,268.8	1,265.5	1,229.0	1,228.4	2.5	2.2	-141.43	-65.9	258.3	316.0	311.5	4.47	70.674		
1,300.0	1,296.3	1,255.2	1,254.5	2.6	2.2	-141.56	-67.8	260.0	321.8	317.3	4.59	70.121		
1,400.0	1,395.2	1,342.6	1,341.3	2.9	2.4	-142.02	-74.1	267.5	342.9	337.9	4.98	68.829		
1,500.0	1,494.0	1,429.2	1,427.0	3.2	2.6	-142.12	-82.4	277.0	366.5	361.1	5.39	68.003 SF		
1,600.0	1,592.9	1,507.8	1,504.2	3.5	2.9	-141.98	-91.6	288.6	394.0	388.3	5.79	68.045		
1,700.0	1,691.7	1,586.5	1,580.8	3.8	3.1	-141.84	-101.2	303.7	425.8	419.7	6.19	68.763		
1,800.0	1,790.6	1,682.4	1,674.0	4.1	3.5	-141.89	-111.5	323.9	459.3	452.6	6.62	69.345		
1,900.0	1,889.4	1,782.0	1,771.0	4.4	3.8	-142.03	-121.4	343.9	491.7	484.7	7.06	69.615		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3C-9H-N267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5011.0ft (Original Well Elev)
Reference Site:	S9-T2N-R67W (Sprague)	MD Reference:	WELL @ 5011.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sprague 3C-9H-N267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5011.0ft (Original Well Elev)

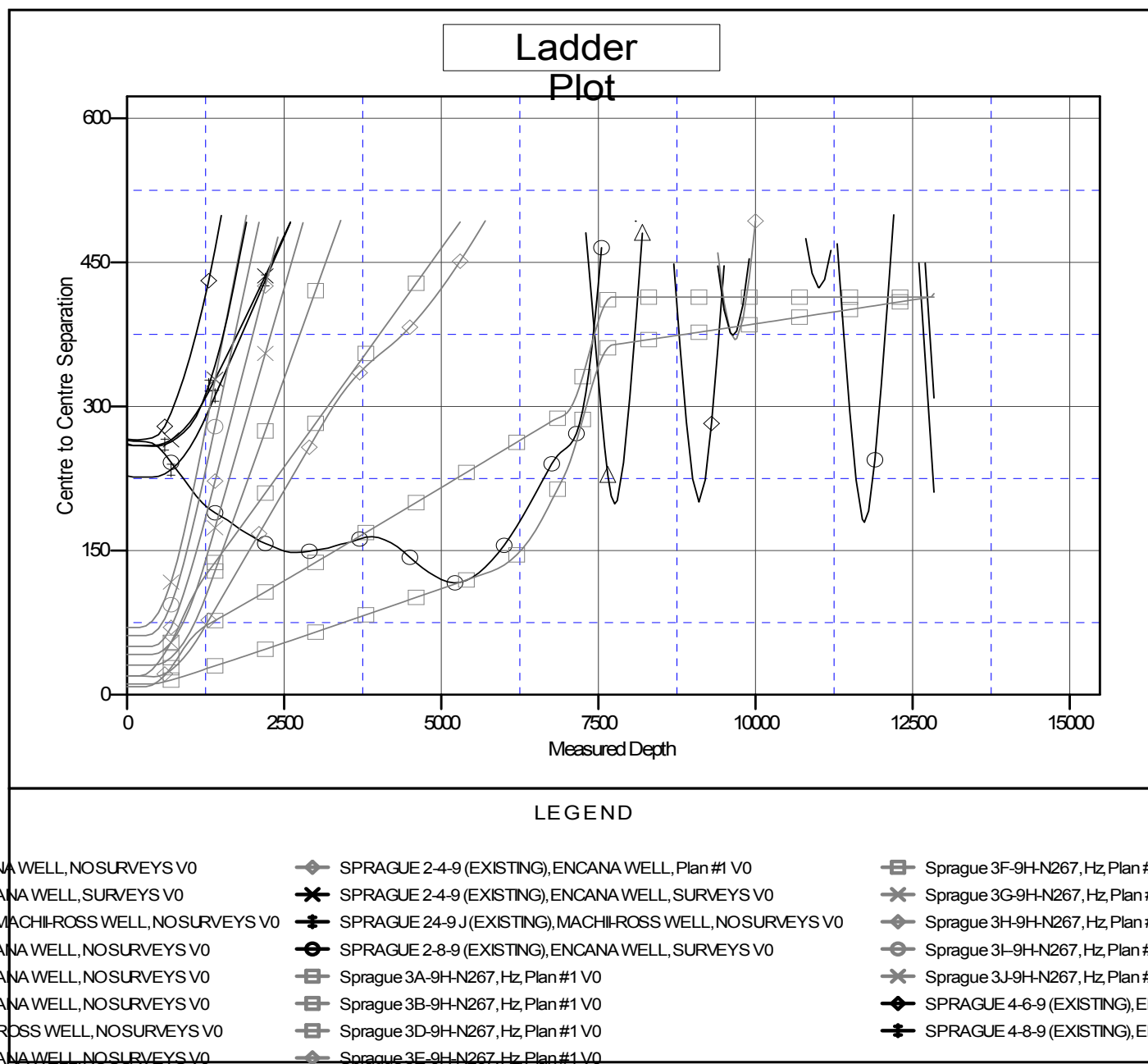
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Sprague 3C-9H-N267

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.39°



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