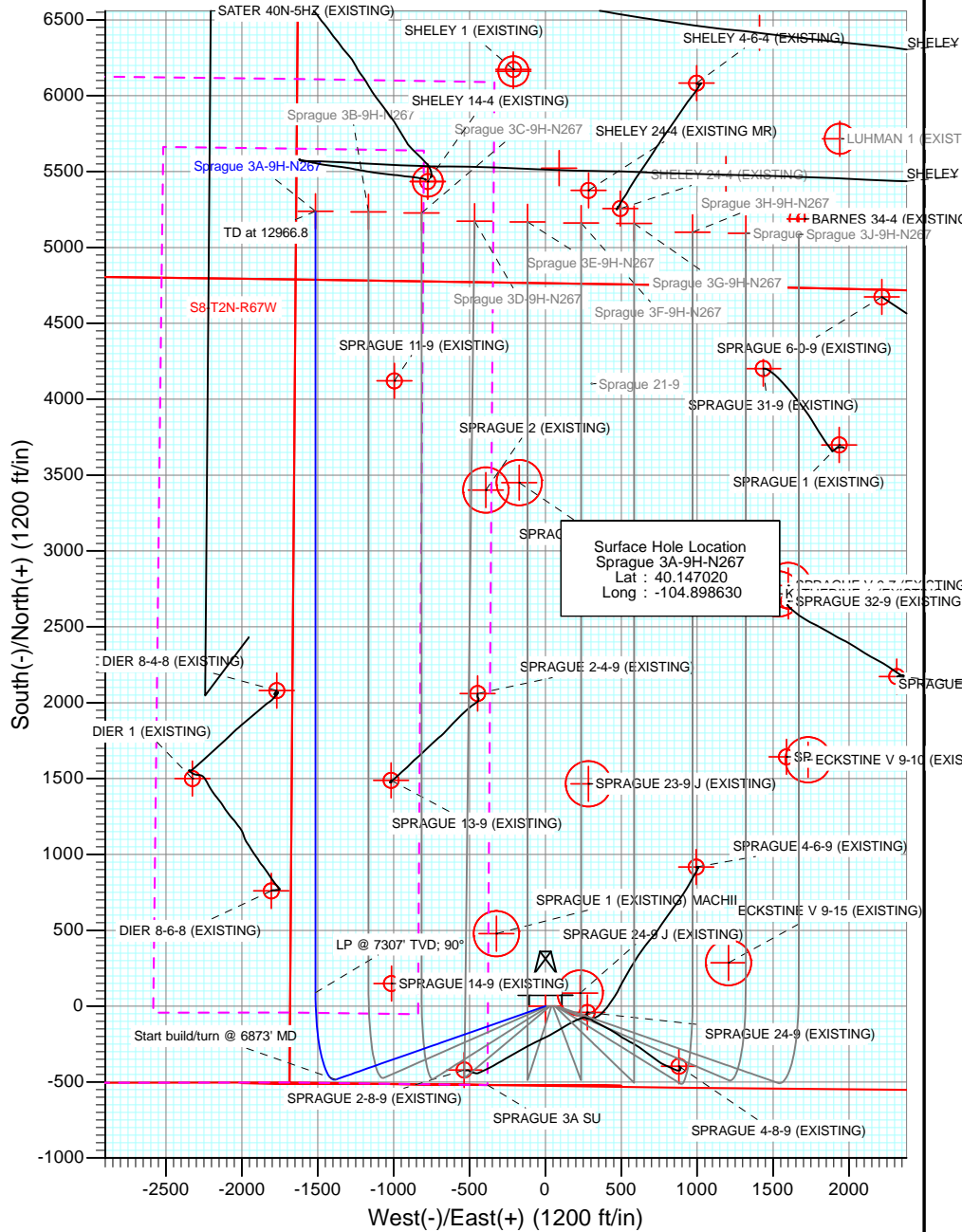
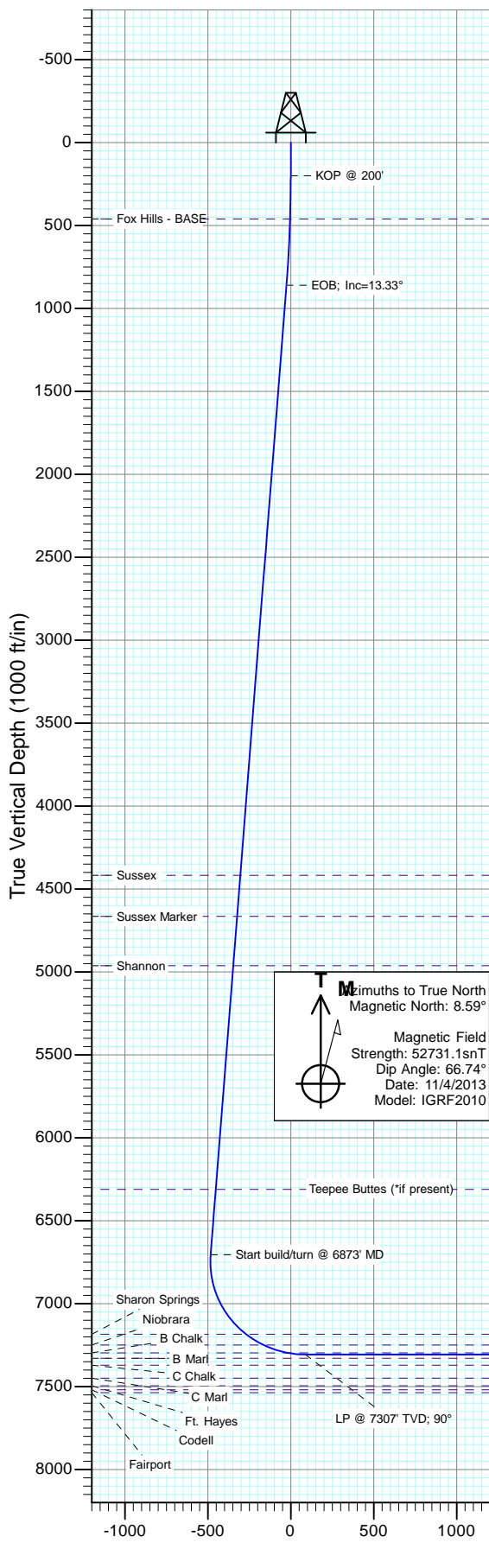




Project: DJ Wattenberg
 Site: S9-T2N-R67W (Sprague)
 Well: Sprague 3A-9H-N267
 Wellbore: Hz
 Design: Plan #1



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

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
461.0	461.4	Fox Hills - BASE
4418.0	4522.5	Sussex
4665.0	4776.4	Sussex Marker
4963.0	5082.6	Shannon
6311.0	6468.0	Teepee Buttes (*if present)
7184.0	7429.5	Sharon Springs
7249.0	7553.5	Niobrara
7297.0	7708.3	B Chalk

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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 3A-9H-N267					
Well Position	+N/-S	0.0 ft	Northing:	1,296,975.45 ft	Latitude:	40.147020
	+E/-W	0.0 ft	Easting:	3,168,117.81 ft	Longitude:	-104.898630
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	11/4/2013	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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
866.6	13.33	250.72	860.6	-25.5	-72.9	2.00	2.00	0.00	250.72	
6,873.2	13.33	250.72	6,705.3	-482.9	-1,380.2	0.00	0.00	0.00	0.00	
7,816.8	90.00	0.00	7,307.0	88.4	-1,514.8	10.00	8.12	11.58	108.80	
12,966.8	90.00	0.00	7,307.0	5,238.4	-1,514.8	0.00	0.00	0.00	0.00	Sprague 3A-9H-N267

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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	Sprague 3A-9H-N267 SECTION LINE
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	2.00	250.72	300.0	-0.6	-1.6	-0.6	2.00	2.00	
400.0	4.00	250.72	399.8	-2.3	-6.6	-2.3	2.00	2.00	KOP @ 200'
461.4	5.23	250.72	461.0	-3.9	-11.2	-3.9	2.00	2.00	
500.0	6.00	250.72	499.5	-5.2	-14.8	-5.2	2.00	2.00	
600.0	8.00	250.72	598.7	-9.2	-26.3	-9.2	2.00	2.00	
700.0	10.00	250.72	697.5	-14.4	-41.1	-14.4	2.00	2.00	Fox Hills - BASE
800.0	12.00	250.72	795.6	-20.7	-59.1	-20.7	2.00	2.00	
866.6	13.33	250.72	860.6	-25.5	-72.9	-25.5	2.00	2.00	
900.0	13.33	250.72	893.1	-28.0	-80.1	-28.0	0.00	0.00	
1,000.0	13.33	250.72	990.4	-35.7	-101.9	-35.7	0.00	0.00	EOB; Inc=13.33°
1,100.0	13.33	250.72	1,087.7	-43.3	-123.7	-43.3	0.00	0.00	
1,200.0	13.33	250.72	1,185.0	-50.9	-145.4	-50.9	0.00	0.00	
1,300.0	13.33	250.72	1,282.3	-58.5	-167.2	-58.5	0.00	0.00	
1,400.0	13.33	250.72	1,379.6	-66.1	-189.0	-66.1	0.00	0.00	
1,500.0	13.33	250.72	1,476.9	-73.7	-210.7	-73.7	0.00	0.00	
1,600.0	13.33	250.72	1,574.2	-81.3	-232.5	-81.3	0.00	0.00	
1,700.0	13.33	250.72	1,671.5	-89.0	-254.3	-89.0	0.00	0.00	
1,800.0	13.33	250.72	1,768.8	-96.6	-276.0	-96.6	0.00	0.00	
1,900.0	13.33	250.72	1,866.2	-104.2	-297.8	-104.2	0.00	0.00	
2,000.0	13.33	250.72	1,963.5	-111.8	-319.6	-111.8	0.00	0.00	
2,100.0	13.33	250.72	2,060.8	-119.4	-341.3	-119.4	0.00	0.00	
2,200.0	13.33	250.72	2,158.1	-127.0	-363.1	-127.0	0.00	0.00	
2,300.0	13.33	250.72	2,255.4	-134.6	-384.9	-134.6	0.00	0.00	
2,400.0	13.33	250.72	2,352.7	-142.3	-406.6	-142.3	0.00	0.00	
2,500.0	13.33	250.72	2,450.0	-149.9	-428.4	-149.9	0.00	0.00	
2,600.0	13.33	250.72	2,547.3	-157.5	-450.2	-157.5	0.00	0.00	
2,700.0	13.33	250.72	2,644.6	-165.1	-471.9	-165.1	0.00	0.00	
2,800.0	13.33	250.72	2,741.9	-172.7	-493.7	-172.7	0.00	0.00	
2,900.0	13.33	250.72	2,839.2	-180.3	-515.5	-180.3	0.00	0.00	
3,000.0	13.33	250.72	2,936.5	-187.9	-537.2	-187.9	0.00	0.00	
3,100.0	13.33	250.72	3,033.8	-195.6	-559.0	-195.6	0.00	0.00	
3,200.0	13.33	250.72	3,131.1	-203.2	-580.8	-203.2	0.00	0.00	
3,300.0	13.33	250.72	3,228.4	-210.8	-602.5	-210.8	0.00	0.00	
3,400.0	13.33	250.72	3,325.7	-218.4	-624.3	-218.4	0.00	0.00	
3,500.0	13.33	250.72	3,423.0	-226.0	-646.1	-226.0	0.00	0.00	
3,600.0	13.33	250.72	3,520.3	-233.6	-667.8	-233.6	0.00	0.00	
3,700.0	13.33	250.72	3,617.6	-241.2	-689.6	-241.2	0.00	0.00	
3,800.0	13.33	250.72	3,714.9	-248.9	-711.4	-248.9	0.00	0.00	
3,900.0	13.33	250.72	3,812.3	-256.5	-733.1	-256.5	0.00	0.00	
4,000.0	13.33	250.72	3,909.6	-264.1	-754.9	-264.1	0.00	0.00	
4,100.0	13.33	250.72	4,006.9	-271.7	-776.6	-271.7	0.00	0.00	
4,200.0	13.33	250.72	4,104.2	-279.3	-798.4	-279.3	0.00	0.00	
4,300.0	13.33	250.72	4,201.5	-286.9	-820.2	-286.9	0.00	0.00	
4,400.0	13.33	250.72	4,298.8	-294.6	-841.9	-294.6	0.00	0.00	
4,500.0	13.33	250.72	4,396.1	-302.2	-863.7	-302.2	0.00	0.00	
4,522.5	13.33	250.72	4,418.0	-303.9	-868.6	-303.9	0.00	0.00	Sussex
4,600.0	13.33	250.72	4,493.4	-309.8	-885.5	-309.8	0.00	0.00	
4,700.0	13.33	250.72	4,590.7	-317.4	-907.2	-317.4	0.00	0.00	Sussex Marker
4,776.4	13.33	250.72	4,665.0	-323.2	-923.9	-323.2	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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	13.33	250.72	4,688.0	-325.0	-929.0	-325.0	0.00	0.00	
4,900.0	13.33	250.72	4,785.3	-332.6	-950.8	-332.6	0.00	0.00	
5,000.0	13.33	250.72	4,882.6	-340.2	-972.5	-340.2	0.00	0.00	
5,082.6	13.33	250.72	4,963.0	-346.5	-990.5	-346.5	0.00	0.00	Shannon
5,100.0	13.33	250.72	4,979.9	-347.9	-994.3	-347.9	0.00	0.00	
5,200.0	13.33	250.72	5,077.2	-355.5	-1,016.1	-355.5	0.00	0.00	
5,300.0	13.33	250.72	5,174.5	-363.1	-1,037.8	-363.1	0.00	0.00	
5,400.0	13.33	250.72	5,271.8	-370.7	-1,059.6	-370.7	0.00	0.00	
5,500.0	13.33	250.72	5,369.1	-378.3	-1,081.4	-378.3	0.00	0.00	
5,600.0	13.33	250.72	5,466.4	-385.9	-1,103.1	-385.9	0.00	0.00	
5,700.0	13.33	250.72	5,563.7	-393.5	-1,124.9	-393.5	0.00	0.00	
5,800.0	13.33	250.72	5,661.0	-401.2	-1,146.7	-401.2	0.00	0.00	
5,900.0	13.33	250.72	5,758.4	-408.8	-1,168.4	-408.8	0.00	0.00	
6,000.0	13.33	250.72	5,855.7	-416.4	-1,190.2	-416.4	0.00	0.00	
6,100.0	13.33	250.72	5,953.0	-424.0	-1,212.0	-424.0	0.00	0.00	
6,200.0	13.33	250.72	6,050.3	-431.6	-1,233.7	-431.6	0.00	0.00	
6,300.0	13.33	250.72	6,147.6	-439.2	-1,255.5	-439.2	0.00	0.00	
6,400.0	13.33	250.72	6,244.9	-446.8	-1,277.3	-446.8	0.00	0.00	
6,468.0	13.33	250.72	6,311.0	-452.0	-1,292.1	-452.0	0.00	0.00	Teepee Buttes (*if present)
6,500.0	13.33	250.72	6,342.2	-454.5	-1,299.0	-454.5	0.00	0.00	
6,600.0	13.33	250.72	6,439.5	-462.1	-1,320.8	-462.1	0.00	0.00	
6,700.0	13.33	250.72	6,536.8	-469.7	-1,342.6	-469.7	0.00	0.00	
6,800.0	13.33	250.72	6,634.1	-477.3	-1,364.3	-477.3	0.00	0.00	
6,873.2	13.33	250.72	6,705.3	-482.9	-1,380.2	-482.9	0.00	0.00	Start build/turn @ 6873' MD
6,900.0	12.72	262.33	6,731.4	-484.3	-1,386.1	-484.3	10.00	-2.28	
7,000.0	15.07	303.81	6,828.7	-478.5	-1,407.9	-478.5	10.00	2.35	
7,100.0	22.11	326.60	6,923.6	-455.5	-1,429.1	-455.5	10.00	7.05	
7,200.0	30.78	337.95	7,013.1	-416.0	-1,449.1	-416.0	10.00	8.67	
7,300.0	40.03	344.56	7,094.5	-361.1	-1,467.3	-361.1	10.00	9.25	
7,400.0	49.54	349.00	7,165.4	-292.6	-1,483.2	-292.6	10.00	9.50	
7,429.5	52.36	350.07	7,184.0	-270.1	-1,487.3	-270.1	10.00	9.60	Sharon Springs
7,500.0	59.17	352.33	7,223.7	-212.5	-1,496.2	-212.5	10.00	9.64	
7,553.5	64.35	353.83	7,249.0	-165.7	-1,501.9	-165.7	10.00	9.69	Niobrara
7,600.0	68.87	355.04	7,267.4	-123.3	-1,506.0	-123.3	10.00	9.71	
7,700.0	78.60	357.42	7,295.4	-27.6	-1,512.3	-27.6	10.00	9.74	
7,708.3	79.41	357.60	7,297.0	-19.5	-1,512.6	-19.5	10.00	9.75	B Chalk
7,800.0	88.36	359.63	7,306.8	71.6	-1,514.8	71.6	10.00	9.76	
7,816.8	90.00	0.00	7,307.0	88.4	-1,514.8	88.4	10.00	9.76	LP @ 7307' TVD; 90°
7,900.0	90.00	0.00	7,307.0	171.6	-1,514.8	171.6	0.00	0.00	
8,000.0	90.00	0.00	7,307.0	271.6	-1,514.8	271.6	0.00	0.00	
8,100.0	90.00	0.00	7,307.0	371.6	-1,514.8	371.6	0.00	0.00	
8,200.0	90.00	0.00	7,307.0	471.6	-1,514.8	471.6	0.00	0.00	
8,300.0	90.00	0.00	7,307.0	571.6	-1,514.8	571.6	0.00	0.00	
8,400.0	90.00	0.00	7,307.0	671.6	-1,514.8	671.6	0.00	0.00	
8,500.0	90.00	0.00	7,307.0	771.6	-1,514.8	771.6	0.00	0.00	
8,600.0	90.00	0.00	7,307.0	871.6	-1,514.8	871.6	0.00	0.00	
8,700.0	90.00	0.00	7,307.0	971.6	-1,514.8	971.6	0.00	0.00	
8,800.0	90.00	0.00	7,307.0	1,071.6	-1,514.8	1,071.6	0.00	0.00	
8,900.0	90.00	0.00	7,307.0	1,171.6	-1,514.8	1,171.6	0.00	0.00	
9,000.0	90.00	0.00	7,307.0	1,271.6	-1,514.8	1,271.6	0.00	0.00	
9,100.0	90.00	0.00	7,307.0	1,371.6	-1,514.8	1,371.6	0.00	0.00	
9,200.0	90.00	0.00	7,307.0	1,471.6	-1,514.8	1,471.6	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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	1,571.6	-1,514.8	1,571.6	0.00	0.00	
9,400.0	90.00	0.00	7,307.0	1,671.6	-1,514.8	1,671.6	0.00	0.00	
9,500.0	90.00	0.00	7,307.0	1,771.6	-1,514.8	1,771.6	0.00	0.00	
9,600.0	90.00	0.00	7,307.0	1,871.6	-1,514.8	1,871.6	0.00	0.00	
9,700.0	90.00	0.00	7,307.0	1,971.6	-1,514.8	1,971.6	0.00	0.00	
9,800.0	90.00	0.00	7,307.0	2,071.6	-1,514.8	2,071.6	0.00	0.00	
9,900.0	90.00	0.00	7,307.0	2,171.6	-1,514.8	2,171.6	0.00	0.00	
10,000.0	90.00	0.00	7,307.0	2,271.6	-1,514.8	2,271.6	0.00	0.00	
10,100.0	90.00	0.00	7,307.0	2,371.6	-1,514.8	2,371.6	0.00	0.00	
10,200.0	90.00	0.00	7,307.0	2,471.6	-1,514.8	2,471.6	0.00	0.00	
10,300.0	90.00	0.00	7,307.0	2,571.6	-1,514.8	2,571.6	0.00	0.00	
10,400.0	90.00	0.00	7,307.0	2,671.6	-1,514.8	2,671.6	0.00	0.00	
10,500.0	90.00	0.00	7,307.0	2,771.6	-1,514.8	2,771.6	0.00	0.00	
10,600.0	90.00	0.00	7,307.0	2,871.6	-1,514.8	2,871.6	0.00	0.00	
10,700.0	90.00	0.00	7,307.0	2,971.6	-1,514.8	2,971.6	0.00	0.00	
10,800.0	90.00	0.00	7,307.0	3,071.6	-1,514.8	3,071.6	0.00	0.00	
10,900.0	90.00	0.00	7,307.0	3,171.6	-1,514.8	3,171.6	0.00	0.00	
11,000.0	90.00	0.00	7,307.0	3,271.6	-1,514.8	3,271.6	0.00	0.00	
11,100.0	90.00	0.00	7,307.0	3,371.6	-1,514.8	3,371.6	0.00	0.00	
11,200.0	90.00	0.00	7,307.0	3,471.6	-1,514.8	3,471.6	0.00	0.00	
11,300.0	90.00	0.00	7,307.0	3,571.6	-1,514.8	3,571.6	0.00	0.00	
11,400.0	90.00	0.00	7,307.0	3,671.6	-1,514.8	3,671.6	0.00	0.00	
11,500.0	90.00	0.00	7,307.0	3,771.6	-1,514.8	3,771.6	0.00	0.00	
11,600.0	90.00	0.00	7,307.0	3,871.6	-1,514.8	3,871.6	0.00	0.00	
11,700.0	90.00	0.00	7,307.0	3,971.6	-1,514.8	3,971.6	0.00	0.00	
11,800.0	90.00	0.00	7,307.0	4,071.6	-1,514.8	4,071.6	0.00	0.00	
11,900.0	90.00	0.00	7,307.0	4,171.6	-1,514.8	4,171.6	0.00	0.00	
12,000.0	90.00	0.00	7,307.0	4,271.6	-1,514.8	4,271.6	0.00	0.00	
12,100.0	90.00	0.00	7,307.0	4,371.6	-1,514.8	4,371.6	0.00	0.00	
12,200.0	90.00	0.00	7,307.0	4,471.6	-1,514.8	4,471.6	0.00	0.00	
12,300.0	90.00	0.00	7,307.0	4,571.6	-1,514.8	4,571.6	0.00	0.00	
12,400.0	90.00	0.00	7,307.0	4,671.6	-1,514.8	4,671.6	0.00	0.00	
12,500.0	90.00	0.00	7,307.0	4,771.6	-1,514.8	4,771.6	0.00	0.00	
12,600.0	90.00	0.00	7,307.0	4,871.6	-1,514.8	4,871.6	0.00	0.00	
12,700.0	90.00	0.00	7,307.0	4,971.6	-1,514.8	4,971.6	0.00	0.00	
12,800.0	90.00	0.00	7,307.0	5,071.6	-1,514.8	5,071.6	0.00	0.00	
12,900.0	90.00	0.00	7,307.0	5,171.6	-1,514.8	5,171.6	0.00	0.00	
12,966.8	90.00	0.00	7,307.0	5,238.4	-1,514.8	5,238.4	0.00	0.00	TD at 12966.8 - Sprague 3A-9H-N267 PBHL

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-9H-N267	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
Sprague 3A-9H-N267 PI	0.00	0.39	7,307.0	5,238.4	-1,514.8	1,302,203.48	3,166,567.48	40.161400	-104.904050
- plan hits target center									
- Point									
Sprague 3A-9H-N267 SI	0.00	0.39	-7,307.0	0.0	0.0	1,296,975.45	3,168,117.81	40.147020	-104.898630
- plan misses target center by 7307.0ft at 0.0ft MD (0.0 TVD, 0.0 N, 0.0 E)									
- Polygon									
Point 1			-7,307.0	-521.0	-2,000.0	1,296,454.33	3,166,117.84		
Point 2			-7,307.0	-521.0	500.0	1,296,454.48	3,168,617.84		

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
461.4	461.0	Fox Hills - BASE				
4,522.5	4,418.0	Sussex				
4,776.4	4,665.0	Sussex Marker				
5,082.6	4,963.0	Shannon				
6,468.0	6,311.0	Teepee Buttes (*if present)				
7,429.5	7,184.0	Sharon Springs				
7,553.5	7,249.0	Niobrara				
7,708.3	7,297.0	B Chalk				

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP @ 200'
866.6	860.6	-25.5	-72.9	EOB; Inc=13.33°
6,873.2	6,705.3	-482.9	-1,380.2	Start build/turn @ 6873' MD
7,816.8	7,307.0	88.4	-1,514.8	LP @ 7307' TVD; 90°
12,966.8	7,307.0	5,238.4	-1,514.8	TD at 12966.8

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S9-T2N-R67W (Sprague)

Sprague 3A-9H-N267

Hz

Plan #1

Anticollision Report

20 November, 2013

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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	12,966.8	Plan #1 (Hz)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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)						
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	9,785.6	7,349.6	272.6	216.9	4.895	CC, ES
DIER 8-4-8 (EXISTING) - ENCANA WELL - SURVEYS	9,800.0	7,350.0	273.0	217.1	4.881	SF
DIER 8-6-8 (EXISTING) - ENCANA WELL - SURVEYS	8,493.6	7,350.6	264.1	225.2	6.781	CC
DIER 8-6-8 (EXISTING) - ENCANA WELL - SURVEYS	8,500.0	7,350.6	264.2	225.2	6.768	ES, SF
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						Out of range
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	12,966.8	7,199.0	415.3	341.0	5.591	CC, ES, SF
SHELEY 3B-4H (EXISTING) - ENCANA WELL - SURVE						Out of range
SHELEY 4-6-4 (EXISTING) - ENCANA WELL - Plan #1						Out of range
SHELEY 4-6-4 (EXISTING) - ENCANA WELL - Plan #2						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						Out of range
SPRAGUE 11-9 (EXISTING) - ENCANA WELL - NO SUR						Out of range
SPRAGUE 13-9 (EXISTING) - ENCANA WELL - NO SUR	9,216.5	7,268.0	498.2	454.7	11.452	CC, ES, SF
SPRAGUE 14-9 (EXISTING) - ENCANA WELL - NO SUR	4,471.7	4,327.5	476.1	450.4	18.526	CC
SPRAGUE 14-9 (EXISTING) - ENCANA WELL - NO SUR	4,500.0	4,355.1	476.1	450.3	18.403	ES
SPRAGUE 14-9 (EXISTING) - ENCANA WELL - NO SUR	5,100.0	4,938.9	497.6	468.8	17.245	SF
SPRAGUE 1-9 (EXISTING) - MACHII-ROSS WELL - NO						Out of range
SPRAGUE 2 (EXISTING) - MACHII-ROSS WELL - NO S						Out of range
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	200.0	169.0	278.7	278.1	470.876	CC, ES
SPRAGUE 24-9 (EXISTING) - ENCANA WELL - NO SUR	1,500.0	1,445.9	487.5	482.2	92.137	SF
SPRAGUE 2-4-9 (EXISTING) - ENCANA WELL - SURVE						Out of range
SPRAGUE 24-9 J (EXISTING) - MACHII-ROSS WELL -	200.0	176.0	244.7	244.1	405.052	CC, ES
SPRAGUE 24-9 J (EXISTING) - MACHII-ROSS WELL -	1,600.0	1,550.2	491.0	485.6	90.891	SF
SPRAGUE 2-8-9 (EXISTING) - ENCANA WELL - SURVE	205.8	188.6	282.6	281.9	455.949	CC, ES
SPRAGUE 2-8-9 (EXISTING) - ENCANA WELL - SURVE	4,000.0	4,014.3	394.9	370.4	16.173	SF
SPRAGUE 31-9 (EXISTING) - ENCANA WELL - Plan #1						Out of range
SPRAGUE 31-9 (EXISTING) - ENCANA WELL - Plan #2						Out of range
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 3B-9H-N267 - Hz - Plan #1	200.0	200.0	11.2	10.6	18.844	CC, ES
Sprague 3B-9H-N267 - Hz - Plan #1	12,966.8	13,105.5	413.9	252.5	2.564	SF
Sprague 3C-9H-N267 - Hz - Plan #1	200.0	200.0	19.6	19.0	32.976	CC, ES
Sprague 3C-9H-N267 - Hz - Plan #1	400.0	399.8	26.3	25.0	20.333	SF

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 3A-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 3A-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 Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance		Separation Factor	Warning
			Between Centres (ft)	Between Ellipses (ft)		
S9-T2N-R67W (Sprague)						
Sprague 3D-9H-N267 - Hz - Plan #1	200.0	200.0	30.8	30.2	51.820	CC, ES
Sprague 3D-9H-N267 - Hz - Plan #1	4,300.0	4,284.4	493.0	474.4	26.485	SF
Sprague 3E-9H-N267 - Hz - Plan #1	200.0	200.0	39.1	38.5	65.953	CC, ES
Sprague 3E-9H-N267 - Hz - Plan #1	3,000.0	2,961.7	492.8	475.6	28.596	SF
Sprague 3F-9H-N267 - Hz - Plan #1	200.0	200.0	50.3	49.7	84.796	CC, ES
Sprague 3F-9H-N267 - Hz - Plan #1	600.0	598.4	77.4	75.4	38.920	SF
Sprague 3G-9H-N267 - Hz - Plan #1	200.0	200.0	61.5	60.9	103.640	CC, ES
Sprague 3G-9H-N267 - Hz - Plan #1	600.0	596.7	90.5	88.5	45.487	SF
Sprague 3H-9H-N267 - Hz - Plan #1	200.0	200.0	69.9	69.3	117.772	CC, ES
Sprague 3H-9H-N267 - Hz - Plan #1	600.0	593.2	102.0	100.1	51.312	SF
Sprague 3I-9H-N267 - Hz - Plan #1	200.0	200.0	81.2	80.6	136.754	CC, ES
Sprague 3I-9H-N267 - Hz - Plan #1	600.0	588.0	121.2	119.2	60.917	SF
Sprague 3J-9H-N267 - Hz - Plan #1	200.0	200.0	89.5	88.9	150.874	CC, ES
Sprague 3J-9H-N267 - Hz - Plan #1	600.0	582.0	141.0	139.0	70.983	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	169.0	151.4	284.0	283.5	579.862	CC
SPRAGUE 4-6-9 (EXISTING) - ENCANA WELL - SURVE	200.0	181.5	284.0	283.4	476.143	ES
SPRAGUE 4-6-9 (EXISTING) - ENCANA WELL - SURVE	1,100.0	993.9	477.7	473.9	123.482	SF
SPRAGUE 4-8-9 (EXISTING) - ENCANA WELL - SURVE	205.4	188.3	278.6	278.0	450.641	CC, ES
SPRAGUE 4-8-9 (EXISTING) - ENCANA WELL - SURVE	1,400.0	1,316.0	475.8	470.8	94.069	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 3A-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 3A-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) - DIER 8-4-8 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 78-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		
9,400.0	7,307.0	7,341.5	7,251.7	43.1	18.4	-88.97	2,057.1	-1,787.5	472.2	422.8	49.37	9.564		
9,500.0	7,307.0	7,343.6	7,253.8	44.4	18.4	-89.40	2,057.1	-1,787.5	394.8	343.8	51.00	7.742		
9,600.0	7,307.0	7,345.7	7,255.9	45.7	18.4	-89.84	2,057.1	-1,787.5	329.8	277.2	52.63	6.266		
9,700.0	7,307.0	7,347.8	7,258.0	47.0	18.4	-90.29	2,057.2	-1,787.5	285.8	231.5	54.28	5.265		
9,785.6	7,307.0	7,349.6	7,259.8	48.2	18.5	-90.68	2,057.2	-1,787.5	272.6	216.9	55.69	4.895 CC, ES		
9,800.0	7,307.0	7,350.0	7,260.1	48.4	18.5	-90.74	2,057.2	-1,787.5	273.0	217.1	55.93	4.881 SF		
9,900.0	7,307.0	7,352.2	7,262.3	49.7	18.5	-91.20	2,057.3	-1,787.4	295.6	238.1	57.59	5.134		
10,000.0	7,307.0	7,354.4	7,264.6	51.2	18.5	-91.67	2,057.3	-1,787.4	346.8	287.5	59.25	5.853		
10,100.0	7,307.0	7,356.7	7,266.8	52.6	18.5	-92.15	2,057.4	-1,787.4	416.1	355.2	60.91	6.831		
10,200.0	7,307.0	7,359.0	7,269.1	54.0	18.5	-92.63	2,057.4	-1,787.3	495.9	433.4	62.58	7.925		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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) - DIER 8-6-8 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 52-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
8,100.0	7,307.0	7,351.6	7,242.7	31.3	21.3	-86.98	765.2	-1,778.6	474.1	439.6	34.46	13.757		
8,200.0	7,307.0	7,351.3	7,242.4	31.7	21.3	-86.92	765.2	-1,778.6	395.0	359.5	35.45	11.142		
8,300.0	7,307.0	7,351.1	7,242.2	32.3	21.3	-86.87	765.2	-1,778.6	327.5	291.0	36.55	8.960		
8,400.0	7,307.0	7,350.8	7,241.9	33.0	21.3	-86.81	765.2	-1,778.6	280.3	242.5	37.76	7.423		
8,493.6	7,307.0	7,350.6	7,241.7	33.7	21.3	-86.76	765.2	-1,778.6	264.1	225.2	38.96	6.781 CC		
8,500.0	7,307.0	7,350.6	7,241.7	33.7	21.3	-86.76	765.2	-1,778.6	264.2	225.2	39.04	6.768 ES, SF		
8,600.0	7,307.0	7,350.3	7,241.4	34.5	21.3	-86.70	765.2	-1,778.6	284.8	244.4	40.39	7.051		
8,700.0	7,307.0	7,350.1	7,241.1	35.4	21.3	-86.64	765.2	-1,778.5	335.2	293.4	41.79	8.021		
8,800.0	7,307.0	7,349.8	7,240.9	36.3	21.3	-86.59	765.3	-1,778.5	404.5	361.3	43.24	9.356		
8,900.0	7,307.0	7,349.5	7,240.6	37.3	21.3	-86.53	765.3	-1,778.5	484.7	439.9	44.72	10.838		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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
12,900.0	7,307.0	7,199.0	7,025.3	97.1	15.8	41.71	5,560.5	-1,340.4	469.0	395.5	73.51	6.381	
12,966.8	7,307.0	7,199.0	7,025.3	98.2	15.8	41.71	5,560.5	-1,340.4	415.3	341.0	74.28	5.591 CC, ES, SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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					
9,200.0	7,307.0	7,268.0	7,268.0	40.7	12.7	90.00	1,488.1	-1,016.7	498.5	455.2	43.24	11.528					
9,216.5	7,307.0	7,268.0	7,268.0	40.9	12.7	90.00	1,488.1	-1,016.7	498.2	454.7	43.50	11.452	CC, ES, SF				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
3,900.0	3,812.3	3,771.3	3,771.3	15.6	6.6	74.92	149.4	-1,014.8	494.0	472.3	21.73	22.732		
4,000.0	3,909.6	3,868.6	3,868.6	16.0	6.8	77.47	149.4	-1,014.8	488.4	465.9	22.47	21.729		
4,100.0	4,006.9	3,965.9	3,965.9	16.5	6.9	80.06	149.4	-1,014.8	483.7	460.5	23.20	20.849		
4,200.0	4,104.2	4,063.2	4,063.2	16.9	7.1	82.70	149.4	-1,014.8	480.2	456.3	23.91	20.083		
4,300.0	4,201.5	4,160.5	4,160.5	17.4	7.3	85.37	149.4	-1,014.8	477.7	453.1	24.59	19.425		
4,400.0	4,298.8	4,257.8	4,257.8	17.8	7.4	88.07	149.4	-1,014.8	476.4	451.1	25.25	18.868		
4,471.7	4,368.5	4,327.5	4,327.5	18.1	7.6	90.00	149.4	-1,014.8	476.1	450.4	25.70	18.526 CC		
4,500.0	4,396.1	4,355.1	4,355.1	18.3	7.6	90.76	149.4	-1,014.8	476.1	450.3	25.87	18.403 ES		
4,600.0	4,493.4	4,452.4	4,452.4	18.7	7.8	93.46	149.4	-1,014.8	477.0	450.5	26.46	18.026		
4,700.0	4,590.7	4,549.7	4,549.7	19.2	7.9	96.14	149.4	-1,014.8	479.0	452.0	27.02	17.730		
4,800.0	4,688.0	4,647.0	4,647.0	19.6	8.1	98.80	149.4	-1,014.8	482.1	454.5	27.53	17.509		
4,900.0	4,785.3	4,744.3	4,744.3	20.1	8.3	101.41	149.4	-1,014.8	486.2	458.2	28.01	17.358		
5,000.0	4,882.6	4,841.6	4,841.6	20.5	8.5	103.98	149.4	-1,014.8	491.4	463.0	28.45	17.272		
5,100.0	4,979.9	4,938.9	4,938.9	21.0	8.6	106.50	149.4	-1,014.8	497.6	468.8	28.86	17.245 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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	98.49	-41.2	275.6	280.4						
100.0	100.0	69.0	69.0	0.1	0.1	98.49	-41.2	275.6	278.7	278.5	0.24	1,147.838			
200.0	200.0	169.0	169.0	0.3	0.3	98.49	-41.2	275.6	278.7	278.1	0.59	470.876	CC, ES		
300.0	300.0	269.0	269.0	0.5	0.5	-152.38	-41.2	275.6	280.2	279.3	0.94	297.660			
400.0	399.8	368.8	368.8	0.7	0.6	-152.82	-41.2	275.6	284.9	283.6	1.29	220.195			
500.0	499.5	468.5	468.5	0.9	0.8	-153.53	-41.2	275.6	292.7	291.0	1.65	177.304			
600.0	598.7	567.7	567.7	1.2	1.0	-154.46	-41.2	275.6	303.6	301.6	2.01	150.853			
700.0	697.5	666.5	666.5	1.5	1.2	-155.55	-41.2	275.6	317.8	315.5	2.38	133.568			
800.0	795.6	764.6	764.6	1.9	1.3	-156.76	-41.2	275.6	335.4	332.6	2.75	121.960			
866.6	860.6	829.6	829.6	2.1	1.4	-157.60	-41.2	275.6	348.9	345.9	3.00	116.450			
900.0	893.1	862.1	862.1	2.3	1.5	-158.07	-41.2	275.6	356.0	352.9	3.12	114.075			
1,000.0	990.4	959.4	959.4	2.7	1.7	-159.37	-41.2	275.6	377.6	374.1	3.49	108.113			
1,100.0	1,087.7	1,056.7	1,056.7	3.1	1.8	-160.53	-41.2	275.6	399.3	395.5	3.86	103.464			
1,200.0	1,185.0	1,154.0	1,154.0	3.6	2.0	-161.58	-41.2	275.6	421.2	417.0	4.22	99.755			
1,300.0	1,282.3	1,251.3	1,251.3	4.0	2.2	-162.52	-41.2	275.6	443.2	438.6	4.58	96.736			
1,400.0	1,379.6	1,348.6	1,348.6	4.5	2.4	-163.37	-41.2	275.6	465.3	460.3	4.94	94.236			
1,500.0	1,476.9	1,445.9	1,445.9	4.9	2.5	-164.14	-41.2	275.6	487.5	482.2	5.29	92.137	SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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		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	69.16	87.1	228.7	245.9						
100.0	100.0	76.0	76.0	0.1	0.1	69.16	87.1	228.7	244.7	244.4	0.26	959.481			
200.0	200.0	176.0	176.0	0.3	0.3	69.16	87.1	228.7	244.7	244.1	0.60	405.052 CC, ES			
300.0	300.0	276.0	276.0	0.5	0.5	178.45	87.1	228.7	246.4	245.5	0.95	258.644			
400.0	399.8	375.8	375.8	0.7	0.7	178.48	87.1	228.7	251.7	250.4	1.30	193.543			
500.0	499.5	475.5	475.5	0.9	0.8	178.53	87.1	228.7	260.4	258.7	1.65	158.191			
600.0	598.7	574.7	574.7	1.2	1.0	178.59	87.1	228.7	272.6	270.6	1.99	137.029			
700.0	697.5	673.5	673.5	1.5	1.2	178.65	87.1	228.7	288.2	285.9	2.33	123.746			
800.0	795.6	771.6	771.6	1.9	1.3	178.73	87.1	228.7	307.3	304.6	2.66	115.302			
866.6	860.6	836.6	836.6	2.1	1.5	178.78	87.1	228.7	321.9	319.0	2.89	111.519			
900.0	893.1	869.1	869.1	2.3	1.5	178.81	87.1	228.7	329.6	326.6	3.00	109.823			
1,000.0	990.4	966.4	966.4	2.7	1.7	178.89	87.1	228.7	352.6	349.3	3.34	105.443			
1,100.0	1,087.7	1,063.7	1,063.7	3.1	1.9	178.96	87.1	228.7	375.7	372.0	3.69	101.883			
1,200.0	1,185.0	1,161.0	1,161.0	3.6	2.0	179.02	87.1	228.7	398.7	394.7	4.03	98.933			
1,300.0	1,282.3	1,258.3	1,258.3	4.0	2.2	179.07	87.1	228.7	421.8	417.4	4.37	96.447			
1,400.0	1,379.6	1,355.6	1,355.6	4.5	2.4	179.12	87.1	228.7	444.8	440.1	4.72	94.325			
1,500.0	1,476.9	1,452.9	1,452.9	4.9	2.5	179.16	87.1	228.7	467.9	462.8	5.06	92.491			
1,600.0	1,574.2	1,550.2	1,550.2	5.3	2.7	179.20	87.1	228.7	491.0	485.6	5.40	90.891 SF			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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	104.99	-73.2	273.4	283.6						
100.0	100.0	83.7	83.7	0.1	0.1	105.04	-73.4	273.1	282.8	282.6	0.25	1,125.834			
200.0	200.0	182.8	182.8	0.3	0.3	105.16	-73.9	272.7	282.6	282.0	0.60	471.971			
205.8	205.8	188.6	188.6	0.3	0.3	-145.55	-73.9	272.7	282.6	281.9	0.62	455.949 CC, ES			
300.0	300.0	284.4	284.4	0.5	0.5	-145.50	-75.0	272.1	283.7	282.7	0.95	297.410			
400.0	399.8	390.5	390.5	0.7	0.7	-145.83	-75.9	270.1	286.5	285.1	1.32	216.929			
500.0	499.5	502.6	502.4	0.9	0.9	-146.73	-75.3	264.6	288.8	287.1	1.71	169.309			
600.0	598.7	612.4	611.7	1.2	1.1	-147.86	-74.4	254.6	290.0	287.9	2.10	138.111			
700.0	697.5	720.3	718.7	1.5	1.4	-148.68	-76.1	241.0	291.4	288.9	2.52	115.838			
800.0	795.6	821.9	819.1	1.9	1.7	-148.91	-81.9	225.7	294.2	291.2	2.96	99.360			
866.6	860.6	892.5	888.5	2.1	2.0	-148.91	-87.5	214.1	297.1	293.8	3.29	90.288			
900.0	893.1	928.4	923.6	2.3	2.1	-148.89	-90.6	207.7	298.4	295.0	3.46	86.171			
1,000.0	990.4	1,034.7	1,027.3	2.7	2.5	-148.58	-100.8	186.8	300.9	296.9	4.01	74.999			
1,100.0	1,087.7	1,135.4	1,125.3	3.1	3.0	-148.12	-111.2	165.7	302.4	297.8	4.58	66.029			
1,200.0	1,185.0	1,234.6	1,221.5	3.6	3.4	-147.46	-122.4	144.8	303.8	298.6	5.18	58.619			
1,300.0	1,282.3	1,333.5	1,317.5	4.0	3.8	-146.58	-134.9	124.0	305.7	299.9	5.83	52.440			
1,400.0	1,379.6	1,432.4	1,413.3	4.5	4.3	-145.64	-147.9	103.4	307.9	301.4	6.51	47.322			
1,500.0	1,476.9	1,530.6	1,508.6	4.9	4.7	-144.73	-160.8	83.3	310.6	303.4	7.20	43.160			
1,600.0	1,574.2	1,633.1	1,608.3	5.3	5.2	-144.06	-172.9	62.7	313.3	305.5	7.88	39.784			
1,700.0	1,671.5	1,735.6	1,707.9	5.8	5.6	-143.60	-183.6	41.4	315.1	306.5	8.55	36.853			
1,800.0	1,768.8	1,834.5	1,804.0	6.2	6.1	-143.09	-194.2	20.5	316.6	307.4	9.23	34.301			
1,900.0	1,866.2	1,932.7	1,899.6	6.7	6.5	-142.63	-204.8	0.4	318.9	308.9	9.91	32.181			
2,000.0	1,963.5	2,035.9	2,000.0	7.1	7.0	-142.22	-215.5	-20.7	321.0	310.4	10.60	30.268			
2,100.0	2,060.8	2,132.8	2,094.2	7.6	7.4	-141.85	-225.3	-41.0	322.5	311.2	11.28	28.601			
2,200.0	2,158.1	2,228.1	2,187.3	8.0	7.8	-141.63	-234.8	-59.4	325.6	313.7	11.92	27.320			
2,300.0	2,255.4	2,332.5	2,289.3	8.4	8.2	-141.43	-244.9	-79.4	328.8	316.2	12.60	26.104			
2,400.0	2,352.7	2,432.2	2,386.5	8.9	8.6	-141.20	-254.5	-99.3	331.2	317.9	13.26	24.972			
2,500.0	2,450.0	2,531.1	2,483.0	9.3	9.1	-141.03	-263.9	-118.6	333.9	320.0	13.93	23.977			
2,600.0	2,547.3	2,629.5	2,578.8	9.8	9.5	-140.62	-274.6	-138.2	336.9	322.2	14.65	22.990			
2,700.0	2,644.6	2,731.5	2,678.2	10.2	9.9	-140.11	-286.4	-158.2	340.3	324.9	15.42	22.062			
2,800.0	2,741.9	2,831.4	2,775.2	10.7	10.4	-139.51	-298.3	-178.8	342.7	326.5	16.22	21.137			
2,900.0	2,839.2	2,929.0	2,870.1	11.1	10.8	-139.00	-309.7	-198.4	345.9	328.9	16.99	20.363			
3,000.0	2,936.5	3,028.8	2,967.4	11.6	11.3	-138.55	-321.1	-217.9	349.4	331.6	17.75	19.680			
3,100.0	3,033.8	3,129.6	3,065.6	12.0	11.7	-138.24	-331.9	-237.3	352.9	334.4	18.49	19.087			
3,200.0	3,131.1	3,230.2	3,163.6	12.5	12.1	-137.87	-342.7	-257.5	355.6	336.4	19.25	18.471			
3,300.0	3,228.4	3,323.3	3,254.5	12.9	12.5	-137.57	-353.0	-275.0	359.8	339.8	19.97	18.016			
3,400.0	3,325.7	3,424.2	3,353.3	13.4	12.9	-137.43	-363.7	-292.4	365.1	344.4	20.67	17.664			
3,500.0	3,423.0	3,525.1	3,452.0	13.8	13.3	-137.35	-373.5	-310.7	369.4	348.0	21.35	17.296			
3,600.0	3,520.3	3,621.4	3,546.3	14.3	13.7	-137.26	-383.3	-327.6	374.3	352.2	22.02	16.993			
3,700.0	3,617.6	3,725.2	3,647.9	14.7	14.1	-137.11	-394.2	-345.8	379.3	356.5	22.75	16.669			
3,800.0	3,714.9	3,825.6	3,746.1	15.1	14.5	-137.03	-404.0	-364.1	383.4	360.0	23.43	16.368			
3,900.0	3,812.3	3,919.7	3,838.6	15.6	14.9	-137.26	-411.7	-379.8	388.4	364.5	23.97	16.205			
4,000.0	3,909.6	4,014.3	3,932.0	16.0	15.2	-137.74	-418.3	-393.6	394.9	370.4	24.41	16.173 SF			
4,100.0	4,006.9	4,108.8	4,025.5	16.5	15.4	-138.46	-423.8	-405.6	402.6	377.8	24.76	16.257			
4,200.0	4,104.2	4,202.4	4,118.4	16.9	15.7	-139.27	-428.8	-416.1	411.8	386.7	25.06	16.431			
4,300.0	4,201.5	4,296.8	4,212.3	17.4	15.9	-140.23	-433.1	-424.9	422.4	397.1	25.28	16.711			
4,400.0	4,298.8	4,389.9	4,305.0	17.8	16.1	-141.39	-435.9	-432.0	434.3	408.9	25.39	17.100			
4,500.0	4,396.1	4,479.0	4,394.0	18.3	16.2	-142.57	-438.1	-437.1	448.1	422.6	25.46	17.596			
4,600.0	4,493.4	4,574.3	4,489.2	18.7	16.3	-143.95	-439.6	-440.4	463.8	438.4	25.46	18.220			
4,700.0	4,590.7	4,671.8	4,586.7	19.2	16.5	-145.31	-440.7	-443.6	479.9	454.5	25.44	18.867			
4,800.0	4,688.0	4,769.4	4,684.2	19.6	16.6	-146.62	-441.6	-446.7	496.4	471.0	25.42	19.531			

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 3A-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 3A-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				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	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 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-163.24	0.0	11.2	12.8	11.9	0.94	13.626		
400.0	399.8	400.4	400.4	0.7	0.6	-166.33	-0.7	9.6	16.2	15.0	1.29	12.569		
500.0	499.5	500.9	500.8	0.9	0.8	-167.57	-2.8	4.7	19.7	18.1	1.64	11.999		
600.0	598.7	601.6	601.0	1.2	1.1	-167.78	-6.4	-3.3	23.3	21.3	2.00	11.634		
700.0	697.5	702.4	701.1	1.5	1.3	-167.35	-11.3	-14.7	26.8	24.5	2.36	11.359		
800.0	795.6	803.3	800.7	1.9	1.6	-166.52	-17.7	-29.2	30.5	27.7	2.74	11.118		
866.6	860.6	870.0	866.3	2.1	1.9	-166.02	-22.6	-40.2	33.3	30.3	3.00	11.104		
900.0	893.1	903.4	899.1	2.3	2.0	-165.95	-25.0	-45.8	35.0	31.9	3.13	11.201		
1,000.0	990.4	1,003.2	997.3	2.7	2.3	-165.78	-32.3	-62.3	40.3	36.8	3.52	11.436		
1,100.0	1,087.7	1,103.1	1,095.5	3.1	2.7	-165.64	-39.6	-78.9	45.6	41.7	3.92	11.615		
1,200.0	1,185.0	1,203.0	1,193.7	3.6	3.0	-165.53	-46.9	-95.5	50.8	46.5	4.33	11.755		
1,300.0	1,282.3	1,302.8	1,292.0	4.0	3.4	-165.45	-54.1	-112.1	56.1	51.4	4.73	11.866		
1,400.0	1,379.6	1,402.7	1,390.2	4.5	3.7	-165.37	-61.4	-128.7	61.4	56.2	5.13	11.957		
1,500.0	1,476.9	1,502.5	1,488.4	4.9	4.1	-165.31	-68.7	-145.3	66.6	61.1	5.54	12.032		
1,600.0	1,574.2	1,602.4	1,586.6	5.3	4.4	-165.26	-76.0	-161.9	71.9	66.0	5.95	12.095		
1,700.0	1,671.5	1,702.3	1,684.8	5.8	4.8	-165.22	-83.3	-178.4	77.2	70.8	6.35	12.149		
1,800.0	1,768.8	1,802.1	1,783.0	6.2	5.2	-165.18	-90.5	-195.0	82.5	75.7	6.76	12.195		
1,900.0	1,866.2	1,902.0	1,881.2	6.7	5.5	-165.14	-97.8	-211.6	87.7	80.5	7.17	12.235		
2,000.0	1,963.5	2,001.8	1,979.4	7.1	5.9	-165.11	-105.1	-228.2	93.0	85.4	7.58	12.270		
2,100.0	2,060.8	2,101.7	2,077.6	7.6	6.2	-165.09	-112.4	-244.8	98.3	90.3	7.99	12.301		
2,200.0	2,158.1	2,201.6	2,175.8	8.0	6.6	-165.06	-119.7	-261.4	103.5	95.1	8.40	12.329		
2,300.0	2,255.4	2,301.4	2,274.0	8.4	7.0	-165.04	-127.0	-278.0	108.8	100.0	8.81	12.353		
2,400.0	2,352.7	2,401.3	2,372.2	8.9	7.3	-165.02	-134.2	-294.5	114.1	104.8	9.22	12.376		
2,500.0	2,450.0	2,501.1	2,470.4	9.3	7.7	-165.00	-141.5	-311.1	119.3	109.7	9.63	12.396		
2,600.0	2,547.3	2,601.0	2,568.6	9.8	8.1	-164.98	-148.8	-327.7	124.6	114.6	10.04	12.414		
2,700.0	2,644.6	2,700.9	2,666.8	10.2	8.4	-164.97	-156.1	-344.3	129.9	119.4	10.45	12.430		
2,800.0	2,741.9	2,800.7	2,765.0	10.7	8.8	-164.95	-163.4	-360.9	135.1	124.3	10.86	12.445		
2,900.0	2,839.2	2,900.6	2,863.2	11.1	9.2	-164.94	-170.6	-377.5	140.4	129.1	11.27	12.459		
3,000.0	2,936.5	3,000.5	2,961.4	11.6	9.5	-164.93	-177.9	-394.1	145.7	134.0	11.68	12.472		
3,100.0	3,033.8	3,100.3	3,059.6	12.0	9.9	-164.92	-185.2	-410.6	150.9	138.8	12.09	12.484		
3,200.0	3,131.1	3,200.2	3,157.8	12.5	10.2	-164.91	-192.5	-427.2	156.2	143.7	12.50	12.495		
3,300.0	3,228.4	3,300.0	3,256.0	12.9	10.6	-164.90	-199.8	-443.8	161.5	148.6	12.91	12.505		
3,400.0	3,325.7	3,399.9	3,354.2	13.4	11.0	-164.89	-207.1	-460.4	166.7	153.4	13.32	12.514		
3,500.0	3,423.0	3,499.8	3,452.5	13.8	11.3	-164.88	-214.3	-477.0	172.0	158.3	13.73	12.523		
3,600.0	3,520.3	3,599.6	3,550.7	14.3	11.7	-164.87	-221.6	-493.6	177.3	163.1	14.15	12.531		
3,700.0	3,617.6	3,699.5	3,648.9	14.7	12.1	-164.86	-228.9	-510.2	182.5	168.0	14.56	12.539		
3,800.0	3,714.9	3,799.3	3,747.1	15.1	12.4	-164.86	-236.2	-526.7	187.8	172.8	14.97	12.546		
3,900.0	3,812.3	3,899.2	3,845.3	15.6	12.8	-164.85	-243.5	-543.3	193.1	177.7	15.38	12.553		
4,000.0	3,909.6	3,999.1	3,943.5	16.0	13.2	-164.84	-250.7	-559.9	198.3	182.6	15.79	12.560		
4,100.0	4,006.9	4,098.9	4,041.7	16.5	13.5	-164.84	-258.0	-576.5	203.6	187.4	16.20	12.566		
4,200.0	4,104.2	4,198.8	4,139.9	16.9	13.9	-164.83	-265.3	-593.1	208.9	192.3	16.62	12.572		
4,300.0	4,201.5	4,298.6	4,238.1	17.4	14.2	-164.83	-272.6	-609.7	214.1	197.1	17.03	12.577		
4,400.0	4,298.8	4,398.5	4,336.3	17.8	14.6	-164.82	-279.9	-626.3	219.4	202.0	17.44	12.582		
4,500.0	4,396.1	4,498.4	4,434.5	18.3	15.0	-164.82	-287.2	-642.8	224.7	206.8	17.85	12.587		
4,600.0	4,493.4	4,598.2	4,532.7	18.7	15.3	-164.81	-294.4	-659.4	230.0	211.7	18.26	12.592		
4,700.0	4,590.7	4,698.1	4,630.9	19.2	15.7	-164.81	-301.7	-676.0	235.2	216.5	18.67	12.596		
4,800.0	4,688.0	4,798.0	4,729.1	19.6	16.1	-164.80	-309.0	-692.6	240.5	221.4	19.09	12.601		
4,900.0	4,785.3	4,897.8	4,827.3	20.1	16.4	-164.80	-316.3	-709.2	245.8	226.3	19.50	12.605		
5,000.0	4,882.6	4,997.7	4,925.5	20.5	16.8	-164.79	-323.6	-725.8	251.0	231.1	19.91	12.609		

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 3A-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 3A-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				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)				
5,100.0	4,979.9	5,097.5	5,023.7	21.0	17.2	-164.79	-330.9	-742.4	256.3	236.0	20.32	12.612		
5,200.0	5,077.2	5,197.4	5,121.9	21.4	17.5	-164.79	-338.1	-758.9	261.6	240.8	20.73	12.616		
5,300.0	5,174.5	5,297.3	5,220.1	21.8	17.9	-164.78	-345.4	-775.5	266.8	245.7	21.14	12.619		
5,400.0	5,271.8	5,397.1	5,318.3	22.3	18.3	-164.78	-352.7	-792.1	272.1	250.5	21.56	12.623		
5,500.0	5,369.1	5,497.0	5,416.5	22.7	18.6	-164.78	-360.0	-808.7	277.4	255.4	21.97	12.626		
5,600.0	5,466.4	5,596.8	5,514.7	23.2	19.0	-164.77	-367.3	-825.3	282.6	260.3	22.38	12.629		
5,700.0	5,563.7	5,696.7	5,613.0	23.6	19.3	-164.77	-374.5	-841.9	287.9	265.1	22.79	12.632		
5,800.0	5,661.0	5,796.6	5,711.2	24.1	19.7	-164.77	-381.8	-858.5	293.2	270.0	23.20	12.634		
5,900.0	5,758.4	5,896.4	5,809.4	24.5	20.1	-164.76	-389.1	-875.0	298.4	274.8	23.62	12.637		
6,000.0	5,855.7	5,996.3	5,907.6	25.0	20.4	-164.76	-396.4	-891.6	303.7	279.7	24.03	12.640		
6,100.0	5,953.0	6,096.1	6,005.8	25.4	20.8	-164.76	-403.7	-908.2	309.0	284.5	24.44	12.642		
6,200.0	6,050.3	6,196.0	6,104.0	25.9	21.2	-164.76	-411.0	-924.8	314.2	289.4	24.85	12.645		
6,300.0	6,147.6	6,295.9	6,202.2	26.3	21.5	-164.75	-418.2	-941.4	319.5	294.2	25.26	12.647		
6,400.0	6,244.9	6,395.7	6,300.4	26.8	21.9	-164.75	-425.5	-958.0	324.8	299.1	25.68	12.649		
6,500.0	6,342.2	6,495.6	6,398.6	27.2	22.3	-164.75	-432.8	-974.6	330.0	304.0	26.09	12.651		
6,600.0	6,439.5	6,595.5	6,496.8	27.7	22.6	-164.75	-440.1	-991.1	335.3	308.8	26.50	12.653		
6,700.0	6,536.8	6,695.3	6,595.0	28.1	23.0	-164.74	-447.4	-1,007.7	340.6	313.7	26.91	12.655		
6,800.0	6,634.1	6,795.2	6,693.2	28.6	23.4	-164.74	-454.6	-1,024.3	345.8	318.5	27.32	12.657		
6,873.2	6,705.3	6,868.2	6,765.0	28.9	23.6	-164.74	-460.0	-1,036.5	349.7	322.1	27.63	12.659		
6,900.0	6,731.4	6,895.0	6,791.4	29.0	23.7	-176.09	-461.9	-1,040.9	351.1	323.4	27.72	12.667		
6,950.0	6,780.2	6,944.8	6,840.3	29.2	23.9	162.41	-465.6	-1,049.2	353.5	325.4	28.07	12.594		
7,000.0	6,828.7	6,993.9	6,888.6	29.3	24.1	145.19	-469.1	-1,057.3	355.7	327.1	28.65	12.416		
7,050.0	6,876.7	7,042.2	6,936.1	29.5	24.3	133.98	-472.5	-1,065.3	358.2	328.8	29.43	12.173		
7,100.0	6,923.6	7,091.0	6,984.3	29.6	24.4	127.14	-472.8	-1,073.5	361.2	331.0	30.15	11.978		
7,150.0	6,969.2	7,141.1	7,033.5	29.7	24.5	123.02	-468.9	-1,081.8	364.6	333.8	30.74	11.861		
7,200.0	7,013.1	7,192.5	7,083.4	29.8	24.6	120.62	-460.3	-1,090.2	368.4	337.2	31.14	11.828		
7,250.0	7,055.0	7,245.3	7,133.7	29.9	24.7	119.31	-446.7	-1,098.7	372.6	341.2	31.35	11.885		
7,300.0	7,094.5	7,299.7	7,184.0	29.9	24.8	118.70	-428.0	-1,107.2	377.0	345.7	31.33	12.034		
7,350.0	7,131.5	7,355.6	7,233.7	29.9	24.8	118.57	-403.7	-1,115.6	381.7	350.6	31.08	12.280		
7,400.0	7,165.4	7,413.3	7,282.2	30.0	24.8	118.74	-373.7	-1,123.8	386.5	355.9	30.62	12.620		
7,450.0	7,196.3	7,472.6	7,328.8	30.0	24.8	119.11	-337.8	-1,131.7	391.2	361.3	29.98	13.050		
7,500.0	7,223.7	7,533.7	7,372.6	30.0	24.8	119.60	-296.0	-1,139.1	395.8	366.6	29.20	13.556		
7,550.0	7,247.5	7,596.5	7,412.8	30.1	24.8	120.14	-248.3	-1,145.9	400.2	371.8	28.35	14.116		
7,600.0	7,267.4	7,660.9	7,448.5	30.1	24.8	120.69	-195.0	-1,151.9	404.1	376.6	27.52	14.687		
7,650.0	7,283.5	7,726.8	7,478.7	30.2	24.8	121.21	-136.6	-1,157.0	407.6	380.8	26.80	15.205		
7,700.0	7,295.4	7,794.1	7,502.4	30.2	24.9	121.67	-73.9	-1,161.0	410.3	384.0	26.32	15.593		
7,750.0	7,303.2	7,862.4	7,519.0	30.3	24.9	122.05	-7.8	-1,163.8	412.4	386.2	26.16	15.763		
7,800.0	7,306.8	7,931.4	7,527.7	30.3	25.0	122.33	60.7	-1,165.3	413.6	387.3	26.38	15.681		
7,816.8	7,307.0	7,954.8	7,528.8	30.4	25.1	122.41	84.0	-1,165.4	413.9	387.3	26.54	15.593		
7,900.0	7,307.0	8,042.3	7,529.0	30.6	25.3	122.43	171.6	-1,165.5	413.9	386.6	27.28	15.171		
8,000.0	7,307.0	8,142.3	7,529.0	30.9	25.7	122.43	271.6	-1,165.5	413.9	385.5	28.40	14.574		
8,100.0	7,307.0	8,242.3	7,529.0	31.3	26.2	122.43	371.6	-1,165.5	413.9	384.2	29.78	13.902		
8,200.0	7,307.0	8,342.3	7,529.0	31.7	26.8	122.43	471.6	-1,165.5	413.9	382.6	31.37	13.195		
8,300.0	7,307.0	8,442.3	7,529.0	32.3	27.5	122.43	571.6	-1,165.5	413.9	380.8	33.15	12.485		
8,400.0	7,307.0	8,542.3	7,529.0	33.0	28.3	122.43	671.6	-1,165.5	413.9	378.8	35.10	11.793		
8,500.0	7,307.0	8,642.3	7,529.0	33.7	29.1	122.43	771.6	-1,165.5	413.9	376.8	37.18	11.133		
8,600.0	7,307.0	8,742.3	7,529.0	34.5	30.1	122.43	871.6	-1,165.5	413.9	374.6	39.37	10.513		
8,700.0	7,307.0	8,842.3	7,529.0	35.4	31.1	122.43	971.6	-1,165.5	413.9	372.3	41.67	9.935		
8,800.0	7,307.0	8,942.3	7,529.0	36.3	32.2	122.43	1,071.6	-1,165.5	413.9	369.9	44.04	9.400		
8,900.0	7,307.0	9,042.3	7,529.0	37.3	33.3	122.43	1,171.6	-1,165.5	413.9	367.5	46.48	8.906		
9,000.0	7,307.0	9,142.3	7,529.0	38.4	34.5	122.43	1,271.6	-1,165.5	413.9	365.0	48.98	8.452		
9,100.0	7,307.0	9,242.3	7,529.0	39.5	35.8	122.43	1,371.6	-1,165.5	413.9	362.4	51.52	8.034		

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 3A-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 3A-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							
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	
9,200.0	7,307.0	9,342.3	7,529.0	40.7	37.0	122.43	1,471.6	-1,165.5	413.9	359.8	54.12	7.649		
9,300.0	7,307.0	9,442.3	7,529.0	41.9	38.4	122.43	1,571.6	-1,165.5	413.9	357.2	56.74	7.295		
9,400.0	7,307.0	9,542.3	7,529.0	43.1	39.7	122.43	1,671.6	-1,165.5	413.9	354.5	59.41	6.968		
9,500.0	7,307.0	9,642.3	7,529.0	44.4	41.1	122.43	1,771.6	-1,165.5	413.9	351.8	62.09	6.666		
9,600.0	7,307.0	9,742.3	7,529.0	45.7	42.5	122.43	1,871.6	-1,165.5	413.9	349.1	64.81	6.387		
9,700.0	7,307.0	9,842.3	7,529.0	47.0	43.9	122.43	1,971.6	-1,165.5	413.9	346.4	67.54	6.129		
9,800.0	7,307.0	9,942.3	7,529.0	48.4	45.4	122.43	2,071.6	-1,165.5	413.9	343.6	70.29	5.889		
9,900.0	7,307.0	10,042.3	7,529.0	49.7	46.9	122.43	2,171.6	-1,165.5	413.9	340.9	73.06	5.665		
10,000.0	7,307.0	10,142.3	7,529.0	51.2	48.4	122.43	2,271.6	-1,165.5	413.9	338.1	75.85	5.457		
10,100.0	7,307.0	10,242.3	7,529.0	52.6	49.9	122.43	2,371.6	-1,165.5	413.9	335.3	78.65	5.263		
10,200.0	7,307.0	10,342.3	7,529.0	54.0	51.4	122.43	2,471.6	-1,165.5	413.9	332.5	81.46	5.081		
10,300.0	7,307.0	10,442.3	7,529.0	55.5	53.0	122.43	2,571.6	-1,165.5	413.9	329.7	84.28	4.911		
10,400.0	7,307.0	10,542.3	7,529.0	57.0	54.5	122.43	2,671.6	-1,165.5	413.9	326.8	87.11	4.752		
10,500.0	7,307.0	10,642.3	7,529.0	58.5	56.1	122.43	2,771.6	-1,165.5	413.9	324.0	89.95	4.602		
10,600.0	7,307.0	10,742.3	7,529.0	60.0	57.7	122.43	2,871.6	-1,165.5	413.9	321.1	92.80	4.461		
10,700.0	7,307.0	10,842.3	7,529.0	61.5	59.3	122.43	2,971.6	-1,165.5	413.9	318.3	95.65	4.327		
10,800.0	7,307.0	10,942.3	7,529.0	63.1	60.9	122.43	3,071.6	-1,165.5	413.9	315.4	98.52	4.202		
10,900.0	7,307.0	11,042.3	7,529.0	64.6	62.5	122.43	3,171.6	-1,165.5	413.9	312.5	101.38	4.083		
11,000.0	7,307.0	11,142.3	7,529.0	66.2	64.1	122.43	3,271.6	-1,165.5	413.9	309.7	104.26	3.970		
11,100.0	7,307.0	11,242.3	7,529.0	67.7	65.7	122.43	3,371.6	-1,165.5	413.9	306.8	107.14	3.864		
11,200.0	7,307.0	11,342.3	7,529.0	69.3	67.3	122.43	3,471.6	-1,165.5	413.9	303.9	110.02	3.762		
11,300.0	7,307.0	11,442.3	7,529.0	70.9	69.0	122.43	3,571.6	-1,165.5	413.9	301.0	112.91	3.666		
11,400.0	7,307.0	11,542.3	7,529.0	72.5	70.6	122.43	3,671.6	-1,165.5	413.9	298.1	115.80	3.574		
11,500.0	7,307.0	11,642.3	7,529.0	74.1	72.3	122.43	3,771.6	-1,165.5	413.9	295.2	118.70	3.487		
11,600.0	7,307.0	11,742.3	7,529.0	75.7	73.9	122.43	3,871.6	-1,165.5	413.9	292.3	121.60	3.404		
11,700.0	7,307.0	11,842.3	7,529.0	77.3	75.6	122.43	3,971.6	-1,165.5	413.9	289.4	124.50	3.325		
11,800.0	7,307.0	11,942.3	7,529.0	79.0	77.2	122.43	4,071.6	-1,165.5	413.9	286.5	127.40	3.249		
11,900.0	7,307.0	12,042.3	7,529.0	80.6	78.9	122.43	4,171.6	-1,165.5	413.9	283.6	130.31	3.176		
12,000.0	7,307.0	12,142.3	7,529.0	82.2	80.6	122.43	4,271.6	-1,165.5	413.9	280.7	133.22	3.107		
12,100.0	7,307.0	12,242.3	7,529.0	83.9	82.2	122.43	4,371.6	-1,165.5	413.9	277.8	136.14	3.041		
12,200.0	7,307.0	12,342.3	7,529.0	85.5	83.9	122.43	4,471.6	-1,165.5	413.9	274.9	139.05	2.977		
12,300.0	7,307.0	12,442.3	7,529.0	87.1	85.6	122.43	4,571.6	-1,165.5	413.9	272.0	141.97	2.916		
12,400.0	7,307.0	12,542.3	7,529.0	88.8	87.3	122.43	4,671.6	-1,165.5	413.9	269.0	144.89	2.857		
12,500.0	7,307.0	12,642.3	7,529.0	90.4	88.9	122.43	4,771.6	-1,165.5	413.9	266.1	147.81	2.800		
12,600.0	7,307.0	12,742.3	7,529.0	92.1	90.6	122.43	4,871.6	-1,165.5	413.9	263.2	150.74	2.746		
12,700.0	7,307.0	12,842.3	7,529.0	93.8	92.3	122.43	4,971.6	-1,165.5	413.9	260.3	153.66	2.694		
12,800.0	7,307.0	12,942.3	7,529.0	95.4	94.0	122.43	5,071.6	-1,165.5	413.9	257.3	156.59	2.643		
12,900.0	7,307.0	13,042.3	7,529.0	97.1	95.7	122.43	5,171.6	-1,165.5	413.9	254.4	159.52	2.595		
12,948.3	7,307.0	13,090.6	7,529.0	97.9	96.5	122.43	5,219.9	-1,165.5	413.9	253.0	160.93	2.572		
12,966.8	7,307.0	13,105.5	7,529.0	98.2	96.8	122.43	5,234.8	-1,165.5	413.9	252.5	161.42	2.564 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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 3C-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 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-162.22	0.0	19.6	21.2	20.3	0.94	22.518		
400.0	399.8	399.8	399.8	0.7	0.6	-165.68	0.0	19.6	26.3	25.0	1.29	20.333 SF		
500.0	499.5	500.0	500.0	0.9	0.8	-168.63	-0.5	18.8	34.0	32.3	1.64	20.721		
600.0	598.7	600.1	600.1	1.2	1.0	-170.35	-1.9	16.6	43.6	41.6	1.99	21.925		
700.0	697.5	700.3	700.1	1.5	1.2	-171.30	-4.2	12.9	55.0	52.7	2.33	23.562		
800.0	795.6	800.4	800.1	1.9	1.4	-171.81	-7.5	7.8	68.3	65.6	2.68	25.451		
866.6	860.6	867.1	866.5	2.1	1.5	-171.98	-10.2	3.5	78.1	75.2	2.91	26.796		
900.0	893.1	900.5	899.9	2.3	1.6	-172.03	-11.7	1.1	83.2	80.1	3.04	27.397		
1,000.0	990.4	1,001.0	999.9	2.7	1.8	-171.89	-16.9	-7.0	97.2	93.8	3.40	28.576		
1,100.0	1,087.7	1,101.9	1,100.2	3.1	2.1	-171.46	-23.0	-16.7	109.6	105.8	3.77	29.031		
1,200.0	1,185.0	1,203.2	1,200.6	3.6	2.3	-170.79	-30.1	-27.9	120.4	116.2	4.16	28.938		
1,300.0	1,282.3	1,304.1	1,300.4	4.0	2.6	-169.96	-38.0	-40.5	129.6	125.1	4.56	28.457		
1,400.0	1,379.6	1,403.7	1,398.8	4.5	2.9	-169.18	-46.1	-53.2	138.6	133.6	4.96	27.958		
1,500.0	1,476.9	1,503.3	1,497.2	4.9	3.2	-168.50	-54.1	-65.9	147.6	142.2	5.36	27.507		
1,600.0	1,574.2	1,602.8	1,595.7	5.3	3.5	-167.89	-62.2	-78.6	156.5	150.8	5.78	27.097		
1,700.0	1,671.5	1,702.4	1,694.1	5.8	3.8	-167.35	-70.2	-91.3	165.6	159.4	6.20	26.724		
1,800.0	1,768.8	1,802.0	1,792.6	6.2	4.1	-166.87	-78.2	-104.0	174.6	168.0	6.62	26.383		
1,900.0	1,866.2	1,901.6	1,891.0	6.7	4.4	-166.44	-86.3	-116.8	183.6	176.6	7.04	26.072		
2,000.0	1,963.5	2,001.2	1,989.4	7.1	4.7	-166.04	-94.3	-129.5	192.7	185.2	7.47	25.786		
2,100.0	2,060.8	2,100.7	2,087.9	7.6	5.0	-165.68	-102.4	-142.2	201.7	193.8	7.90	25.523		
2,200.0	2,158.1	2,200.3	2,186.3	8.0	5.3	-165.36	-110.4	-154.9	210.8	202.4	8.34	25.280		
2,300.0	2,255.4	2,299.9	2,284.7	8.4	5.6	-165.05	-118.5	-167.6	219.8	211.1	8.77	25.056		
2,400.0	2,352.7	2,399.5	2,383.2	8.9	6.0	-164.78	-126.5	-180.3	228.9	219.7	9.21	24.848		
2,500.0	2,450.0	2,499.1	2,481.6	9.3	6.3	-164.52	-134.5	-193.0	238.0	228.3	9.65	24.655		
2,600.0	2,547.3	2,598.7	2,580.1	9.8	6.6	-164.28	-142.6	-205.7	247.1	237.0	10.09	24.476		
2,700.0	2,644.6	2,698.2	2,678.5	10.2	6.9	-164.06	-150.6	-218.4	256.1	245.6	10.54	24.308		
2,800.0	2,741.9	2,797.8	2,776.9	10.7	7.2	-163.86	-158.7	-231.2	265.2	254.3	10.98	24.152		
2,900.0	2,839.2	2,897.4	2,875.4	11.1	7.5	-163.67	-166.7	-243.9	274.3	262.9	11.43	24.005		
3,000.0	2,936.5	2,997.0	2,973.8	11.6	7.8	-163.49	-174.8	-256.6	283.4	271.5	11.87	23.868		
3,100.0	3,033.8	3,096.6	3,072.3	12.0	8.1	-163.32	-182.8	-269.3	292.5	280.2	12.32	23.739		
3,200.0	3,131.1	3,196.1	3,170.7	12.5	8.5	-163.16	-190.8	-282.0	301.6	288.8	12.77	23.617		
3,300.0	3,228.4	3,295.7	3,269.1	12.9	8.8	-163.01	-198.9	-294.7	310.7	297.5	13.22	23.502		
3,400.0	3,325.7	3,395.3	3,367.6	13.4	9.1	-162.87	-206.9	-307.4	319.8	306.1	13.67	23.394		
3,500.0	3,423.0	3,494.9	3,466.0	13.8	9.4	-162.74	-215.0	-320.1	328.9	314.8	14.12	23.292		
3,600.0	3,520.3	3,594.5	3,564.5	14.3	9.7	-162.61	-223.0	-332.8	338.0	323.5	14.57	23.195		
3,700.0	3,617.6	3,694.1	3,662.9	14.7	10.0	-162.49	-231.1	-345.6	347.1	332.1	15.03	23.103		
3,800.0	3,714.9	3,793.6	3,761.3	15.1	10.3	-162.38	-239.1	-358.3	356.2	340.8	15.48	23.016		
3,900.0	3,812.3	3,893.2	3,859.8	15.6	10.7	-162.27	-247.1	-371.0	365.4	349.4	15.93	22.933		
4,000.0	3,909.6	3,992.8	3,958.2	16.0	11.0	-162.17	-255.2	-383.7	374.5	358.1	16.39	22.854		
4,100.0	4,006.9	4,092.4	4,056.7	16.5	11.3	-162.08	-263.2	-396.4	383.6	366.7	16.84	22.779		
4,200.0	4,104.2	4,192.0	4,155.1	16.9	11.6	-161.98	-271.3	-409.1	392.7	375.4	17.29	22.707		
4,300.0	4,201.5	4,291.5	4,253.5	17.4	11.9	-161.89	-279.3	-421.8	401.8	384.1	17.75	22.639		
4,400.0	4,298.8	4,391.1	4,352.0	17.8	12.2	-161.81	-287.4	-434.5	410.9	392.7	18.20	22.573		
4,500.0	4,396.1	4,490.7	4,450.4	18.3	12.6	-161.73	-295.4	-447.2	420.0	401.4	18.66	22.511		
4,600.0	4,493.4	4,590.3	4,548.9	18.7	12.9	-161.65	-303.4	-460.0	429.2	410.0	19.12	22.451		
4,700.0	4,590.7	4,689.9	4,647.3	19.2	13.2	-161.58	-311.5	-472.7	438.3	418.7	19.57	22.394		
4,800.0	4,688.0	4,789.5	4,745.7	19.6	13.5	-161.51	-319.5	-485.4	447.4	427.4	20.03	22.338		
4,900.0	4,785.3	4,889.0	4,844.2	20.1	13.8	-161.44	-327.6	-498.1	456.5	436.0	20.48	22.286		
5,000.0	4,882.6	4,988.6	4,942.6	20.5	14.1	-161.37	-335.6	-510.8	465.6	444.7	20.94	22.235		

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 3A-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 3A-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 3C-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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor						
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)							
5,100.0	4,979.9	5,088.2	5,041.0	21.0	14.4	-161.31	-343.7	-523.5	474.8	453.4	21.40	22.186					
5,200.0	5,077.2	5,187.8	5,139.5	21.4	14.8	-161.25	-351.7	-536.2	483.9	462.0	21.86	22.139					
5,300.0	5,174.5	5,287.4	5,237.9	21.8	15.1	-161.19	-359.7	-548.9	493.0	470.7	22.31	22.094					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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		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	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 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-161.68	0.0	30.8	32.4	31.5	0.94	34.378		
400.0	399.8	399.8	399.8	0.7	0.6	-164.17	0.0	30.8	37.4	36.1	1.29	28.960		
500.0	499.5	499.5	499.5	0.9	0.8	-167.11	0.0	30.8	45.9	44.2	1.64	27.968		
600.0	598.7	599.6	599.5	1.2	1.0	-169.33	-0.6	30.1	57.1	55.1	1.99	28.724		
700.0	697.5	699.6	699.6	1.5	1.2	-170.56	-2.3	28.1	70.3	67.9	2.33	30.108		
800.0	795.6	799.6	799.5	1.9	1.4	-171.16	-5.1	24.7	85.4	82.7	2.68	31.849		
866.6	860.6	866.2	866.0	2.1	1.5	-171.34	-7.5	21.8	96.5	93.6	2.91	33.128		
900.0	893.1	899.6	899.3	2.3	1.5	-171.38	-9.0	20.1	102.2	99.2	3.03	33.695		
1,000.0	990.4	1,000.0	999.4	2.7	1.8	-171.20	-14.0	14.0	118.3	114.9	3.40	34.790		
1,100.0	1,087.7	1,100.9	1,099.8	3.1	2.0	-170.68	-20.3	6.6	132.9	129.1	3.78	35.177		
1,200.0	1,185.0	1,202.1	1,200.4	3.6	2.2	-169.91	-27.6	-2.2	146.0	141.8	4.17	35.018		
1,300.0	1,282.3	1,303.6	1,301.0	4.0	2.5	-168.93	-36.2	-12.4	157.6	153.0	4.58	34.430		
1,400.0	1,379.6	1,403.0	1,399.4	4.5	2.8	-167.95	-45.1	-22.9	168.5	163.5	4.99	33.753		
1,500.0	1,476.9	1,502.4	1,497.8	4.9	3.0	-167.09	-54.0	-33.5	179.5	174.1	5.42	33.135		
1,600.0	1,574.2	1,601.7	1,596.2	5.3	3.3	-166.33	-62.9	-44.1	190.5	184.7	5.85	32.571		
1,700.0	1,671.5	1,701.1	1,694.6	5.8	3.6	-165.65	-71.7	-54.7	201.6	195.3	6.29	32.056		
1,800.0	1,768.8	1,800.4	1,793.0	6.2	3.9	-165.05	-80.6	-65.3	212.7	206.0	6.73	31.586		
1,900.0	1,866.2	1,899.8	1,891.4	6.7	4.1	-164.50	-89.5	-75.9	223.8	216.6	7.18	31.155		
2,000.0	1,963.5	1,999.2	1,989.8	7.1	4.4	-164.01	-98.4	-86.5	234.9	227.3	7.64	30.760		
2,100.0	2,060.8	2,098.5	2,088.2	7.6	4.7	-163.56	-107.3	-97.1	246.1	238.0	8.10	30.397		
2,200.0	2,158.1	2,197.9	2,186.5	8.0	5.0	-163.15	-116.2	-107.7	257.2	248.7	8.56	30.062		
2,300.0	2,255.4	2,297.2	2,284.9	8.4	5.3	-162.77	-125.1	-118.3	268.4	259.4	9.02	29.754		
2,400.0	2,352.7	2,396.6	2,383.3	8.9	5.6	-162.42	-134.0	-128.9	279.6	270.1	9.49	29.469		
2,500.0	2,450.0	2,496.0	2,481.7	9.3	5.9	-162.10	-142.9	-139.5	290.8	280.8	9.96	29.204		
2,600.0	2,547.3	2,595.3	2,580.1	9.8	6.2	-161.81	-151.7	-150.1	301.9	291.5	10.43	28.959		
2,700.0	2,644.6	2,694.7	2,678.5	10.2	6.5	-161.53	-160.6	-160.7	313.1	302.2	10.90	28.730		
2,800.0	2,741.9	2,794.0	2,776.9	10.7	6.8	-161.28	-169.5	-171.2	324.4	313.0	11.37	28.517		
2,900.0	2,839.2	2,893.4	2,875.3	11.1	7.1	-161.04	-178.4	-181.8	335.6	323.7	11.85	28.318		
3,000.0	2,936.5	2,992.8	2,973.7	11.6	7.4	-160.81	-187.3	-192.4	346.8	334.5	12.33	28.132		
3,100.0	3,033.8	3,092.1	3,072.1	12.0	7.7	-160.60	-196.2	-203.0	358.0	345.2	12.81	27.957		
3,200.0	3,131.1	3,191.5	3,170.5	12.5	7.9	-160.41	-205.1	-213.6	369.2	356.0	13.29	27.793		
3,300.0	3,228.4	3,290.8	3,268.9	12.9	8.2	-160.22	-214.0	-224.2	380.5	366.7	13.77	27.638		
3,400.0	3,325.7	3,390.2	3,367.3	13.4	8.5	-160.05	-222.9	-234.8	391.7	377.5	14.25	27.493		
3,500.0	3,423.0	3,489.6	3,465.6	13.8	8.8	-159.88	-231.7	-245.4	403.0	388.2	14.73	27.356		
3,600.0	3,520.3	3,588.9	3,564.0	14.3	9.1	-159.73	-240.6	-256.0	414.2	399.0	15.21	27.226		
3,700.0	3,617.6	3,688.3	3,662.4	14.7	9.4	-159.58	-249.5	-266.6	425.4	409.7	15.70	27.103		
3,800.0	3,714.9	3,787.6	3,760.8	15.1	9.7	-159.44	-258.4	-277.2	436.7	420.5	16.18	26.986		
3,900.0	3,812.3	3,887.0	3,859.2	15.6	10.0	-159.31	-267.3	-287.8	447.9	431.3	16.67	26.876		
4,000.0	3,909.6	3,986.4	3,957.6	16.0	10.3	-159.18	-276.2	-298.4	459.2	442.0	17.15	26.771		
4,100.0	4,006.9	4,085.7	4,056.0	16.5	10.6	-159.06	-285.1	-309.0	470.5	452.8	17.64	26.671		
4,200.0	4,104.2	4,185.1	4,154.4	16.9	10.9	-158.95	-294.0	-319.5	481.7	463.6	18.13	26.576		
4,300.0	4,201.5	4,284.4	4,252.8	17.4	11.2	-158.84	-302.9	-330.1	493.0	474.4	18.61	26.485 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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				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	90.05	0.0	39.1	39.1					
100.0	100.0	100.0	100.0	0.1	0.1	90.05	0.0	39.1	39.1	38.9	0.24	160.170		
200.0	200.0	200.0	200.0	0.3	0.3	90.05	0.0	39.1	39.1	38.5	0.59	65.953 CC, ES		
300.0	300.0	300.2	300.2	0.5	0.5	-160.30	-0.9	38.9	40.5	39.6	0.94	42.927		
400.0	399.8	400.3	400.3	0.7	0.7	-159.32	-3.4	38.1	44.7	43.4	1.30	34.363		
500.0	499.5	500.3	500.2	0.9	0.8	-158.04	-7.5	36.7	51.6	49.9	1.67	30.944		
600.0	598.7	600.1	599.7	1.2	1.0	-156.72	-13.3	34.9	61.3	59.3	2.05	29.858		
700.0	697.5	699.5	698.9	1.5	1.3	-155.51	-20.8	32.5	73.9	71.4	2.47	29.944		
800.0	795.6	798.6	797.6	1.9	1.5	-154.47	-29.8	29.6	89.2	86.3	2.91	30.632		
866.6	860.6	864.4	862.9	2.1	1.7	-153.88	-36.7	27.4	100.9	97.7	3.23	31.258		
900.0	893.1	897.4	895.6	2.3	1.7	-153.61	-40.4	26.2	107.1	103.7	3.39	31.566		
1,000.0	990.4	996.0	993.5	2.7	2.0	-152.46	-52.6	22.3	125.4	121.4	3.92	31.999		
1,100.0	1,087.7	1,094.7	1,091.1	3.1	2.3	-150.92	-66.4	17.8	143.4	138.9	4.49	31.952		
1,200.0	1,185.0	1,193.3	1,188.3	3.6	2.6	-149.12	-81.8	12.9	161.3	156.2	5.11	31.587		
1,300.0	1,282.3	1,291.6	1,285.1	4.0	2.9	-147.38	-98.1	7.7	179.3	173.6	5.75	31.180		
1,400.0	1,379.6	1,389.8	1,381.9	4.5	3.3	-145.95	-114.3	2.5	197.4	191.0	6.40	30.827		
1,500.0	1,476.9	1,488.0	1,478.6	4.9	3.6	-144.77	-130.5	-2.8	215.6	208.5	7.06	30.523		
1,600.0	1,574.2	1,586.3	1,575.4	5.3	3.9	-143.76	-146.8	-8.0	233.9	226.1	7.73	30.259		
1,700.0	1,671.5	1,684.5	1,672.1	5.8	4.3	-142.91	-163.0	-13.2	252.2	243.8	8.40	30.031		
1,800.0	1,768.8	1,782.8	1,768.8	6.2	4.6	-142.17	-179.3	-18.4	270.6	261.5	9.07	29.831		
1,900.0	1,866.2	1,881.0	1,865.6	6.7	4.9	-141.52	-195.5	-23.6	289.0	279.2	9.74	29.656		
2,000.0	1,963.5	1,979.3	1,962.3	7.1	5.3	-140.95	-211.8	-28.8	307.4	297.0	10.42	29.501		
2,100.0	2,060.8	2,077.5	2,059.1	7.6	5.6	-140.45	-228.0	-34.1	325.9	314.8	11.10	29.364		
2,200.0	2,158.1	2,175.7	2,155.8	8.0	6.0	-140.00	-244.2	-39.3	344.4	332.6	11.78	29.241		
2,300.0	2,255.4	2,274.0	2,252.6	8.4	6.3	-139.59	-260.5	-44.5	362.9	350.5	12.46	29.131		
2,400.0	2,352.7	2,372.2	2,349.3	8.9	6.6	-139.23	-276.7	-49.7	381.4	368.3	13.14	29.032		
2,500.0	2,450.0	2,470.5	2,446.1	9.3	7.0	-138.90	-293.0	-54.9	400.0	386.2	13.82	28.942		
2,600.0	2,547.3	2,568.7	2,542.8	9.8	7.3	-138.59	-309.2	-60.1	418.5	404.0	14.50	28.860		
2,700.0	2,644.6	2,666.9	2,639.6	10.2	7.7	-138.32	-325.4	-65.3	437.1	421.9	15.18	28.786		
2,800.0	2,741.9	2,765.2	2,736.3	10.7	8.0	-138.06	-341.7	-70.6	455.7	439.8	15.87	28.717		
2,900.0	2,839.2	2,863.4	2,833.1	11.1	8.3	-137.83	-357.9	-75.8	474.2	457.7	16.55	28.654		
3,000.0	2,936.5	2,961.7	2,929.8	11.6	8.7	-137.61	-374.2	-81.0	492.8	475.6	17.23	28.596 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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				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	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 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-161.30	0.0	50.3	52.0	51.0	0.94	55.137		
400.0	399.8	399.8	399.8	0.7	0.6	-162.96	0.0	50.3	57.0	55.7	1.29	44.080		
500.0	499.5	499.5	499.5	0.9	0.8	-165.15	0.0	50.3	65.3	63.7	1.64	39.817		
600.0	598.7	598.4	598.4	1.2	1.0	-166.80	-0.8	50.6	77.4	75.4	1.99	38.920 SF		
700.0	697.5	696.7	696.7	1.5	1.2	-167.39	-3.2	51.5	93.3	90.9	2.34	39.895		
800.0	795.6	794.4	794.2	1.9	1.3	-167.31	-7.1	53.0	112.9	110.2	2.69	41.924		
866.6	860.6	858.9	858.7	2.1	1.5	-167.04	-10.6	54.3	128.1	125.1	2.94	43.619		
900.0	893.1	891.1	890.8	2.3	1.5	-166.87	-12.5	55.0	136.1	133.0	3.06	44.444		
1,000.0	990.4	987.5	986.9	2.7	1.7	-166.09	-19.4	57.6	160.4	157.0	3.45	46.438		
1,100.0	1,087.7	1,083.5	1,082.5	3.1	1.9	-165.02	-27.8	60.8	185.2	181.3	3.87	47.882		
1,200.0	1,185.0	1,179.2	1,177.6	3.6	2.2	-163.78	-37.7	64.5	210.5	206.2	4.31	48.889		
1,300.0	1,282.3	1,274.5	1,272.2	4.0	2.4	-162.42	-48.9	68.8	236.4	231.6	4.77	49.555		
1,400.0	1,379.6	1,370.5	1,367.2	4.5	2.7	-161.07	-61.4	73.5	262.8	257.6	5.26	50.006		
1,500.0	1,476.9	1,466.8	1,462.6	4.9	2.9	-159.96	-73.9	78.2	289.3	283.6	5.75	50.321		
1,600.0	1,574.2	1,563.0	1,557.9	5.3	3.2	-159.03	-86.4	83.0	315.9	309.7	6.25	50.550		
1,700.0	1,671.5	1,659.3	1,653.2	5.8	3.5	-158.24	-99.0	87.7	342.6	335.9	6.75	50.720		
1,800.0	1,768.8	1,755.6	1,748.6	6.2	3.7	-157.57	-111.5	92.4	369.3	362.1	7.26	50.848		
1,900.0	1,866.2	1,851.9	1,843.9	6.7	4.0	-156.99	-124.1	97.2	396.1	388.3	7.78	50.946		
2,000.0	1,963.5	1,948.2	1,939.3	7.1	4.3	-156.48	-136.6	101.9	422.9	414.6	8.29	51.021		
2,100.0	2,060.8	2,044.4	2,034.6	7.6	4.6	-156.03	-149.1	106.7	449.7	440.9	8.80	51.081		
2,200.0	2,158.1	2,140.7	2,129.9	8.0	4.8	-155.64	-161.7	111.4	476.6	467.3	9.32	51.127		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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		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	61.5	61.5					
100.0	100.0	100.0	100.0	0.1	0.1	90.05	0.0	61.5	61.5	61.3	0.24	251.696		
200.0	200.0	200.0	200.0	0.3	0.3	90.05	0.0	61.5	61.5	60.9	0.59	103.640 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-161.18	0.0	61.5	63.2	62.2	0.94	67.000		
400.0	399.8	399.8	399.8	0.7	0.6	-162.57	0.0	61.5	68.1	66.8	1.29	52.725		
500.0	499.5	498.6	498.6	0.9	0.8	-164.00	-0.6	62.1	77.1	75.4	1.64	46.976		
600.0	598.7	596.7	596.6	1.2	1.0	-164.85	-2.4	63.9	90.5	88.5	1.99	45.487 SF		
700.0	697.5	693.9	693.8	1.5	1.2	-165.23	-5.3	66.9	108.4	106.1	2.34	46.286		
800.0	795.6	790.1	789.8	1.9	1.4	-165.28	-9.3	71.0	130.8	128.1	2.70	48.410		
866.6	860.6	853.4	852.9	2.1	1.5	-165.20	-12.5	74.4	148.0	145.1	2.94	50.285		
900.0	893.1	884.9	884.4	2.3	1.6	-165.17	-14.3	76.3	157.2	154.2	3.07	51.219		
1,000.0	990.4	979.0	978.0	2.7	1.8	-164.84	-20.4	82.5	185.5	182.0	3.46	53.660		
1,100.0	1,087.7	1,072.4	1,070.9	3.1	2.0	-164.27	-27.4	89.9	214.8	210.9	3.86	55.694		
1,200.0	1,185.0	1,165.2	1,162.9	3.6	2.2	-163.57	-35.5	98.2	245.1	240.9	4.27	57.406		
1,300.0	1,282.3	1,259.1	1,255.9	4.0	2.5	-162.82	-44.5	107.5	276.4	271.7	4.70	58.837		
1,400.0	1,379.6	1,354.0	1,349.9	4.5	2.7	-162.20	-53.7	117.0	307.7	302.6	5.13	59.968		
1,500.0	1,476.9	1,448.9	1,443.9	4.9	3.0	-161.70	-62.8	126.5	339.1	333.5	5.57	60.889		
1,600.0	1,574.2	1,543.8	1,537.9	5.3	3.3	-161.28	-72.0	136.0	370.4	364.4	6.01	61.652		
1,700.0	1,671.5	1,638.7	1,631.9	5.8	3.5	-160.92	-81.2	145.5	401.8	395.4	6.45	62.293		
1,800.0	1,768.8	1,733.7	1,725.9	6.2	3.8	-160.62	-90.4	155.0	433.3	426.4	6.89	62.838		
1,900.0	1,866.2	1,828.6	1,819.9	6.7	4.1	-160.36	-99.6	164.5	464.7	457.3	7.34	63.306		
2,000.0	1,963.5	1,923.5	1,913.9	7.1	4.4	-160.13	-108.7	174.0	496.1	488.3	7.79	63.713		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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			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	-0.1	69.9	69.9					
100.0	100.0	100.0	100.0	0.1	0.1	90.05	-0.1	69.9	69.9	69.6	0.24	286.018		
200.0	200.0	200.0	200.0	0.3	0.3	90.05	-0.1	69.9	69.9	69.3	0.59	117.772	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	-161.12	-0.1	69.9	71.5	70.6	0.94	75.897		
400.0	399.8	399.8	399.8	0.7	0.6	-162.36	-0.1	69.9	76.5	75.2	1.29	59.210		
500.0	499.5	497.1	497.1	0.9	0.8	-163.41	-0.9	71.3	86.2	84.6	1.64	52.623		
600.0	598.7	593.2	593.1	1.2	1.0	-163.65	-3.5	75.4	102.0	100.1	1.99	51.312	SF	
700.0	697.5	687.8	687.3	1.5	1.2	-163.34	-7.7	82.1	123.8	121.5	2.35	52.774		
800.0	795.6	780.2	779.1	1.9	1.4	-162.75	-13.4	91.3	151.4	148.7	2.72	55.779		
866.6	860.6	840.6	838.9	2.1	1.6	-162.28	-17.9	98.6	173.0	170.0	2.97	58.341		
900.0	893.1	872.0	869.9	2.3	1.7	-162.12	-20.5	102.6	184.4	181.3	3.10	59.509		
1,000.0	990.4	966.0	962.8	2.7	1.9	-161.75	-28.0	114.7	218.5	215.0	3.50	62.402		
1,100.0	1,087.7	1,060.0	1,055.7	3.1	2.2	-161.48	-35.5	126.8	252.7	248.7	3.91	64.620		
1,200.0	1,185.0	1,154.0	1,148.6	3.6	2.5	-161.27	-43.1	138.9	286.8	282.5	4.32	66.363		
1,300.0	1,282.3	1,248.0	1,241.5	4.0	2.8	-161.11	-50.6	151.0	320.9	316.2	4.74	67.765		
1,400.0	1,379.6	1,342.0	1,334.4	4.5	3.1	-160.98	-58.2	163.1	355.1	349.9	5.15	68.914		
1,500.0	1,476.9	1,435.9	1,427.3	4.9	3.4	-160.87	-65.7	175.2	389.2	383.6	5.57	69.872		
1,600.0	1,574.2	1,529.9	1,520.2	5.3	3.7	-160.78	-73.2	187.3	423.4	417.4	5.99	70.681		
1,700.0	1,671.5	1,623.9	1,613.1	5.8	4.0	-160.70	-80.8	199.4	457.5	451.1	6.41	71.373		
1,800.0	1,768.8	1,717.9	1,706.0	6.2	4.2	-160.64	-88.3	211.5	491.7	484.8	6.83	71.972		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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	92.57	-3.6	81.1	81.2					
100.0	100.0	100.0	100.0	0.1	0.1	92.57	-3.6	81.1	81.2	80.9	0.24	332.116		
200.0	200.0	200.0	200.0	0.3	0.3	92.57	-3.6	81.1	81.2	80.6	0.59	136.754 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-158.58	-3.6	81.1	82.8	81.8	0.94	87.807		
400.0	399.8	397.1	397.0	0.7	0.6	-159.35	-4.3	82.6	89.2	87.9	1.29	69.252		
500.0	499.5	493.2	493.1	0.9	0.8	-159.91	-6.2	87.1	102.1	100.4	1.64	62.358		
600.0	598.7	588.0	587.5	1.2	1.0	-160.22	-9.4	94.4	121.2	119.2	1.99	60.917 SF		
700.0	697.5	680.8	679.7	1.5	1.3	-160.32	-13.6	104.3	146.4	144.1	2.35	62.374		
800.0	795.6	771.1	769.0	1.9	1.5	-160.28	-18.9	116.6	177.7	175.0	2.71	65.472		
866.6	860.6	829.7	826.6	2.1	1.7	-160.19	-22.9	125.9	201.7	198.7	2.96	68.131		
900.0	893.1	858.6	855.0	2.3	1.8	-160.21	-25.1	130.9	214.5	211.4	3.09	69.458		
1,000.0	990.4	950.1	944.8	2.7	2.2	-160.19	-32.2	147.4	253.5	250.0	3.49	72.744		
1,100.0	1,087.7	1,042.1	1,035.0	3.1	2.5	-160.18	-39.4	164.1	292.6	288.7	3.89	75.266		
1,200.0	1,185.0	1,134.2	1,125.3	3.6	2.8	-160.16	-46.5	180.7	331.6	327.3	4.29	77.259		
1,300.0	1,282.3	1,226.3	1,215.6	4.0	3.2	-160.16	-53.7	197.3	370.6	365.9	4.70	78.871		
1,400.0	1,379.6	1,318.3	1,305.8	4.5	3.5	-160.15	-60.8	213.9	409.7	404.5	5.11	80.198		
1,500.0	1,476.9	1,410.4	1,396.1	4.9	3.9	-160.14	-68.0	230.6	448.7	443.2	5.52	81.309		
1,600.0	1,574.2	1,502.5	1,486.4	5.3	4.2	-160.14	-75.2	247.2	487.7	481.8	5.93	82.251		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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		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	92.34	-3.7	89.5	89.5					
100.0	100.0	100.0	100.0	0.1	0.1	92.34	-3.7	89.5	89.5	89.3	0.24	366.408		
200.0	200.0	200.0	200.0	0.3	0.3	92.34	-3.7	89.5	89.5	88.9	0.59	150.874	CC, ES	
300.0	300.0	297.0	297.0	0.5	0.5	-158.45	-4.2	91.0	92.8	91.8	0.94	98.928		
400.0	399.8	393.4	393.2	0.7	0.7	-158.62	-5.8	95.6	102.5	101.2	1.28	79.824		
500.0	499.5	488.6	488.1	0.9	0.9	-158.83	-8.4	103.2	118.6	116.9	1.63	72.624		
600.0	598.7	582.0	580.9	1.2	1.1	-159.02	-12.0	113.5	141.0	139.0	1.99	70.983	SF	
700.0	697.5	673.2	671.0	1.5	1.4	-159.15	-16.5	126.3	169.4	167.1	2.34	72.302		
800.0	795.6	761.6	758.0	1.9	1.7	-159.22	-21.7	141.3	203.9	201.2	2.71	75.311		
866.6	860.6	818.7	813.9	2.1	1.9	-159.22	-25.5	152.3	230.0	227.0	2.95	77.937		
900.0	893.1	846.9	841.4	2.3	2.1	-159.31	-27.6	158.1	243.8	240.8	3.08	79.228		
1,000.0	990.4	935.3	927.4	2.7	2.4	-159.44	-34.3	177.5	286.4	282.9	3.47	82.582		
1,100.0	1,087.7	1,025.7	1,015.4	3.1	2.8	-159.54	-41.2	197.3	329.1	325.2	3.87	85.125		
1,200.0	1,185.0	1,116.2	1,103.3	3.6	3.2	-159.61	-48.1	217.2	371.7	367.5	4.27	87.139		
1,300.0	1,282.3	1,206.6	1,191.3	4.0	3.6	-159.67	-55.0	237.1	414.4	409.7	4.67	88.769		
1,400.0	1,379.6	1,297.0	1,279.2	4.5	4.0	-159.72	-61.9	256.9	457.1	452.0	5.07	90.114		
1,500.0	1,476.9	1,387.5	1,367.2	4.9	4.4	-159.76	-68.8	276.8	499.8	494.3	5.48	91.239		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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									
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	107.15	-83.8	271.4	284.6						
100.0	100.0	82.7	82.7	0.1	0.1	107.16	-83.8	271.4	284.0	283.8	0.26	1,109.193			
169.0	169.0	151.4	151.4	0.2	0.2	107.17	-83.8	271.3	284.0	283.5	0.49	579.862 CC			
200.0	200.0	181.5	181.5	0.3	0.3	107.18	-83.9	271.3	284.0	283.4	0.60	476.143 ES			
300.0	300.0	279.5	279.5	0.5	0.5	-143.69	-84.2	272.0	286.1	285.2	0.94	303.397			
400.0	399.8	377.5	377.5	0.7	0.6	-144.43	-83.6	273.5	291.7	290.4	1.30	225.006			
500.0	499.5	467.4	467.3	0.9	0.8	-145.70	-81.6	276.6	301.6	299.9	1.65	183.284			
600.0	598.7	552.1	551.8	1.2	1.0	-146.99	-81.0	282.9	318.8	316.8	1.99	159.811			
700.0	697.5	638.4	637.5	1.5	1.2	-148.28	-81.6	292.5	342.9	340.6	2.36	145.476			
800.0	795.6	728.9	727.2	1.9	1.4	-149.89	-81.2	304.8	372.3	369.6	2.74	136.022			
866.6	860.6	790.7	788.3	2.1	1.6	-151.20	-79.6	313.6	394.0	391.0	2.99	131.581			
900.0	893.1	819.9	817.2	2.3	1.7	-151.94	-78.5	317.9	405.4	402.3	3.12	129.860			
1,000.0	990.4	906.8	902.9	2.7	2.0	-154.09	-74.3	331.5	440.7	437.3	3.50	126.075			
1,100.0	1,087.7	993.9	988.4	3.1	2.3	-156.34	-66.9	346.4	477.7	473.9	3.87	123.482 SF			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
0.0	0.0	0.0	0.0	0.0	0.0	98.49	-41.2	275.6	279.2					
100.0	100.0	82.5	82.5	0.1	0.1	98.51	-41.2	275.6	278.7	278.4	0.25	1,118.854		
200.0	200.0	182.8	182.8	0.3	0.3	98.61	-41.7	275.4	278.6	278.0	0.60	465.290		
205.4	205.4	188.3	188.3	0.3	0.3	-152.10	-41.8	275.4	278.6	278.0	0.62	450.641	CC, ES	
300.0	300.0	283.2	283.2	0.5	0.5	-152.05	-42.7	275.0	279.9	278.9	0.95	294.399		
400.0	399.8	383.5	383.5	0.7	0.7	-152.18	-44.3	274.5	284.2	282.9	1.31	217.502		
500.0	499.5	483.7	483.7	0.9	0.8	-152.44	-46.6	273.6	291.3	289.7	1.67	174.413		
600.0	598.7	582.8	582.7	1.2	1.0	-152.87	-49.3	272.6	301.6	299.5	2.04	147.848		
700.0	697.5	681.1	680.9	1.5	1.2	-153.68	-51.2	271.9	315.1	312.7	2.41	130.604		
800.0	795.6	779.5	779.4	1.9	1.4	-154.74	-52.6	271.4	332.1	329.3	2.79	118.950		
866.6	860.6	844.6	844.5	2.1	1.5	-155.55	-53.2	271.1	345.1	342.0	3.04	113.389		
900.0	893.1	877.2	877.1	2.3	1.5	-156.01	-53.5	270.9	352.0	348.8	3.17	110.998		
1,000.0	990.4	975.2	975.1	2.7	1.7	-157.31	-54.4	270.3	372.6	369.1	3.55	104.915		
1,100.0	1,087.7	1,063.0	1,062.8	3.1	1.9	-158.14	-56.7	270.7	394.6	390.7	3.92	100.613		
1,200.0	1,185.0	1,146.7	1,146.3	3.6	2.0	-158.62	-60.6	273.5	419.6	415.3	4.29	97.754		
1,300.0	1,282.3	1,237.4	1,236.7	4.0	2.2	-158.87	-66.5	278.4	446.5	441.9	4.69	95.295		
1,400.0	1,379.6	1,316.0	1,314.9	4.5	2.4	-159.00	-72.1	284.5	475.8	470.8	5.06	94.069	SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sprague 3A-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 3A-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 3A-9H-N267

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.39°

