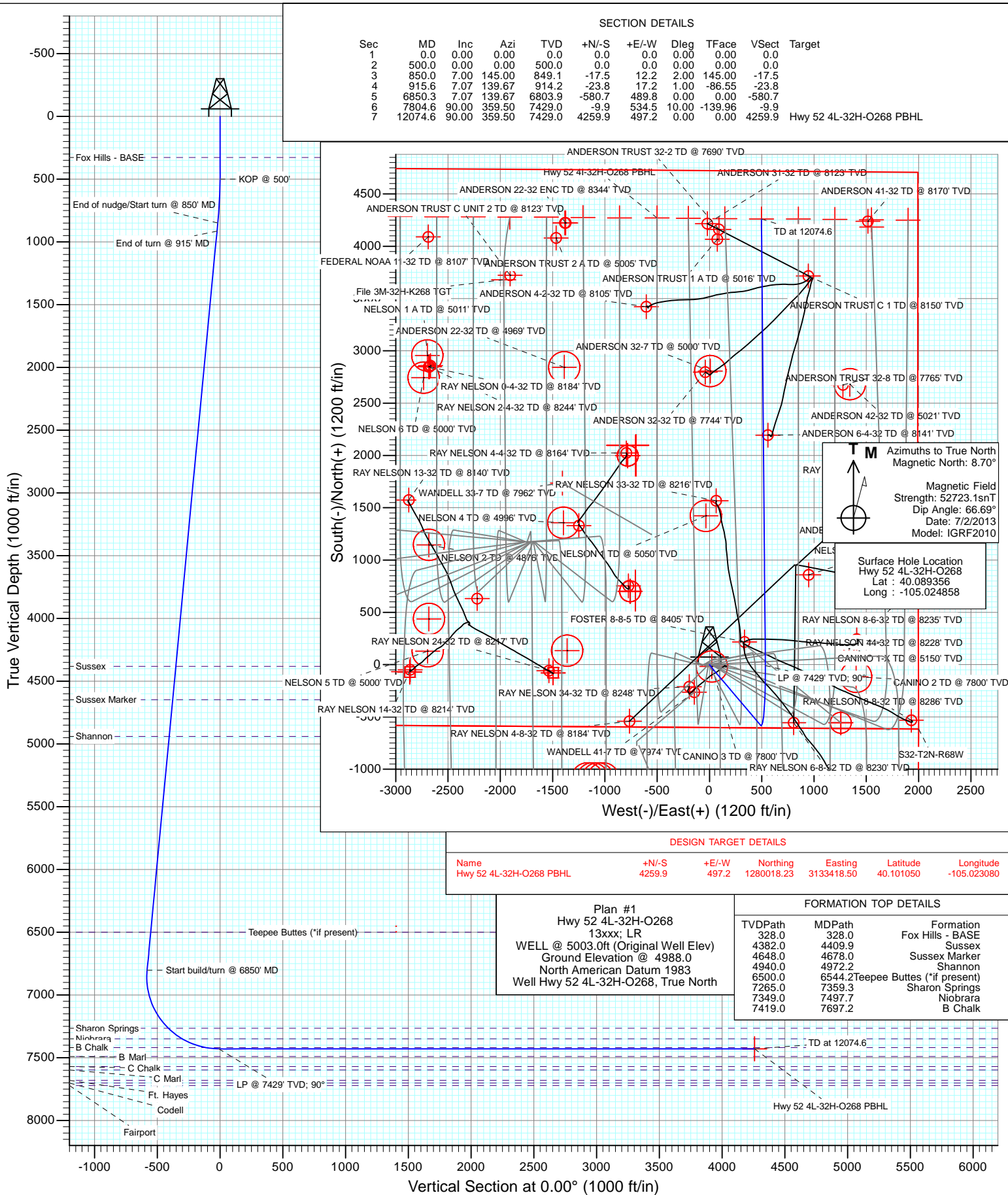




Project: DJ Wattenberg
Site: S32-T2N-R68W (File/Hwy 52)
Well: Hwy 52 4L-32H-O268
Wellbore: Hz
Design: Plan #1



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File/Hwy 52)	North Reference:	True
Well:	Hwy 52 4L-32H-O268	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		S32-T2N-R68W (File/Hwy 52)			
Site Position:		Northing:	1,275,973.93 ft	Latitude:	40.089950
From:	Lat/Long	Easting:	3,133,277.97 ft	Longitude:	-105.023660
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.31 °

Well	Hwy 52 4L-32H-O268					
Well Position	+N/-S	0.0 ft	Northing:	1,275,755.69 ft	Latitude:	40.089356
	+E/-W	0.0 ft	Easting:	3,132,944.09 ft	Longitude:	-105.024858
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,988.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	7/2/2013	8.70	66.69	52,723

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	0.00

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
850.0	7.00	145.00	849.1	-17.5	12.2	2.00	2.00	0.00	145.00	
915.6	7.07	139.67	914.2	-23.8	17.2	1.00	0.11	-8.12	-86.55	
6,850.3	7.07	139.67	6,803.9	-580.7	489.8	0.00	0.00	0.00	0.00	
7,804.6	90.00	359.50	7,429.0	-9.9	534.5	10.00	8.69	-14.69	-139.96	
12,074.6	90.00	359.50	7,429.0	4,259.9	497.2	0.00	0.00	0.00	0.00	Hwy 52 4L-32H-O268

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File/Hwy 52)	North Reference:	True
Well:	Hwy 52 4L-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
328.0	0.00	0.00	328.0	0.0	0.0	0.0	0.00	0.00	Fox Hills - BASE
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	KOP @ 500'
600.0	2.00	145.00	600.0	-1.4	1.0	-1.4	2.00	2.00	
700.0	4.00	145.00	699.8	-5.7	4.0	-5.7	2.00	2.00	
800.0	6.00	145.00	799.5	-12.9	9.0	-12.9	2.00	2.00	
850.0	7.00	145.00	849.1	-17.5	12.2	-17.5	2.00	2.00	End of nudge/Start turn @ 850' MD
900.0	7.05	140.93	898.8	-22.4	15.9	-22.4	1.00	0.10	
915.6	7.07	139.67	914.2	-23.8	17.2	-23.8	1.00	0.14	End of turn @ 915' MD
1,000.0	7.07	139.67	998.0	-31.8	23.9	-31.8	0.00	0.00	
1,100.0	7.07	139.67	1,097.2	-41.1	31.8	-41.1	0.00	0.00	
1,200.0	7.07	139.67	1,196.5	-50.5	39.8	-50.5	0.00	0.00	
1,300.0	7.07	139.67	1,295.7	-59.9	47.8	-59.9	0.00	0.00	
1,400.0	7.07	139.67	1,395.0	-69.3	55.7	-69.3	0.00	0.00	
1,500.0	7.07	139.67	1,494.2	-78.7	63.7	-78.7	0.00	0.00	
1,600.0	7.07	139.67	1,593.4	-88.1	71.7	-88.1	0.00	0.00	
1,700.0	7.07	139.67	1,692.7	-97.4	79.6	-97.4	0.00	0.00	
1,800.0	7.07	139.67	1,791.9	-106.8	87.6	-106.8	0.00	0.00	
1,900.0	7.07	139.67	1,891.2	-116.2	95.6	-116.2	0.00	0.00	
2,000.0	7.07	139.67	1,990.4	-125.6	103.5	-125.6	0.00	0.00	
2,100.0	7.07	139.67	2,089.6	-135.0	111.5	-135.0	0.00	0.00	
2,200.0	7.07	139.67	2,188.9	-144.4	119.5	-144.4	0.00	0.00	
2,300.0	7.07	139.67	2,288.1	-153.7	127.4	-153.7	0.00	0.00	
2,400.0	7.07	139.67	2,387.4	-163.1	135.4	-163.1	0.00	0.00	
2,500.0	7.07	139.67	2,486.6	-172.5	143.3	-172.5	0.00	0.00	
2,600.0	7.07	139.67	2,585.8	-181.9	151.3	-181.9	0.00	0.00	
2,700.0	7.07	139.67	2,685.1	-191.3	159.3	-191.3	0.00	0.00	
2,800.0	7.07	139.67	2,784.3	-200.7	167.2	-200.7	0.00	0.00	
2,900.0	7.07	139.67	2,883.5	-210.0	175.2	-210.0	0.00	0.00	
3,000.0	7.07	139.67	2,982.8	-219.4	183.2	-219.4	0.00	0.00	
3,100.0	7.07	139.67	3,082.0	-228.8	191.1	-228.8	0.00	0.00	
3,200.0	7.07	139.67	3,181.3	-238.2	199.1	-238.2	0.00	0.00	
3,300.0	7.07	139.67	3,280.5	-247.6	207.1	-247.6	0.00	0.00	
3,400.0	7.07	139.67	3,379.7	-257.0	215.0	-257.0	0.00	0.00	
3,500.0	7.07	139.67	3,479.0	-266.3	223.0	-266.3	0.00	0.00	
3,600.0	7.07	139.67	3,578.2	-275.7	231.0	-275.7	0.00	0.00	
3,700.0	7.07	139.67	3,677.5	-285.1	238.9	-285.1	0.00	0.00	
3,800.0	7.07	139.67	3,776.7	-294.5	246.9	-294.5	0.00	0.00	
3,900.0	7.07	139.67	3,875.9	-303.9	254.8	-303.9	0.00	0.00	
4,000.0	7.07	139.67	3,975.2	-313.3	262.8	-313.3	0.00	0.00	
4,100.0	7.07	139.67	4,074.4	-322.6	270.8	-322.6	0.00	0.00	
4,200.0	7.07	139.67	4,173.7	-332.0	278.7	-332.0	0.00	0.00	
4,300.0	7.07	139.67	4,272.9	-341.4	286.7	-341.4	0.00	0.00	
4,400.0	7.07	139.67	4,372.1	-350.8	294.7	-350.8	0.00	0.00	
4,409.9	7.07	139.67	4,382.0	-351.7	295.5	-351.7	0.00	0.00	Sussex
4,500.0	7.07	139.67	4,471.4	-360.2	302.6	-360.2	0.00	0.00	
4,600.0	7.07	139.67	4,570.6	-369.6	310.6	-369.6	0.00	0.00	
4,678.0	7.07	139.67	4,648.0	-376.9	316.8	-376.9	0.00	0.00	Sussex Marker

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File/Hwy 52)	North Reference:	True
Well:	Hwy 52 4L-32H-O268	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
4,700.0	7.07	139.67	4,669.9	-378.9	318.6	-378.9	0.00	0.00	
4,800.0	7.07	139.67	4,769.1	-388.3	326.5	-388.3	0.00	0.00	
4,900.0	7.07	139.67	4,868.3	-397.7	334.5	-397.7	0.00	0.00	
4,972.2	7.07	139.67	4,940.0	-404.5	340.2	-404.5	0.00	0.00	Shannon
5,000.0	7.07	139.67	4,967.6	-407.1	342.5	-407.1	0.00	0.00	
5,100.0	7.07	139.67	5,066.8	-416.5	350.4	-416.5	0.00	0.00	
5,200.0	7.07	139.67	5,166.1	-425.9	358.4	-425.9	0.00	0.00	
5,300.0	7.07	139.67	5,265.3	-435.2	366.4	-435.2	0.00	0.00	
5,400.0	7.07	139.67	5,364.5	-444.6	374.3	-444.6	0.00	0.00	
5,500.0	7.07	139.67	5,463.8	-454.0	382.3	-454.0	0.00	0.00	
5,600.0	7.07	139.67	5,563.0	-463.4	390.2	-463.4	0.00	0.00	
5,700.0	7.07	139.67	5,662.3	-472.8	398.2	-472.8	0.00	0.00	
5,800.0	7.07	139.67	5,761.5	-482.2	406.2	-482.2	0.00	0.00	
5,900.0	7.07	139.67	5,860.7	-491.5	414.1	-491.5	0.00	0.00	
6,000.0	7.07	139.67	5,960.0	-500.9	422.1	-500.9	0.00	0.00	
6,100.0	7.07	139.67	6,059.2	-510.3	430.1	-510.3	0.00	0.00	
6,200.0	7.07	139.67	6,158.5	-519.7	438.0	-519.7	0.00	0.00	
6,300.0	7.07	139.67	6,257.7	-529.1	446.0	-529.1	0.00	0.00	
6,400.0	7.07	139.67	6,356.9	-538.4	454.0	-538.4	0.00	0.00	
6,500.0	7.07	139.67	6,456.2	-547.8	461.9	-547.8	0.00	0.00	
6,544.2	7.07	139.67	6,500.0	-552.0	465.4	-552.0	0.00	0.00	Teepee Buttes (*if present)
6,600.0	7.07	139.67	6,555.4	-557.2	469.9	-557.2	0.00	0.00	
6,700.0	7.07	139.67	6,654.7	-566.6	477.9	-566.6	0.00	0.00	
6,800.0	7.07	139.67	6,753.9	-576.0	485.8	-576.0	0.00	0.00	
6,850.3	7.07	139.67	6,803.9	-580.7	489.8	-580.7	0.00	0.00	Start build/turn @ 6850' MD
6,900.0	4.56	95.26	6,853.3	-583.2	493.8	-583.2	10.00	-5.04	
7,000.0	10.56	24.72	6,952.5	-575.2	501.6	-575.2	10.00	5.99	
7,100.0	20.04	12.08	7,048.9	-550.1	509.0	-550.1	10.00	9.48	
7,200.0	29.86	7.45	7,139.5	-508.5	515.9	-508.5	10.00	9.82	
7,300.0	39.76	4.98	7,221.5	-451.9	521.9	-451.9	10.00	9.90	
7,359.3	45.65	3.95	7,265.0	-411.8	525.0	-411.8	10.00	9.93	Sharon Springs
7,400.0	49.70	3.36	7,292.4	-381.8	526.9	-381.8	10.00	9.94	
7,497.7	59.42	2.19	7,349.0	-302.4	530.7	-302.4	10.00	9.95	Niobrara
7,500.0	59.65	2.17	7,350.2	-300.4	530.8	-300.4	10.00	9.96	
7,600.0	69.61	1.19	7,393.0	-210.2	533.4	-210.2	10.00	9.96	
7,697.2	79.30	0.36	7,419.0	-116.6	534.6	-116.6	10.00	9.97	B Chalk
7,700.0	79.58	0.34	7,419.5	-113.9	534.7	-113.9	10.00	9.97	
7,800.0	89.54	359.54	7,429.0	-14.5	534.5	-14.5	10.00	9.97	
7,804.6	90.00	359.50	7,429.0	-9.9	534.5	-9.9	10.00	9.97	LP @ 7429' TVD; 90°
7,900.0	90.00	359.50	7,429.0	85.5	533.7	85.5	0.00	0.00	
8,000.0	90.00	359.50	7,429.0	185.5	532.8	185.5	0.00	0.00	
8,100.0	90.00	359.50	7,429.0	285.5	531.9	285.5	0.00	0.00	
8,200.0	90.00	359.50	7,429.0	385.5	531.1	385.5	0.00	0.00	
8,300.0	90.00	359.50	7,429.0	485.5	530.2	485.5	0.00	0.00	
8,400.0	90.00	359.50	7,429.0	585.5	529.3	585.5	0.00	0.00	
8,500.0	90.00	359.50	7,429.0	685.5	528.4	685.5	0.00	0.00	
8,600.0	90.00	359.50	7,429.0	785.5	527.6	785.5	0.00	0.00	
8,700.0	90.00	359.50	7,429.0	885.5	526.7	885.5	0.00	0.00	
8,800.0	90.00	359.50	7,429.0	985.5	525.8	985.5	0.00	0.00	
8,900.0	90.00	359.50	7,429.0	1,085.5	524.9	1,085.5	0.00	0.00	
9,000.0	90.00	359.50	7,429.0	1,185.5	524.1	1,185.5	0.00	0.00	
9,100.0	90.00	359.50	7,429.0	1,285.5	523.2	1,285.5	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File/Hwy 52)	North Reference:	True
Well:	Hwy 52 4L-32H-O268	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
9,200.0	90.00	359.50	7,429.0	1,385.5	522.3	1,385.5	0.00	0.00	
9,300.0	90.00	359.50	7,429.0	1,485.5	521.5	1,485.5	0.00	0.00	
9,400.0	90.00	359.50	7,429.0	1,585.5	520.6	1,585.5	0.00	0.00	
9,500.0	90.00	359.50	7,429.0	1,685.5	519.7	1,685.5	0.00	0.00	
9,600.0	90.00	359.50	7,429.0	1,785.5	518.8	1,785.5	0.00	0.00	
9,700.0	90.00	359.50	7,429.0	1,885.5	518.0	1,885.5	0.00	0.00	
9,800.0	90.00	359.50	7,429.0	1,985.4	517.1	1,985.4	0.00	0.00	
9,900.0	90.00	359.50	7,429.0	2,085.4	516.2	2,085.4	0.00	0.00	
10,000.0	90.00	359.50	7,429.0	2,185.4	515.3	2,185.4	0.00	0.00	
10,100.0	90.00	359.50	7,429.0	2,285.4	514.5	2,285.4	0.00	0.00	
10,200.0	90.00	359.50	7,429.0	2,385.4	513.6	2,385.4	0.00	0.00	
10,300.0	90.00	359.50	7,429.0	2,485.4	512.7	2,485.4	0.00	0.00	
10,400.0	90.00	359.50	7,429.0	2,585.4	511.9	2,585.4	0.00	0.00	
10,500.0	90.00	359.50	7,429.0	2,685.4	511.0	2,685.4	0.00	0.00	
10,600.0	90.00	359.50	7,429.0	2,785.4	510.1	2,785.4	0.00	0.00	
10,700.0	90.00	359.50	7,429.0	2,885.4	509.2	2,885.4	0.00	0.00	
10,800.0	90.00	359.50	7,429.0	2,985.4	508.4	2,985.4	0.00	0.00	
10,900.0	90.00	359.50	7,429.0	3,085.4	507.5	3,085.4	0.00	0.00	
11,000.0	90.00	359.50	7,429.0	3,185.4	506.6	3,185.4	0.00	0.00	
11,100.0	90.00	359.50	7,429.0	3,285.4	505.7	3,285.4	0.00	0.00	
11,200.0	90.00	359.50	7,429.0	3,385.4	504.9	3,385.4	0.00	0.00	
11,300.0	90.00	359.50	7,429.0	3,485.4	504.0	3,485.4	0.00	0.00	
11,400.0	90.00	359.50	7,429.0	3,585.4	503.1	3,585.4	0.00	0.00	
11,500.0	90.00	359.50	7,429.0	3,685.4	502.3	3,685.4	0.00	0.00	
11,600.0	90.00	359.50	7,429.0	3,785.4	501.4	3,785.4	0.00	0.00	
11,700.0	90.00	359.50	7,429.0	3,885.4	500.5	3,885.4	0.00	0.00	
11,800.0	90.00	359.50	7,429.0	3,985.4	499.6	3,985.4	0.00	0.00	
11,900.0	90.00	359.50	7,429.0	4,085.4	498.8	4,085.4	0.00	0.00	
12,000.0	90.00	359.50	7,429.0	4,185.4	497.9	4,185.4	0.00	0.00	
12,074.6	90.00	359.50	7,429.0	4,259.9	497.2	4,259.9	0.00	0.00	TD at 12074.6 - Hwy 52 4L-32H-O268 PBHL

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Hwy 52 4L-32H-O268 PI	0.00	0.00	7,429.0	4,259.9	497.2	1,280,018.23	3,133,418.50	40.101050	-105.023080
- plan hits target center									
- Point									

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File/Hwy 52)	North Reference:	True
Well:	Hwy 52 4L-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
328.0	328.0	Fox Hills - BASE				
4,409.9	4,382.0	Sussex				
4,678.0	4,648.0	Sussex Marker				
4,972.2	4,940.0	Shannon				
6,544.2	6,500.0	Teepee Buttes (*if present)				
7,359.3	7,265.0	Sharon Springs				
7,497.7	7,349.0	Niobrara				
7,697.2	7,419.0	B Chalk				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
500.0	500.0	0.0	0.0	KOP @ 500'	
850.0	849.1	-17.5	12.2	End of nudge/Start turn @ 850' MD	
915.6	914.2	-23.8	17.2	End of turn @ 915' MD	
6,850.3	6,803.9	-580.7	489.8	Start build/turn @ 6850' MD	
7,804.6	7,429.0	-9.9	534.5	LP @ 7429' TVD; 90°	
12,074.6	7,429.0	4,259.9	497.2	TD at 12074.6	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S32-T2N-R68W (File/Hwy 52)

Hwy 52 4L-32H-O268

Hz

Plan #1

Anticollision Report

05 July, 2013

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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:	MD Interval 100.0ft	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	7/5/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	12,074.6	Plan #1 (Hz)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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		Separation Factor	Warning
Offset Well - Wellbore - Design			Between Centres (ft)	Between Ellipses (ft)		
S32-T2N-R68W (File/Hwy 52)						
ANDERSON 21-32 (EXISTING) - ENCANA WELL - NO S						Out of range
ANDERSON 22-32 (EXISTING) - KPK WELL - NO SURV						Out of range
ANDERSON 22-32 ENC (EXISTING) - ENCANA WELL -						Out of range
ANDERSON 31-32 (EXISTING) - ENCANA WELL - PLAN						Out of range
ANDERSON 32-32 (EXISTING) - ENCANA WELL - SUR						Out of range
ANDERSON 32-7 (EXISTING) - KPK WELL - NO SURVE						Out of range
ANDERSON 41-32 (EXISTING) - ENCANA WELL - NO S						Out of range
ANDERSON 42-32 (EXISTING) - BASIN EXP WELL - NO						Out of range
ANDERSON 4-2-32 (EXISTING) - ENCANA WELL - SUR						Out of range
ANDERSON 6-4-32 (EXISTING) - ENCANA WELL - SUR	10,010.8	7,633.1	55.3	-16.5	0.770	Level 1, CC, ES, SF
ANDERSON TRUST 1 (EXISTING) - KPK WELL - NO S						Out of range
ANDERSON TRUST 1 A (EXISTING) - ENCANA WELL -						Out of range
ANDERSON TRUST 2 A (EXISTING) - ENCANA WELL -						Out of range
ANDERSON TRUST 32-2 (EXISTING) - ENCANA WELL	11,979.0	7,367.0	407.3	318.5	4.588	CC, ES
ANDERSON TRUST 32-2 (EXISTING) - ENCANA WELL	12,000.0	7,367.0	407.8	318.7	4.575	SF
ANDERSON TRUST 32-8 (EXISTING) - ENCANA WELL						Out of range
ANDERSON TRUST C 1 (EXISTING) - ENCANA WELL	11,525.7	7,372.0	443.4	362.4	5.475	CC, ES
ANDERSON TRUST C 1 (EXISTING) - ENCANA WELL	11,600.0	7,372.0	449.6	367.3	5.466	SF
ANDERSON TRUST C UNIT 2 (EXISTING) - ENCANA W						Out of range
BROWN 22-5 (EXISTING) - ENCANA WELL - NO SURV						Out of range
BROWN 31-5 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
BROWN 41-5 (EXISTING) - ENCANA WELL - ENCANA	1,294.9	1,284.0	330.2	323.7	51.093	CC
BROWN 41-5 (EXISTING) - ENCANA WELL - ENCANA	1,300.0	1,288.5	330.2	323.7	50.809	ES
BROWN 41-5 (EXISTING) - ENCANA WELL - ENCANA	2,000.0	1,934.5	406.8	395.8	37.039	SF
BROWN 5-3 (EXISTING) - ENCANA WELL - NO SURVE						Out of range
BROWN 5-5 (EXISTING) - ENCANA WELL - NO SURVE						Out of range
BROWN C UNIT 1 (EXISTING) - ENCANA WELL - NO S						Out of range
BROWN C UNIT 2 (EXISTING) - ENCANA WELL - NO S						Out of range
CANINO 1-X (EXISTING) - ENCANA WELL - NO SURVE						Out of range
CANINO 2 (EXISTING) - HUGHES CW WELL - NO SUR						Out of range
CANINO 3 (EXISTING) - HUGHES CW WELL - NO SUR	905.1	846.8	8.0	4.9	2.550	CC, ES, SF
FEDERAL NOAA 11-32 (EXISTING) - ENCANA WELL - N						Out of range
File 3A-32H-K268 - Hz - Plan #1						Out of range
File 3B-32H-K268 - Hz - Plan #1						Out of range
File 3C-32H-K268 - Hz - Plan #1						Out of range
File 3D-32H-K268 - Hz - Plan #1						Out of range
File 3E-32H-K268 - Hz - Plan #1						Out of range
File 3F-32H-K268 - Hz - Plan #1						Out of range
File 3G-32H-K268 - Hz - Plan #1						Out of range
File 3H-32H-K268 - Hz - Plan #1						Out of range
File 3I-32H-K268 - Hz - Plan #1						Out of range
File 3J-32H-K268 - Hz - Plan #1						Out of range
File 3K-32H-K268 - Hz - Plan #1						Out of range
File 3L-32H-K268 - Hz - Plan #1						Out of range
File 3M-32H-K268 - Hz - Plan #1						Out of range
File 3N-32H-K268 - Hz - Plan #1						Out of range
File 3O-32H-K268 - Hz - Plan #1						Out of range
File 3P-32H-K268 - Hz - Plan #1						Out of range
FOSTER 33-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 43-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 4-5 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
FOSTER 4-6-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 6-4-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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	Offset	Distance		Separation	Warning
	Measured Depth (ft)	Measured Depth (ft)	Between Centres (ft)	Between Ellipses (ft)		
S32-T2N-R68W (File/Hwy 52)						
FOSTER 6-4-5X (EXISTING) - ENCANA WELL - SURVE						Out of range
FOSTER 6-8-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 8-8-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER E UNIT 1 (EXISTING) - ENCANA WELL - NO S						Out of range
GENE 11-5 (EXISTING) - KERR-MCGEE WELL - NO SU						Out of range
HIGHLAND 21-5 (EXISTING) - KPK WELL - NO SURVE						Out of range
HOPE 31-5 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
Hwy 52 4A-32H-O268 - Hz - Plan #1	166.0	168.0	75.2	74.7	141.819	CC
Hwy 52 4A-32H-O268 - Hz - Plan #1	200.0	202.0	75.2	74.6	115.892	ES
Hwy 52 4A-32H-O268 - Hz - Plan #1	800.0	793.8	113.1	110.3	41.081	SF
Hwy 52 4B-32H-O268 - Hz - Plan #1	166.3	167.3	70.0	69.5	132.079	CC
Hwy 52 4B-32H-O268 - Hz - Plan #1	200.0	201.0	70.0	69.4	108.108	ES
Hwy 52 4B-32H-O268 - Hz - Plan #1	800.0	796.9	99.2	96.5	36.035	SF
Hwy 52 4C-32H-O268 - Hz - Plan #1	511.2	512.3	65.3	63.5	37.641	CC
Hwy 52 4C-32H-O268 - Hz - Plan #1	600.0	602.0	65.4	63.3	31.932	ES
Hwy 52 4C-32H-O268 - Hz - Plan #1	7,400.0	7,620.6	441.6	412.2	15.012	SF
Hwy 52 4D-32H-O268 - Hz - Plan #1	505.5	506.6	60.0	58.3	35.000	CC
Hwy 52 4D-32H-O268 - Hz - Plan #1	600.0	602.0	60.2	58.1	29.396	ES
Hwy 52 4D-32H-O268 - Hz - Plan #1	7,846.3	7,471.3	101.9	75.1	3.806	SF
Hwy 52 4E-32H-O268 - Hz - Plan #1	500.0	501.0	45.4	43.7	26.788	CC, ES
Hwy 52 4E-32H-O268 - Hz - Plan #1	7,588.8	7,542.8	144.1	116.5	5.223	SF
Hwy 52 4F-32H-O268 - Hz - Plan #1	642.4	644.8	39.6	37.4	18.004	CC, ES
Hwy 52 4F-32H-O268 - Hz - Plan #1	800.0	802.4	43.6	40.8	15.621	SF
Hwy 52 4G-32H-O268 - Hz - Plan #1	500.0	501.0	35.5	33.8	20.954	CC, ES
Hwy 52 4G-32H-O268 - Hz - Plan #1	1,700.0	1,704.0	81.3	74.0	11.171	SF
Hwy 52 4H-32H-O268 - Hz - Plan #1	500.0	501.0	30.0	28.3	17.702	CC, ES
Hwy 52 4H-32H-O268 - Hz - Plan #1	700.0	700.8	34.5	32.1	14.390	SF
Hwy 52 4I-32H-O268 - Hz - Plan #1	200.0	200.0	16.2	15.5	25.017	CC, ES
Hwy 52 4I-32H-O268 - Hz - Plan #1	500.0	499.0	23.5	21.8	13.826	SF
Hwy 52 4J-32H-O268 - Hz - Plan #1	300.0	300.0	10.0	9.0	10.052	CC
Hwy 52 4J-32H-O268 - Hz - Plan #1	400.0	400.0	10.2	8.8	7.571	ES
Hwy 52 4J-32H-O268 - Hz - Plan #1	500.0	499.9	11.1	9.4	6.548	SF
Hwy 52 4K-32H-O268 - Hz - Plan #1	400.0	400.0	7.8	6.5	5.812	CC, ES
Hwy 52 4K-32H-O268 - Hz - Plan #1	800.0	799.7	9.4	6.6	3.325	SF
Hwy 52 4M-32H-O268 - Hz - Plan #1	789.9	789.2	17.7	14.9	6.429	CC
Hwy 52 4M-32H-O268 - Hz - Plan #1	800.0	799.2	17.7	14.9	6.343	ES
Hwy 52 4M-32H-O268 - Hz - Plan #1	12,074.6	12,377.2	452.0	328.9	3.671	SF
Hwy 52 4N-32H-O268 - Hz - Plan #1	775.5	774.9	23.5	20.8	8.724	CC, ES
Hwy 52 4N-32H-O268 - Hz - Plan #1	900.0	898.7	26.5	23.3	8.327	SF
Hwy 52 4O-32H-O268 - Hz - Plan #1	400.0	400.0	30.2	28.8	22.443	CC, ES
Hwy 52 4O-32H-O268 - Hz - Plan #1	1,100.0	1,095.5	46.0	41.8	11.089	SF
Hwy 52 4P-32H-O268 - Hz - Plan #1	200.0	200.0	35.7	35.1	55.303	CC, ES
Hwy 52 4P-32H-O268 - Hz - Plan #1	1,100.0	1,090.6	78.4	74.2	18.920	SF
LAURIE 32-5 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
NATALIE 33-5 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
NELSON 1 (EXISTING) - TEXAS TEA WELL - NO SURV						Out of range
NELSON 1 A (EXISTING) - TEXAS TEA WELL - NO SUR						Out of range
NELSON 2 (EXISTING) - TEXAS TEA WELL - NO SURV						Out of range
NELSON 3 (EXISTING) - TEXAS TEA WELL - NO SURV						Out of range
NELSON 4 (EXISTING) - TEXAS TEA WELL - NO SURV						Out of range
NELSON 5 (EXISTING) - VESSELS WELL - NO SURVE						Out of range
NELSON 5 TT (EXISTING) - TEXAS TEA WELL - NO SU						Out of range
NELSON 6 (EXISTING) - VESSELS WELL - NO SURVE						Out of range

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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						
S32-T2N-R68W (File/Hwy 52)						
NELSON E UNIT 1 (EXISTING) - ENCANA WELL - NO S						Out of range
NELSON E UNIT 2 (EXISTING) - ENCANA WELL - NO S	8,669.1	7,382.0	421.9	387.6	12.290	CC, ES
NELSON E UNIT 2 (EXISTING) - ENCANA WELL - NO S	8,700.0	7,382.0	423.1	388.3	12.175	SF
PAQUETTE 13-5 (EXISTING) - KERR-MCGEE WELL - N						Out of range
PAQUETTE 14-5 (EXISTING) - KERR-MCGEE WELL - N						Out of range
RAY NELSON 0-4-32 (EXISTING) - ENCANA WELL - NO						Out of range
RAY NELSON 12-32 (EXISTING) - ENCANA WELL - NO						Out of range
RAY NELSON 13-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 14-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 23-32 (EXISTING) - ENCANA WELL - NO						Out of range
RAY NELSON 24-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 2-4-32 (EXISTING) - ENCANA WELL - NO						Out of range
RAY NELSON 33-32 (EXISTING) - ENCANA WELL - EN	1,035.9	1,027.8	371.3	367.6	98.964	CC, ES
RAY NELSON 33-32 (EXISTING) - ENCANA WELL - EN	9,400.0	7,606.3	455.3	396.1	7.690	SF
RAY NELSON 34-32 (EXISTING) - ENCANA WELL - EN	1,644.2	1,630.6	110.3	103.9	17.242	CC, ES
RAY NELSON 34-32 (EXISTING) - ENCANA WELL - EN	1,900.0	1,882.0	118.3	110.9	15.985	SF
RAY NELSON 44-32 (EXISTING) - ENCANA WELL - EN	143.0	134.0	383.8	383.3	887.692	CC, ES
RAY NELSON 44-32 (EXISTING) - ENCANA WELL - EN	1,100.0	1,017.0	484.2	480.2	121.261	SF
RAY NELSON 4-4-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 4-6-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 4-8-32 (EXISTING) - ENCANA WELL - PL						Out of range
RAY NELSON 6-8-32 (EXISTING) - ENCANA WELL - PL	7,100.0	7,203.4	296.2	251.7	6.655	SF
RAY NELSON 6-8-32 (EXISTING) - ENCANA WELL - PL	7,184.5	7,280.0	293.1	249.4	6.716	CC, ES
Ray Nelson 7-8-32 - DD - Plan #1	500.0	491.0	387.5	385.8	231.002	CC
Ray Nelson 7-8-32 - DD - Plan #1	600.0	586.9	387.8	385.8	191.766	ES
Ray Nelson 7-8-32 - DD - Plan #1	2,500.0	2,452.6	495.1	482.5	39.462	SF
RAY NELSON 8-4-32 (EXISTING) - ENCANA WELL - PL						Out of range
RAY NELSON 8-6-32 (EXISTING) - ENCANA WELL - PL						Out of range
RAY NELSON 8-8-32 (EXISTING) - ENCANA WELL - SU	0.0	0.0	387.6			
RAY NELSON 8-8-32 (EXISTING) - ENCANA WELL - SU	1,200.0	1,095.9	482.6	477.4	91.706	SF
SCHRINER 11-5 (EXISTING) - KERR-MCGEE WELL - N						Out of range
SCHRINER 12-5 (EXISTING) - KERR-MCGEE WELL - N						Out of range
WANDELL 33-7 (EXISTING) - ENCANA WELL - Plan #1						Out of range
WANDELL 41-7 (EXISTING) - ENCANA WELL - Plan #1						Out of range
WANDELL 42-7 (EXISTING) - ENCANA WELL - Plan #1						Out of range
WANDELL 43-7 (EXISTING) - ENCANA WELL - Plan #1						Out of range

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - ANDERSON 6-4-32 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error: 0.0 ft
Survey Program: 71-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
9,600.0	7,429.0	7,633.0	7,389.8	36.9	30.3	90.83	2,196.8	570.5	414.5	349.5	65.03	6.375	
9,700.0	7,429.0	7,633.0	7,389.8	38.4	30.3	90.85	2,196.8	570.5	315.7	249.1	66.65	4.737	
9,800.0	7,429.0	7,633.0	7,389.8	40.0	30.3	90.87	2,196.8	570.5	218.0	149.7	68.29	3.192	
9,900.0	7,429.0	7,633.0	7,389.9	41.6	30.3	90.89	2,196.8	570.5	123.9	53.9	69.94	1.771	
10,000.0	7,429.0	7,633.1	7,389.9	43.2	30.3	90.91	2,196.8	570.5	56.3	-15.3	71.60	0.787 Level 1	
10,010.8	7,429.0	7,633.1	7,389.9	43.4	30.3	90.91	2,196.8	570.5	55.3	-16.5	71.78	0.770 Level 1, CC, ES, SF	
10,100.0	7,429.0	7,633.1	7,389.9	44.9	30.3	90.93	2,196.8	570.5	104.9	31.6	73.27	1.432 Level 3	
10,200.0	7,429.0	7,633.1	7,389.9	46.5	30.3	90.95	2,196.8	570.5	197.1	122.1	74.94	2.630	
10,300.0	7,429.0	7,633.1	7,389.9	48.2	30.3	90.97	2,196.8	570.5	294.4	217.8	76.62	3.842	
10,400.0	7,429.0	7,633.1	7,390.0	49.8	30.3	90.99	2,196.8	570.5	393.1	314.8	78.30	5.020	
10,500.0	7,429.0	7,633.1	7,390.0	51.5	30.3	91.00	2,196.8	570.5	492.3	412.3	79.99	6.154	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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										S32-T2N-R68W (File/Hwy 52) - ANDERSON TRUST 32-2 (EXISTING) - ENCANA WELL - NO SURVEY				Offset Site Error:		0.0 ft
Survey Program: 7690-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 +N/-S	+E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)						
11,700.0	7,429.0	7,367.0	7,367.0	71.7	12.9	-90.00	4,160.8	90.8	493.7	409.8	83.97	5.880				
11,800.0	7,429.0	7,367.0	7,367.0	73.4	12.9	-90.00	4,160.8	90.8	444.9	359.2	85.69	5.192				
11,900.0	7,429.0	7,367.0	7,367.0	75.1	12.9	-90.00	4,160.8	90.8	414.9	327.5	87.42	4.746				
11,979.0	7,429.0	7,367.0	7,367.0	76.5	12.9	-90.00	4,160.8	90.8	407.3	318.5	88.78	4.588 CC, ES				
12,000.0	7,429.0	7,367.0	7,367.0	76.9	12.9	-90.00	4,160.8	90.8	407.8	318.7	89.14	4.575 SF				
12,074.6	7,429.0	7,367.0	7,367.0	78.1	12.9	-90.00	4,160.8	90.8	418.4	327.9	90.43	4.626				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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										S32-T2N-R68W (File/Hwy 52) - ANDERSON TRUST C 1 (EXISTING) - ENCANA WELL - NO SURVEY				Offset Site Error:		0.0 ft
Survey Program: 8150-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 +N/-S	+E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)						
11,300.0	7,429.0	7,372.0	7,372.0	64.9	12.9	90.00	3,715.0	945.4	497.5	420.4	77.10	6.453				
11,400.0	7,429.0	7,372.0	7,372.0	66.6	12.9	90.00	3,715.0	945.4	460.9	382.1	78.82	5.847				
11,500.0	7,429.0	7,372.0	7,372.0	68.3	12.9	90.00	3,715.0	945.4	444.1	363.6	80.54	5.515				
11,525.7	7,429.0	7,372.0	7,372.0	68.8	12.9	90.00	3,715.0	945.4	443.4	362.4	80.98	5.475 CC, ES				
11,600.0	7,429.0	7,372.0	7,372.0	70.0	12.9	90.00	3,715.0	945.4	449.6	367.3	82.26	5.466 SF				
11,700.0	7,429.0	7,372.0	7,372.0	71.7	12.9	90.00	3,715.0	945.4	476.4	392.4	83.98	5.673				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - BROWN 41-5 (EXISTING) - ENCANA WELL - ENCANA WELL													Offset Site Error:	0.0 ft
Survey Program: 41-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	58.06	201.9	323.9	381.7					
100.0	100.0	88.1	88.1	0.1	0.1	58.12	201.8	324.4	382.1	0.28	1,384.802			
200.0	200.0	187.5	187.5	0.3	0.3	58.20	201.8	325.5	383.0	0.62	613.806			
300.0	300.0	289.0	289.0	0.5	0.5	58.32	201.5	326.6	383.8	0.98	393.296			
400.0	400.0	399.7	399.6	0.7	0.7	58.64	199.2	326.8	382.9	1.35	283.896			
500.0	500.0	507.3	507.0	0.8	0.9	59.47	192.6	326.6	379.5	1.73	218.907			
600.0	600.0	615.3	614.3	1.0	1.2	-84.30	180.6	327.0	374.1	2.16	173.242			
700.0	699.8	719.2	716.9	1.2	1.5	-82.90	163.7	328.0	366.5	2.64	138.614			
800.0	799.5	813.0	809.1	1.4	1.8	-81.81	146.9	330.0	359.0	3.15	114.059			
900.0	898.8	910.8	905.1	1.6	2.1	-76.74	128.7	333.8	352.2	3.72	94.789			
1,000.0	998.0	1,012.1	1,004.1	1.9	2.5	-74.04	108.0	338.6	344.7	4.36	79.078			
1,100.0	1,097.2	1,109.6	1,098.4	2.1	3.0	-71.81	84.0	344.8	337.2	5.07	66.491			
1,200.0	1,196.5	1,199.4	1,184.7	2.4	3.4	-69.24	60.1	352.7	331.9	5.78	57.464			
1,294.9	1,290.6	1,284.0	1,265.5	2.7	3.9	-66.54	37.1	362.7	330.2	6.46	51.093 CC			
1,300.0	1,295.7	1,288.5	1,269.8	2.7	3.9	-66.39	35.9	363.3	330.2	6.50	50.809 ES			
1,400.0	1,395.0	1,377.0	1,354.0	2.9	4.4	-63.50	12.2	376.4	332.4	7.20	46.168			
1,500.0	1,494.2	1,465.4	1,437.9	3.2	4.8	-60.69	-10.7	392.0	338.6	7.88	42.955			
1,600.0	1,593.4	1,559.2	1,526.5	3.5	5.4	-57.69	-35.4	410.4	347.7	8.57	40.571			
1,700.0	1,692.7	1,650.7	1,612.8	3.7	5.9	-54.98	-59.0	429.6	359.1	9.20	39.033			
1,800.0	1,791.9	1,740.9	1,697.4	4.0	6.5	-52.40	-82.5	450.3	373.4	9.81	38.061			
1,900.0	1,891.2	1,836.6	1,786.2	4.3	7.1	-49.55	-109.4	473.6	390.0	10.42	37.423			
2,000.0	1,990.4	1,934.5	1,876.8	4.5	7.8	-46.59	-138.9	496.4	406.8	10.98	37.039 SF			
2,100.0	2,089.6	2,030.3	1,965.8	4.8	8.4	-44.24	-165.5	519.7	425.1	11.48	37.045			
2,200.0	2,188.9	2,126.0	2,055.2	5.1	9.0	-42.29	-190.4	542.9	443.8	11.96	37.094			
2,300.0	2,288.1	2,220.9	2,143.5	5.4	9.6	-40.39	-216.2	566.4	463.6	12.40	37.380			
2,400.0	2,387.4	2,319.5	2,235.6	5.6	10.2	-38.80	-241.2	591.1	483.9	12.83	37.709			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - CANINO 3 (EXISTING) - HUGHES CW WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 7800-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		
0.0	0.0	0.0	0.0	0.0	0.0	128.31	-17.8	22.5	63.8					
100.0	100.0	43.0	43.0	0.1	0.1	128.31	-17.8	22.5	28.7	28.5	0.22	128.411		
200.0	200.0	143.0	143.0	0.3	0.2	128.31	-17.8	22.5	28.7	28.1	0.57	50.139		
300.0	300.0	243.0	243.0	0.5	0.4	128.31	-17.8	22.5	28.7	27.8	0.92	31.151		
400.0	400.0	343.0	343.0	0.7	0.6	128.31	-17.8	22.5	28.7	27.4	1.27	22.595		
500.0	500.0	443.0	443.0	0.8	0.8	128.31	-17.8	22.5	28.7	27.1	1.62	17.726		
600.0	600.0	543.0	543.0	1.0	0.9	-17.77	-17.8	22.5	27.0	25.1	1.97	13.740		
700.0	699.8	642.8	642.8	1.2	1.1	-21.94	-17.8	22.5	22.1	19.8	2.32	9.548		
800.0	799.5	742.5	742.5	1.4	1.3	-35.08	-17.8	22.5	14.4	11.7	2.68	5.382		
900.0	898.8	841.8	841.8	1.6	1.5	-85.66	-17.8	22.5	8.0	4.9	3.12	2.575		
905.1	903.8	846.8	846.8	1.7	1.5	-90.00	-17.8	22.5	8.0	4.9	3.14	2.550 CC, ES, SF		
1,000.0	998.0	941.0	941.0	1.9	1.6	-144.97	-17.8	22.5	14.0	10.6	3.40	4.122		
1,100.0	1,097.2	1,040.2	1,040.2	2.1	1.8	-161.28	-17.8	22.5	25.1	21.4	3.72	6.759		
1,200.0	1,196.5	1,139.5	1,139.5	2.4	2.0	-167.40	-17.8	22.5	37.0	33.0	4.06	9.123		
1,300.0	1,295.7	1,238.7	1,238.7	2.7	2.2	-170.54	-17.8	22.5	49.1	44.7	4.40	11.158		
1,400.0	1,395.0	1,338.0	1,338.0	2.9	2.3	-172.43	-17.8	22.5	61.3	56.5	4.75	12.912		
1,500.0	1,494.2	1,437.2	1,437.2	3.2	2.5	-173.69	-17.8	22.5	73.5	68.4	5.09	14.434		
1,600.0	1,593.4	1,536.4	1,536.4	3.5	2.7	-174.60	-17.8	22.5	85.7	80.3	5.44	15.766		
1,700.0	1,692.7	1,635.7	1,635.7	3.7	2.9	-175.27	-17.8	22.5	98.0	92.2	5.78	16.941		
1,800.0	1,791.9	1,734.9	1,734.9	4.0	3.0	-175.80	-17.8	22.5	110.3	104.1	6.13	17.984		
1,900.0	1,891.2	1,834.2	1,834.2	4.3	3.2	-176.22	-17.8	22.5	122.5	116.1	6.48	18.916		
2,000.0	1,990.4	1,933.4	1,933.4	4.5	3.4	-176.57	-17.8	22.5	134.8	128.0	6.83	19.754		
2,100.0	2,089.6	2,032.6	2,032.6	4.8	3.5	-176.85	-17.8	22.5	147.1	139.9	7.17	20.512		
2,200.0	2,188.9	2,131.9	2,131.9	5.1	3.7	-177.10	-17.8	22.5	159.4	151.9	7.52	21.200		
2,300.0	2,288.1	2,231.1	2,231.1	5.4	3.9	-177.30	-17.8	22.5	171.7	163.8	7.87	21.827		
2,400.0	2,387.4	2,330.4	2,330.4	5.6	4.1	-177.48	-17.8	22.5	184.0	175.8	8.21	22.401		
2,500.0	2,486.6	2,429.6	2,429.6	5.9	4.2	-177.64	-17.8	22.5	196.3	187.7	8.56	22.930		
2,600.0	2,585.8	2,528.8	2,528.8	6.2	4.4	-177.78	-17.8	22.5	208.6	199.7	8.91	23.417		
2,700.0	2,685.1	2,628.1	2,628.1	6.5	4.6	-177.91	-17.8	22.5	220.9	211.6	9.26	23.867		
2,800.0	2,784.3	2,727.3	2,727.3	6.7	4.8	-178.02	-17.8	22.5	233.2	223.6	9.60	24.285		
2,900.0	2,883.5	2,826.5	2,826.5	7.0	4.9	-178.12	-17.8	22.5	245.5	235.5	9.95	24.674		
3,000.0	2,982.8	2,925.8	2,925.8	7.3	5.1	-178.21	-17.8	22.5	257.8	247.5	10.30	25.037		
3,100.0	3,082.0	3,025.0	3,025.0	7.6	5.3	-178.29	-17.8	22.5	270.1	259.5	10.64	25.376		
3,200.0	3,181.3	3,124.3	3,124.3	7.8	5.5	-178.36	-17.8	22.5	282.4	271.4	10.99	25.694		
3,300.0	3,280.5	3,223.5	3,223.5	8.1	5.6	-178.43	-17.8	22.5	294.7	283.4	11.34	25.992		
3,400.0	3,379.7	3,322.7	3,322.7	8.4	5.8	-178.49	-17.8	22.5	307.0	295.3	11.69	26.273		
3,500.0	3,479.0	3,422.0	3,422.0	8.7	6.0	-178.55	-17.8	22.5	319.3	307.3	12.03	26.538		
3,600.0	3,578.2	3,521.2	3,521.2	8.9	6.1	-178.60	-17.8	22.5	331.6	319.2	12.38	26.787		
3,700.0	3,677.5	3,620.5	3,620.5	9.2	6.3	-178.65	-17.8	22.5	343.9	331.2	12.73	27.023		
3,800.0	3,776.7	3,719.7	3,719.7	9.5	6.5	-178.70	-17.8	22.5	356.2	343.1	13.07	27.247		
3,900.0	3,875.9	3,818.9	3,818.9	9.8	6.7	-178.74	-17.8	22.5	368.5	355.1	13.42	27.459		
4,000.0	3,975.2	3,918.2	3,918.2	10.1	6.8	-178.79	-17.8	22.5	380.8	367.1	13.77	27.660		
4,100.0	4,074.4	4,017.4	4,017.4	10.3	7.0	-178.82	-17.8	22.5	393.1	379.0	14.12	27.852		
4,200.0	4,173.7	4,116.7	4,116.7	10.6	7.2	-178.86	-17.8	22.5	405.4	391.0	14.46	28.034		
4,300.0	4,272.9	4,215.9	4,215.9	10.9	7.4	-178.89	-17.8	22.5	417.7	402.9	14.81	28.208		
4,400.0	4,372.1	4,315.1	4,315.1	11.2	7.5	-178.92	-17.8	22.5	430.0	414.9	15.16	28.373		
4,500.0	4,471.4	4,414.4	4,414.4	11.4	7.7	-178.95	-17.8	22.5	442.4	426.9	15.50	28.532		
4,600.0	4,570.6	4,513.6	4,513.6	11.7	7.9	-178.98	-17.8	22.5	454.7	438.8	15.85	28.683		
4,700.0	4,669.9	4,612.9	4,612.9	12.0	8.1	-179.01	-17.8	22.5	467.0	450.8	16.20	28.828		
4,800.0	4,769.1	4,712.1	4,712.1	12.3	8.2	-179.03	-17.8	22.5	479.3	462.7	16.55	28.967		
4,900.0	4,868.3	4,811.3	4,811.3	12.5	8.4	-179.06	-17.8	22.5	491.6	474.7	16.89	29.100		

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 Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4A-32H-O268 - 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	2.0	2.0	0.0	0.0	-94.27	-5.6	-75.0	75.2					
100.0	100.0	102.0	102.0	0.1	0.2	-94.27	-5.6	-75.0	75.2	74.9	0.30	250.634		
166.0	166.0	168.0	168.0	0.3	0.3	-94.27	-5.6	-75.0	75.2	74.7	0.53	141.819 CC		
200.0	200.0	202.0	202.0	0.3	0.3	-94.27	-5.6	-75.0	75.2	74.6	0.65	115.892 ES		
300.0	300.0	300.7	300.7	0.5	0.5	-94.06	-5.4	-75.9	76.1	75.1	1.00	76.383		
400.0	400.0	400.0	400.0	0.7	0.7	-93.48	-4.8	-78.4	78.6	77.3	1.34	58.457		
500.0	500.0	498.0	497.9	0.8	0.9	-92.62	-3.8	-82.6	82.8	81.1	1.69	48.921		
600.0	600.0	596.3	596.0	1.0	1.1	124.27	-2.4	-88.3	89.6	87.5	2.04	43.919		
700.0	699.8	694.9	694.3	1.2	1.3	127.62	-0.6	-95.5	99.9	97.5	2.39	41.786		
800.0	799.5	793.8	792.9	1.4	1.5	131.64	1.1	-102.9	113.1	110.3	2.75	41.081 SF		
900.0	898.8	892.1	890.9	1.6	1.7	139.85	2.9	-110.1	129.0	125.8	3.12	41.399		
1,000.0	998.0	990.3	988.8	1.9	1.9	144.27	4.7	-117.4	146.4	142.9	3.48	42.071		
1,100.0	1,097.2	1,088.5	1,086.7	2.1	2.1	146.74	6.5	-124.7	164.1	160.3	3.84	42.712		
1,200.0	1,196.5	1,186.7	1,184.6	2.4	2.3	148.73	8.2	-132.0	182.1	177.9	4.20	43.310		
1,300.0	1,295.7	1,284.8	1,282.5	2.7	2.5	150.36	10.0	-139.3	200.3	195.7	4.57	43.858		
1,400.0	1,395.0	1,383.0	1,380.4	2.9	2.7	151.72	11.8	-146.6	218.6	213.6	4.93	44.359		
1,500.0	1,494.2	1,481.2	1,478.3	3.2	3.0	152.87	13.5	-153.9	237.0	231.7	5.29	44.815		
1,600.0	1,593.4	1,579.4	1,576.2	3.5	3.2	153.86	15.3	-161.2	255.4	249.8	5.65	45.230		
1,700.0	1,692.7	1,677.6	1,674.1	3.7	3.4	154.71	17.1	-168.4	274.0	268.0	6.01	45.608		
1,800.0	1,791.9	1,775.8	1,772.0	4.0	3.6	155.45	18.8	-175.7	292.6	286.2	6.37	45.953		
1,900.0	1,891.2	1,874.0	1,870.0	4.3	3.8	156.11	20.6	-183.0	311.2	304.5	6.73	46.269		
2,000.0	1,990.4	1,972.2	1,967.9	4.5	4.0	156.69	22.4	-190.3	329.9	322.8	7.09	46.559		
2,100.0	2,089.6	2,070.4	2,065.8	4.8	4.2	157.20	24.1	-197.6	348.6	341.1	7.44	46.825		
2,200.0	2,188.9	2,168.6	2,163.7	5.1	4.5	157.67	25.9	-204.9	367.3	359.5	7.80	47.071		
2,300.0	2,288.1	2,266.7	2,261.6	5.4	4.7	158.09	27.7	-212.2	386.0	377.9	8.16	47.298		
2,400.0	2,387.4	2,364.9	2,359.5	5.6	4.9	158.47	29.4	-219.4	404.8	396.3	8.52	47.508		
2,500.0	2,486.6	2,463.1	2,457.4	5.9	5.1	158.82	31.2	-226.7	423.6	414.7	8.88	47.704		
2,600.0	2,585.8	2,561.3	2,555.3	6.2	5.3	159.14	33.0	-234.0	442.4	433.1	9.24	47.886		
2,700.0	2,685.1	2,659.5	2,653.2	6.5	5.5	159.43	34.7	-241.3	461.2	451.6	9.60	48.055		
2,800.0	2,784.3	2,757.7	2,751.1	6.7	5.8	159.70	36.5	-248.6	480.0	470.0	9.96	48.214		
2,900.0	2,883.5	2,855.9	2,849.0	7.0	6.0	159.95	38.3	-255.9	498.8	488.5	10.31	48.363		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4B-32H-O268 - 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	1.0	1.0	0.0	0.0	-89.69	0.4	-70.0	70.0					
100.0	100.0	101.0	101.0	0.1	0.2	-89.69	0.4	-70.0	70.0	69.7	0.30	234.544		
166.3	166.3	167.3	167.3	0.3	0.3	-89.69	0.4	-70.0	70.0	69.5	0.53	132.079 CC		
200.0	200.0	201.0	201.0	0.3	0.3	-89.69	0.4	-70.0	70.0	69.4	0.65	108.108 ES		
300.0	300.0	300.0	300.0	0.5	0.5	-89.41	0.7	-70.8	70.8	69.8	0.99	71.172		
400.0	400.0	398.7	398.7	0.7	0.7	-88.61	1.8	-73.1	73.2	71.9	1.34	54.553		
500.0	500.0	498.2	498.1	0.8	0.9	-87.48	3.4	-76.8	76.9	75.2	1.69	45.473		
600.0	600.0	598.0	597.8	1.0	1.0	129.45	5.0	-80.5	81.8	79.7	2.04	40.046		
700.0	699.8	697.6	697.4	1.2	1.2	132.81	6.7	-84.2	89.1	86.7	2.40	37.201		
800.0	799.5	796.9	796.5	1.4	1.4	137.01	8.3	-87.8	99.2	96.5	2.75	36.035 SF		
900.0	898.8	895.7	895.2	1.6	1.6	145.44	9.9	-91.5	112.3	109.2	3.11	36.082		
1,000.0	998.0	994.4	993.9	1.9	1.8	149.99	11.6	-95.2	126.8	123.3	3.47	36.538		
1,100.0	1,097.2	1,093.1	1,092.5	2.1	2.0	152.59	13.2	-98.9	141.7	137.8	3.83	37.013		
1,200.0	1,196.5	1,191.8	1,191.1	2.4	2.2	154.70	14.8	-102.5	156.7	152.6	4.18	37.479		
1,300.0	1,295.7	1,290.5	1,289.7	2.7	2.3	156.43	16.5	-106.2	172.0	167.5	4.54	37.922		
1,400.0	1,395.0	1,389.2	1,388.4	2.9	2.5	157.89	18.1	-109.9	187.4	182.5	4.89	38.335		
1,500.0	1,494.2	1,487.9	1,487.0	3.2	2.7	159.12	19.7	-113.5	202.9	197.6	5.24	38.719		
1,600.0	1,593.4	1,586.6	1,585.6	3.5	2.9	160.17	21.3	-117.2	218.4	212.8	5.59	39.072		
1,700.0	1,692.7	1,685.3	1,684.2	3.7	3.1	161.09	23.0	-120.9	234.1	228.1	5.94	39.398		
1,800.0	1,791.9	1,784.0	1,782.9	4.0	3.3	161.89	24.6	-124.5	249.7	243.4	6.29	39.698		
1,900.0	1,891.2	1,882.7	1,881.5	4.3	3.5	162.60	26.2	-128.2	265.5	258.8	6.64	39.975		
2,000.0	1,990.4	1,981.4	1,980.1	4.5	3.6	163.23	27.9	-131.9	281.2	274.2	6.99	40.230		
2,100.0	2,089.6	2,080.2	2,078.7	4.8	3.8	163.79	29.5	-135.5	297.0	289.7	7.34	40.466		
2,200.0	2,188.9	2,178.9	2,177.4	5.1	4.0	164.29	31.1	-139.2	312.8	305.1	7.69	40.684		
2,300.0	2,288.1	2,277.6	2,276.0	5.4	4.2	164.75	32.8	-142.9	328.6	320.6	8.04	40.887		
2,400.0	2,387.4	2,376.3	2,374.6	5.6	4.4	165.16	34.4	-146.5	344.5	336.1	8.39	41.076		
2,500.0	2,486.6	2,475.0	2,473.2	5.9	4.6	165.54	36.0	-150.2	360.4	351.6	8.74	41.251		
2,600.0	2,585.8	2,573.7	2,571.9	6.2	4.8	165.88	37.6	-153.9	376.2	367.1	9.08	41.415		
2,700.0	2,685.1	2,672.4	2,670.5	6.5	4.9	166.20	39.3	-157.5	392.1	382.7	9.43	41.568		
2,800.0	2,784.3	2,771.1	2,769.1	6.7	5.1	166.50	40.9	-161.2	408.0	398.2	9.78	41.712		
2,900.0	2,883.5	2,869.8	2,867.7	7.0	5.3	166.77	42.5	-164.9	423.9	413.8	10.13	41.847		
3,000.0	2,982.8	2,968.5	2,966.4	7.3	5.5	167.02	44.2	-168.5	439.9	429.4	10.48	41.974		
3,100.0	3,082.0	3,067.2	3,065.0	7.6	5.7	167.25	45.8	-172.2	455.8	445.0	10.83	42.093		
3,200.0	3,181.3	3,165.9	3,163.6	7.8	5.9	167.47	47.4	-175.9	471.7	460.5	11.18	42.205		
3,300.0	3,280.5	3,264.6	3,262.2	8.1	6.1	167.67	49.1	-179.5	487.7	476.1	11.53	42.312		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4C-32H-O268 - 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		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			
0.0	0.0	1.0	1.0	0.0	0.0	-94.97	-5.7	-65.0	65.3					
100.0	100.0	101.0	101.0	0.1	0.2	-94.97	-5.7	-65.0	65.3	65.0	0.30	218.717		
200.0	200.0	201.0	201.0	0.3	0.3	-94.97	-5.7	-65.0	65.3	64.6	0.65	100.810		
300.0	300.0	301.0	301.0	0.5	0.5	-94.97	-5.7	-65.0	65.3	64.3	1.00	65.500		
400.0	400.0	401.0	401.0	0.7	0.7	-94.97	-5.7	-65.0	65.3	63.9	1.35	48.509		
500.0	500.0	501.0	501.0	0.8	0.8	-94.97	-5.7	-65.0	65.3	63.6	1.69	38.517		
511.2	511.2	512.3	512.3	0.9	0.9	120.05	-5.6	-65.0	65.3	63.5	1.73	37.641 CC		
600.0	600.0	602.0	602.0	1.0	1.0	121.70	-5.2	-64.2	65.4	63.3	2.05	31.932 ES		
700.0	699.8	702.5	702.4	1.2	1.2	126.53	-4.0	-62.0	66.1	63.7	2.40	27.492		
800.0	799.5	802.1	802.0	1.4	1.4	133.45	-2.6	-59.6	69.4	66.6	2.77	25.068		
900.0	898.8	901.4	901.3	1.6	1.6	145.09	-1.2	-57.2	76.1	73.0	3.13	24.316		
1,000.0	998.0	1,000.6	1,000.5	1.9	1.7	152.30	0.2	-54.7	84.9	81.4	3.49	24.333		
1,100.0	1,097.2	1,099.9	1,099.7	2.1	1.9	157.11	1.5	-52.3	94.4	90.5	3.84	24.572		
1,200.0	1,196.5	1,199.2	1,198.9	2.4	2.1	161.01	2.9	-49.9	104.4	100.2	4.19	24.918		
1,300.0	1,295.7	1,298.4	1,298.2	2.7	2.3	164.22	4.3	-47.4	114.8	110.3	4.54	25.307		
1,400.0	1,395.0	1,397.7	1,397.4	2.9	2.4	166.90	5.7	-45.0	125.6	120.7	4.89	25.705		
1,500.0	1,494.2	1,497.0	1,496.6	3.2	2.6	169.14	7.0	-42.6	136.5	131.3	5.23	26.094		
1,600.0	1,593.4	1,596.2	1,595.8	3.5	2.8	171.06	8.4	-40.1	147.7	142.1	5.58	26.464		
1,700.0	1,692.7	1,695.5	1,695.1	3.7	3.0	172.70	9.8	-37.7	159.0	153.0	5.93	26.812		
1,800.0	1,791.9	1,794.8	1,794.3	4.0	3.2	174.12	11.1	-35.3	170.3	164.1	6.28	27.136		
1,900.0	1,891.2	1,894.0	1,893.5	4.3	3.3	175.37	12.5	-32.8	181.8	175.2	6.63	27.437		
2,000.0	1,990.4	1,993.3	1,992.7	4.5	3.5	176.47	13.9	-30.4	193.4	186.4	6.98	27.715		
2,100.0	2,089.6	2,092.6	2,092.0	4.8	3.7	177.44	15.3	-28.0	205.0	197.7	7.33	27.973		
2,200.0	2,188.9	2,191.8	2,191.2	5.1	3.9	178.31	16.6	-25.5	216.7	209.0	7.68	28.211		
2,300.0	2,288.1	2,291.1	2,290.4	5.4	4.1	179.09	18.0	-23.1	228.4	220.4	8.03	28.432		
2,400.0	2,387.4	2,390.4	2,389.7	5.6	4.2	179.79	19.4	-20.7	240.1	231.8	8.39	28.637		
2,500.0	2,486.6	2,489.6	2,488.9	5.9	4.4	-179.57	20.8	-18.2	251.9	243.2	8.74	28.827		
2,600.0	2,585.8	2,588.9	2,588.1	6.2	4.6	-178.99	22.1	-15.8	263.7	254.6	9.09	29.005		
2,700.0	2,685.1	2,688.2	2,687.3	6.5	4.8	-178.46	23.5	-13.4	275.6	266.1	9.45	29.170		
2,800.0	2,784.3	2,787.4	2,786.6	6.7	5.0	-177.97	24.9	-10.9	287.4	277.6	9.80	29.324		
2,900.0	2,883.5	2,886.7	2,885.8	7.0	5.1	-177.52	26.3	-8.5	299.3	289.2	10.16	29.468		
3,000.0	2,982.8	2,986.0	2,985.0	7.3	5.3	-177.11	27.6	-6.1	311.2	300.7	10.51	29.603		
3,100.0	3,082.0	3,085.2	3,084.2	7.6	5.5	-176.72	29.0	-3.7	323.1	312.3	10.87	29.730		
3,200.0	3,181.3	3,184.5	3,183.5	7.8	5.7	-176.37	30.4	-1.2	335.0	323.8	11.22	29.849		
3,300.0	3,280.5	3,283.7	3,282.7	8.1	5.9	-176.03	31.8	1.2	347.0	335.4	11.58	29.961		
3,400.0	3,379.7	3,383.0	3,381.9	8.4	6.0	-175.72	33.1	3.6	358.9	347.0	11.94	30.067		
3,500.0	3,479.0	3,482.3	3,481.1	8.7	6.2	-175.43	34.5	6.1	370.9	358.6	12.29	30.167		
3,600.0	3,578.2	3,581.5	3,580.4	8.9	6.4	-175.16	35.9	8.5	382.9	370.2	12.65	30.262		
3,700.0	3,677.5	3,680.8	3,679.6	9.2	6.6	-174.91	37.2	10.9	394.8	381.8	13.01	30.351		
3,800.0	3,776.7	3,780.1	3,778.8	9.5	6.8	-174.67	38.6	13.4	406.8	393.4	13.37	30.436		
3,900.0	3,875.9	3,879.3	3,878.0	9.8	6.9	-174.44	40.0	15.8	418.8	405.1	13.72	30.516		
4,000.0	3,975.2	3,978.6	3,977.3	10.1	7.1	-174.23	41.4	18.2	430.8	416.7	14.08	30.593		
4,100.0	4,074.4	4,077.9	4,076.5	10.3	7.3	-174.02	42.7	20.7	442.8	428.3	14.44	30.666		
4,200.0	4,173.7	4,177.1	4,175.7	10.6	7.5	-173.83	44.1	23.1	454.8	440.0	14.80	30.735		
4,300.0	4,272.9	4,276.4	4,275.0	10.9	7.7	-173.65	45.5	25.5	466.8	451.6	15.15	30.801		
4,400.0	4,372.1	4,375.7	4,374.2	11.2	7.8	-173.48	46.9	28.0	478.8	463.3	15.51	30.865		
4,500.0	4,471.4	4,474.9	4,473.4	11.4	8.0	-173.31	48.2	30.4	490.8	474.9	15.87	30.925		
7,300.0	7,221.5	7,698.2	7,425.8	17.5	15.8	-108.75	-431.4	102.8	466.3	435.3	30.97	15.055		
7,400.0	7,292.4	7,620.6	7,412.5	17.1	15.1	-101.90	-355.1	102.5	441.6	412.2	29.42	15.012 SF		
7,500.0	7,350.2	7,551.3	7,391.9	16.8	14.5	-95.00	-288.9	102.0	430.9	402.7	28.18	15.292		
7,529.0	7,364.2	7,532.3	7,384.9	16.7	14.4	-92.95	-271.2	101.8	430.4	402.5	27.90	15.427		
7,600.0	7,393.0	7,486.9	7,365.8	16.6	14.0	-87.83	-230.1	101.3	433.5	406.2	27.23	15.920		

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 Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4C-32H-O268 - 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	
7,700.0	7,419.5	7,425.6	7,334.9	16.5	13.7	-80.54	-177.1	100.6	447.0	420.5	26.44	16.902	
7,800.0	7,429.0	7,366.3	7,299.9	16.5	13.4	-73.48	-129.4	99.7	468.2	442.5	25.74	18.193	
7,900.0	7,429.0	7,312.2	7,263.7	16.8	13.2	-69.14	-89.2	98.8	497.3	471.9	25.36	19.606	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4D-32H-O268 - 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		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	1.0	1.0	0.0	0.0	-89.69	0.3	-60.0	60.0					
100.0	100.0	101.0	101.0	0.1	0.2	-89.69	0.3	-60.0	60.0	59.7	201.038			
200.0	200.0	201.0	201.0	0.3	0.3	-89.69	0.3	-60.0	60.0	59.4	92.662			
300.0	300.0	301.0	301.0	0.5	0.5	-89.69	0.3	-60.0	60.0	59.0	60.206			
400.0	400.0	401.0	401.0	0.7	0.7	-89.69	0.3	-60.0	60.0	58.7	44.588			
500.0	500.0	501.0	501.0	0.8	0.8	-89.69	0.3	-60.0	60.0	58.3	35.404			
505.5	505.5	506.6	506.6	0.9	0.9	125.31	0.3	-60.0	60.0	58.3	1.71	35.000 CC		
600.0	600.0	602.0	602.0	1.0	1.0	126.88	0.5	-59.1	60.2	58.1	2.05	29.396 ES		
700.0	699.8	702.9	702.9	1.2	1.2	131.52	1.2	-56.5	60.9	58.5	2.40	25.357		
800.0	799.5	803.6	803.4	1.4	1.4	138.86	2.2	-52.2	63.1	60.3	2.77	22.809		
900.0	898.8	903.9	903.6	1.6	1.6	151.83	3.7	-46.2	67.4	64.3	3.13	21.563		
1,000.0	998.0	1,003.6	1,002.9	1.9	1.8	160.93	5.4	-38.9	73.1	69.6	3.49	20.958		
1,100.0	1,097.2	1,102.9	1,102.0	2.1	2.0	167.56	7.2	-31.7	79.9	76.1	3.85	20.749		
1,200.0	1,196.5	1,202.3	1,201.1	2.4	2.2	173.10	8.9	-24.4	87.6	83.4	4.22	20.764		
1,300.0	1,295.7	1,301.7	1,300.2	2.7	2.4	177.71	10.7	-17.2	96.0	91.4	4.59	20.893		
1,400.0	1,395.0	1,401.1	1,399.3	2.9	2.6	-178.43	12.4	-9.9	104.9	99.9	4.98	21.077		
1,500.0	1,494.2	1,500.4	1,498.4	3.2	2.8	-175.19	14.2	-2.6	114.2	108.8	5.37	21.282		
1,600.0	1,593.4	1,599.8	1,597.5	3.5	3.0	-172.44	16.0	4.6	123.8	118.0	5.76	21.490		
1,700.0	1,692.7	1,699.2	1,696.6	3.7	3.2	-170.09	17.7	11.9	133.6	127.5	6.16	21.693		
1,800.0	1,791.9	1,798.6	1,795.7	4.0	3.4	-168.07	19.5	19.1	143.7	137.1	6.57	21.886		
1,900.0	1,891.2	1,897.9	1,894.8	4.3	3.7	-166.31	21.2	26.4	153.9	146.9	6.97	22.067		
2,000.0	1,990.4	1,997.3	1,993.9	4.5	3.9	-164.77	23.0	33.7	164.2	156.8	7.38	22.235		
2,100.0	2,089.6	2,096.7	2,093.0	4.8	4.1	-163.42	24.7	40.9	174.6	166.8	7.80	22.392		
2,200.0	2,188.9	2,196.1	2,192.1	5.1	4.3	-162.21	26.5	48.2	185.1	176.9	8.22	22.537		
2,300.0	2,288.1	2,295.4	2,291.2	5.4	4.5	-161.14	28.3	55.4	195.7	187.1	8.63	22.672		
2,400.0	2,387.4	2,394.8	2,390.3	5.6	4.7	-160.18	30.0	62.7	206.4	197.3	9.05	22.797		
2,500.0	2,486.6	2,494.2	2,489.3	5.9	4.9	-159.31	31.8	70.0	217.1	207.6	9.47	22.913		
2,600.0	2,585.8	2,593.6	2,588.4	6.2	5.2	-158.52	33.5	77.2	227.8	217.9	9.90	23.021		
2,700.0	2,685.1	2,692.9	2,687.5	6.5	5.4	-157.80	35.3	84.5	238.6	228.3	10.32	23.121		
2,800.0	2,784.3	2,792.3	2,786.6	6.7	5.6	-157.15	37.0	91.8	249.4	238.7	10.74	23.215		
2,900.0	2,883.5	2,891.7	2,885.7	7.0	5.8	-156.55	38.8	99.0	260.2	249.1	11.17	23.303		
3,000.0	2,982.8	2,991.0	2,984.8	7.3	6.0	-156.00	40.6	106.3	271.1	259.5	11.59	23.386		
3,100.0	3,082.0	3,090.4	3,083.9	7.6	6.2	-155.49	42.3	113.5	282.0	270.0	12.02	23.463		
3,200.0	3,181.3	3,189.8	3,183.0	7.8	6.5	-155.02	44.1	120.8	292.9	280.5	12.45	23.536		
3,300.0	3,280.5	3,289.2	3,282.1	8.1	6.7	-154.58	45.8	128.1	303.9	291.0	12.87	23.604		
3,400.0	3,379.7	3,388.5	3,381.2	8.4	6.9	-154.17	47.6	135.3	314.8	301.5	13.30	23.668		
3,500.0	3,479.0	3,487.9	3,480.3	8.7	7.1	-153.79	49.3	142.6	325.8	312.0	13.73	23.729		
3,600.0	3,578.2	3,587.3	3,579.4	8.9	7.3	-153.44	51.1	149.8	336.7	322.6	14.16	23.787		
3,700.0	3,677.5	3,686.7	3,678.5	9.2	7.5	-153.11	52.9	157.1	347.7	333.1	14.59	23.841		
3,800.0	3,776.7	3,786.0	3,777.6	9.5	7.8	-152.79	54.6	164.4	358.7	343.7	15.01	23.893		
3,900.0	3,875.9	3,885.4	3,876.7	9.8	8.0	-152.50	56.4	171.6	369.7	354.3	15.44	23.942		
4,000.0	3,975.2	3,984.8	3,975.8	10.1	8.2	-152.22	58.1	178.9	380.8	364.9	15.87	23.989		
4,100.0	4,074.4	4,084.2	4,074.8	10.3	8.4	-151.96	59.9	186.2	391.8	375.5	16.30	24.034		
4,200.0	4,173.7	4,183.5	4,173.9	10.6	8.6	-151.72	61.6	193.4	402.8	386.1	16.73	24.076		
4,300.0	4,272.9	4,282.9	4,273.0	10.9	8.8	-151.48	63.4	200.7	413.9	396.7	17.16	24.116		
4,400.0	4,372.1	4,382.3	4,372.1	11.2	9.1	-151.26	65.2	207.9	424.9	407.3	17.59	24.155		
4,500.0	4,471.4	4,481.7	4,471.2	11.4	9.3	-151.05	66.9	215.2	436.0	417.9	18.02	24.192		
4,600.0	4,570.6	4,581.0	4,570.3	11.7	9.5	-150.85	68.7	222.5	447.0	428.6	18.45	24.227		
4,700.0	4,669.9	4,680.4	4,669.4	12.0	9.7	-150.66	70.4	229.7	458.1	439.2	18.88	24.261		
4,800.0	4,769.1	4,779.8	4,768.5	12.3	9.9	-150.48	72.2	237.0	469.1	449.8	19.31	24.293		
4,900.0	4,868.3	4,879.2	4,867.6	12.5	10.1	-150.31	74.0	244.2	480.2	460.5	19.74	24.324		
5,000.0	4,967.6	4,978.5	4,966.7	12.8	10.4	-150.14	75.7	251.5	491.3	471.1	20.17	24.354		

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 Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4D-32H-O268 - 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	
7,300.0	7,221.5	8,014.5	7,710.3	17.5	18.3	-165.92	-414.7	452.6	494.1	465.1	29.04	17.014		
7,400.0	7,292.4	7,802.8	7,656.0	17.1	16.8	-152.51	-211.4	448.6	408.2	381.1	27.04	15.095		
7,500.0	7,350.2	7,699.6	7,603.4	16.8	16.3	-144.43	-122.8	444.7	320.3	295.2	25.11	12.754		
7,600.0	7,393.0	7,623.3	7,554.8	16.6	16.0	-136.56	-64.2	441.2	236.0	212.0	24.06	9.809		
7,700.0	7,419.5	7,557.5	7,507.0	16.5	15.8	-124.89	-19.2	437.7	160.8	136.3	24.59	6.541		
7,800.0	7,429.0	7,496.8	7,458.6	16.5	15.7	-105.82	17.2	434.1	109.1	82.8	26.31	4.148		
7,846.3	7,429.3	7,471.3	7,437.2	16.6	15.6	-93.89	30.9	432.5	101.9	75.1	26.77	3.806 SF		
7,900.0	7,429.0	7,445.3	7,414.7	16.8	15.6	-81.58	43.9	430.9	111.9	85.4	26.48	4.226		
8,000.0	7,429.0	7,406.5	7,380.2	17.2	15.5	-64.72	61.4	428.4	169.7	144.5	25.18	6.739		
8,100.0	7,429.0	7,376.5	7,352.7	17.7	15.5	-54.25	73.2	426.3	249.4	225.3	24.08	10.354		
8,200.0	7,429.0	7,350.0	7,327.9	18.5	15.4	-46.92	82.5	424.5	337.0	313.7	23.33	14.445		
8,300.0	7,429.0	7,333.4	7,312.2	19.3	15.4	-43.11	87.7	423.4	428.4	405.2	23.23	18.445		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4E-32H-O268 - 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		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			
0.0	0.0	1.0	1.0	0.0	0.0	-97.29	-5.8	-45.0	45.4					
100.0	100.0	101.0	101.0	0.1	0.2	-97.29	-5.8	-45.0	45.4	45.1	0.30	152.113		
200.0	200.0	201.0	201.0	0.3	0.3	-97.29	-5.8	-45.0	45.4	44.8	0.65	70.111		
300.0	300.0	301.0	301.0	0.5	0.5	-97.29	-5.8	-45.0	45.4	44.4	1.00	45.554		
400.0	400.0	401.0	401.0	0.7	0.7	-97.29	-5.8	-45.0	45.4	44.1	1.35	33.737		
500.0	500.0	501.0	501.0	0.8	0.8	-97.29	-5.8	-45.0	45.4	43.7	1.69	26.788 CC, ES		
600.0	600.0	601.0	601.0	1.0	1.0	119.61	-5.8	-45.0	46.2	44.2	2.04	22.610		
700.0	699.8	700.8	700.8	1.2	1.2	124.88	-5.8	-45.0	49.0	46.6	2.40	20.424		
800.0	799.5	800.5	800.5	1.4	1.4	132.33	-5.8	-45.0	54.5	51.7	2.76	19.720		
900.0	898.8	899.8	899.8	1.6	1.5	144.11	-5.8	-45.0	63.2	60.1	3.12	20.228		
1,000.0	998.0	1,000.1	1,000.1	1.9	1.7	151.22	-5.6	-44.2	72.9	69.4	3.48	20.951		
1,100.0	1,097.2	1,100.6	1,100.6	2.1	1.9	156.36	-5.2	-41.6	81.8	78.0	3.83	21.352		
1,200.0	1,196.5	1,201.2	1,201.1	2.4	2.1	161.19	-4.4	-37.2	89.9	85.7	4.18	21.514		
1,300.0	1,295.7	1,301.8	1,301.5	2.7	2.3	165.93	-3.4	-31.2	97.2	92.7	4.52	21.497		
1,400.0	1,395.0	1,402.4	1,401.8	2.9	2.5	170.72	-2.0	-23.3	104.0	99.1	4.87	21.342		
1,500.0	1,494.2	1,503.0	1,501.9	3.2	2.7	175.63	-0.4	-13.8	110.4	105.1	5.24	21.078		
1,600.0	1,593.4	1,603.0	1,601.3	3.5	2.9	-179.34	1.6	-2.7	116.6	111.0	5.62	20.746		
1,700.0	1,692.7	1,702.3	1,699.9	3.7	3.1	-174.71	3.5	8.8	123.5	117.5	6.03	20.487		
1,800.0	1,791.9	1,801.6	1,798.5	4.0	3.4	-170.58	5.5	20.3	131.1	124.6	6.46	20.307		
1,900.0	1,891.2	1,900.9	1,897.1	4.3	3.6	-166.92	7.5	31.7	139.3	132.4	6.90	20.185		
2,000.0	1,990.4	2,000.2	1,995.7	4.5	3.8	-163.67	9.5	43.2	148.0	140.6	7.36	20.106		
2,100.0	2,089.6	2,099.5	2,094.3	4.8	4.1	-160.79	11.5	54.7	157.1	149.3	7.83	20.060		
2,200.0	2,188.9	2,198.8	2,192.9	5.1	4.3	-158.23	13.5	66.2	166.6	158.3	8.31	20.039		
2,300.0	2,288.1	2,298.0	2,291.5	5.4	4.6	-155.95	15.4	77.6	176.4	167.6	8.80	20.039		
2,400.0	2,387.4	2,397.3	2,390.1	5.6	4.8	-153.91	17.4	89.1	186.4	177.1	9.29	20.055		
2,500.0	2,486.6	2,496.6	2,488.7	5.9	5.1	-152.08	19.4	100.6	196.6	186.8	9.79	20.082		
2,600.0	2,585.8	2,595.9	2,587.3	6.2	5.4	-150.43	21.4	112.0	207.0	196.8	10.29	20.118		
2,700.0	2,685.1	2,695.2	2,685.9	6.5	5.6	-148.94	23.4	123.5	217.6	206.8	10.79	20.162		
2,800.0	2,784.3	2,794.5	2,784.5	6.7	5.9	-147.59	25.4	135.0	228.3	217.0	11.30	20.210		
2,900.0	2,883.5	2,893.8	2,883.1	7.0	6.1	-146.36	27.3	146.4	239.1	227.3	11.80	20.262		
3,000.0	2,982.8	2,993.1	2,981.7	7.3	6.4	-145.24	29.3	157.9	250.0	237.7	12.31	20.316		
3,100.0	3,082.0	3,092.4	3,080.3	7.6	6.6	-144.21	31.3	169.4	261.0	248.2	12.81	20.372		
3,200.0	3,181.3	3,191.6	3,178.9	7.8	6.9	-143.26	33.3	180.8	272.1	258.8	13.32	20.429		
3,300.0	3,280.5	3,290.9	3,277.5	8.1	7.2	-142.39	35.3	192.3	283.3	269.4	13.83	20.486		
3,400.0	3,379.7	3,390.2	3,376.1	8.4	7.4	-141.58	37.3	203.8	294.5	280.1	14.33	20.544		
3,500.0	3,479.0	3,489.5	3,474.7	8.7	7.7	-140.84	39.2	215.2	305.7	290.9	14.84	20.600		
3,600.0	3,578.2	3,588.8	3,573.3	8.9	8.0	-140.14	41.2	226.7	317.0	301.7	15.35	20.656		
3,700.0	3,677.5	3,688.1	3,672.0	9.2	8.2	-139.50	43.2	238.2	328.4	312.5	15.85	20.712		
3,800.0	3,776.7	3,787.4	3,770.6	9.5	8.5	-138.89	45.2	249.6	339.8	323.4	16.36	20.766		
3,900.0	3,875.9	3,886.7	3,869.2	9.8	8.7	-138.33	47.2	261.1	351.2	334.3	16.87	20.819		
4,000.0	3,975.2	3,985.9	3,967.8	10.1	9.0	-137.80	49.2	272.6	362.6	345.3	17.38	20.871		
4,100.0	4,074.4	4,085.2	4,066.4	10.3	9.3	-137.31	51.1	284.1	374.1	356.2	17.88	20.921		
4,200.0	4,173.7	4,184.5	4,165.0	10.6	9.5	-136.84	53.1	295.5	385.6	367.2	18.39	20.971		
4,300.0	4,272.9	4,283.8	4,263.6	10.9	9.8	-136.40	55.1	307.0	397.2	378.3	18.90	21.019		
4,400.0	4,372.1	4,383.1	4,362.2	11.2	10.1	-135.99	57.1	318.5	408.7	389.3	19.40	21.066		
4,500.0	4,471.4	4,482.4	4,460.8	11.4	10.3	-135.59	59.1	329.9	420.3	400.4	19.91	21.112		
4,600.0	4,570.6	4,581.7	4,559.4	11.7	10.6	-135.22	61.1	341.4	431.9	411.5	20.41	21.156		
4,700.0	4,669.9	4,681.0	4,658.0	12.0	10.9	-134.87	63.0	352.9	443.5	422.6	20.92	21.199		
4,800.0	4,769.1	4,780.2	4,756.6	12.3	11.1	-134.54	65.0	364.3	455.1	433.7	21.43	21.241		
4,900.0	4,868.3	4,879.5	4,855.2	12.5	11.4	-134.22	67.0	375.8	466.8	444.8	21.93	21.282		
5,000.0	4,967.6	4,978.8	4,953.8	12.8	11.7	-133.92	69.0	387.3	478.4	456.0	22.44	21.322		
5,100.0	5,066.8	5,078.1	5,052.4	13.1	11.9	-133.63	71.0	398.7	490.1	467.1	22.94	21.360		

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 Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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													S32-T2N-R68W (File/Hwy 52) - Hwy 52 4E-32H-O268 - 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						
7,100.0	7,048.9	7,880.1	7,429.0	18.0	21.3	117.18	-546.0	690.2	420.2	394.5	25.70	16.350						
7,200.0	7,139.5	7,838.7	7,429.0	17.8	20.9	125.15	-504.6	689.3	336.7	311.7	25.02	13.458						
7,300.0	7,221.5	7,771.9	7,428.4	17.5	20.3	123.83	-437.8	687.7	264.8	240.2	24.59	10.766						
7,400.0	7,292.4	7,682.5	7,417.4	17.1	19.6	113.51	-349.2	684.4	203.1	177.7	25.40	7.997						
7,500.0	7,350.2	7,605.3	7,397.1	16.8	19.1	99.13	-274.9	680.4	158.5	131.6	26.91	5.891						
7,588.8	7,389.0	7,542.8	7,373.4	16.6	18.8	82.89	-217.3	676.3	144.1	116.5	27.59	5.223 SF						
7,600.0	7,393.0	7,535.2	7,370.1	16.6	18.7	80.71	-210.5	675.8	144.4	116.8	27.55	5.240						
7,700.0	7,419.5	7,469.7	7,338.0	16.5	18.4	61.47	-153.6	670.7	164.0	138.2	25.80	6.355						
7,800.0	7,429.0	7,407.1	7,301.5	16.5	18.1	45.51	-103.1	665.3	203.6	180.7	22.95	8.871						
7,900.0	7,429.0	7,350.0	7,263.6	16.8	17.9	36.91	-60.8	659.9	255.0	233.5	21.53	11.844						
8,000.0	7,429.0	7,300.0	7,227.1	17.2	17.8	30.65	-27.0	654.9	318.2	297.6	20.62	15.433						
8,100.0	7,429.0	7,263.5	7,198.7	17.7	17.7	26.75	-4.4	651.1	389.6	369.4	20.21	19.277						
8,200.0	7,429.0	7,230.1	7,171.4	18.5	17.6	23.64	14.6	647.5	466.9	446.9	19.97	23.377						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4F-32H-O268 - 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	1.0	1.0	0.0	0.0	-89.69	0.2	-40.0	40.0					
100.0	100.0	101.0	101.0	0.1	0.2	-89.69	0.2	-40.0	40.0	39.7	0.30	134.025		
200.0	200.0	201.0	201.0	0.3	0.3	-89.69	0.2	-40.0	40.0	39.4	0.65	61.774		
300.0	300.0	301.0	301.0	0.5	0.5	-89.69	0.2	-40.0	40.0	39.0	1.00	40.137		
400.0	400.0	401.0	401.0	0.7	0.7	-89.69	0.2	-40.0	40.0	38.7	1.35	29.725		
500.0	500.0	501.0	501.0	0.8	0.8	-89.69	0.2	-40.0	40.0	38.3	1.69	23.602		
600.0	600.0	602.0	602.0	1.0	1.0	129.08	1.4	-38.6	39.7	37.7	2.05	19.402		
642.4	642.4	644.8	644.7	1.1	1.1	132.96	2.6	-37.2	39.6	37.4	2.20	18.004 CC, ES		
700.0	699.8	702.6	702.4	1.2	1.2	140.33	4.8	-34.5	40.0	37.6	2.41	16.586		
800.0	799.5	802.4	801.8	1.4	1.4	157.34	10.5	-27.8	43.6	40.8	2.79	15.621 SF		
900.0	898.8	901.1	899.8	1.6	1.7	178.75	18.2	-18.5	53.3	50.1	3.20	16.664		
1,000.0	998.0	1,000.5	998.2	1.9	1.9	-167.72	26.5	-7.3	66.1	62.5	3.63	18.228		
1,100.0	1,097.2	1,100.2	1,096.9	2.1	2.2	-159.14	33.6	5.2	79.3	75.3	4.08	19.450		
1,200.0	1,196.5	1,200.2	1,195.8	2.4	2.5	-152.53	39.4	18.9	92.3	87.8	4.56	20.265		
1,300.0	1,295.7	1,300.4	1,294.7	2.7	2.8	-147.02	44.0	33.9	104.9	99.8	5.06	20.726		
1,400.0	1,395.0	1,400.8	1,393.7	2.9	3.1	-142.15	47.4	50.1	116.8	111.2	5.59	20.912		
1,500.0	1,494.2	1,500.2	1,491.6	3.2	3.4	-137.81	49.7	67.1	128.5	122.4	6.12	20.980		
1,600.0	1,593.4	1,599.1	1,589.0	3.5	3.7	-134.19	52.0	84.1	140.7	134.0	6.67	21.105		
1,700.0	1,692.7	1,697.9	1,686.4	3.7	4.1	-131.16	54.2	101.1	153.4	146.2	7.21	21.266		
1,800.0	1,791.9	1,796.8	1,783.8	4.0	4.4	-128.59	56.5	118.1	166.4	158.6	7.76	21.445		
1,900.0	1,891.2	1,895.7	1,881.2	4.3	4.7	-126.40	58.8	135.1	179.7	171.4	8.31	21.633		
2,000.0	1,990.4	1,994.6	1,978.6	4.5	5.1	-124.51	61.0	152.0	193.3	184.4	8.86	21.822		
2,100.0	2,089.6	2,093.5	2,076.0	4.8	5.4	-122.87	63.3	169.0	207.0	197.6	9.41	22.008		
2,200.0	2,188.9	2,192.4	2,173.4	5.1	5.7	-121.43	65.6	186.0	220.9	210.9	9.95	22.188		
2,300.0	2,288.1	2,291.3	2,270.8	5.4	6.1	-120.16	67.8	203.0	234.8	224.3	10.50	22.361		
2,400.0	2,387.4	2,390.2	2,368.2	5.6	6.4	-119.04	70.1	220.0	248.9	237.9	11.05	22.527		
2,500.0	2,486.6	2,489.1	2,465.6	5.9	6.8	-118.04	72.4	237.0	263.1	251.5	11.60	22.684		
2,600.0	2,585.8	2,588.0	2,562.9	6.2	7.1	-117.14	74.6	254.0	277.4	265.2	12.15	22.834		
2,700.0	2,685.1	2,686.9	2,660.3	6.5	7.4	-116.32	76.9	271.0	291.7	279.0	12.69	22.976		
2,800.0	2,784.3	2,785.7	2,757.7	6.7	7.8	-115.59	79.2	288.0	306.0	292.8	13.24	23.110		
2,900.0	2,883.5	2,884.6	2,855.1	7.0	8.1	-114.91	81.4	305.0	320.4	306.6	13.79	23.238		
3,000.0	2,982.8	2,983.5	2,952.5	7.3	8.5	-114.30	83.7	322.0	334.9	320.5	14.34	23.358		
3,100.0	3,082.0	3,082.4	3,049.9	7.6	8.8	-113.74	86.0	339.0	349.3	334.5	14.88	23.473		
3,200.0	3,181.3	3,181.3	3,147.3	7.8	9.2	-113.22	88.2	355.9	363.8	348.4	15.43	23.581		
3,300.0	3,280.5	3,280.2	3,244.7	8.1	9.5	-112.74	90.5	372.9	378.4	362.4	15.98	23.684		
3,400.0	3,379.7	3,379.1	3,342.1	8.4	9.9	-112.30	92.8	389.9	392.9	376.4	16.52	23.782		
3,500.0	3,479.0	3,478.0	3,439.5	8.7	10.2	-111.89	95.0	406.9	407.5	390.4	17.07	23.875		
3,600.0	3,578.2	3,576.9	3,536.9	8.9	10.6	-111.51	97.3	423.9	422.1	404.5	17.61	23.963		
3,700.0	3,677.5	3,675.8	3,634.3	9.2	10.9	-111.15	99.6	440.9	436.7	418.6	18.16	24.047		
3,800.0	3,776.7	3,774.7	3,731.7	9.5	11.2	-110.82	101.8	457.9	451.4	432.6	18.71	24.127		
3,900.0	3,875.9	3,873.5	3,829.1	9.8	11.6	-110.50	104.1	474.9	466.0	446.7	19.25	24.204		
4,000.0	3,975.2	3,972.4	3,926.5	10.1	11.9	-110.21	106.4	491.9	480.7	460.9	19.80	24.277		
4,100.0	4,074.4	4,071.3	4,023.9	10.3	12.3	-109.93	108.6	508.9	495.3	475.0	20.35	24.346		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4G-32H-O268 - 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	1.0	1.0	0.0	0.0	-99.42	-5.8	-35.0	35.5					
100.0	100.0	101.0	101.0	0.1	0.2	-99.42	-5.8	-35.0	35.5	35.2	118.983			
200.0	200.0	201.0	201.0	0.3	0.3	-99.42	-5.8	-35.0	35.5	34.9	0.65	54.841		
300.0	300.0	301.0	301.0	0.5	0.5	-99.42	-5.8	-35.0	35.5	34.5	1.00	35.632		
400.0	400.0	401.0	401.0	0.7	0.7	-99.42	-5.8	-35.0	35.5	34.2	1.35	26.389		
500.0	500.0	501.0	501.0	0.8	0.8	-99.42	-5.8	-35.0	35.5	33.8	1.69	20.954 CC, ES		
600.0	600.0	601.0	601.0	1.0	1.0	118.05	-5.8	-35.0	36.3	34.3	2.04	17.750		
700.0	699.8	700.8	700.8	1.2	1.2	124.79	-5.8	-35.0	39.0	36.6	2.40	16.259		
800.0	799.5	801.2	801.2	1.4	1.4	134.08	-5.8	-34.6	44.1	41.4	2.76	15.976		
900.0	898.8	902.4	902.3	1.6	1.6	148.35	-6.0	-31.0	49.8	46.6	3.12	15.949		
1,000.0	998.0	1,003.6	1,003.3	1.9	1.7	158.57	-6.2	-23.8	54.3	50.8	3.47	15.640		
1,100.0	1,097.2	1,104.9	1,104.0	2.1	2.0	167.96	-6.6	-13.1	57.0	53.2	3.82	14.903		
1,200.0	1,196.5	1,205.5	1,203.7	2.4	2.2	178.39	-7.1	0.8	58.7	54.5	4.20	13.954		
1,300.0	1,295.7	1,305.7	1,302.6	2.7	2.5	-170.88	-8.2	16.5	60.7	56.1	4.65	13.063		
1,400.0	1,395.0	1,405.7	1,401.1	2.9	2.8	-159.98	-9.8	33.8	63.7	58.5	5.19	12.271		
1,500.0	1,494.2	1,505.5	1,499.0	3.2	3.1	-149.08	-11.9	52.6	67.8	62.0	5.83	11.644		
1,600.0	1,593.4	1,604.9	1,596.3	3.5	3.5	-138.48	-14.5	73.1	73.6	67.1	6.54	11.262		
1,700.0	1,692.7	1,704.0	1,692.8	3.7	3.9	-128.50	-17.6	95.0	81.3	74.0	7.28	11.171 SF		
1,800.0	1,791.9	1,802.6	1,788.6	4.0	4.3	-119.49	-21.2	118.3	91.1	83.1	8.00	11.384		
1,900.0	1,891.2	1,901.2	1,884.3	4.3	4.7	-112.21	-24.8	141.7	102.7	94.0	8.67	11.848		
2,000.0	1,990.4	1,999.7	1,980.0	4.5	5.1	-106.46	-28.5	165.2	115.6	106.3	9.29	12.446		
2,100.0	2,089.6	2,098.3	2,075.6	4.8	5.6	-101.90	-32.1	188.7	129.5	119.6	9.88	13.104		
2,200.0	2,188.9	2,196.9	2,171.3	5.1	6.0	-98.22	-35.7	212.1	144.0	133.6	10.45	13.779		
2,300.0	2,288.1	2,295.4	2,266.9	5.4	6.4	-95.23	-39.4	235.6	159.0	148.0	11.01	14.445		
2,400.0	2,387.4	2,394.0	2,362.6	5.6	6.9	-92.75	-43.0	259.1	174.3	162.8	11.55	15.091		
2,500.0	2,486.6	2,492.5	2,458.2	5.9	7.3	-90.67	-46.7	282.5	189.9	177.8	12.09	15.709		
2,600.0	2,585.8	2,591.1	2,553.9	6.2	7.8	-88.91	-50.3	306.0	205.8	193.1	12.63	16.296		
2,700.0	2,685.1	2,689.7	2,649.5	6.5	8.2	-87.41	-53.9	329.5	221.7	208.6	13.16	16.851		
2,800.0	2,784.3	2,788.2	2,745.2	6.7	8.7	-86.10	-57.6	353.0	237.8	224.1	13.69	17.375		
2,900.0	2,883.5	2,886.8	2,840.8	7.0	9.1	-84.96	-61.2	376.4	254.1	239.8	14.22	17.869		
3,000.0	2,982.8	2,985.3	2,936.5	7.3	9.6	-83.96	-64.9	399.9	270.3	255.6	14.75	18.334		
3,100.0	3,082.0	3,083.9	3,032.2	7.6	10.0	-83.07	-68.5	423.4	286.7	271.4	15.27	18.773		
3,200.0	3,181.3	3,182.4	3,127.8	7.8	10.5	-82.28	-72.2	446.8	303.2	287.4	15.80	19.186		
3,300.0	3,280.5	3,281.0	3,223.5	8.1	10.9	-81.57	-75.8	470.3	319.6	303.3	16.33	19.577		
3,400.0	3,379.7	3,379.6	3,319.1	8.4	11.4	-80.92	-79.4	493.8	336.2	319.3	16.85	19.946		
3,500.0	3,479.0	3,478.1	3,414.8	8.7	11.8	-80.34	-83.1	517.2	352.7	335.3	17.38	20.294		
3,600.0	3,578.2	3,576.7	3,510.4	8.9	12.3	-79.81	-86.7	540.7	369.3	351.4	17.91	20.624		
3,700.0	3,677.5	3,675.2	3,606.1	9.2	12.7	-79.33	-90.4	564.2	385.9	367.5	18.43	20.937		
3,800.0	3,776.7	3,773.8	3,701.7	9.5	13.2	-78.89	-94.0	587.6	402.6	383.6	18.96	21.234		
3,900.0	3,875.9	3,872.4	3,797.4	9.8	13.6	-78.48	-97.7	611.1	419.3	399.8	19.49	21.515		
4,000.0	3,975.2	3,970.9	3,893.0	10.1	14.1	-78.10	-101.3	634.6	435.9	415.9	20.01	21.783		
4,100.0	4,074.4	4,069.5	3,988.7	10.3	14.6	-77.75	-104.9	658.0	452.6	432.1	20.54	22.038		
4,200.0	4,173.7	4,168.0	4,084.4	10.6	15.0	-77.43	-108.6	681.5	469.4	448.3	21.07	22.280		
4,300.0	4,272.9	4,266.6	4,180.0	10.9	15.5	-77.13	-112.2	705.0	486.1	464.5	21.59	22.511		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4H-32H-O268 - 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	1.0	1.0	0.0	0.0	-89.69	0.2	-30.0	30.0					
100.0	100.0	101.0	101.0	0.1	0.2	-89.69	0.2	-30.0	30.0	29.7	0.30	100.519		
200.0	200.0	201.0	201.0	0.3	0.3	-89.69	0.2	-30.0	30.0	29.4	0.65	46.331		
300.0	300.0	301.0	301.0	0.5	0.5	-89.69	0.2	-30.0	30.0	29.0	1.00	30.103		
400.0	400.0	401.0	401.0	0.7	0.7	-89.69	0.2	-30.0	30.0	28.7	1.35	22.294		
500.0	500.0	501.0	501.0	0.8	0.8	-89.69	0.2	-30.0	30.0	28.3	1.69	17.702 CC, ES		
600.0	600.0	601.0	601.0	1.0	1.0	127.92	0.2	-30.0	31.0	29.0	2.04	15.182		
700.0	699.8	700.8	700.8	1.2	1.2	134.74	0.2	-30.0	34.5	32.1	2.40	14.390 SF		
800.0	799.5	801.1	801.1	1.4	1.4	143.83	0.2	-29.1	40.3	37.5	2.75	14.632		
900.0	898.8	901.2	901.2	1.6	1.5	157.17	0.3	-26.5	48.1	45.0	3.10	15.507		
1,000.0	998.0	1,001.5	1,001.3	1.9	1.7	165.41	0.6	-22.1	56.2	52.8	3.45	16.295		
1,100.0	1,097.2	1,101.8	1,101.4	2.1	1.9	171.64	0.9	-15.9	63.7	59.9	3.80	16.759		
1,200.0	1,196.5	1,202.1	1,201.4	2.4	2.1	177.59	1.3	-8.0	70.6	66.5	4.16	16.972		
1,300.0	1,295.7	1,302.4	1,301.3	2.7	2.3	-176.51	1.7	1.6	77.2	72.6	4.54	16.990		
1,400.0	1,395.0	1,402.5	1,400.8	2.9	2.6	-170.52	2.3	13.0	83.5	78.6	4.95	16.861		
1,500.0	1,494.2	1,502.5	1,499.9	3.2	2.8	-164.42	2.9	26.0	90.0	84.6	5.41	16.634		
1,600.0	1,593.4	1,602.3	1,598.6	3.5	3.1	-158.22	3.7	40.8	96.9	91.0	5.92	16.358		
1,700.0	1,692.7	1,701.8	1,696.7	3.7	3.4	-151.97	4.5	57.3	104.4	97.9	6.49	16.090		
1,800.0	1,791.9	1,801.0	1,794.2	4.0	3.7	-145.76	5.4	75.3	112.9	105.8	7.11	15.884		
1,900.0	1,891.2	1,899.7	1,891.0	4.3	4.1	-139.68	6.4	95.0	122.6	114.8	7.77	15.782		
2,000.0	1,990.4	1,998.0	1,986.9	4.5	4.4	-133.83	7.4	116.2	133.7	125.3	8.46	15.813		
2,100.0	2,089.6	2,095.8	2,082.0	4.8	4.8	-128.30	8.6	139.0	146.4	137.3	9.15	15.993		
2,200.0	2,188.9	2,193.0	2,176.2	5.1	5.3	-123.12	9.8	163.2	160.8	151.0	9.85	16.322		
2,300.0	2,288.1	2,289.6	2,269.3	5.4	5.7	-118.35	11.1	188.8	177.0	166.4	10.54	16.794		
2,400.0	2,387.4	2,386.1	2,361.9	5.6	6.2	-113.98	12.4	215.9	194.9	183.7	11.20	17.402		
2,500.0	2,486.6	2,483.3	2,455.1	5.9	6.7	-110.23	13.8	243.6	214.0	202.2	11.84	18.078		
2,600.0	2,585.8	2,580.6	2,548.3	6.2	7.2	-107.09	15.2	271.2	233.9	221.4	12.45	18.780		
2,700.0	2,685.1	2,677.9	2,641.6	6.5	7.7	-104.45	16.5	298.9	254.3	241.2	13.05	19.486		
2,800.0	2,784.3	2,775.1	2,734.8	6.7	8.2	-102.20	17.9	326.6	275.1	261.5	13.63	20.182		
2,900.0	2,883.5	2,872.4	2,828.1	7.0	8.7	-100.26	19.3	354.2	296.4	282.2	14.21	20.861		
3,000.0	2,982.8	2,969.7	2,921.3	7.3	9.2	-98.59	20.7	381.9	317.9	303.1	14.77	21.517		
3,100.0	3,082.0	3,066.9	3,014.5	7.6	9.7	-97.12	22.0	409.5	339.6	324.3	15.33	22.147		
3,200.0	3,181.3	3,164.2	3,107.8	7.8	10.2	-95.83	23.4	437.2	361.5	345.6	15.89	22.752		
3,300.0	3,280.5	3,261.4	3,201.0	8.1	10.8	-94.69	24.8	464.9	383.6	367.1	16.44	23.329		
3,400.0	3,379.7	3,358.7	3,294.2	8.4	11.3	-93.67	26.2	492.5	405.8	388.8	16.99	23.881		
3,500.0	3,479.0	3,456.0	3,387.5	8.7	11.8	-92.76	27.5	520.2	428.1	410.5	17.54	24.407		
3,600.0	3,578.2	3,553.2	3,480.7	8.9	12.3	-91.94	28.9	547.9	450.5	432.4	18.09	24.908		
3,700.0	3,677.5	3,650.5	3,573.9	9.2	12.8	-91.19	30.3	575.5	473.0	454.3	18.63	25.387		
3,800.0	3,776.7	3,747.8	3,667.2	9.5	13.4	-90.52	31.7	603.2	495.5	476.3	19.17	25.843		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4I-32H-O268 - 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	-111.49	-5.9	-15.0	16.2					
100.0	100.0	100.0	100.0	0.1	0.1	-111.49	-5.9	-15.0	16.2	15.9	0.30	54.449		
200.0	200.0	200.0	200.0	0.3	0.3	-111.49	-5.9	-15.0	16.2	15.5	0.65	25.017 CC, ES		
300.0	300.0	299.7	299.7	0.5	0.5	-112.66	-6.5	-15.6	17.0	16.0	1.00	17.042		
400.0	400.0	399.4	399.4	0.7	0.7	-115.58	-8.4	-17.5	19.4	18.1	1.35	14.401		
500.0	500.0	499.0	498.8	0.8	0.9	-119.08	-11.4	-20.5	23.5	21.8	1.70	13.826 SF		
600.0	600.0	598.3	598.0	1.0	1.1	95.94	-15.7	-24.8	29.6	27.5	2.04	14.466		
700.0	699.8	697.4	696.8	1.2	1.3	100.40	-21.2	-30.3	37.7	35.3	2.41	15.662		
800.0	799.5	796.4	795.4	1.4	1.5	106.51	-27.7	-36.8	48.3	45.5	2.80	17.229		
900.0	898.8	895.5	894.0	1.6	1.7	117.06	-34.3	-43.4	60.7	57.5	3.22	18.846		
1,000.0	998.0	994.4	992.4	1.9	2.0	122.65	-40.9	-50.0	74.7	71.0	3.65	20.472		
1,100.0	1,097.2	1,093.2	1,090.9	2.1	2.2	125.61	-47.5	-56.6	88.9	84.9	4.08	21.811		
1,200.0	1,196.5	1,192.1	1,189.3	2.4	2.4	127.75	-54.1	-63.3	103.4	98.9	4.51	22.922		
1,300.0	1,295.7	1,291.0	1,287.8	2.7	2.6	129.36	-60.7	-69.9	117.9	113.0	4.94	23.853		
1,400.0	1,395.0	1,389.9	1,386.2	2.9	2.9	130.62	-67.3	-76.5	132.5	127.1	5.38	24.642		
1,500.0	1,494.2	1,488.8	1,484.7	3.2	3.1	131.63	-73.9	-83.1	147.2	141.4	5.81	25.319		
1,600.0	1,593.4	1,587.7	1,583.1	3.5	3.4	132.45	-80.5	-89.7	161.9	155.6	6.25	25.906		
1,700.0	1,692.7	1,686.6	1,681.5	3.7	3.6	133.14	-87.1	-96.3	176.6	169.9	6.69	26.418		
1,800.0	1,791.9	1,785.5	1,780.0	4.0	3.8	133.72	-93.7	-102.9	191.4	184.2	7.12	26.869		
1,900.0	1,891.2	1,884.4	1,878.4	4.3	4.1	134.22	-100.3	-109.6	206.1	198.6	7.56	27.270		
2,000.0	1,990.4	1,983.3	1,976.9	4.5	4.3	134.65	-106.9	-116.2	220.9	212.9	8.00	27.627		
2,100.0	2,089.6	2,082.1	2,075.3	4.8	4.5	135.03	-113.5	-122.8	235.7	227.2	8.43	27.948		
2,200.0	2,188.9	2,181.0	2,173.8	5.1	4.8	135.37	-120.1	-129.4	250.5	241.6	8.87	28.238		
2,300.0	2,288.1	2,279.9	2,272.2	5.4	5.0	135.66	-126.7	-136.0	265.3	256.0	9.31	28.500		
2,400.0	2,387.4	2,378.8	2,370.7	5.6	5.2	135.93	-133.4	-142.6	280.1	270.3	9.75	28.740		
2,500.0	2,486.6	2,477.7	2,469.1	5.9	5.5	136.16	-140.0	-149.2	294.9	284.7	10.18	28.959		
2,600.0	2,585.8	2,576.6	2,567.6	6.2	5.7	136.38	-146.6	-155.8	309.7	299.1	10.62	29.160		
2,700.0	2,685.1	2,675.5	2,666.0	6.5	6.0	136.58	-153.2	-162.5	324.5	313.5	11.06	29.346		
2,800.0	2,784.3	2,774.4	2,764.5	6.7	6.2	136.75	-159.8	-169.1	339.4	327.9	11.50	29.517		
2,900.0	2,883.5	2,873.3	2,862.9	7.0	6.4	136.92	-166.4	-175.7	354.2	342.3	11.94	29.676		
3,000.0	2,982.8	2,972.1	2,961.4	7.3	6.7	137.07	-173.0	-182.3	369.0	356.7	12.37	29.823		
3,100.0	3,082.0	3,071.0	3,059.8	7.6	6.9	137.21	-179.6	-188.9	383.9	371.0	12.81	29.961		
3,200.0	3,181.3	3,169.9	3,158.2	7.8	7.1	137.34	-186.2	-195.5	398.7	385.4	13.25	30.090		
3,300.0	3,280.5	3,268.8	3,256.7	8.1	7.4	137.46	-192.8	-202.1	413.5	399.8	13.69	30.210		
3,400.0	3,379.7	3,367.7	3,355.1	8.4	7.6	137.57	-199.4	-208.8	428.4	414.2	14.13	30.323		
3,500.0	3,479.0	3,466.6	3,453.6	8.7	7.8	137.67	-206.0	-215.4	443.2	428.6	14.57	30.429		
3,600.0	3,578.2	3,565.5	3,552.0	8.9	8.1	137.77	-212.6	-222.0	458.1	443.1	15.00	30.529		
3,700.0	3,677.5	3,664.4	3,650.5	9.2	8.3	137.86	-219.2	-228.6	472.9	457.5	15.44	30.623		
3,800.0	3,776.7	3,763.3	3,748.9	9.5	8.6	137.94	-225.8	-235.2	487.7	471.9	15.88	30.713		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4J-32H-O268 - 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		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.69	0.1	-10.0	10.0					
100.0	100.0	100.0	100.0	0.1	0.1	-89.69	0.1	-10.0	10.0	9.7	0.30	33.703		
200.0	200.0	200.0	200.0	0.3	0.3	-89.69	0.1	-10.0	10.0	9.4	0.65	15.485		
300.0	300.0	300.0	300.0	0.5	0.5	-89.69	0.1	-10.0	10.0	9.0	0.99	10.052 CC		
400.0	400.0	400.0	400.0	0.7	0.7	-94.54	-0.8	-10.1	10.2	8.8	1.34	7.571 ES		
500.0	500.0	499.9	499.8	0.8	0.9	-107.72	-3.4	-10.6	11.1	9.4	1.70	6.548 SF		
600.0	600.0	599.7	599.5	1.0	1.0	98.07	-7.7	-11.3	13.8	11.8	2.05	6.728		
700.0	699.8	699.4	699.1	1.2	1.2	98.89	-13.7	-12.3	18.2	15.8	2.43	7.491		
800.0	799.5	799.0	798.4	1.4	1.4	104.11	-21.4	-13.7	24.2	21.4	2.84	8.537		
900.0	898.8	898.6	897.5	1.6	1.7	114.36	-30.3	-15.2	32.1	28.9	3.27	9.816		
1,000.0	998.0	998.1	996.7	1.9	1.9	119.40	-39.3	-16.7	41.3	37.6	3.72	11.111		
1,100.0	1,097.2	1,097.7	1,095.8	2.1	2.1	121.80	-48.3	-18.3	50.6	46.5	4.17	12.143		
1,200.0	1,196.5	1,197.2	1,194.9	2.4	2.3	123.45	-57.3	-19.8	60.0	55.4	4.63	12.976		
1,300.0	1,295.7	1,296.8	1,294.1	2.7	2.6	124.65	-66.4	-21.4	69.4	64.4	5.08	13.660		
1,400.0	1,395.0	1,396.3	1,393.2	2.9	2.8	125.57	-75.4	-22.9	78.9	73.3	5.54	14.229		
1,500.0	1,494.2	1,495.9	1,492.3	3.2	3.0	126.29	-84.4	-24.4	88.3	82.3	6.01	14.709		
1,600.0	1,593.4	1,595.4	1,591.4	3.5	3.3	126.87	-93.4	-26.0	97.8	91.3	6.47	15.120		
1,700.0	1,692.7	1,695.0	1,690.6	3.7	3.5	127.35	-102.4	-27.5	107.3	100.3	6.93	15.474		
1,800.0	1,791.9	1,794.5	1,789.7	4.0	3.7	127.75	-111.4	-29.1	116.8	109.4	7.40	15.784		
1,900.0	1,891.2	1,894.1	1,888.8	4.3	4.0	128.09	-120.4	-30.6	126.2	118.4	7.86	16.056		
2,000.0	1,990.4	1,993.6	1,987.9	4.5	4.2	128.38	-129.5	-32.1	135.7	127.4	8.33	16.296		
2,100.0	2,089.6	2,093.2	2,087.1	4.8	4.4	128.63	-138.5	-33.7	145.2	136.4	8.80	16.511		
2,200.0	2,188.9	2,192.7	2,186.2	5.1	4.7	128.86	-147.5	-35.2	154.7	145.5	9.26	16.704		
2,300.0	2,288.1	2,292.2	2,285.3	5.4	4.9	129.05	-156.5	-36.8	164.2	154.5	9.73	16.878		
2,400.0	2,387.4	2,391.8	2,384.4	5.6	5.1	129.23	-165.5	-38.3	173.7	163.5	10.20	17.035		
2,500.0	2,486.6	2,491.3	2,483.6	5.9	5.4	129.39	-174.5	-39.8	183.2	172.6	10.67	17.178		
2,600.0	2,585.8	2,590.9	2,582.7	6.2	5.6	129.53	-183.5	-41.4	192.7	181.6	11.13	17.309		
2,700.0	2,685.1	2,690.4	2,681.8	6.5	5.8	129.66	-192.6	-42.9	202.2	190.6	11.60	17.430		
2,800.0	2,784.3	2,790.0	2,780.9	6.7	6.1	129.77	-201.6	-44.5	211.7	199.7	12.07	17.541		
2,900.0	2,883.5	2,889.5	2,880.1	7.0	6.3	129.88	-210.6	-46.0	221.2	208.7	12.54	17.643		
3,000.0	2,982.8	2,989.1	2,979.2	7.3	6.5	129.98	-219.6	-47.5	230.7	217.7	13.01	17.738		
3,100.0	3,082.0	3,088.6	3,078.3	7.6	6.8	130.07	-228.6	-49.1	240.3	226.8	13.48	17.826		
3,200.0	3,181.3	3,188.2	3,177.4	7.8	7.0	130.15	-237.6	-50.6	249.8	235.8	13.95	17.908		
3,300.0	3,280.5	3,287.7	3,276.6	8.1	7.2	130.23	-246.7	-52.2	259.3	244.8	14.42	17.985		
3,400.0	3,379.7	3,387.3	3,375.7	8.4	7.5	130.30	-255.7	-53.7	268.8	253.9	14.89	18.056		
3,500.0	3,479.0	3,486.8	3,474.8	8.7	7.7	130.37	-264.7	-55.3	278.3	262.9	15.35	18.124		
3,600.0	3,578.2	3,586.4	3,573.9	8.9	7.9	130.43	-273.7	-56.8	287.8	272.0	15.82	18.187		
3,700.0	3,677.5	3,685.9	3,673.1	9.2	8.2	130.49	-282.7	-58.3	297.3	281.0	16.29	18.246		
3,800.0	3,776.7	3,785.4	3,772.2	9.5	8.4	130.55	-291.7	-59.9	306.8	290.0	16.76	18.302		
3,900.0	3,875.9	3,885.0	3,871.3	9.8	8.6	130.60	-300.7	-61.4	316.3	299.1	17.23	18.355		
4,000.0	3,975.2	3,984.5	3,970.4	10.1	8.9	130.65	-309.8	-63.0	325.8	308.1	17.70	18.406		
4,100.0	4,074.4	4,084.1	4,069.6	10.3	9.1	130.69	-318.8	-64.5	335.3	317.2	18.17	18.453		
4,200.0	4,173.7	4,183.6	4,168.7	10.6	9.4	130.74	-327.8	-66.0	344.8	326.2	18.64	18.498		
4,300.0	4,272.9	4,283.2	4,267.8	10.9	9.6	130.78	-336.8	-67.6	354.4	335.2	19.11	18.541		
4,400.0	4,372.1	4,382.7	4,366.9	11.2	9.8	130.82	-345.8	-69.1	363.9	344.3	19.58	18.582		
4,500.0	4,471.4	4,482.3	4,466.1	11.4	10.1	130.85	-354.8	-70.7	373.4	353.3	20.05	18.621		
4,600.0	4,570.6	4,581.8	4,565.2	11.7	10.3	130.89	-363.8	-72.2	382.9	362.4	20.52	18.658		
4,700.0	4,669.9	4,681.4	4,664.3	12.0	10.5	130.92	-372.9	-73.7	392.4	371.4	20.99	18.693		
4,800.0	4,769.1	4,780.9	4,763.4	12.3	10.8	130.95	-381.9	-75.3	401.9	380.4	21.46	18.727		
4,900.0	4,868.3	4,880.5	4,862.6	12.5	11.0	130.98	-390.9	-76.8	411.4	389.5	21.93	18.759		
5,000.0	4,967.6	4,980.0	4,961.7	12.8	11.2	131.01	-399.9	-78.4	420.9	398.5	22.40	18.790		
5,100.0	5,066.8	5,079.5	5,060.8	13.1	11.5	131.04	-408.9	-79.9	430.4	407.6	22.87	18.820		

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 Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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													S32-T2N-R68W (File/Hwy 52) - Hwy 52 4J-32H-O268 - 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	Separation						
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor						
5,200.0	5,166.1	5,179.1	5,159.9	13.4	11.7	131.07	-417.9	-81.4	440.0	416.6	23.34	18.848						
5,300.0	5,265.3	5,278.6	5,259.1	13.6	11.9	131.09	-426.9	-83.0	449.5	425.7	23.81	18.875						
5,400.0	5,364.5	5,378.2	5,358.2	13.9	12.2	131.12	-436.0	-84.5	459.0	434.7	24.28	18.902						
5,500.0	5,463.8	5,477.7	5,457.3	14.2	12.4	131.14	-445.0	-86.1	468.5	443.7	24.75	18.927						
5,600.0	5,563.0	5,577.3	5,556.4	14.5	12.7	131.16	-454.0	-87.6	478.0	452.8	25.22	18.951						
5,700.0	5,662.3	5,676.8	5,655.6	14.8	12.9	131.18	-463.0	-89.2	487.5	461.8	25.69	18.975						
5,800.0	5,761.5	5,776.4	5,754.7	15.0	13.1	131.20	-472.0	-90.7	497.0	470.9	26.16	18.997						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4K-32H-O268 - 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	-139.89	-6.0	-5.0	7.8					
100.0	100.0	100.0	100.0	0.1	0.1	-139.89	-6.0	-5.0	7.8	7.5	0.30	26.323		
200.0	200.0	200.0	200.0	0.3	0.3	-139.89	-6.0	-5.0	7.8	7.2	0.65	12.094		
300.0	300.0	300.0	300.0	0.5	0.5	-139.89	-6.0	-5.0	7.8	6.8	0.99	7.851		
400.0	400.0	400.0	400.0	0.7	0.7	-139.89	-6.0	-5.0	7.8	6.5	1.34	5.812 CC, ES		
500.0	500.0	499.9	499.9	0.8	0.8	-145.54	-6.7	-4.6	8.2	6.5	1.69	4.832		
600.0	600.0	599.9	599.8	1.0	1.0	65.08	-9.1	-3.4	8.8	6.8	2.05	4.314		
700.0	699.8	699.8	699.6	1.2	1.2	71.87	-12.9	-1.4	9.0	6.6	2.41	3.738		
800.0	799.5	799.7	799.4	1.4	1.4	89.17	-18.3	1.4	9.4	6.6	2.82	3.325 SF		
900.0	898.8	899.6	899.0	1.6	1.6	114.07	-25.3	5.0	11.3	8.1	3.24	3.488		
1,000.0	998.0	999.6	998.5	1.9	1.8	122.65	-33.7	9.4	14.6	11.0	3.67	3.988		
1,100.0	1,097.2	1,099.5	1,097.9	2.1	2.1	125.93	-42.5	14.0	17.9	13.8	4.10	4.375		
1,200.0	1,196.5	1,199.5	1,197.4	2.4	2.3	128.19	-51.3	18.5	21.3	16.8	4.54	4.694		
1,300.0	1,295.7	1,299.4	1,296.8	2.7	2.5	129.83	-60.1	23.1	24.7	19.7	4.97	4.960		
1,400.0	1,395.0	1,399.3	1,396.3	2.9	2.8	131.07	-68.9	27.7	28.1	22.7	5.41	5.186		
1,500.0	1,494.2	1,499.3	1,495.7	3.2	3.0	132.05	-77.8	32.3	31.5	25.6	5.85	5.378		
1,600.0	1,593.4	1,599.2	1,595.2	3.5	3.2	132.83	-86.6	36.9	34.9	28.6	6.29	5.544		
1,700.0	1,692.7	1,699.2	1,694.6	3.7	3.5	133.48	-95.4	41.4	38.3	31.6	6.73	5.688		
1,800.0	1,791.9	1,799.1	1,794.1	4.0	3.7	134.02	-104.2	46.0	41.7	34.6	7.18	5.815		
1,900.0	1,891.2	1,899.0	1,893.5	4.3	4.0	134.47	-113.0	50.6	45.2	37.5	7.62	5.927		
2,000.0	1,990.4	1,999.0	1,993.0	4.5	4.2	134.87	-121.8	55.2	48.6	40.5	8.06	6.027		
2,100.0	2,089.6	2,098.9	2,092.4	4.8	4.4	135.21	-130.6	59.7	52.0	43.5	8.50	6.117		
2,200.0	2,188.9	2,198.9	2,191.8	5.1	4.7	135.51	-139.4	64.3	55.4	46.5	8.95	6.197		
2,300.0	2,288.1	2,298.8	2,291.3	5.4	4.9	135.77	-148.2	68.9	58.9	49.5	9.39	6.270		
2,400.0	2,387.4	2,398.7	2,390.7	5.6	5.2	136.01	-157.0	73.5	62.3	52.5	9.83	6.337		
2,500.0	2,486.6	2,498.7	2,490.2	5.9	5.4	136.22	-165.8	78.0	65.7	55.5	10.28	6.397		
2,600.0	2,585.8	2,598.6	2,589.6	6.2	5.7	136.41	-174.6	82.6	69.2	58.5	10.72	6.453		
2,700.0	2,685.1	2,698.6	2,689.1	6.5	5.9	136.58	-183.4	87.2	72.6	61.4	11.16	6.504		
2,800.0	2,784.3	2,798.5	2,788.5	6.7	6.1	136.73	-192.3	91.8	76.0	64.4	11.61	6.552		
2,900.0	2,883.5	2,898.4	2,888.0	7.0	6.4	136.88	-201.1	96.4	79.5	67.4	12.05	6.595		
3,000.0	2,982.8	2,998.4	2,987.4	7.3	6.6	137.01	-209.9	100.9	82.9	70.4	12.49	6.636		
3,100.0	3,082.0	3,098.3	3,086.9	7.6	6.9	137.13	-218.7	105.5	86.4	73.4	12.94	6.674		
3,200.0	3,181.3	3,198.3	3,186.3	7.8	7.1	137.24	-227.5	110.1	89.8	76.4	13.38	6.709		
3,300.0	3,280.5	3,298.2	3,285.8	8.1	7.4	137.34	-236.3	114.7	93.2	79.4	13.83	6.742		
3,400.0	3,379.7	3,398.2	3,385.2	8.4	7.6	137.44	-245.1	119.2	96.7	82.4	14.27	6.773		
3,500.0	3,479.0	3,498.1	3,484.7	8.7	7.8	137.53	-253.9	123.8	100.1	85.4	14.72	6.802		
3,600.0	3,578.2	3,598.0	3,584.1	8.9	8.1	137.61	-262.7	128.4	103.5	88.4	15.16	6.830		
3,700.0	3,677.5	3,698.0	3,683.5	9.2	8.3	137.69	-271.5	133.0	107.0	91.4	15.61	6.856		
3,800.0	3,776.7	3,797.9	3,783.0	9.5	8.6	137.76	-280.3	137.6	110.4	94.4	16.05	6.880		
3,900.0	3,875.9	3,897.9	3,882.4	9.8	8.8	137.83	-289.1	142.1	113.9	97.4	16.49	6.903		
4,000.0	3,975.2	3,997.8	3,981.9	10.1	9.1	137.89	-297.9	146.7	117.3	100.4	16.94	6.925		
4,100.0	4,074.4	4,097.7	4,081.3	10.3	9.3	137.95	-306.8	151.3	120.7	103.4	17.38	6.946		
4,200.0	4,173.7	4,197.7	4,180.8	10.6	9.6	138.01	-315.6	155.9	124.2	106.4	17.83	6.965		
4,300.0	4,272.9	4,297.6	4,280.2	10.9	9.8	138.06	-324.4	160.4	127.6	109.3	18.27	6.984		
4,400.0	4,372.1	4,397.6	4,379.7	11.2	10.1	138.12	-333.2	165.0	131.1	112.3	18.72	7.002		
4,500.0	4,471.4	4,497.5	4,479.1	11.4	10.3	138.17	-342.0	169.6	134.5	115.3	19.16	7.019		
4,600.0	4,570.6	4,597.4	4,578.6	11.7	10.5	138.21	-350.8	174.2	137.9	118.3	19.61	7.035		
4,700.0	4,669.9	4,697.4	4,678.0	12.0	10.8	138.26	-359.6	178.7	141.4	121.3	20.05	7.051		
4,800.0	4,769.1	4,797.3	4,777.5	12.3	11.0	138.30	-368.4	183.3	144.8	124.3	20.50	7.065		
4,900.0	4,868.3	4,897.3	4,876.9	12.5	11.3	138.34	-377.2	187.9	148.3	127.3	20.94	7.080		
5,000.0	4,967.6	4,997.2	4,976.4	12.8	11.5	138.38	-386.0	192.5	151.7	130.3	21.39	7.093		
5,100.0	5,066.8	5,097.1	5,075.8	13.1	11.8	138.41	-394.8	197.1	155.1	133.3	21.83	7.106		

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 Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4K-32H-O268 - 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)				
5,200.0	5,166.1	5,197.1	5,175.2	13.4	12.0	138.45	-403.6	201.6	158.6	136.3	22.28	7.119		
5,300.0	5,265.3	5,297.0	5,274.7	13.6	12.3	138.48	-412.4	206.2	162.0	139.3	22.72	7.131		
5,400.0	5,364.5	5,397.0	5,374.1	13.9	12.5	138.51	-421.2	210.8	165.5	142.3	23.17	7.142		
5,500.0	5,463.8	5,496.9	5,473.6	14.2	12.8	138.54	-430.1	215.4	168.9	145.3	23.61	7.153		
5,600.0	5,563.0	5,596.8	5,573.0	14.5	13.0	138.57	-438.9	219.9	172.3	148.3	24.06	7.164		
5,700.0	5,662.3	5,696.8	5,672.5	14.8	13.2	138.60	-447.7	224.5	175.8	151.3	24.50	7.174		
5,800.0	5,761.5	5,796.7	5,771.9	15.0	13.5	138.63	-456.5	229.1	179.2	154.3	24.95	7.184		
5,900.0	5,860.7	5,896.7	5,871.4	15.3	13.7	138.66	-465.3	233.7	182.7	157.3	25.39	7.194		
6,000.0	5,960.0	5,996.6	5,970.8	15.6	14.0	138.68	-474.1	238.3	186.1	160.3	25.84	7.203		
6,100.0	6,059.2	6,096.6	6,070.3	15.9	14.2	138.71	-482.9	242.8	189.6	163.3	26.28	7.212		
6,200.0	6,158.5	6,196.5	6,169.7	16.1	14.5	138.73	-491.7	247.4	193.0	166.3	26.73	7.221		
6,300.0	6,257.7	6,296.4	6,269.2	16.4	14.7	138.75	-500.5	252.0	196.4	169.3	27.17	7.229		
6,400.0	6,356.9	6,396.4	6,368.6	16.7	15.0	138.77	-509.3	256.6	199.9	172.3	27.62	7.237		
6,500.0	6,456.2	6,496.3	6,468.1	17.0	15.2	138.80	-518.1	261.1	203.3	175.3	28.06	7.245		
6,600.0	6,555.4	6,596.3	6,567.5	17.2	15.5	138.82	-526.9	265.7	206.8	178.3	28.51	7.253		
6,700.0	6,654.7	6,696.2	6,666.9	17.5	15.7	138.84	-535.7	270.3	210.2	181.2	28.95	7.260		
6,800.0	6,753.9	6,796.1	6,766.4	17.8	15.9	138.85	-544.6	274.9	213.6	184.2	29.40	7.267		
6,900.0	6,853.3	6,896.0	6,865.8	18.0	16.2	-177.33	-553.4	279.4	216.8	186.9	29.88	7.254		
7,000.0	6,952.5	6,994.4	6,963.7	18.1	16.4	-111.42	-562.0	284.0	218.3	187.5	30.83	7.082		
7,100.0	7,048.9	7,088.5	7,057.3	18.0	16.7	-107.03	-570.3	288.3	221.8	189.9	31.96	6.941		
7,200.0	7,139.5	7,181.7	7,150.2	17.8	16.8	-112.41	-575.2	292.4	233.4	200.9	32.49	7.183		
7,300.0	7,221.5	7,284.5	7,252.2	17.5	16.8	-119.29	-563.9	296.4	253.7	221.9	31.80	7.976		
7,400.0	7,292.4	7,399.1	7,361.5	17.1	16.6	-125.79	-530.2	299.9	279.9	249.8	30.00	9.327		
7,500.0	7,350.2	7,529.0	7,474.4	16.8	16.2	-131.39	-466.6	302.6	308.5	281.0	27.50	11.215		
7,600.0	7,393.0	7,677.6	7,582.2	16.6	15.6	-135.82	-365.1	303.6	335.6	310.6	24.92	13.464		
7,700.0	7,419.5	7,846.2	7,668.5	16.5	15.1	-138.78	-220.8	302.3	357.0	333.9	23.04	15.495		
7,800.0	7,429.0	8,031.1	7,710.6	16.5	15.0	-139.95	-41.7	297.9	368.9	346.2	22.64	16.292		
7,900.0	7,429.0	8,150.0	7,712.0	16.8	15.2	-139.70	77.1	293.8	371.1	347.8	23.28	15.943		
8,000.0	7,429.0	8,250.0	7,712.0	17.2	15.7	-139.40	177.0	290.3	372.8	348.7	24.08	15.479		
8,100.0	7,429.0	8,350.0	7,712.0	17.7	16.3	-139.09	277.0	286.8	374.5	349.4	25.09	14.928		
8,200.0	7,429.0	8,449.9	7,712.0	18.5	17.1	-138.79	376.9	283.3	376.2	350.0	26.27	14.321		
8,300.0	7,429.0	8,549.9	7,712.0	19.3	18.0	-138.49	476.8	279.8	378.0	350.3	27.62	13.685		
8,400.0	7,429.0	8,649.9	7,712.0	20.3	19.1	-138.20	576.7	276.3	379.7	350.6	29.11	13.042		
8,500.0	7,429.0	8,749.8	7,712.0	21.4	20.2	-137.90	676.6	272.8	381.4	350.7	30.74	12.409		
8,600.0	7,429.0	8,849.8	7,712.0	22.6	21.4	-137.61	776.5	269.3	383.2	350.7	32.48	11.797		
8,700.0	7,429.0	8,949.8	7,712.0	23.8	22.7	-137.33	876.4	265.9	385.0	350.6	34.33	11.213		
8,800.0	7,429.0	9,049.7	7,712.0	25.1	24.0	-137.04	976.3	262.4	386.8	350.5	36.27	10.662		
8,900.0	7,429.0	9,149.7	7,712.0	26.4	25.4	-136.76	1,076.2	258.9	388.5	350.2	38.30	10.145		
9,000.0	7,429.0	9,249.7	7,712.0	27.8	26.9	-136.48	1,176.1	255.4	390.3	349.9	40.40	9.662		
9,100.0	7,429.0	9,349.6	7,712.0	29.3	28.4	-136.20	1,276.0	251.9	392.2	349.6	42.57	9.212		
9,200.0	7,429.0	9,449.6	7,712.0	30.7	29.9	-135.93	1,375.9	248.4	394.0	349.2	44.80	8.794		
9,300.0	7,429.0	9,549.6	7,712.0	32.2	31.4	-135.65	1,475.8	244.9	395.8	348.7	47.08	8.406		
9,400.0	7,429.0	9,649.5	7,712.0	33.8	32.9	-135.38	1,575.7	241.4	397.6	348.2	49.42	8.046		
9,500.0	7,429.0	9,749.5	7,712.0	35.3	34.5	-135.12	1,675.6	237.9	399.5	347.7	51.80	7.711		
9,600.0	7,429.0	9,849.5	7,712.0	36.9	36.1	-134.85	1,775.5	234.5	401.3	347.1	54.23	7.400		
9,700.0	7,429.0	9,949.4	7,712.0	38.4	37.7	-134.59	1,875.4	231.0	403.2	346.5	56.70	7.111		
9,800.0	7,429.0	10,049.4	7,712.0	40.0	39.3	-134.33	1,975.3	227.5	405.1	345.9	59.20	6.842		
9,900.0	7,429.0	10,149.4	7,712.0	41.6	41.0	-134.07	2,075.2	224.0	406.9	345.2	61.74	6.591		
10,000.0	7,429.0	10,249.3	7,712.0	43.2	42.6	-133.82	2,175.1	220.5	408.8	344.5	64.32	6.356		
10,100.0	7,429.0	10,349.3	7,712.0	44.9	44.2	-133.57	2,275.0	217.0	410.7	343.8	66.92	6.137		
10,200.0	7,429.0	10,449.3	7,712.0	46.5	45.9	-133.31	2,375.0	213.5	412.6	343.1	69.55	5.932		
10,300.0	7,429.0	10,549.2	7,712.0	48.2	47.6	-133.07	2,474.9	210.0	414.5	342.3	72.22	5.740		

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 Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4K-32H-O268 - 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		
10,400.0	7,429.0	10,649.2	7,712.0	49.8	49.2	-132.82	2,574.8	206.5	416.4	341.5	74.91	5.560		
10,500.0	7,429.0	10,749.2	7,712.0	51.5	50.9	-132.58	2,674.7	203.1	418.4	340.7	77.62	5.390		
10,600.0	7,429.0	10,849.1	7,712.0	53.1	52.6	-132.34	2,774.6	199.6	420.3	339.9	80.36	5.230		
10,700.0	7,429.0	10,949.1	7,712.0	54.8	54.3	-132.10	2,874.5	196.1	422.2	339.1	83.12	5.080		
10,800.0	7,429.0	11,049.1	7,712.0	56.5	56.0	-131.86	2,974.4	192.6	424.2	338.3	85.90	4.938		
10,900.0	7,429.0	11,149.0	7,712.0	58.2	57.7	-131.62	3,074.3	189.1	426.1	337.4	88.71	4.804		
11,000.0	7,429.0	11,249.0	7,712.0	59.8	59.3	-131.39	3,174.2	185.6	428.1	336.6	91.53	4.677		
11,100.0	7,429.0	11,348.9	7,712.0	61.5	61.0	-131.16	3,274.1	182.1	430.1	335.7	94.38	4.557		
11,200.0	7,429.0	11,448.9	7,712.0	63.2	62.7	-130.93	3,374.0	178.6	432.0	334.8	97.24	4.443		
11,300.0	7,429.0	11,548.9	7,712.0	64.9	64.5	-130.71	3,473.9	175.1	434.0	333.9	100.13	4.335		
11,400.0	7,429.0	11,648.8	7,712.0	66.6	66.2	-130.48	3,573.8	171.7	436.0	333.0	103.03	4.232		
11,500.0	7,429.0	11,748.8	7,712.0	68.3	67.9	-130.26	3,673.7	168.2	438.0	332.1	105.95	4.134		
11,600.0	7,429.0	11,848.8	7,712.0	70.0	69.6	-130.04	3,773.6	164.7	440.0	331.1	108.88	4.041		
11,700.0	7,429.0	11,948.7	7,712.0	71.7	71.3	-129.82	3,873.5	161.2	442.0	330.2	111.83	3.952		
11,800.0	7,429.0	12,048.7	7,712.0	73.4	73.0	-129.60	3,973.4	157.7	444.0	329.2	114.80	3.868		
11,900.0	7,429.0	12,148.7	7,712.0	75.1	74.7	-129.39	4,073.3	154.2	446.0	328.3	117.78	3.787		
12,000.0	7,429.0	12,248.6	7,712.0	76.9	76.5	-129.18	4,173.2	150.7	448.1	327.3	120.77	3.710		
12,074.6	7,429.0	12,323.2	7,712.0	78.1	77.7	-129.02	4,247.7	148.1	449.6	326.6	123.02	3.655		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4M-32H-O268 - 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							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	95.65	-2.1	21.7	21.8					
100.0	100.0	100.0	100.0	0.1	0.1	95.65	-2.1	21.7	21.8	21.5	0.30	73.467		
200.0	200.0	200.0	200.0	0.3	0.3	95.65	-2.1	21.7	21.8	21.2	0.65	33.755		
300.0	300.0	300.0	300.0	0.5	0.5	95.65	-2.1	21.7	21.8	20.8	0.99	21.911		
400.0	400.0	400.0	400.0	0.7	0.7	95.65	-2.1	21.7	21.8	20.5	1.34	16.220		
500.0	500.0	500.0	500.0	0.8	0.8	95.65	-2.1	21.7	21.8	20.1	1.69	12.876		
600.0	600.0	600.0	600.0	1.0	1.0	-53.03	-2.1	21.7	20.7	18.7	2.04	10.135		
700.0	699.8	699.6	699.6	1.2	1.2	-64.42	-2.7	22.4	18.6	16.2	2.40	7.759		
789.9	789.4	789.2	789.2	1.4	1.4	-81.77	-4.0	24.2	17.7	14.9	2.75	6.429 CC		
800.0	799.5	799.2	799.2	1.4	1.4	-84.09	-4.2	24.5	17.7	14.9	2.79	6.343 ES		
900.0	898.8	898.9	898.7	1.6	1.6	-103.17	-6.9	27.9	19.6	16.4	3.19	6.133		
1,000.0	998.0	998.7	998.4	1.9	1.7	-116.95	-10.5	32.7	23.0	19.4	3.59	6.407		
1,100.0	1,097.2	1,098.7	1,098.1	2.1	1.9	-124.26	-15.3	39.0	26.9	22.9	3.99	6.725		
1,200.0	1,196.5	1,198.9	1,197.8	2.4	2.2	-126.74	-21.1	46.6	30.3	25.8	4.42	6.847		
1,300.0	1,295.7	1,299.1	1,297.3	2.7	2.4	-125.98	-27.9	55.6	33.0	28.1	4.88	6.753		
1,400.0	1,395.0	1,399.2	1,396.6	2.9	2.7	-122.70	-35.8	66.0	35.1	29.7	5.40	6.493		
1,500.0	1,494.2	1,499.3	1,495.6	3.2	2.9	-117.22	-44.7	77.8	36.8	30.8	5.97	6.154		
1,600.0	1,593.4	1,599.2	1,594.4	3.5	3.2	-111.31	-54.1	90.0	38.7	32.1	6.57	5.881		
1,700.0	1,692.7	1,699.1	1,693.1	3.7	3.5	-106.00	-63.4	102.3	40.9	33.7	7.17	5.705		
1,800.0	1,791.9	1,799.1	1,791.8	4.0	3.8	-101.29	-72.7	114.5	43.5	35.7	7.77	5.600		
1,900.0	1,891.2	1,899.0	1,890.5	4.3	4.1	-97.12	-82.0	126.8	46.3	38.0	8.35	5.548		
2,000.0	1,990.4	1,998.9	1,989.2	4.5	4.4	-93.45	-91.3	139.1	49.4	40.5	8.93	5.534		
2,100.0	2,089.6	2,098.8	2,087.9	4.8	4.7	-90.22	-100.6	151.3	52.6	43.1	9.49	5.548		
2,200.0	2,188.9	2,198.7	2,186.6	5.1	5.0	-87.38	-109.9	163.6	56.0	46.0	10.04	5.580		
2,300.0	2,288.1	2,298.6	2,285.4	5.4	5.3	-84.86	-119.2	175.8	59.5	48.9	10.58	5.626		
2,400.0	2,387.4	2,398.5	2,384.1	5.6	5.6	-82.62	-128.6	188.1	63.1	52.0	11.11	5.681		
2,500.0	2,486.6	2,498.4	2,482.8	5.9	5.9	-80.63	-137.9	200.4	66.8	55.2	11.64	5.741		
2,600.0	2,585.8	2,598.3	2,581.5	6.2	6.3	-78.85	-147.2	212.6	70.6	58.4	12.16	5.805		
2,700.0	2,685.1	2,698.2	2,680.2	6.5	6.6	-77.25	-156.5	224.9	74.4	61.7	12.67	5.871		
2,800.0	2,784.3	2,798.1	2,778.9	6.7	6.9	-75.81	-165.8	237.1	78.3	65.1	13.19	5.937		
2,900.0	2,883.5	2,898.0	2,877.6	7.0	7.2	-74.51	-175.1	249.4	82.2	68.5	13.69	6.004		
3,000.0	2,982.8	2,997.9	2,976.3	7.3	7.5	-73.32	-184.4	261.6	86.2	72.0	14.20	6.070		
3,100.0	3,082.0	3,097.8	3,075.1	7.6	7.8	-72.24	-193.7	273.9	90.2	75.5	14.70	6.134		
3,200.0	3,181.3	3,197.7	3,173.8	7.8	8.2	-71.25	-203.0	286.2	94.2	79.0	15.20	6.198		
3,300.0	3,280.5	3,297.6	3,272.5	8.1	8.5	-70.35	-212.4	298.4	98.2	82.5	15.69	6.259		
3,400.0	3,379.7	3,397.6	3,371.2	8.4	8.8	-69.51	-221.7	310.7	102.3	86.1	16.19	6.319		
3,500.0	3,479.0	3,497.5	3,469.9	8.7	9.1	-68.74	-231.0	322.9	106.4	89.7	16.68	6.377		
3,600.0	3,578.2	3,597.4	3,568.6	8.9	9.4	-68.02	-240.3	335.2	110.5	93.3	17.18	6.434		
3,700.0	3,677.5	3,697.3	3,667.3	9.2	9.7	-67.36	-249.6	347.5	114.6	97.0	17.67	6.488		
3,800.0	3,776.7	3,797.2	3,766.1	9.5	10.1	-66.74	-258.9	359.7	118.8	100.6	18.16	6.541		
3,900.0	3,875.9	3,897.1	3,864.8	9.8	10.4	-66.17	-268.2	372.0	122.9	104.3	18.65	6.591		
4,000.0	3,975.2	3,997.0	3,963.5	10.1	10.7	-65.63	-277.5	384.2	127.1	108.0	19.14	6.641		
4,100.0	4,074.4	4,096.9	4,062.2	10.3	11.0	-65.13	-286.9	396.5	131.3	111.6	19.63	6.688		
4,200.0	4,173.7	4,196.8	4,160.9	10.6	11.3	-64.66	-296.2	408.7	135.5	115.3	20.12	6.734		
4,300.0	4,272.9	4,296.7	4,259.6	10.9	11.7	-64.21	-305.5	421.0	139.6	119.0	20.60	6.778		
4,400.0	4,372.1	4,396.6	4,358.3	11.2	12.0	-63.79	-314.8	433.3	143.9	122.8	21.09	6.821		
4,500.0	4,471.4	4,496.5	4,457.0	11.4	12.3	-63.40	-324.1	445.5	148.1	126.5	21.58	6.862		
4,600.0	4,570.6	4,596.4	4,555.8	11.7	12.6	-63.03	-333.4	457.8	152.3	130.2	22.06	6.902		
4,700.0	4,669.9	4,696.3	4,654.5	12.0	12.9	-62.67	-342.7	470.0	156.5	133.9	22.55	6.940		
4,800.0	4,769.1	4,796.2	4,753.2	12.3	13.3	-62.34	-352.0	482.3	160.7	137.7	23.03	6.977		
4,900.0	4,868.3	4,896.2	4,851.9	12.5	13.6	-62.02	-361.4	494.6	165.0	141.4	23.52	7.013		
5,000.0	4,967.6	4,996.1	4,950.6	12.8	13.9	-61.72	-370.7	506.8	169.2	145.2	24.00	7.048		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4M-32H-O268 - 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							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,066.8	5,096.0	5,049.3	13.1	14.2	-61.44	-380.0	519.1	173.4	148.9	24.49	7.082		
5,200.0	5,166.1	5,195.9	5,148.0	13.4	14.5	-61.16	-389.3	531.3	177.7	152.7	24.97	7.114		
5,300.0	5,265.3	5,295.8	5,246.8	13.6	14.9	-60.90	-398.6	543.6	181.9	156.5	25.46	7.146		
5,400.0	5,364.5	5,395.7	5,345.5	13.9	15.2	-60.66	-407.9	555.8	186.2	160.2	25.94	7.177		
5,500.0	5,463.8	5,495.6	5,444.2	14.2	15.5	-60.42	-417.2	568.1	190.4	164.0	26.43	7.206		
5,600.0	5,563.0	5,595.5	5,542.9	14.5	15.8	-60.19	-426.5	580.4	194.7	167.8	26.91	7.235		
5,700.0	5,662.3	5,695.4	5,641.6	14.8	16.1	-59.98	-435.8	592.6	199.0	171.6	27.39	7.263		
5,800.0	5,761.5	5,795.3	5,740.3	15.0	16.5	-59.77	-445.2	604.9	203.2	175.3	27.88	7.290		
5,900.0	5,860.7	5,895.2	5,839.0	15.3	16.8	-59.57	-454.5	617.1	207.5	179.1	28.36	7.316		
6,000.0	5,960.0	5,995.1	5,937.7	15.6	17.1	-59.38	-463.8	629.4	211.8	182.9	28.84	7.341		
6,100.0	6,059.2	6,095.0	6,036.5	15.9	17.4	-59.20	-473.1	641.7	216.0	186.7	29.33	7.366		
6,200.0	6,158.5	6,194.9	6,135.2	16.1	17.7	-59.02	-482.4	653.9	220.3	190.5	29.81	7.390		
6,300.0	6,257.7	6,294.8	6,233.9	16.4	18.1	-58.85	-491.7	666.2	224.6	194.3	30.29	7.413		
6,400.0	6,356.9	6,394.7	6,332.6	16.7	18.4	-58.69	-501.0	678.4	228.9	198.1	30.78	7.436		
6,500.0	6,456.2	6,494.7	6,431.3	17.0	18.7	-58.53	-510.3	690.7	233.1	201.9	31.26	7.458		
6,600.0	6,555.4	6,594.6	6,530.0	17.2	19.0	-58.38	-519.7	702.9	237.4	205.7	31.74	7.479		
6,700.0	6,654.7	6,694.5	6,628.7	17.5	19.3	-58.23	-529.0	715.2	241.7	209.5	32.23	7.500		
6,800.0	6,753.9	6,794.4	6,727.4	17.8	19.7	-58.09	-538.3	727.5	246.0	213.3	32.71	7.521		
6,900.0	6,853.3	6,894.2	6,826.1	18.0	20.0	-13.43	-547.6	739.7	250.0	216.9	33.07	7.559		
7,000.0	6,952.5	6,992.5	6,923.2	18.1	20.3	60.39	-556.7	751.8	252.6	220.1	32.46	7.782		
7,100.0	7,048.9	7,086.3	7,015.9	18.0	20.6	79.40	-565.5	763.3	256.8	225.9	30.97	8.294		
7,200.0	7,139.5	7,174.1	7,102.7	17.8	20.9	91.85	-573.5	774.1	268.8	239.6	29.16	9.217		
7,300.0	7,221.5	7,273.3	7,201.0	17.5	21.1	102.62	-572.1	786.3	291.1	263.8	27.34	10.649		
7,400.0	7,292.4	7,386.2	7,310.6	17.1	21.1	111.62	-549.7	799.9	321.0	295.2	25.78	12.449		
7,500.0	7,350.2	7,518.6	7,430.6	16.8	21.0	119.24	-496.5	814.8	354.4	330.0	24.42	14.513		
7,600.0	7,393.0	7,677.7	7,554.1	16.6	20.7	125.50	-398.3	830.1	386.5	363.2	23.27	16.611		
7,700.0	7,419.5	7,868.8	7,660.2	16.5	20.3	129.98	-240.9	843.3	411.5	388.9	22.56	18.240		
7,800.0	7,429.0	8,087.1	7,711.3	16.5	20.3	131.89	-30.1	849.6	423.4	400.7	22.67	18.676		
7,900.0	7,429.0	8,202.8	7,712.0	16.8	20.5	131.84	85.5	849.7	424.2	400.9	23.28	18.221		
8,000.0	7,429.0	8,302.8	7,712.0	17.2	20.9	131.77	185.5	849.7	424.9	400.7	24.15	17.595		
8,100.0	7,429.0	8,402.8	7,712.0	17.7	21.4	131.69	285.5	849.7	425.5	400.3	25.26	16.845		
8,200.0	7,429.0	8,502.8	7,712.0	18.5	22.0	131.61	385.5	849.7	426.2	399.6	26.59	16.026		
8,300.0	7,429.0	8,602.8	7,712.0	19.3	22.7	131.53	485.5	849.7	426.8	398.7	28.11	15.182		
8,400.0	7,429.0	8,702.8	7,712.0	20.3	23.6	131.45	585.5	849.7	427.5	397.7	29.80	14.347		
8,500.0	7,429.0	8,802.8	7,712.0	21.4	24.5	131.38	685.5	849.7	428.1	396.5	31.62	13.541		
8,600.0	7,429.0	8,902.8	7,712.0	22.6	25.5	131.30	785.5	849.7	428.8	395.2	33.56	12.779		
8,700.0	7,429.0	9,002.7	7,712.0	23.8	26.6	131.22	885.5	849.7	429.5	393.9	35.59	12.066		
8,800.0	7,429.0	9,102.7	7,712.0	25.1	27.8	131.15	985.5	849.7	430.1	392.4	37.71	11.405		
8,900.0	7,429.0	9,202.7	7,712.0	26.4	29.0	131.07	1,085.5	849.7	430.8	390.9	39.90	10.795		
9,000.0	7,429.0	9,302.7	7,712.0	27.8	30.3	130.99	1,185.5	849.7	431.4	389.3	42.16	10.234		
9,100.0	7,429.0	9,402.7	7,712.0	29.3	31.7	130.92	1,285.5	849.7	432.1	387.6	44.47	9.717		
9,200.0	7,429.0	9,502.7	7,712.0	30.7	33.0	130.84	1,385.5	849.7	432.7	385.9	46.82	9.243		
9,300.0	7,429.0	9,602.7	7,712.0	32.2	34.4	130.77	1,485.5	849.7	433.4	384.2	49.21	8.807		
9,400.0	7,429.0	9,702.7	7,712.0	33.8	35.9	130.69	1,585.5	849.7	434.1	382.4	51.64	8.405		
9,500.0	7,429.0	9,802.7	7,712.0	35.3	37.3	130.62	1,685.5	849.7	434.7	380.6	54.11	8.035		
9,600.0	7,429.0	9,902.7	7,712.0	36.9	38.8	130.54	1,785.5	849.7	435.4	378.8	56.60	7.693		
9,700.0	7,429.0	10,002.7	7,712.0	38.4	40.3	130.47	1,885.5	849.7	436.1	376.9	59.12	7.376		
9,800.0	7,429.0	10,102.7	7,712.0	40.0	41.8	130.39	1,985.4	849.7	436.7	375.1	61.66	7.083		
9,900.0	7,429.0	10,202.7	7,712.0	41.6	43.4	130.32	2,085.4	849.7	437.4	373.2	64.22	6.811		
10,000.0	7,429.0	10,302.7	7,712.0	43.2	45.0	130.24	2,185.4	849.7	438.1	371.3	66.80	6.558		
10,100.0	7,429.0	10,402.7	7,712.0	44.9	46.5	130.17	2,285.4	849.7	438.7	369.3	69.40	6.322		
10,200.0	7,429.0	10,502.7	7,712.0	46.5	48.1	130.10	2,385.4	849.7	439.4	367.4	72.01	6.102		

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 Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4M-32H-O268 - 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)				
10,300.0	7,429.0	10,602.7	7,712.0	48.2	49.7	130.02	2,485.4	849.7	440.1	365.4	74.64	5.896		
10,400.0	7,429.0	10,702.7	7,712.0	49.8	51.3	129.95	2,585.4	849.7	440.7	363.4	77.29	5.702		
10,500.0	7,429.0	10,802.7	7,712.0	51.5	52.9	129.88	2,685.4	849.7	441.4	361.4	79.94	5.521		
10,600.0	7,429.0	10,902.7	7,712.0	53.1	54.6	129.81	2,785.4	849.7	442.1	359.4	82.62	5.351		
10,700.0	7,429.0	11,002.7	7,712.0	54.8	56.2	129.73	2,885.4	849.7	442.7	357.4	85.30	5.190		
10,800.0	7,429.0	11,102.7	7,712.0	56.5	57.8	129.66	2,985.4	849.7	443.4	355.4	87.99	5.039		
10,900.0	7,429.0	11,202.7	7,712.0	58.2	59.5	129.59	3,085.4	849.7	444.1	353.4	90.70	4.896		
11,000.0	7,429.0	11,302.7	7,712.0	59.8	61.1	129.52	3,185.4	849.7	444.8	351.3	93.41	4.761		
11,100.0	7,429.0	11,402.7	7,712.0	61.5	62.8	129.45	3,285.4	849.7	445.4	349.3	96.14	4.633		
11,200.0	7,429.0	11,502.7	7,712.0	63.2	64.5	129.38	3,385.4	849.7	446.1	347.2	98.87	4.512		
11,300.0	7,429.0	11,602.6	7,712.0	64.9	66.1	129.30	3,485.4	849.7	446.8	345.2	101.61	4.397		
11,400.0	7,429.0	11,702.6	7,712.0	66.6	67.8	129.23	3,585.4	849.7	447.4	343.1	104.37	4.287		
11,500.0	7,429.0	11,802.6	7,712.0	68.3	69.5	129.16	3,685.4	849.7	448.1	341.0	107.13	4.183		
11,600.0	7,429.0	11,902.6	7,712.0	70.0	71.1	129.09	3,785.4	849.7	448.8	338.9	109.89	4.084		
11,700.0	7,429.0	12,002.6	7,712.0	71.7	72.8	129.02	3,885.4	849.7	449.5	336.8	112.67	3.989		
11,800.0	7,429.0	12,102.6	7,712.0	73.4	74.5	128.95	3,985.4	849.7	450.2	334.7	115.45	3.899		
11,900.0	7,429.0	12,202.6	7,712.0	75.1	76.2	128.88	4,085.4	849.7	450.8	332.6	118.24	3.813		
12,000.0	7,429.0	12,302.6	7,712.0	76.9	77.9	128.81	4,185.4	849.7	451.5	330.5	121.04	3.730		
12,074.6	7,429.0	12,377.2	7,712.0	78.1	79.2	128.76	4,259.9	849.7	452.0	328.9	123.13	3.671 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4N-32H-O268 - 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	86.84	1.5	27.3	27.3					
100.0	100.0	100.0	100.0	0.1	0.1	86.84	1.5	27.3	27.3	27.0	0.30	92.109		
200.0	200.0	200.0	200.0	0.3	0.3	86.84	1.5	27.3	27.3	26.7	0.65	42.321		
300.0	300.0	300.0	300.0	0.5	0.5	86.84	1.5	27.3	27.3	26.3	0.99	27.471		
400.0	400.0	400.0	400.0	0.7	0.7	86.84	1.5	27.3	27.3	26.0	1.34	20.336		
500.0	500.0	500.0	500.0	0.8	0.8	86.84	1.5	27.3	27.3	25.6	1.69	16.143		
600.0	600.0	600.0	600.0	1.0	1.0	-61.38	1.5	27.3	26.5	24.4	2.04	12.945		
700.0	699.8	699.8	699.8	1.2	1.2	-72.27	1.5	27.3	24.4	22.0	2.40	10.145		
775.5	775.1	774.9	774.9	1.4	1.3	-86.03	1.3	27.7	23.5	20.8	2.69	8.724 CC, ES		
800.0	799.5	799.3	799.3	1.4	1.4	-91.18	1.1	28.0	23.6	20.8	2.79	8.470		
900.0	898.8	898.7	898.7	1.6	1.5	-107.87	-0.1	30.3	26.5	23.3	3.18	8.327 SF		
1,000.0	998.0	998.4	998.3	1.9	1.7	-120.43	-2.2	34.1	31.3	27.7	3.56	8.780		
1,100.0	1,097.2	1,098.3	1,098.0	2.1	1.9	-127.65	-5.1	39.5	36.9	32.9	3.95	9.326		
1,200.0	1,196.5	1,198.3	1,197.7	2.4	2.1	-130.72	-8.8	46.3	42.2	37.9	4.36	9.692		
1,300.0	1,295.7	1,298.5	1,297.4	2.7	2.3	-131.12	-13.4	54.8	47.1	42.3	4.79	9.828		
1,400.0	1,395.0	1,398.7	1,396.9	2.9	2.6	-129.61	-18.7	64.7	51.4	46.1	5.26	9.764		
1,500.0	1,494.2	1,498.8	1,496.2	3.2	2.8	-126.59	-25.0	76.2	55.2	49.4	5.77	9.556		
1,600.0	1,593.4	1,598.9	1,595.2	3.5	3.1	-122.32	-32.0	89.2	58.8	52.4	6.34	9.272		
1,700.0	1,692.7	1,698.8	1,693.8	3.7	3.4	-116.97	-39.8	103.7	62.4	55.5	6.95	8.983		
1,800.0	1,791.9	1,798.6	1,791.8	4.0	3.7	-110.76	-48.5	119.6	66.6	59.0	7.60	8.759		
1,900.0	1,891.2	1,898.0	1,889.3	4.3	4.1	-103.97	-57.9	137.0	71.6	63.3	8.26	8.663		
2,000.0	1,990.4	1,997.4	1,986.4	4.5	4.4	-97.18	-67.9	155.6	77.8	68.9	8.90	8.739		
2,100.0	2,089.6	2,096.8	2,083.5	4.8	4.8	-91.39	-78.0	174.2	84.9	75.4	9.50	8.944		
2,200.0	2,188.9	2,196.2	2,180.6	5.1	5.2	-86.54	-88.1	192.8	92.8	82.8	10.06	9.230		
2,300.0	2,288.1	2,295.6	2,277.8	5.4	5.6	-82.47	-98.2	211.5	101.3	90.7	10.59	9.563		
2,400.0	2,387.4	2,395.0	2,374.9	5.6	5.9	-79.04	-108.3	230.1	110.1	99.0	11.10	9.921		
2,500.0	2,486.6	2,494.4	2,472.0	5.9	6.3	-76.13	-118.4	248.7	119.4	107.8	11.60	10.289		
2,600.0	2,585.8	2,593.8	2,569.1	6.2	6.7	-73.64	-128.4	267.3	128.8	116.7	12.09	10.658		
2,700.0	2,685.1	2,693.2	2,666.3	6.5	7.1	-71.49	-138.5	286.0	138.5	125.9	12.57	11.021		
2,800.0	2,784.3	2,792.6	2,763.4	6.7	7.5	-69.62	-148.6	304.6	148.4	135.3	13.04	11.375		
2,900.0	2,883.5	2,892.0	2,860.5	7.0	7.9	-67.99	-158.7	323.2	158.3	144.8	13.51	11.717		
3,000.0	2,982.8	2,991.4	2,957.6	7.3	8.3	-66.55	-168.8	341.8	168.4	154.5	13.98	12.047		
3,100.0	3,082.0	3,090.8	3,054.7	7.6	8.7	-65.28	-178.9	360.5	178.6	164.2	14.45	12.364		
3,200.0	3,181.3	3,190.2	3,151.9	7.8	9.1	-64.14	-188.9	379.1	188.9	174.0	14.91	12.668		
3,300.0	3,280.5	3,289.6	3,249.0	8.1	9.5	-63.12	-199.0	397.7	199.2	183.9	15.38	12.958		
3,400.0	3,379.7	3,389.0	3,346.1	8.4	9.9	-62.20	-209.1	416.3	209.6	193.8	15.84	13.236		
3,500.0	3,479.0	3,488.4	3,443.2	8.7	10.4	-61.37	-219.2	435.0	220.1	203.8	16.30	13.501		
3,600.0	3,578.2	3,587.8	3,540.3	8.9	10.8	-60.61	-229.3	453.6	230.6	213.8	16.76	13.755		
3,700.0	3,677.5	3,687.3	3,637.5	9.2	11.2	-59.92	-239.4	472.2	241.1	223.9	17.22	13.997		
3,800.0	3,776.7	3,786.7	3,734.6	9.5	11.6	-59.29	-249.5	490.9	251.6	234.0	17.69	14.229		
3,900.0	3,875.9	3,886.1	3,831.7	9.8	12.0	-58.71	-259.5	509.5	262.2	244.1	18.15	14.450		
4,000.0	3,975.2	3,985.5	3,928.8	10.1	12.4	-58.17	-269.6	528.1	272.8	254.2	18.61	14.662		
4,100.0	4,074.4	4,084.9	4,026.0	10.3	12.8	-57.68	-279.7	546.7	283.4	264.4	19.07	14.865		
4,200.0	4,173.7	4,184.3	4,123.1	10.6	13.2	-57.22	-289.8	565.4	294.1	274.6	19.53	15.060		
4,300.0	4,272.9	4,283.7	4,220.2	10.9	13.6	-56.79	-299.9	584.0	304.8	284.8	19.99	15.246		
4,400.0	4,372.1	4,383.1	4,317.3	11.2	14.0	-56.39	-310.0	602.6	315.4	295.0	20.45	15.424		
4,500.0	4,471.4	4,482.5	4,414.4	11.4	14.4	-56.01	-320.0	621.2	326.1	305.2	20.91	15.596		
4,600.0	4,570.6	4,581.9	4,511.6	11.7	14.9	-55.66	-330.1	639.9	336.8	315.5	21.37	15.760		
4,700.0	4,669.9	4,681.3	4,608.7	12.0	15.3	-55.34	-340.2	658.5	347.6	325.7	21.83	15.918		
4,800.0	4,769.1	4,780.7	4,705.8	12.3	15.7	-55.03	-350.3	677.1	358.3	336.0	22.29	16.070		
4,900.0	4,868.3	4,880.1	4,802.9	12.5	16.1	-54.74	-360.4	695.7	369.0	346.3	22.76	16.216		
5,000.0	4,967.6	4,979.5	4,900.1	12.8	16.5	-54.46	-370.5	714.4	379.8	356.5	23.22	16.357		

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 Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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										S32-T2N-R68W (File/Hwy 52) - Hwy 52 4N-32H-O268 - 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	5,066.8	5,078.9	4,997.2	13.1	16.9	-54.20	-380.5	733.0	390.5	366.8	23.68	16.493				
5,200.0	5,166.1	5,178.3	5,094.3	13.4	17.3	-53.96	-390.6	751.6	401.3	377.1	24.14	16.623				
5,300.0	5,265.3	5,277.7	5,191.4	13.6	17.7	-53.73	-400.7	770.3	412.1	387.5	24.60	16.749				
5,400.0	5,364.5	5,377.1	5,288.5	13.9	18.1	-53.51	-410.8	788.9	422.8	397.8	25.06	16.871				
5,500.0	5,463.8	5,476.5	5,385.7	14.2	18.6	-53.30	-420.9	807.5	433.6	408.1	25.52	16.988				
5,600.0	5,563.0	5,575.9	5,482.8	14.5	19.0	-53.10	-431.0	826.1	444.4	418.4	25.99	17.101				
5,700.0	5,662.3	5,675.4	5,579.9	14.8	19.4	-52.91	-441.0	844.8	455.2	428.7	26.45	17.211				
5,800.0	5,761.5	5,774.8	5,677.0	15.0	19.8	-52.73	-451.1	863.4	466.0	439.1	26.91	17.317				
5,900.0	5,860.7	5,874.2	5,774.2	15.3	20.2	-52.55	-461.2	882.0	476.8	449.4	27.37	17.419				
6,000.0	5,960.0	5,973.6	5,871.3	15.6	20.6	-52.39	-471.3	900.6	487.6	459.8	27.83	17.518				
6,100.0	6,059.2	6,073.0	5,968.4	15.9	21.0	-52.23	-481.4	919.3	498.4	470.1	28.30	17.614				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4O-32H-O268 - 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	94.06	-2.1	30.1	30.2					
100.0	100.0	100.0	100.0	0.1	0.1	94.06	-2.1	30.1	30.2	29.9	0.30	101.655		
200.0	200.0	200.0	200.0	0.3	0.3	94.06	-2.1	30.1	30.2	29.5	0.65	46.706		
300.0	300.0	300.0	300.0	0.5	0.5	94.06	-2.1	30.1	30.2	29.2	0.99	30.318		
400.0	400.0	400.0	400.0	0.7	0.7	94.06	-2.1	30.1	30.2	28.8	1.34	22.443 CC, ES		
500.0	500.0	499.5	499.5	0.8	0.8	94.47	-2.4	30.9	31.0	29.3	1.69	18.321		
600.0	600.0	598.9	598.9	1.0	1.0	-51.74	-3.3	33.4	32.4	30.4	2.04	15.883		
700.0	699.8	698.3	698.2	1.2	1.2	-56.74	-4.6	37.4	33.5	31.1	2.40	13.961		
800.0	799.5	797.7	797.3	1.4	1.4	-65.19	-6.6	43.1	34.8	32.0	2.78	12.497		
900.0	898.8	896.9	896.3	1.6	1.6	-71.64	-9.1	50.5	37.1	33.9	3.21	11.560		
1,000.0	998.0	996.2	995.1	1.9	1.8	-78.17	-12.1	59.4	40.7	37.0	3.66	11.106		
1,100.0	1,097.2	1,095.5	1,093.8	2.1	2.1	-82.86	-15.7	70.0	46.0	41.8	4.14	11.089 SF		
1,200.0	1,196.5	1,194.8	1,192.3	2.4	2.3	-85.00	-19.9	82.2	52.5	47.8	4.64	11.298		
1,300.0	1,295.7	1,294.0	1,290.3	2.7	2.6	-85.30	-24.6	96.0	60.0	54.8	5.16	11.635		
1,400.0	1,395.0	1,392.9	1,388.0	2.9	2.9	-84.36	-29.8	111.3	68.5	62.8	5.68	12.067		
1,500.0	1,494.2	1,491.7	1,485.1	3.2	3.3	-82.63	-35.6	128.2	78.1	71.9	6.21	12.586		
1,600.0	1,593.4	1,590.2	1,581.6	3.5	3.6	-80.42	-41.9	146.7	88.9	82.1	6.73	13.196		
1,700.0	1,692.7	1,688.3	1,677.4	3.7	4.0	-77.98	-48.7	166.6	100.9	93.6	7.26	13.899		
1,800.0	1,791.9	1,786.0	1,772.5	4.0	4.4	-75.46	-56.0	188.0	114.2	106.4	7.77	14.696		
1,900.0	1,891.2	1,883.3	1,866.8	4.3	4.9	-72.96	-63.8	210.8	128.9	120.7	8.27	15.586		
2,000.0	1,990.4	1,981.1	1,961.2	4.5	5.3	-70.61	-72.0	235.0	144.9	136.2	8.76	16.542		
2,100.0	2,089.6	2,079.6	2,056.3	4.8	5.8	-68.67	-80.4	259.5	161.3	152.0	9.25	17.436		
2,200.0	2,188.9	2,178.2	2,151.3	5.1	6.3	-67.10	-88.7	284.0	177.7	168.0	9.73	18.258		
2,300.0	2,288.1	2,276.7	2,246.4	5.4	6.7	-65.79	-97.1	308.5	194.3	184.1	10.22	19.015		
2,400.0	2,387.4	2,375.2	2,341.5	5.6	7.2	-64.68	-105.4	333.0	211.0	200.3	10.70	19.713		
2,500.0	2,486.6	2,473.8	2,436.5	5.9	7.7	-63.74	-113.8	357.6	227.7	216.5	11.18	20.357		
2,600.0	2,585.8	2,572.3	2,531.6	6.2	8.2	-62.93	-122.2	382.1	244.5	232.8	11.67	20.952		
2,700.0	2,685.1	2,670.8	2,626.6	6.5	8.7	-62.22	-130.5	406.6	261.3	249.1	12.15	21.503		
2,800.0	2,784.3	2,769.3	2,721.7	6.7	9.2	-61.59	-138.9	431.1	278.1	265.5	12.63	22.015		
2,900.0	2,883.5	2,867.9	2,816.8	7.0	9.6	-61.04	-147.2	455.6	295.0	281.9	13.12	22.492		
3,000.0	2,982.8	2,966.4	2,911.8	7.3	10.1	-60.55	-155.6	480.1	311.9	298.3	13.60	22.936		
3,100.0	3,082.0	3,064.9	3,006.9	7.6	10.6	-60.11	-164.0	504.6	328.8	314.7	14.08	23.351		
3,200.0	3,181.3	3,163.5	3,102.0	7.8	11.1	-59.71	-172.3	529.1	345.8	331.2	14.56	23.740		
3,300.0	3,280.5	3,262.0	3,197.0	8.1	11.6	-59.35	-180.7	553.6	362.7	347.7	15.05	24.105		
3,400.0	3,379.7	3,360.5	3,292.1	8.4	12.1	-59.02	-189.0	578.2	379.7	364.2	15.53	24.447		
3,500.0	3,479.0	3,459.0	3,387.2	8.7	12.6	-58.72	-197.4	602.7	396.7	380.6	16.01	24.770		
3,600.0	3,578.2	3,557.6	3,482.2	8.9	13.1	-58.44	-205.7	627.2	413.6	397.1	16.50	25.074		
3,700.0	3,677.5	3,656.1	3,577.3	9.2	13.6	-58.19	-214.1	651.7	430.6	413.7	16.98	25.361		
3,800.0	3,776.7	3,754.6	3,672.4	9.5	14.1	-57.96	-222.5	676.2	447.6	430.2	17.46	25.633		
3,900.0	3,875.9	3,853.1	3,767.4	9.8	14.5	-57.74	-230.8	700.7	464.7	446.7	17.95	25.890		
4,000.0	3,975.2	3,951.7	3,862.5	10.1	15.0	-57.54	-239.2	725.2	481.7	463.2	18.43	26.134		
4,100.0	4,074.4	4,050.2	3,957.5	10.3	15.5	-57.35	-247.5	749.7	498.7	479.8	18.91	26.366		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Hwy 52 4P-32H-O268 - 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	87.58	1.5	35.7	35.7					
100.0	100.0	100.0	100.0	0.1	0.1	87.58	1.5	35.7	35.7	35.4	0.30	120.366		
200.0	200.0	200.0	200.0	0.3	0.3	87.58	1.5	35.7	35.7	35.1	0.65	55.303 CC, ES		
300.0	300.0	299.4	299.4	0.5	0.5	87.89	1.3	36.5	36.6	35.6	0.99	36.783		
400.0	400.0	398.7	398.7	0.7	0.7	88.73	0.9	39.1	39.1	37.8	1.34	29.122		
500.0	500.0	497.9	497.8	0.8	0.9	89.90	0.1	43.3	43.3	41.7	1.69	25.610		
600.0	600.0	597.0	596.7	1.0	1.1	-55.37	-1.0	49.2	48.3	46.3	2.04	23.683		
700.0	699.8	696.0	695.4	1.2	1.3	-58.30	-2.5	56.8	53.1	50.7	2.40	22.114		
800.0	799.5	794.9	793.8	1.4	1.5	-63.23	-4.2	66.0	57.9	55.1	2.78	20.804		
900.0	898.8	893.5	891.8	1.6	1.7	-65.20	-6.3	76.9	63.4	60.2	3.21	19.760		
1,000.0	998.0	992.2	989.6	1.9	2.0	-68.49	-8.6	89.4	70.0	66.3	3.66	19.104		
1,100.0	1,097.2	1,090.6	1,087.1	2.1	2.3	-71.53	-11.3	103.6	78.4	74.2	4.14	18.920 SF		
1,200.0	1,196.5	1,188.9	1,184.0	2.4	2.6	-73.34	-14.2	119.3	88.3	83.7	4.64	19.050		
1,300.0	1,295.7	1,286.9	1,280.4	2.7	3.0	-74.22	-17.5	136.7	99.7	94.6	5.14	19.397		
1,400.0	1,395.0	1,384.7	1,376.2	2.9	3.3	-74.40	-21.1	155.6	112.5	106.8	5.65	19.905		
1,500.0	1,494.2	1,482.0	1,471.3	3.2	3.7	-74.11	-24.9	176.0	126.6	120.5	6.16	20.540		
1,600.0	1,593.4	1,578.9	1,565.7	3.5	4.2	-73.48	-29.1	198.0	142.1	135.5	6.68	21.282		
1,700.0	1,692.7	1,675.4	1,659.1	3.7	4.6	-72.64	-33.5	221.3	159.1	151.9	7.19	22.116		
1,800.0	1,791.9	1,771.3	1,751.7	4.0	5.1	-71.67	-38.1	246.1	177.4	169.7	7.70	23.032		
1,900.0	1,891.2	1,866.6	1,843.2	4.3	5.6	-70.63	-43.0	272.2	197.1	188.9	8.21	24.023		
2,000.0	1,990.4	1,963.7	1,936.1	4.5	6.1	-69.60	-48.2	299.9	217.9	209.2	8.71	25.023		
2,100.0	2,089.6	2,061.5	2,029.7	4.8	6.6	-68.74	-53.5	327.8	238.8	229.6	9.21	25.922		
2,200.0	2,188.9	2,159.2	2,123.2	5.1	7.1	-68.02	-58.8	355.7	259.7	250.0	9.72	26.733		
2,300.0	2,288.1	2,256.9	2,216.7	5.4	7.7	-67.41	-64.0	383.6	280.7	270.5	10.22	27.466		
2,400.0	2,387.4	2,354.7	2,310.2	5.6	8.2	-66.88	-69.3	411.5	301.7	291.0	10.72	28.133		
2,500.0	2,486.6	2,452.4	2,403.7	5.9	8.7	-66.42	-74.5	439.4	322.7	311.5	11.23	28.742		
2,600.0	2,585.8	2,550.1	2,497.3	6.2	9.3	-66.01	-79.8	467.3	343.7	332.0	11.73	29.300		
2,700.0	2,685.1	2,647.9	2,590.8	6.5	9.8	-65.66	-85.0	495.2	364.8	352.5	12.24	29.812		
2,800.0	2,784.3	2,745.6	2,684.3	6.7	10.3	-65.34	-90.3	523.1	385.8	373.1	12.74	30.285		
2,900.0	2,883.5	2,843.4	2,777.8	7.0	10.9	-65.05	-95.5	551.1	406.9	393.6	13.24	30.723		
3,000.0	2,982.8	2,941.1	2,871.4	7.3	11.4	-64.80	-100.8	579.0	427.9	414.2	13.75	31.128		
3,100.0	3,082.0	3,038.8	2,964.9	7.6	11.9	-64.56	-106.1	606.9	449.0	434.8	14.25	31.506		
3,200.0	3,181.3	3,136.6	3,058.4	7.8	12.5	-64.35	-111.3	634.8	470.1	455.4	14.76	31.858		
3,300.0	3,280.5	3,234.3	3,151.9	8.1	13.0	-64.16	-116.6	662.7	491.2	475.9	15.26	32.186		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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												S32-T2N-R68W (File/Hwy 52) - NELSON E UNIT 2 (EXISTING) - ENCANA WELL - NO SURVEYS		Offset Site Error:		0.0 ft	
Survey Program:												8190-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	Separation						
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor					
8,500.0	7,429.0	7,382.0	7,382.0	21.4	12.9	90.00	858.3	948.9	454.6	422.5	32.11	14.155					
8,600.0	7,429.0	7,382.0	7,382.0	22.6	12.9	90.00	858.3	948.9	427.6	394.2	33.40	12.802					
8,669.1	7,429.0	7,382.0	7,382.0	23.4	12.9	90.00	858.3	948.9	421.9	387.6	34.33	12.290 CC, ES					
8,700.0	7,429.0	7,382.0	7,382.0	23.8	12.9	90.00	858.3	948.9	423.1	388.3	34.75	12.175 SF					
8,800.0	7,429.0	7,382.0	7,382.0	25.1	12.9	90.00	858.3	948.9	441.8	405.6	36.15	12.219					
8,900.0	7,429.0	7,382.0	7,382.0	26.4	12.9	90.00	858.3	948.9	481.0	443.4	37.60	12.791					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - RAY NELSON 33-32 (EXISTING) - ENCANA WELL - ENCANA WELL													Offset Site Error:	0.0 ft
Survey Program: 926-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	54.08	224.1	309.3	382.0					
100.0	100.0	92.9	92.9	0.1	0.2	54.08	224.0	309.2	381.8	381.5	0.31	1,233.554		
200.0	200.0	193.8	193.8	0.3	0.3	54.09	223.8	309.0	381.5	380.8	0.66	578.644		
300.0	300.0	294.7	294.7	0.5	0.5	54.09	223.4	308.5	380.9	379.9	1.01	377.489		
400.0	400.0	395.7	395.7	0.7	0.7	54.11	222.8	307.9	380.1	378.7	1.36	279.707		
500.0	500.0	496.6	496.6	0.8	0.9	54.12	222.1	307.0	379.0	377.3	1.71	221.814		
600.0	600.0	597.5	597.5	1.0	1.1	-91.15	221.2	306.0	377.7	375.6	2.05	184.303		
700.0	699.8	698.3	698.3	1.2	1.2	-91.96	220.1	304.8	376.2	373.8	2.41	156.190		
800.0	799.5	798.8	798.8	1.4	1.4	-93.30	218.9	303.5	374.8	372.0	2.79	134.348		
900.0	898.8	899.0	899.0	1.6	1.6	-91.07	217.5	301.9	373.4	370.2	3.19	116.928		
1,000.0	998.0	995.6	995.5	1.9	1.8	-91.79	217.0	299.8	371.5	367.9	3.60	103.072		
1,035.9	1,033.7	1,027.8	1,027.7	2.0	1.8	-92.57	217.5	298.8	371.3	367.6	3.75	98.964 CC, ES		
1,100.0	1,097.2	1,081.9	1,081.8	2.1	1.9	-93.94	219.4	297.6	372.2	368.2	4.01	92.829		
1,200.0	1,196.5	1,167.5	1,167.1	2.4	2.0	-96.25	225.0	296.5	377.2	372.8	4.42	85.257		
1,300.0	1,295.7	1,254.2	1,253.4	2.7	2.2	-98.75	233.8	296.2	386.2	381.4	4.84	79.751		
1,400.0	1,395.0	1,344.1	1,342.5	2.9	2.4	-101.35	245.1	296.6	398.6	393.3	5.28	75.515		
1,500.0	1,494.2	1,430.1	1,427.5	3.2	2.6	-103.96	258.5	296.5	413.9	408.2	5.71	72.505		
1,600.0	1,593.4	1,521.0	1,516.9	3.5	2.8	-106.71	275.0	296.3	432.4	426.3	6.15	70.335		
1,700.0	1,692.7	1,606.7	1,600.9	3.7	3.1	-109.30	292.3	295.5	453.4	446.8	6.58	68.889		
1,800.0	1,791.9	1,691.9	1,683.7	4.0	3.4	-111.92	312.1	293.7	477.5	470.5	7.01	68.126		
9,200.0	7,429.0	7,604.4	7,420.8	30.7	27.1	-89.98	1,560.2	66.0	488.7	432.6	56.06	8.718		
9,300.0	7,429.0	7,605.4	7,421.7	32.2	27.1	-90.09	1,560.2	66.0	461.6	404.0	57.62	8.010		
9,378.7	7,429.0	7,606.1	7,422.5	33.4	27.1	-90.19	1,560.2	66.0	454.8	396.0	58.87	7.726		
9,400.0	7,429.0	7,606.3	7,422.7	33.8	27.1	-90.21	1,560.2	66.0	455.3	396.1	59.21	7.690 SF		
9,500.0	7,429.0	7,607.2	7,423.6	35.3	27.1	-90.33	1,560.2	66.0	470.7	409.9	60.81	7.740		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - RAY NELSON 34-32 (EXISTING) - ENCANA WELL - ENCANA WELL													Offset Site Error:	0.0 ft
Survey Program: 103-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	95.16	-14.2	156.8	157.7					
100.0	100.0	91.0	91.0	0.1	0.1	95.14	-14.1	157.1	157.7	157.5	0.28	554.889		
200.0	200.0	190.4	190.4	0.3	0.3	95.13	-14.2	157.9	158.6	157.9	0.63	251.937		
300.0	300.0	290.7	290.7	0.5	0.5	95.26	-14.6	158.8	159.5	158.5	0.98	162.974		
400.0	400.0	390.9	390.9	0.7	0.7	95.52	-15.4	159.5	160.3	159.0	1.33	120.680		
500.0	500.0	491.1	491.1	0.8	0.8	95.76	-16.2	160.1	160.9	159.2	1.68	95.926		
600.0	600.0	591.2	591.2	1.0	1.0	-49.55	-16.7	160.6	160.3	158.3	2.03	79.055		
700.0	699.8	691.5	691.5	1.2	1.2	-50.92	-17.1	161.0	157.4	155.0	2.38	66.001		
800.0	799.5	791.3	791.3	1.4	1.4	-53.49	-17.2	161.1	152.2	149.4	2.75	55.242		
900.0	898.8	891.2	891.2	1.6	1.5	-53.17	-17.3	161.0	145.2	142.1	3.14	46.177		
1,000.0	998.0	990.7	990.7	1.9	1.7	-56.01	-17.1	160.6	137.5	134.0	3.55	38.734		
1,100.0	1,097.2	1,090.1	1,090.1	2.1	1.9	-60.47	-17.2	160.0	130.4	126.5	3.97	32.843		
1,200.0	1,196.5	1,189.9	1,189.8	2.4	2.1	-65.55	-17.1	159.1	123.9	119.5	4.41	28.119		
1,300.0	1,295.7	1,288.6	1,288.6	2.7	2.2	-71.25	-16.7	158.0	118.4	113.6	4.85	24.398		
1,400.0	1,395.0	1,387.7	1,387.6	2.9	2.4	-77.55	-16.0	157.0	114.4	109.1	5.31	21.560		
1,500.0	1,494.2	1,487.1	1,487.1	3.2	2.6	-84.42	-15.1	155.7	111.8	106.0	5.76	19.401		
1,600.0	1,593.4	1,586.6	1,586.5	3.5	2.7	-91.58	-14.4	153.9	110.5	104.3	6.21	17.797		
1,644.2	1,637.3	1,630.6	1,630.5	3.6	2.8	-94.79	-14.1	153.1	110.3	103.9	6.40	17.242 CC, ES		
1,700.0	1,692.7	1,685.1	1,685.0	3.7	2.9	-98.75	-13.7	152.1	110.7	104.1	6.63	16.704		
1,800.0	1,791.9	1,783.5	1,783.4	4.0	3.1	-105.68	-12.6	150.8	113.5	106.5	7.03	16.152		
1,900.0	1,891.2	1,882.0	1,881.9	4.3	3.3	-112.26	-11.0	149.6	118.3	110.9	7.40	15.985 SF		
2,000.0	1,990.4	1,981.2	1,981.1	4.5	3.4	-118.31	-9.3	148.4	124.7	116.9	7.75	16.093		
2,100.0	2,089.6	2,081.5	2,081.3	4.8	3.6	-123.55	-8.3	147.6	131.7	123.6	8.09	16.291		
2,200.0	2,188.9	2,181.8	2,181.7	5.1	3.8	-127.94	-8.5	147.2	138.7	130.3	8.42	16.480		
2,300.0	2,288.1	2,281.2	2,281.0	5.4	4.0	-131.80	-9.1	146.9	146.0	137.2	8.74	16.705		
2,400.0	2,387.4	2,381.0	2,380.8	5.6	4.1	-135.35	-9.7	146.5	153.9	144.8	9.06	16.991		
2,500.0	2,486.6	2,482.0	2,481.8	5.9	4.3	-138.62	-11.1	146.0	161.4	152.1	9.37	17.230		
2,600.0	2,585.8	2,580.7	2,580.5	6.2	4.5	-142.33	-13.1	143.1	169.0	159.3	9.66	17.496		
2,700.0	2,685.1	2,684.1	2,683.6	6.5	4.7	-146.75	-16.3	137.4	176.4	166.5	9.93	17.772		
2,800.0	2,784.3	2,785.0	2,784.2	6.7	4.9	-150.91	-21.3	131.5	183.1	172.9	10.19	17.959		
2,900.0	2,883.5	2,885.3	2,884.0	7.0	5.1	-155.35	-28.0	124.0	189.3	178.8	10.46	18.103		
3,000.0	2,982.8	2,984.0	2,982.2	7.3	5.3	-159.66	-34.6	115.8	196.9	186.2	10.73	18.354		
3,100.0	3,082.0	3,084.6	3,081.8	7.6	5.5	-164.46	-43.1	105.2	204.7	193.7	11.02	18.580		
3,200.0	3,181.3	3,183.2	3,179.0	7.8	5.7	-169.62	-53.4	92.4	213.4	202.1	11.33	18.835		
3,300.0	3,280.5	3,279.2	3,273.8	8.1	5.9	-174.07	-62.9	80.4	223.9	212.3	11.68	19.171		
3,400.0	3,379.7	3,373.0	3,366.5	8.4	6.2	-177.93	-70.8	68.2	237.1	225.1	12.06	19.660		
3,500.0	3,479.0	3,469.3	3,461.2	8.7	6.5	177.99	-79.7	53.1	252.6	240.1	12.50	20.206		
3,600.0	3,578.2	3,565.6	3,555.6	8.9	6.7	174.02	-89.6	36.7	269.4	256.5	12.97	20.771		
3,700.0	3,677.5	3,663.4	3,651.1	9.2	7.1	170.20	-100.4	18.9	287.8	274.4	13.49	21.337		
3,800.0	3,776.7	3,765.2	3,750.4	9.5	7.4	166.36	-114.2	0.8	305.6	291.5	14.06	21.731		
3,900.0	3,875.9	3,864.8	3,847.1	9.8	7.8	162.72	-129.5	-17.3	323.9	309.2	14.66	22.094		
4,000.0	3,975.2	3,958.5	3,938.0	10.1	8.1	159.54	-144.9	-34.0	342.5	327.3	15.25	22.460		
4,100.0	4,074.4	4,051.2	4,027.8	10.3	8.5	156.69	-159.5	-51.9	363.6	347.8	15.84	22.959		
4,200.0	4,173.7	4,147.6	4,121.3	10.6	8.8	154.18	-173.8	-70.4	385.8	369.4	16.43	23.486		
4,300.0	4,272.9	4,252.4	4,223.3	10.9	9.2	151.91	-188.8	-89.0	407.6	390.6	17.03	23.935		
4,400.0	4,372.1	4,350.5	4,319.3	11.2	9.6	150.24	-201.7	-104.9	428.8	411.3	17.58	24.393		
4,500.0	4,471.4	4,456.5	4,423.3	11.4	9.9	148.72	-215.3	-120.2	448.7	430.6	18.15	24.725		
4,600.0	4,570.6	4,552.9	4,517.9	11.7	10.3	147.44	-228.0	-133.6	468.3	449.6	18.69	25.059		
4,700.0	4,669.9	4,655.0	4,618.1	12.0	10.6	146.17	-241.7	-147.8	488.1	468.9	19.24	25.371		

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 Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - RAY NELSON 44-32 (EXISTING) - ENCANA WELL - ENCANA WELL														Offset Site Error:	0.0 ft
Survey Program: 134-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	56.60	211.3	320.5	384.0						
100.0	100.0	91.5	91.5	0.1	0.1	56.66	211.0	320.7	383.8	383.6	0.29	1,318.948			
143.0	143.0	134.0	134.0	0.2	0.2	56.72	210.6	320.8	383.8	383.3	0.43	887.692 CC, ES			
200.0	200.0	185.5	185.5	0.3	0.3	56.78	210.4	321.3	384.1	383.5	0.62	618.583			
300.0	300.0	273.8	273.7	0.5	0.5	56.79	211.8	323.5	387.0	386.1	0.95	407.335			
400.0	400.0	365.3	365.1	0.7	0.6	56.78	214.6	327.8	392.7	391.4	1.29	304.430			
500.0	500.0	454.2	453.7	0.8	0.8	56.84	218.1	333.9	400.5	398.9	1.63	245.707			
600.0	600.0	544.7	543.8	1.0	1.1	-88.03	222.4	342.4	411.0	409.0	1.95	210.810			
700.0	699.8	635.8	634.1	1.2	1.3	-88.21	227.3	352.8	423.3	421.0	2.30	184.282			
800.0	799.5	723.9	721.2	1.4	1.6	-88.62	232.4	364.8	437.7	435.0	2.66	164.274			
900.0	898.8	815.9	811.8	1.6	1.9	-85.26	237.5	379.9	453.9	450.9	3.07	147.880			
1,000.0	998.0	920.4	914.6	1.9	2.2	-84.71	241.5	398.2	469.4	465.9	3.53	133.092			
1,100.0	1,097.2	1,017.0	1,009.6	2.1	2.6	-85.07	243.2	415.8	484.2	480.2	3.99	121.261 SF			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - RAY NELSON 6-8-32 (EXISTING) - ENCANA WELL - PLAN ONLY													Offset Site Error:	0.0 ft
Survey Program: 850-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)				
5,500.0	5,463.8	5,644.3	5,492.2	14.2	24.2	-80.12	-213.1	809.6	495.2	459.8	35.40	13.990		
5,600.0	5,563.0	5,742.5	5,586.9	14.5	24.7	-78.85	-239.0	809.3	479.5	443.2	36.28	13.215		
5,700.0	5,662.3	5,840.6	5,681.6	14.8	25.2	-77.49	-264.9	809.0	464.0	426.9	37.18	12.481		
5,800.0	5,761.5	5,938.8	5,776.3	15.0	25.7	-76.04	-290.8	808.6	448.9	410.8	38.08	11.787		
5,900.0	5,860.7	6,037.0	5,871.0	15.3	26.1	-74.48	-316.7	808.3	434.0	395.0	38.99	11.132		
6,000.0	5,960.0	6,135.1	5,965.7	15.6	26.6	-72.83	-342.7	808.0	419.4	379.6	39.89	10.515		
6,100.0	6,059.2	6,233.3	6,060.3	15.9	27.1	-71.05	-368.6	807.6	405.3	364.5	40.79	9.936		
6,200.0	6,158.5	6,331.5	6,155.0	16.1	27.6	-69.15	-394.5	807.3	391.5	349.8	41.68	9.394		
6,300.0	6,257.7	6,429.6	6,249.7	16.4	28.1	-67.12	-420.4	807.0	378.2	335.7	42.55	8.888		
6,400.0	6,356.9	6,527.8	6,344.4	16.7	28.5	-64.95	-446.3	806.6	365.5	322.1	43.40	8.420		
6,500.0	6,456.2	6,624.1	6,437.4	17.0	28.7	-62.79	-471.0	806.3	353.4	309.5	43.94	8.044		
6,600.0	6,555.4	6,720.3	6,531.1	17.2	28.8	-60.99	-492.7	806.0	342.6	298.3	44.30	7.733		
6,700.0	6,654.7	6,817.2	6,626.3	17.5	28.9	-59.62	-511.3	805.8	332.7	288.1	44.63	7.455		
6,800.0	6,753.9	6,914.7	6,722.5	17.8	28.9	-58.75	-526.9	805.6	323.6	278.7	44.95	7.199		
6,900.0	6,853.3	7,012.5	6,819.5	18.0	29.0	-13.37	-539.1	805.4	314.8	269.6	45.17	6.969		
7,000.0	6,952.5	7,109.2	6,915.9	18.1	29.1	60.64	-548.0	805.3	305.0	259.9	45.05	6.769		
7,100.0	7,048.9	7,203.4	7,009.9	18.0	29.2	79.25	-553.5	805.3	296.2	251.7	44.51	6.655 SF		
7,184.5	7,125.9	7,280.0	7,086.4	17.8	29.2	89.77	-555.6	805.2	293.1	249.4	43.64	6.716 CC, ES		
7,200.0	7,139.5	7,293.6	7,100.0	17.8	29.2	91.54	-555.8	805.2	293.2	249.8	43.44	6.749		
7,300.0	7,221.5	7,376.0	7,182.5	17.5	29.3	101.79	-556.0	805.2	301.9	259.9	41.95	7.196		
7,400.0	7,292.4	7,447.0	7,253.4	17.1	29.3	109.49	-556.0	805.2	328.3	287.9	40.45	8.118		
7,500.0	7,350.2	7,504.7	7,311.2	16.8	29.4	113.56	-556.0	805.2	375.0	335.5	39.53	9.488		
7,600.0	7,393.0	7,547.5	7,354.0	16.6	29.4	113.01	-556.0	805.2	439.8	400.1	39.74	11.067		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - Ray Nelson 7-8-32 - DD - Plan #1														Offset Site Error:	0.0 ft
Survey Program: 0-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)				Between Centres (ft)	Between Ellipses (ft)		
0.0	0.0	0.0	0.0	0.0	0.0	59.85	194.6	335.1	387.6						
100.0	100.0	91.0	91.0	0.1	0.1	59.85	194.6	335.1	387.5	0.28	1,367.373				
200.0	200.0	191.0	191.0	0.3	0.3	59.85	194.6	335.1	387.5	0.63	614.939				
300.0	300.0	291.0	291.0	0.5	0.5	59.85	194.6	335.1	387.5	0.98	395.710				
400.0	400.0	391.0	391.0	0.7	0.7	59.85	194.6	335.1	387.5	1.33	291.712				
500.0	500.0	491.0	491.0	0.8	0.8	59.85	194.6	335.1	387.5	1.68	231.002 CC				
600.0	600.0	586.9	586.8	1.0	1.0	-85.20	193.7	336.1	387.8	2.02	191.766 ES				
700.0	699.8	682.3	682.2	1.2	1.2	-85.29	190.9	339.5	389.0	2.38	163.171				
800.0	799.5	777.7	777.3	1.4	1.4	-85.42	186.1	345.5	391.1	2.78	140.485				
900.0	898.8	873.2	872.1	1.6	1.6	-81.50	179.2	353.9	393.9	3.23	121.869				
1,000.0	998.0	968.6	966.5	1.9	1.9	-80.03	170.4	364.7	396.9	3.73	106.539				
1,100.0	1,097.2	1,063.7	1,060.1	2.1	2.2	-79.39	159.6	377.9	401.1	4.26	94.063				
1,200.0	1,196.5	1,159.5	1,153.7	2.4	2.5	-78.34	146.9	393.6	406.5	4.84	84.049				
1,300.0	1,295.7	1,259.0	1,250.8	2.7	2.9	-77.17	133.0	410.5	412.5	5.44	75.838				
1,400.0	1,395.0	1,358.5	1,347.8	2.9	3.3	-76.03	119.2	427.5	418.6	6.05	69.227				
1,500.0	1,494.2	1,457.9	1,444.8	3.2	3.7	-74.93	105.4	444.5	424.9	6.66	63.828				
1,600.0	1,593.4	1,557.4	1,541.8	3.5	4.1	-73.85	91.5	461.5	431.3	7.27	59.362				
1,700.0	1,692.7	1,656.9	1,638.9	3.7	4.5	-72.81	77.7	478.4	437.9	7.87	55.624				
1,800.0	1,791.9	1,756.3	1,735.9	4.0	4.9	-71.80	63.9	495.4	444.6	8.47	52.461				
1,900.0	1,891.2	1,855.8	1,832.9	4.3	5.3	-70.82	50.0	512.4	451.4	9.07	49.757				
2,000.0	1,990.4	1,955.3	1,930.0	4.5	5.7	-69.86	36.2	529.4	458.4	9.67	47.426				
2,100.0	2,089.6	2,054.7	2,027.0	4.8	6.1	-68.94	22.3	546.3	465.5	10.25	45.402				
2,200.0	2,188.9	2,154.2	2,124.0	5.1	6.6	-68.05	8.5	563.3	472.8	10.84	43.630				
2,300.0	2,288.1	2,253.7	2,221.0	5.4	7.0	-67.18	-5.3	580.3	480.1	11.41	42.071				
2,400.0	2,387.4	2,353.2	2,318.1	5.6	7.4	-66.34	-19.2	597.3	487.5	11.98	40.690				
2,500.0	2,486.6	2,452.6	2,415.1	5.9	7.8	-65.52	-33.0	614.2	495.1	12.55	39.462 SF				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 S32-T2N-R68W (File/Hwy 52) - RAY NELSON 8-8-32 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error: 0.0 ft
Survey Program: 70-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	59.85	194.6	335.1	387.6				
100.0	100.0	87.5	87.5	0.1	0.1	59.87	194.7	335.5	387.9	387.6	0.27	1,410.630	
200.0	200.0	183.6	183.6	0.3	0.3	59.94	194.9	336.7	389.1	388.5	0.62	630.424	
300.0	300.0	280.2	280.2	0.5	0.5	60.33	193.6	339.9	391.4	390.4	0.96	407.222	
400.0	400.0	371.7	371.4	0.7	0.7	61.08	190.9	345.5	395.2	393.9	1.30	304.440	
500.0	500.0	466.0	465.2	0.8	0.9	62.19	186.7	354.1	401.1	399.5	1.64	243.975	
600.0	600.0	559.5	557.9	1.0	1.2	-81.47	180.8	364.5	407.9	405.8	2.11	193.112	
700.0	699.8	649.7	647.0	1.2	1.5	-80.28	173.7	377.2	416.4	413.9	2.55	163.164	
800.0	799.5	739.9	735.3	1.4	1.8	-79.16	165.1	392.8	426.6	423.6	3.04	140.553	
900.0	898.8	828.6	821.9	1.6	2.2	-74.39	156.7	410.4	438.5	435.0	3.55	123.597	
1,000.0	998.0	920.8	911.5	1.9	2.6	-72.50	148.3	430.6	451.5	447.4	4.10	110.200	
1,100.0	1,097.2	1,011.7	999.2	2.1	3.1	-71.61	138.3	452.3	465.7	461.1	4.68	99.534	
1,200.0	1,196.5	1,095.9	1,079.4	2.4	3.6	-70.49	127.3	475.3	482.6	477.4	5.26	91.706 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4L-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4L-32H-O268	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 @ 5003.0ft (Original Well Elev)

Offset Depths are relative to Offset Datum

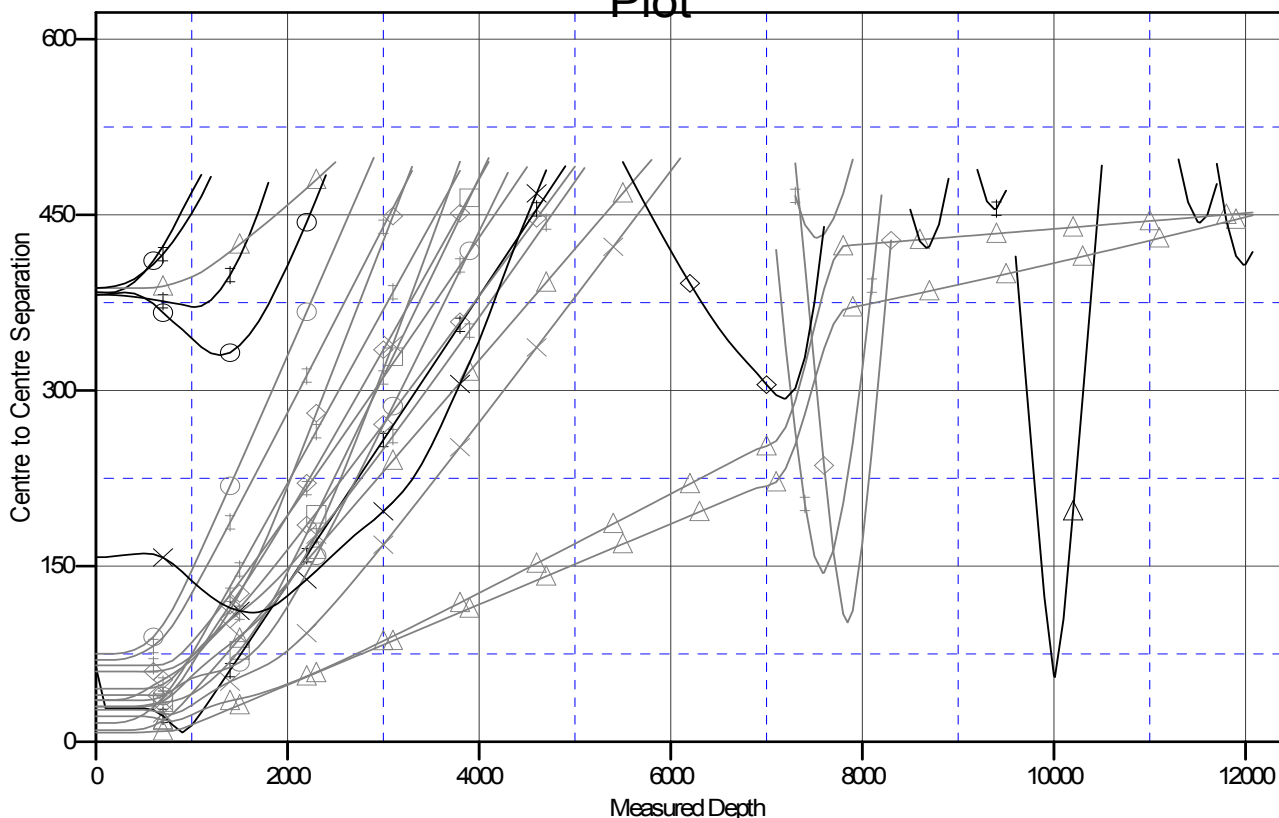
Central Meridian is -105.500000 °

Coordinates are relative to: Hwy 52 4L-32H-O268

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.31°

Ladder Plot



LEGEND

ENCANA WELL, SURVEYS V0	Hwy52 4E-32H-O268, Hz, Plan #1 V0	Hwy52 4O-32H-O268, Hz, Plan #1 V0
ING), ENCANA WELL, NOSURVEYS V0	Hwy52 4F-32H-O268, Hz, Plan #1 V0	Hwy52 4P-32H-O268, Hz, Plan #1 V0
VG), ENCANA WELL, NOSURVEYS V0	Hwy52 4G-32H-O268, Hz, Plan #1 V0	NELSON E UNIT 2 (EXISTING), EN
VA WELL, ENCANA WELL V0	Hwy52 4H-32H-O268, Hz, Plan #1 V0	RAY NELSON 33-32 (EXISTING), E
OW WELL, NOSURVEYS V0	Hwy52 4I-32H-O268, Hz, Plan #1 V0	RAY NELSON 34-32 (EXISTING), E
V0	Hwy52 4J-32H-O268, Hz, Plan #1 V0	RAY NELSON 44-32 (EXISTING), E
V0	Hwy52 4K-32H-O268, Hz, Plan #1 V0	RAY NELSON 6-8-32 (EXISTING),
V0	Hwy52 4M-32H-O268, Hz, Plan #1 V0	Ray Nelson 7-8-32, DD, Plan #1 VC
V0	Hwy52 4N-32H-O268, Hz, Plan #1 V0	RAY NELSON 8-8-32 (EXISTING), I