

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4983.0ft
Project:	DJ Wattenberg	MD Reference:	WELL @ 4983.0ft
Site:	S17-T2N-R67W (Big Horn)	North Reference:	True
Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

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		S17-T2N-R67W (Big Horn)			
Site Position:		Northing:	1,292,301.45 ft	Latitude:	40.134300
From:	Lat/Long	Easting:	3,162,073.61 ft	Longitude:	-104.920360
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.37 °

Well	Bighorn 4K-17H-P267					
Well Position	+N-S	0.0 ft	Northing:	1,292,099.59 ft	Latitude:	40.133682
	+E-W	0.0 ft	Easting:	3,165,595.51 ft	Longitude:	-104.907769
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	4,953.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/29/2014	8.50	66.70	52,647

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	0.00

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
566.2	5.32	90.07	565.8	0.0	12.4	2.00	2.00	0.00	90.07	
6,723.4	5.32	90.07	6,696.4	-0.7	583.6	0.00	0.00	0.00	0.00	
7,623.5	90.00	0.00	7,267.0	572.2	636.8	10.00	9.41	-10.01	-90.07	
13,598.5	90.00	0.00	7,267.0	6,547.2	636.8	0.00	0.00	0.00	0.00	Bighorn 4K-17H-P267

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Site:	S17-T2N-R67W (Big Horn)	North Reference:	True
Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

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	Start Build 2.00
400.0	2.00	90.07	400.0	0.0	1.7	0.0	2.00	2.00	
483.1	3.66	90.07	483.0	0.0	5.9	0.0	2.00	2.00	Fox Hills - BASE
500.0	4.00	90.07	499.8	0.0	7.0	0.0	2.00	2.00	
566.2	5.32	90.07	565.8	0.0	12.4	0.0	2.00	2.00	Start 6157.2 hold at 566.2 MD
600.0	5.32	90.07	599.5	0.0	15.5	0.0	0.00	0.00	
700.0	5.32	90.07	699.0	0.0	24.8	0.0	0.00	0.00	
800.0	5.32	90.07	798.6	0.0	34.1	0.0	0.00	0.00	
900.0	5.32	90.07	898.2	-0.1	43.3	-0.1	0.00	0.00	
1,000.0	5.32	90.07	997.7	-0.1	52.6	-0.1	0.00	0.00	
1,100.0	5.32	90.07	1,097.3	-0.1	61.9	-0.1	0.00	0.00	
1,200.0	5.32	90.07	1,196.9	-0.1	71.2	-0.1	0.00	0.00	
1,300.0	5.32	90.07	1,296.5	-0.1	80.4	-0.1	0.00	0.00	
1,400.0	5.32	90.07	1,396.0	-0.1	89.7	-0.1	0.00	0.00	
1,500.0	5.32	90.07	1,495.6	-0.1	99.0	-0.1	0.00	0.00	
1,600.0	5.32	90.07	1,595.2	-0.1	108.3	-0.1	0.00	0.00	
1,700.0	5.32	90.07	1,694.7	-0.1	117.6	-0.1	0.00	0.00	
1,800.0	5.32	90.07	1,794.3	-0.2	126.8	-0.2	0.00	0.00	
1,900.0	5.32	90.07	1,893.9	-0.2	136.1	-0.2	0.00	0.00	
2,000.0	5.32	90.07	1,993.4	-0.2	145.4	-0.2	0.00	0.00	
2,100.0	5.32	90.07	2,093.0	-0.2	154.7	-0.2	0.00	0.00	
2,200.0	5.32	90.07	2,192.6	-0.2	163.9	-0.2	0.00	0.00	
2,300.0	5.32	90.07	2,292.1	-0.2	173.2	-0.2	0.00	0.00	
2,400.0	5.32	90.07	2,391.7	-0.2	182.5	-0.2	0.00	0.00	
2,500.0	5.32	90.07	2,491.3	-0.2	191.8	-0.2	0.00	0.00	
2,600.0	5.32	90.07	2,590.8	-0.2	201.1	-0.2	0.00	0.00	
2,700.0	5.32	90.07	2,690.4	-0.3	210.3	-0.3	0.00	0.00	
2,800.0	5.32	90.07	2,790.0	-0.3	219.6	-0.3	0.00	0.00	
2,900.0	5.32	90.07	2,889.6	-0.3	228.9	-0.3	0.00	0.00	
3,000.0	5.32	90.07	2,989.1	-0.3	238.2	-0.3	0.00	0.00	
3,100.0	5.32	90.07	3,088.7	-0.3	247.4	-0.3	0.00	0.00	
3,200.0	5.32	90.07	3,188.3	-0.3	256.7	-0.3	0.00	0.00	
3,300.0	5.32	90.07	3,287.8	-0.3	266.0	-0.3	0.00	0.00	
3,400.0	5.32	90.07	3,387.4	-0.3	275.3	-0.3	0.00	0.00	
3,500.0	5.32	90.07	3,487.0	-0.4	284.5	-0.4	0.00	0.00	
3,600.0	5.32	90.07	3,586.5	-0.4	293.8	-0.4	0.00	0.00	
3,700.0	5.32	90.07	3,686.1	-0.4	303.1	-0.4	0.00	0.00	
3,800.0	5.32	90.07	3,785.7	-0.4	312.4	-0.4	0.00	0.00	
3,900.0	5.32	90.07	3,885.2	-0.4	321.7	-0.4	0.00	0.00	
4,000.0	5.32	90.07	3,984.8	-0.4	330.9	-0.4	0.00	0.00	
4,100.0	5.32	90.07	4,084.4	-0.4	340.2	-0.4	0.00	0.00	
4,200.0	5.32	90.07	4,183.9	-0.4	349.5	-0.4	0.00	0.00	
4,300.0	5.32	90.07	4,283.5	-0.4	358.8	-0.4	0.00	0.00	
4,379.8	5.32	90.07	4,363.0	-0.5	366.2	-0.5	0.00	0.00	Sussex
4,400.0	5.32	90.07	4,383.1	-0.5	368.0	-0.5	0.00	0.00	
4,500.0	5.32	90.07	4,482.7	-0.5	377.3	-0.5	0.00	0.00	
4,600.0	5.32	90.07	4,582.2	-0.5	386.6	-0.5	0.00	0.00	
4,679.1	5.32	90.07	4,661.0	-0.5	393.9	-0.5	0.00	0.00	Sussex Marker
4,700.0	5.32	90.07	4,681.8	-0.5	395.9	-0.5	0.00	0.00	

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Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,800.0	5.32	90.07	4,781.4	-0.5	405.2	-0.5	0.00	0.00	
4,900.0	5.32	90.07	4,880.9	-0.5	414.4	-0.5	0.00	0.00	
4,958.3	5.32	90.07	4,939.0	-0.5	419.9	-0.5	0.00	0.00	Shannon
5,000.0	5.32	90.07	4,980.5	-0.5	423.7	-0.5	0.00	0.00	
5,100.0	5.32	90.07	5,080.1	-0.5	433.0	-0.5	0.00	0.00	
5,200.0	5.32	90.07	5,179.6	-0.5	442.3	-0.5	0.00	0.00	
5,300.0	5.32	90.07	5,279.2	-0.6	451.5	-0.6	0.00	0.00	
5,400.0	5.32	90.07	5,378.8	-0.6	460.8	-0.6	0.00	0.00	
5,500.0	5.32	90.07	5,478.3	-0.6	470.1	-0.6	0.00	0.00	
5,600.0	5.32	90.07	5,577.9	-0.6	479.4	-0.6	0.00	0.00	
5,700.0	5.32	90.07	5,677.5	-0.6	488.7	-0.6	0.00	0.00	
5,800.0	5.32	90.07	5,777.0	-0.6	497.9	-0.6	0.00	0.00	
5,900.0	5.32	90.07	5,876.6	-0.6	507.2	-0.6	0.00	0.00	
6,000.0	5.32	90.07	5,976.2	-0.6	516.5	-0.6	0.00	0.00	
6,100.0	5.32	90.07	6,075.7	-0.7	525.8	-0.7	0.00	0.00	
6,200.0	5.32	90.07	6,175.3	-0.7	535.0	-0.7	0.00	0.00	
6,300.0	5.32	90.07	6,274.9	-0.7	544.3	-0.7	0.00	0.00	
6,400.0	5.32	90.07	6,374.5	-0.7	553.6	-0.7	0.00	0.00	
6,500.0	5.32	90.07	6,474.0	-0.7	562.9	-0.7	0.00	0.00	
6,509.0	5.32	90.07	6,483.0	-0.7	563.7	-0.7	0.00	0.00	Teepee Buttes (*if present)
6,600.0	5.32	90.07	6,573.6	-0.7	572.2	-0.7	0.00	0.00	
6,700.0	5.32	90.07	6,673.2	-0.7	581.4	-0.7	0.00	0.00	
6,723.4	5.32	90.07	6,696.4	-0.7	583.6	-0.7	0.00	0.00	Start DLS 10.00 TFO -90.07
6,800.0	9.31	34.62	6,772.5	4.4	590.7	4.4	10.00	5.21	
6,900.0	18.42	16.25	6,869.5	26.3	599.7	26.3	10.00	9.10	
7,000.0	28.12	10.04	6,961.3	64.7	608.3	64.7	10.00	9.71	
7,100.0	37.97	6.86	7,045.0	118.6	616.1	118.6	10.00	9.85	
7,200.0	47.88	4.83	7,118.2	186.3	622.9	186.3	10.00	9.91	
7,227.3	50.59	4.39	7,136.0	206.9	624.6	206.9	10.00	9.92	Sharon Springs
7,300.0	57.81	3.36	7,178.5	265.7	628.5	265.7	10.00	9.93	
7,367.5	64.52	2.55	7,211.0	324.7	631.6	324.7	10.00	9.94	Niobrara
7,400.0	67.76	2.18	7,224.2	354.4	632.8	354.4	10.00	9.95	
7,500.0	77.71	1.16	7,253.8	449.7	635.5	449.7	10.00	9.95	
7,516.0	79.30	1.01	7,257.0	465.4	635.8	465.4	10.00	9.96	B Chalk
7,600.0	87.66	0.22	7,266.5	548.8	636.7	548.8	10.00	9.96	
7,623.5	90.00	0.00	7,267.0	572.2	636.8	572.2	10.00	9.96	Start 5975.0 hold at 7623.5 MD
7,700.0	90.00	0.00	7,267.0	648.8	636.8	648.8	0.00	0.00	
7,800.0	90.00	0.00	7,267.0	748.8	636.8	748.8	0.00	0.00	
7,900.0	90.00	0.00	7,267.0	848.8	636.8	848.8	0.00	0.00	
8,000.0	90.00	0.00	7,267.0	948.8	636.8	948.8	0.00	0.00	
8,100.0	90.00	0.00	7,267.0	1,048.8	636.8	1,048.8	0.00	0.00	
8,200.0	90.00	0.00	7,267.0	1,148.8	636.8	1,148.8	0.00	0.00	
8,300.0	90.00	0.00	7,267.0	1,248.8	636.8	1,248.8	0.00	0.00	
8,400.0	90.00	0.00	7,267.0	1,348.8	636.8	1,348.8	0.00	0.00	
8,500.0	90.00	0.00	7,267.0	1,448.8	636.8	1,448.8	0.00	0.00	
8,600.0	90.00	0.00	7,267.0	1,548.8	636.8	1,548.8	0.00	0.00	
8,700.0	90.00	0.00	7,267.0	1,648.8	636.8	1,648.8	0.00	0.00	
8,800.0	90.00	0.00	7,267.0	1,748.8	636.8	1,748.8	0.00	0.00	
8,900.0	90.00	0.00	7,267.0	1,848.8	636.8	1,848.8	0.00	0.00	
9,000.0	90.00	0.00	7,267.0	1,948.8	636.8	1,948.8	0.00	0.00	
9,100.0	90.00	0.00	7,267.0	2,048.8	636.8	2,048.8	0.00	0.00	
9,200.0	90.00	0.00	7,267.0	2,148.8	636.8	2,148.8	0.00	0.00	

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Project:	DJ Wattenberg	MD Reference:	WELL @ 4983.0ft
Site:	S17-T2N-R67W (Big Horn)	North Reference:	True
Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
9,300.0	90.00	0.00	7,267.0	2,248.8	636.8	2,248.8	0.00	0.00	
9,400.0	90.00	0.00	7,267.0	2,348.8	636.8	2,348.8	0.00	0.00	
9,500.0	90.00	0.00	7,267.0	2,448.8	636.8	2,448.8	0.00	0.00	
9,600.0	90.00	0.00	7,267.0	2,548.8	636.8	2,548.8	0.00	0.00	
9,700.0	90.00	0.00	7,267.0	2,648.8	636.8	2,648.8	0.00	0.00	
9,800.0	90.00	0.00	7,267.0	2,748.8	636.8	2,748.8	0.00	0.00	
9,900.0	90.00	0.00	7,267.0	2,848.8	636.8	2,848.8	0.00	0.00	
10,000.0	90.00	0.00	7,267.0	2,948.8	636.8	2,948.8	0.00	0.00	
10,100.0	90.00	0.00	7,267.0	3,048.8	636.8	3,048.8	0.00	0.00	
10,200.0	90.00	0.00	7,267.0	3,148.8	636.8	3,148.8	0.00	0.00	
10,300.0	90.00	0.00	7,267.0	3,248.8	636.8	3,248.8	0.00	0.00	
10,400.0	90.00	0.00	7,267.0	3,348.8	636.8	3,348.8	0.00	0.00	
10,500.0	90.00	0.00	7,267.0	3,448.8	636.8	3,448.8	0.00	0.00	
10,600.0	90.00	0.00	7,267.0	3,548.8	636.8	3,548.8	0.00	0.00	
10,700.0	90.00	0.00	7,267.0	3,648.8	636.8	3,648.8	0.00	0.00	
10,800.0	90.00	0.00	7,267.0	3,748.8	636.8	3,748.8	0.00	0.00	
10,900.0	90.00	0.00	7,267.0	3,848.8	636.8	3,848.8	0.00	0.00	
11,000.0	90.00	0.00	7,267.0	3,948.8	636.8	3,948.8	0.00	0.00	
11,100.0	90.00	0.00	7,267.0	4,048.8	636.8	4,048.8	0.00	0.00	
11,200.0	90.00	0.00	7,267.0	4,148.8	636.8	4,148.8	0.00	0.00	
11,300.0	90.00	0.00	7,267.0	4,248.8	636.8	4,248.8	0.00	0.00	
11,400.0	90.00	0.00	7,267.0	4,348.8	636.8	4,348.8	0.00	0.00	
11,500.0	90.00	0.00	7,267.0	4,448.8	636.8	4,448.8	0.00	0.00	
11,600.0	90.00	0.00	7,267.0	4,548.8	636.8	4,548.8	0.00	0.00	
11,700.0	90.00	0.00	7,267.0	4,648.8	636.8	4,648.8	0.00	0.00	
11,800.0	90.00	0.00	7,267.0	4,748.8	636.8	4,748.8	0.00	0.00	
11,900.0	90.00	0.00	7,267.0	4,848.8	636.8	4,848.8	0.00	0.00	
12,000.0	90.00	0.00	7,267.0	4,948.8	636.8	4,948.8	0.00	0.00	
12,100.0	90.00	0.00	7,267.0	5,048.8	636.8	5,048.8	0.00	0.00	
12,200.0	90.00	0.00	7,267.0	5,148.8	636.8	5,148.8	0.00	0.00	
12,300.0	90.00	0.00	7,267.0	5,248.8	636.8	5,248.8	0.00	0.00	
12,400.0	90.00	0.00	7,267.0	5,348.8	636.8	5,348.8	0.00	0.00	
12,500.0	90.00	0.00	7,267.0	5,448.8	636.8	5,448.8	0.00	0.00	
12,600.0	90.00	0.00	7,267.0	5,548.8	636.8	5,548.8	0.00	0.00	
12,700.0	90.00	0.00	7,267.0	5,648.8	636.8	5,648.8	0.00	0.00	
12,800.0	90.00	0.00	7,267.0	5,748.8	636.8	5,748.8	0.00	0.00	
12,900.0	90.00	0.00	7,267.0	5,848.8	636.8	5,848.8	0.00	0.00	
13,000.0	90.00	0.00	7,267.0	5,948.8	636.8	5,948.8	0.00	0.00	
13,100.0	90.00	0.00	7,267.0	6,048.8	636.8	6,048.8	0.00	0.00	
13,200.0	90.00	0.00	7,267.0	6,148.8	636.8	6,148.8	0.00	0.00	
13,300.0	90.00	0.00	7,267.0	6,248.8	636.8	6,248.8	0.00	0.00	
13,400.0	90.00	0.00	7,267.0	6,348.8	636.8	6,348.8	0.00	0.00	
13,500.0	90.00	0.00	7,267.0	6,448.8	636.8	6,448.8	0.00	0.00	
13,598.5	90.00	0.00	7,267.0	6,547.2	636.8	6,547.2	0.00	0.00	TD at 13598.5

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4983.0ft
Project:	DJ Wattenberg	MD Reference:	WELL @ 4983.0ft
Site:	S17-T2N-R67W (Big Horn)	North Reference:	True
Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
Bighorn 4K-17H-P267 P	0.00	0.38	7,267.0	6,547.2	636.8	1,298,650.93	3,166,188.54	40.151655	-104.905491
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
483.1	483.0	Fox Hills - BASE				
4,379.8	4,363.0	Sussex				
4,679.1	4,661.0	Sussex Marker				
4,958.3	4,939.0	Shannon				
6,509.0	6,483.0	Teepee Buttes (*if present)				
7,227.3	7,136.0	Sharon Springs				
7,367.5	7,211.0	Niobrara				
7,516.0	7,257.0	B Chalk				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S	+E/-W	Comment	
(ft)	(ft)	(ft)	(ft)		
300.0	300.0	0.0	0.0	Start Build 2.00	
566.2	565.8	0.0	12.4	Start 6157.2 hold at 566.2 MD	
6,723.4	6,696.4	-0.7	583.6	Start DLS 10.00 TFO -90.07	
7,623.5	7,267.0	572.2	636.8	Start 5975.0 hold at 7623.5 MD	
13,598.5	7,267.0	6,547.2	636.8	TD at 13598.5	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S17-T2N-R67W (Big Horn)

Bighorn 4K-17H-P267

DD

Plan #2

Anticollision Report

18 November, 2014

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference	Plan #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	11/18/2014		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	13,598.5	Plan #2 (DD)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S17-T2N-R67W (Big Horn)						
ALVIN-STATE 1 (EXISTING) - MERIT ENERGY - NO SU	6,887.8	6,853.9	835.4	810.9	34.149	CC
ALVIN-STATE 1 (EXISTING) - MERIT ENERGY - NO SU	6,900.0	6,865.5	835.4	810.9	34.064	ES
ALVIN-STATE 1 (EXISTING) - MERIT ENERGY - NO SU	7,100.0	7,041.0	853.0	827.5	33.428	SF
Bighorn 4A-17H-P267 - DD - Plan #2	200.0	200.0	99.8	99.2	168.216	CC, ES
Bighorn 4A-17H-P267 - DD - Plan #2	700.0	675.0	164.3	162.0	71.182	SF
Bighorn 4B-17H-P267 - DD - Plan #4	233.3	233.3	90.0	89.3	126.842	CC, ES
Bighorn 4B-17H-P267 - DD - Plan #4	600.0	586.2	125.1	123.1	63.559	SF
Bighorn 4C-17H-P267 - DD - Plan #3	300.0	300.0	80.0	79.0	84.851	CC, ES
Bighorn 4C-17H-P267 - DD - Plan #3	600.0	589.3	109.9	107.9	55.749	SF
Bighorn 4D-17H-P267 - DD - Plan #1	300.0	300.0	69.9	69.0	74.171	CC, ES
Bighorn 4D-17H-P267 - DD - Plan #1	700.0	689.9	109.7	107.3	46.597	SF
Bighorn 4E-17H-P267 - DD - Plan #1	300.0	300.0	59.8	58.9	63.492	CC, ES
Bighorn 4E-17H-P267 - DD - Plan #1	600.0	596.3	79.3	77.4	39.894	SF
Bighorn 4F-17H-P267 - DD - Plan #3	300.0	300.0	50.1	49.1	53.105	CC, ES
Bighorn 4F-17H-P267 - DD - Plan #3	600.0	598.0	67.2	65.2	33.838	SF
Bighorn 4G-17H-P267 - DD - Plan #2	300.0	300.0	40.0	39.0	42.425	CC, ES
Bighorn 4G-17H-P267 - DD - Plan #2	13,598.5	14,511.2	902.1	667.4	3.845	SF
Bighorn 4H-17H-P267 - DD - Plan #2	300.0	300.0	29.9	29.0	31.746	CC, ES
Bighorn 4H-17H-P267 - DD - Plan #2	13,598.5	14,720.9	712.6	490.3	3.205	SF
Bighorn 4I-17H-P267 - DD - Plan #4	300.0	300.0	19.9	18.9	21.067	CC, ES
Bighorn 4I-17H-P267 - DD - Plan #4	13,598.5	14,506.9	447.0	212.4	1.906	SF
Bighorn 4J-17H-P267 - DD - Plan #3	300.0	300.0	9.8	8.8	10.390	CC, ES
Bighorn 4J-17H-P267 - DD - Plan #3	13,598.5	13,803.5	330.7	160.3	1.941	SF
Bighorn 4L-17H-P267 - DD - Plan #3	200.0	200.0	10.1	9.5	16.963	CC, ES
Bighorn 4L-17H-P267 - DD - Plan #3	13,598.5	13,855.2	323.9	156.8	1.939	SF
DECHANT 7 (EXISTING) - FOUNDATION - NO SURVEY						Out of range
DECHANT STATE V 16-12JI (EXISTING) - KMG - NO SU	8,263.6	7,251.0	640.7	602.1	16.607	CC, ES
DECHANT STATE V 16-12JI (EXISTING) - KMG - NO SU	8,400.0	7,251.0	655.0	614.3	16.089	SF
DECHANT STATE V 16-4JI (EXISTING) - KMG - NO SU	10,793.9	7,240.0	878.7	797.7	10.848	CC
DECHANT STATE V 16-4JI (EXISTING) - KMG - NO SU	10,800.0	7,240.0	878.8	797.6	10.834	ES
DECHANT STATE V 16-4JI (EXISTING) - KMG - NO SU	11,000.0	7,240.0	902.6	818.0	10.673	SF
DECHANT STATE V 16-5JI (EXISTING) - KMG - NO SU	9,301.8	7,256.0	640.6	585.1	11.536	CC, ES
DECHANT STATE V 16-5JI (EXISTING) - KMG - NO SU	9,400.0	7,256.0	648.1	590.9	11.333	SF
DECHANT-STATE 3 (EXISTING) - FOUNDATION - NO S	5,210.5	5,100.0	963.2	945.0	53.019	CC, ES
DECHANT-STATE 3 (EXISTING) - FOUNDATION - NO S	5,300.0	5,100.0	967.3	949.0	52.779	SF
DECHANT-STATE 5 (EXISTING) - FOUNDATION - NO S						Out of range
DECHANT-STATE 9 (EXISTING) - KMG - NO SURVEYS						Out of range
DIER 1 (EXISTING) - ENCANA WELL - GYRO	13,412.1	7,209.8	478.7	352.3	3.788	CC, ES, SF
DIER 33-8 (EXISTING) - ENCANA WELL - GYRO						Out of range
DIER 34-8 (EXISTING) - ENCANA WELL - GYRO						Out of range
DIER 44-8 (EXISTING) - ENCANA WELL - GYRO	11,829.7	7,248.4	379.7	280.8	3.839	CC, ES, SF
DIER 4-4-8 (EXISTING) - ENCANA WELL - NO SURVEY						Out of range
DIER 4-8 (EXISTING) - ENCANA - GYRO						Out of range
DIER 8-4-8 (EXISTING) - ENCANA WELL - SURVEYS	13,598.5	7,315.1	390.4	257.9	2.946	CC, ES, SF
DIER 8-6-8 (EXISTING) - ENCANA WELL - SURVEYS	12,675.2	7,349.8	139.7	20.0	1.167	Level 2, CC, ES, SF
DIER J 1-A (EXISTING) - ENCANA WELL - GYRO						Out of range
MILLER 1 (EXISTING) - SUNDANCE WELL - GYRO	10,402.6	7,204.7	870.0	795.8	11.727	CC, ES
MILLER 1 (EXISTING) - SUNDANCE WELL - GYRO	10,600.0	7,201.8	892.1	814.5	11.500	SF
MILLER 1-17 (EXISTING) - ENCANA WELL - NO SURV						Out of range
MILLER 13-17J (EXISTING) - DD - SURVEYS						Out of range
MILLER 2-17 (EXISTING) - ENCANA WELL - GYRO	9,805.8	7,245.3	883.3	819.3	13.788	CC, ES
MILLER 2-17 (EXISTING) - ENCANA WELL - GYRO	10,000.0	7,242.0	904.4	837.0	13.424	SF
MILLER 23-17J (EXISTING) - DD - SURVEYS						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 Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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						
S17-T2N-R67W (Big Horn)						
MILLER 2-4-17 (EXISTING) - DD - SURVEYS						Out of range
MILLER 31-17C (EXISTING) - SUNDANCE WELL - GYR						Out of range
MILLER 3-17J (EXISTING) - ENCANA - NO SURVEYS	300.0	270.0	613.8	612.9	651.157	CC, ES
MILLER 3-17J (EXISTING) - ENCANA - NO SURVEYS	5,300.0	5,249.2	999.4	980.5	52.889	SF
MILLER 32-17 (EXISTING) SUNDANCE - SUNDANCE W						Out of range
MILLER 33-17J (EXISTING) - ENCANA - SURVEYS	300.0	274.0	755.8	754.8	795.916	CC, ES
MILLER 33-17J (EXISTING) - ENCANA - SURVEYS	2,800.0	2,765.7	999.3	989.6	103.424	SF
MILLER 34-17J (EXISTING) - ENCANA - SURVEYS	300.0	274.0	780.2	779.2	821.602	CC, ES
MILLER 34-17J (EXISTING) - ENCANA - SURVEYS	2,600.0	2,561.8	997.0	988.1	111.181	SF
MILLER 41-17 (EXISTING) - SUNDANCE WELL - GYRO						Out of range
MILLER 42-17 (EXISTING) - SUNDANCE WELL - NO SU						Out of range
MILLER 43-17 (EXISTING) - SUNDANCE - NO SURVEY						Out of range
MILLER 43-17J (EXISTING) - SUNDANCE - NO SURVE	8,099.3	7,245.0	539.5	503.4	14.961	CC
MILLER 43-17J (EXISTING) - SUNDANCE - NO SURVE	8,100.0	7,245.0	539.5	503.4	14.957	ES
MILLER 43-17J (EXISTING) - SUNDANCE - NO SURVE	8,200.0	7,245.0	548.8	511.2	14.601	SF
MILLER 44-17J (EXISTING) - ENCANA - SURVEYS	6,851.6	7,114.6	667.2	636.7	21.868	CC, ES, SF
MILLER CJ1A-17 (EXISTING) - DD - SURVEYS						Out of range
OWENS 44-8 (EXISTING) - KPK WELL - SURVEYS						Out of range
PACE 1 (EXISTING) - TEXAS TEA OIL - NO SURVEYS	300.0	277.0	737.4	736.4	772.198	CC, ES
PACE 1 (EXISTING) - TEXAS TEA OIL - NO SURVEYS	3,500.0	3,464.0	995.7	983.3	80.547	SF
PACE 2 (EXISTING) - TEXAS TEA OIL - NO SURVEYS						Out of range
PACE 3 (EXISTING) - TEXAS TEA OIL - NO SURVEYS	2,137.9	2,110.7	158.3	149.9	18.987	CC
PACE 3 (EXISTING) - TEXAS TEA OIL - NO SURVEYS	2,200.0	2,172.6	158.4	149.8	18.437	ES
PACE 3 (EXISTING) - TEXAS TEA OIL - NO SURVEYS	3,300.0	3,267.8	191.5	178.9	15.171	SF
SATER 21-8 (EXISTING) - KERRMCGEE WELL - SURV						Out of range
SATER 24-8 (EXISTING) - KERRMCGEE WELL - SURV						Out of range
SATER 2-8 (EXISTING) - KERRMCGEE WELL - SURVE						Out of range
SATER 28-8 (EXISTING) - KERRMCGEE WELL - SURV						Out of range
SATER 7-8 (EXISTING) - KERRMCGEE WELL - SURVE						Out of range
SATER 8-8 (EXISTING) - KERRMCGEE WELL - SURVE						Out of range
STANLEY 2 (EXISTING) - GERRITY OIL - NO SURVEYS	5,245.0	5,175.0	887.4	868.9	47.947	CC, ES
STANLEY 2 (EXISTING) - GERRITY OIL - NO SURVEYS	5,300.0	5,175.0	889.1	870.5	47.778	SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - ALVIN-STATE 1 (EXISTING) - MERIT ENERGY - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 7650-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,000.0	4,980.5	4,976.5	4,976.5	11.5	8.7	13.16	-228.0	1,395.5	998.1	980.6	17.51	57.000		
5,100.0	5,080.1	5,076.1	5,076.1	11.7	8.9	13.28	-228.0	1,395.5	989.0	971.2	17.86	55.362		
5,200.0	5,179.6	5,175.6	5,175.6	11.9	9.0	13.41	-228.0	1,395.5	980.0	961.8	18.22	53.787		
5,300.0	5,279.2	5,275.2	5,275.2	12.2	9.2	13.53	-228.0	1,395.5	971.0	952.4	18.58	52.272		
5,400.0	5,378.8	5,374.8	5,374.8	12.4	9.4	13.66	-228.0	1,395.5	962.0	943.0	18.93	50.814		
5,500.0	5,478.3	5,474.3	5,474.3	12.7	9.6	13.79	-228.0	1,395.5	953.0	933.7	19.29	49.408		
5,600.0	5,577.9	5,573.9	5,573.9	12.9	9.7	13.93	-228.0	1,395.5	943.9	924.3	19.64	48.054		
5,700.0	5,677.5	5,673.5	5,673.5	13.1	9.9	14.06	-228.0	1,395.5	934.9	914.9	20.00	46.747		
5,800.0	5,777.0	5,773.0	5,773.0	13.4	10.1	14.20	-228.0	1,395.5	925.9	905.6	20.36	45.486		
5,900.0	5,876.6	5,872.6	5,872.6	13.6	10.2	14.35	-228.0	1,395.5	916.9	896.2	20.71	44.267		
6,000.0	5,976.2	5,972.2	5,972.2	13.9	10.4	14.49	-228.0	1,395.5	908.0	886.9	21.07	43.090		
6,100.0	6,075.7	6,071.7	6,071.7	14.1	10.6	14.64	-228.0	1,395.5	899.0	877.5	21.43	41.952		
6,200.0	6,175.3	6,171.3	6,171.3	14.3	10.8	14.79	-228.0	1,395.5	890.0	868.2	21.79	40.850		
6,300.0	6,274.9	6,270.9	6,270.9	14.6	10.9	14.94	-228.0	1,395.5	881.0	858.9	22.15	39.784		
6,400.0	6,374.5	6,370.5	6,370.5	14.8	11.1	15.10	-228.0	1,395.5	872.1	849.6	22.50	38.752		
6,500.0	6,474.0	6,470.0	6,470.0	15.0	11.3	15.26	-228.0	1,395.5	863.1	840.2	22.86	37.751		
6,600.0	6,573.6	6,569.6	6,569.6	15.3	11.5	15.42	-228.0	1,395.5	854.2	830.9	23.22	36.781		
6,700.0	6,673.2	6,669.2	6,669.2	15.5	11.6	15.59	-228.0	1,395.5	845.2	821.6	23.58	35.841		
6,723.4	6,696.4	6,692.4	6,692.4	15.6	11.7	15.63	-228.0	1,395.5	843.1	819.5	23.67	35.625		
6,750.0	6,722.9	6,718.9	6,718.9	15.6	11.7	42.43	-228.0	1,395.5	840.9	817.1	23.79	35.354		
6,800.0	6,772.5	6,768.5	6,768.5	15.8	11.8	71.72	-228.0	1,395.5	837.7	813.7	24.02	34.873		
6,850.0	6,821.5	6,817.5	6,817.5	15.9	11.9	84.48	-228.0	1,395.5	835.8	811.5	24.27	34.439		
6,887.8	6,857.9	6,853.9	6,853.9	16.0	12.0	90.00	-228.0	1,395.5	835.4	810.9	24.46	34.149 CC		
6,900.0	6,869.5	6,865.5	6,865.5	16.0	12.0	91.39	-228.0	1,395.5	835.4	810.9	24.52	34.064 ES		
6,950.0	6,916.3	6,912.3	6,912.3	16.1	12.1	95.89	-228.0	1,395.5	836.7	811.9	24.78	33.761		
7,000.0	6,961.3	6,957.3	6,957.3	16.3	12.1	99.16	-228.0	1,395.5	839.9	814.9	25.04	33.544		
7,050.0	7,004.3	7,000.3	7,000.3	16.4	12.2	101.68	-228.0	1,395.5	845.3	820.0	25.28	33.429		
7,100.0	7,045.0	7,041.0	7,041.0	16.6	12.3	103.65	-228.0	1,395.5	853.0	827.5	25.52	33.428 SF		
7,150.0	7,083.1	7,079.1	7,079.1	16.8	12.4	105.14	-228.0	1,395.5	863.4	837.7	25.74	33.544		
7,200.0	7,118.2	7,114.2	7,114.2	17.0	12.4	106.16	-228.0	1,395.5	876.7	850.7	25.96	33.776		
7,250.0	7,150.0	7,146.0	7,146.0	17.3	12.5	106.70	-228.0	1,395.5	892.9	866.7	26.18	34.109		
7,300.0	7,178.5	7,174.5	7,174.5	17.6	12.5	106.71	-228.0	1,395.5	912.1	885.7	26.42	34.521		
7,350.0	7,203.3	7,199.3	7,199.3	17.9	12.6	106.15	-228.0	1,395.5	934.4	907.7	26.71	34.981		
7,400.0	7,224.2	7,220.2	7,220.2	18.2	12.6	104.94	-228.0	1,395.5	959.7	932.6	27.07	35.455		
7,450.0	7,241.1	7,237.1	7,237.1	18.6	12.6	103.02	-228.0	1,395.5	987.7	960.2	27.50	35.914		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4A-17H-P267 - DD - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.58	0.7	-99.8	99.8					
100.0	100.0	100.0	100.0	0.1	0.1	-89.58	0.7	-99.8	99.8	99.6	0.24	408.525		
200.0	200.0	200.0	200.0	0.3	0.3	-89.58	0.7	-99.8	99.8	99.2	0.59	168.216	CC, ES	
300.0	300.0	296.8	296.8	0.5	0.5	-89.89	0.2	-101.4	101.4	100.5	0.94	107.859		
400.0	400.0	393.2	393.1	0.6	0.7	179.18	-1.4	-106.0	107.9	106.7	1.28	84.237		
500.0	499.8	488.7	488.2	0.8	0.9	178.00	-4.0	-113.5	121.2	119.5	1.62	74.590		
566.2	565.8	551.0	550.1	1.0	1.0	177.17	-6.3	-120.1	133.5	131.7	1.85	72.192		
600.0	599.5	582.6	581.4	1.1	1.1	176.75	-7.6	-123.9	140.8	138.8	1.97	71.627		
700.0	699.0	675.0	672.8	1.3	1.4	175.56	-12.1	-136.9	164.3	162.0	2.31	71.182	SF	
800.0	798.6	765.9	762.2	1.5	1.7	174.45	-17.5	-152.5	190.8	188.2	2.65	72.054		
900.0	898.2	855.1	849.4	1.7	2.1	173.45	-23.7	-170.3	220.4	217.4	2.99	73.798		
1,000.0	997.7	947.6	939.3	2.0	2.5	172.53	-30.8	-190.8	252.2	248.9	3.33	75.764		
1,100.0	1,097.3	1,042.2	1,031.2	2.2	2.9	171.80	-38.2	-212.0	284.3	280.6	3.68	77.357		
1,200.0	1,196.9	1,136.9	1,123.2	2.4	3.3	171.21	-45.5	-233.2	316.4	312.4	4.02	78.695		
1,300.0	1,296.5	1,231.6	1,215.2	2.7	3.8	170.73	-52.8	-254.3	348.5	344.1	4.37	79.834		
1,400.0	1,396.0	1,326.2	1,307.2	2.9	4.2	170.34	-60.2	-275.5	380.6	375.9	4.71	80.814		
1,500.0	1,495.6	1,420.9	1,399.1	3.1	4.6	170.00	-67.5	-296.7	412.8	407.7	5.05	81.668		
1,600.0	1,595.2	1,515.5	1,491.1	3.4	5.0	169.71	-74.8	-317.8	444.9	439.5	5.40	82.417		
1,700.0	1,694.7	1,610.2	1,583.1	3.6	5.5	169.46	-82.2	-339.0	477.1	471.4	5.74	83.080		
1,800.0	1,794.3	1,704.9	1,675.1	3.8	5.9	169.25	-89.5	-360.2	509.3	503.2	6.09	83.671		
1,900.0	1,893.9	1,799.5	1,767.1	4.1	6.3	169.06	-96.9	-381.3	541.5	535.0	6.43	84.200		
2,000.0	1,993.4	1,894.2	1,859.0	4.3	6.8	168.89	-104.2	-402.5	573.6	566.9	6.77	84.677		
2,100.0	2,093.0	1,988.9	1,951.0	4.6	7.2	168.73	-111.5	-423.7	605.8	598.7	7.12	85.110		
2,200.0	2,192.6	2,083.5	2,043.0	4.8	7.6	168.60	-118.9	-444.8	638.0	630.6	7.46	85.503		
2,300.0	2,292.1	2,178.2	2,135.0	5.0	8.0	168.47	-126.2	-466.0	670.2	662.4	7.81	85.863		
2,400.0	2,391.7	2,272.9	2,226.9	5.3	8.5	168.36	-133.5	-487.2	702.4	694.3	8.15	86.193		
2,500.0	2,491.3	2,367.5	2,318.9	5.5	8.9	168.26	-140.9	-508.4	734.6	726.1	8.49	86.497		
2,600.0	2,590.8	2,462.2	2,410.9	5.8	9.3	168.17	-148.2	-529.5	766.8	758.0	8.84	86.777		
2,700.0	2,690.4	2,556.9	2,502.9	6.0	9.8	168.08	-155.6	-550.7	799.0	789.8	9.18	87.037		
2,800.0	2,790.0	2,651.5	2,594.8	6.2	10.2	168.00	-162.9	-571.9	831.2	821.7	9.52	87.279		
2,900.0	2,889.6	2,746.2	2,686.8	6.5	10.6	167.93	-170.2	-593.0	863.4	853.6	9.87	87.504		
3,000.0	2,989.1	2,840.9	2,778.8	6.7	11.1	167.86	-177.6	-614.2	895.7	885.4	10.21	87.714		
3,100.0	3,088.7	2,935.5	2,870.8	6.9	11.5	167.80	-184.9	-635.4	927.9	917.3	10.55	87.911		
3,200.0	3,188.3	3,030.2	2,962.7	7.2	11.9	167.74	-192.2	-656.5	960.1	949.2	10.90	88.095		
3,300.0	3,287.8	3,124.9	3,054.7	7.4	12.4	167.68	-199.6	-677.7	992.3	981.0	11.24	88.268		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4B-17H-P267 - DD - Plan #4													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
0.0	0.0	0.0	0.0	0.0	0.0	-89.54	0.7	-90.0	90.0					
100.0	100.0	100.0	100.0	0.1	0.1	-89.54	0.7	-90.0	90.0	89.8	0.24	368.476		
200.0	200.0	200.0	200.0	0.3	0.3	-89.54	0.7	-90.0	90.0	89.4	0.59	151.725		
233.3	233.3	233.3	233.3	0.4	0.4	-89.54	0.7	-90.0	90.0	89.3	0.71	126.842	CC, ES	
300.0	300.0	298.6	298.6	0.5	0.5	-89.63	0.6	-90.4	90.4	89.5	0.94	96.190		
400.0	400.0	395.5	395.4	0.6	0.6	179.64	-0.5	-93.5	95.4	94.1	1.28	74.287		
500.0	499.8	491.5	491.2	0.8	0.8	178.52	-2.6	-99.6	107.0	105.4	1.63	65.787		
566.2	565.8	554.3	553.8	1.0	1.0	177.68	-4.6	-105.3	118.4	116.5	1.85	63.903		
600.0	599.5	586.2	585.4	1.1	1.1	177.26	-5.7	-108.7	125.1	123.1	1.97	63.559	SF	
700.0	699.0	679.4	677.8	1.3	1.3	176.01	-9.8	-120.4	147.0	144.7	2.31	63.639		
800.0	798.6	771.3	768.4	1.5	1.6	174.84	-14.7	-134.7	172.1	169.4	2.65	64.898		
900.0	898.2	862.1	857.4	1.7	2.0	173.77	-20.6	-151.6	200.2	197.2	2.99	66.928		
1,000.0	997.7	957.6	950.9	2.0	2.3	172.85	-27.1	-170.4	229.5	226.2	3.34	68.749		
1,100.0	1,097.3	1,053.1	1,044.3	2.2	2.7	172.14	-33.6	-189.3	258.9	255.2	3.69	70.252		
1,200.0	1,196.9	1,148.7	1,137.7	2.4	3.1	171.57	-40.1	-208.1	288.3	284.3	4.03	71.511		
1,300.0	1,296.5	1,244.2	1,231.2	2.7	3.5	171.11	-46.7	-227.0	317.7	313.3	4.38	72.579		
1,400.0	1,396.0	1,339.8	1,324.6	2.9	3.8	170.72	-53.2	-245.8	347.2	342.4	4.72	73.498		
1,500.0	1,495.6	1,435.3	1,418.0	3.1	4.2	170.40	-59.7	-264.7	376.6	371.5	5.07	74.295		
1,600.0	1,595.2	1,530.9	1,511.5	3.4	4.6	170.12	-66.2	-283.6	406.1	400.7	5.41	74.994		
1,700.0	1,694.7	1,626.4	1,604.9	3.6	5.0	169.88	-72.8	-302.4	435.5	429.8	5.76	75.612		
1,800.0	1,794.3	1,722.0	1,698.4	3.8	5.4	169.67	-79.3	-321.3	465.0	458.9	6.11	76.162		
1,900.0	1,893.9	1,817.5	1,791.8	4.1	5.8	169.49	-85.8	-340.1	494.5	488.1	6.45	76.654		
2,000.0	1,993.4	1,913.0	1,885.2	4.3	6.2	169.32	-92.3	-359.0	524.0	517.2	6.80	77.097		
2,100.0	2,093.0	2,008.6	1,978.7	4.6	6.6	169.18	-98.9	-377.8	553.5	546.3	7.14	77.499		
2,200.0	2,192.6	2,104.1	2,072.1	4.8	6.9	169.04	-105.4	-396.7	583.0	575.5	7.49	77.864		
2,300.0	2,292.1	2,199.7	2,165.5	5.0	7.3	168.92	-111.9	-415.5	612.5	604.6	7.83	78.197		
2,400.0	2,391.7	2,295.2	2,259.0	5.3	7.7	168.82	-118.4	-434.4	642.0	633.8	8.18	78.503		
2,500.0	2,491.3	2,390.8	2,352.4	5.5	8.1	168.72	-125.0	-453.2	671.5	663.0	8.52	78.785		
2,600.0	2,590.8	2,486.3	2,445.9	5.8	8.5	168.63	-131.5	-472.1	701.0	692.1	8.87	79.044		
2,700.0	2,690.4	2,581.8	2,539.3	6.0	8.9	168.55	-138.0	-491.0	730.5	721.3	9.21	79.285		
2,800.0	2,790.0	2,677.4	2,632.7	6.2	9.3	168.47	-144.5	-509.8	760.0	750.4	9.56	79.508		
2,900.0	2,889.6	2,772.9	2,726.2	6.5	9.7	168.40	-151.0	-528.7	789.5	779.6	9.90	79.716		
3,000.0	2,989.1	2,868.5	2,819.6	6.7	10.1	168.33	-157.6	-547.5	819.0	808.7	10.25	79.911		
3,100.0	3,088.7	2,964.0	2,913.0	6.9	10.5	168.27	-164.1	-566.4	848.5	837.9	10.59	80.092		
3,200.0	3,188.3	3,059.6	3,006.5	7.2	10.9	168.21	-170.6	-585.2	878.0	867.1	10.94	80.263		
3,300.0	3,287.8	3,155.1	3,099.9	7.4	11.2	168.16	-177.1	-604.1	907.5	896.2	11.28	80.423		
3,400.0	3,387.4	3,250.6	3,193.3	7.7	11.6	168.11	-183.7	-622.9	937.0	925.4	11.63	80.573		
3,500.0	3,487.0	3,346.2	3,286.8	7.9	12.0	168.06	-190.2	-641.8	966.5	954.6	11.97	80.716		
3,600.0	3,586.5	3,441.7	3,380.2	8.1	12.4	168.02	-196.7	-660.6	996.1	983.7	12.32	80.850		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4C-17H-P267 - DD - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.49	0.7	-80.0	80.0					
100.0	100.0	100.0	100.0	0.1	0.1	-89.49	0.7	-80.0	80.0	79.7	0.24	327.282		
200.0	200.0	200.0	200.0	0.3	0.3	-89.49	0.7	-80.0	80.0	79.4	0.59	134.763		
300.0	300.0	300.0	300.0	0.5	0.5	-89.49	0.7	-80.0	80.0	79.0	0.94	84.851 CC, ES		
400.0	400.0	397.3	397.3	0.6	0.6	-179.95	0.2	-81.5	83.3	82.0	1.29	64.757		
500.0	499.8	494.0	493.8	0.8	0.8	179.06	-1.4	-86.2	93.4	91.7	1.63	57.301		
566.2	565.8	557.2	556.9	1.0	1.0	178.25	-3.0	-90.9	103.7	101.8	1.85	55.891		
600.0	599.5	589.3	588.9	1.1	1.0	177.82	-4.0	-93.8	109.9	107.9	1.97	55.749 SF		
700.0	699.0	683.4	682.3	1.3	1.3	176.54	-7.5	-104.2	130.3	128.0	2.31	56.318		
800.0	798.6	776.1	773.9	1.5	1.6	175.32	-12.0	-117.3	153.8	151.2	2.66	57.942		
900.0	898.2	870.2	866.5	1.7	1.9	174.20	-17.4	-133.1	180.1	177.1	3.00	60.043		
1,000.0	997.7	966.6	961.3	2.0	2.2	173.32	-23.0	-149.5	206.7	203.3	3.35	61.759		
1,100.0	1,097.3	1,062.9	1,056.1	2.2	2.5	172.65	-28.6	-166.0	233.3	229.6	3.69	63.167		
1,200.0	1,196.9	1,159.3	1,150.9	2.4	2.9	172.11	-34.2	-182.4	260.0	255.9	4.04	64.342		
1,300.0	1,296.5	1,255.6	1,245.6	2.7	3.2	171.67	-39.8	-198.9	286.7	282.3	4.39	65.337		
1,400.0	1,396.0	1,352.0	1,340.4	2.9	3.5	171.31	-45.4	-215.3	313.4	308.6	4.73	66.191		
1,500.0	1,495.6	1,448.3	1,435.2	3.1	3.9	171.00	-51.0	-231.8	340.1	335.0	5.08	66.931		
1,600.0	1,595.2	1,544.7	1,530.0	3.4	4.2	170.74	-56.6	-248.2	366.8	361.4	5.43	67.579		
1,700.0	1,694.7	1,641.0	1,624.7	3.6	4.6	170.51	-62.2	-264.7	393.5	387.7	5.77	68.151		
1,800.0	1,794.3	1,737.4	1,719.5	3.8	4.9	170.32	-67.8	-281.1	420.2	414.1	6.12	68.660		
1,900.0	1,893.9	1,833.7	1,814.3	4.1	5.3	170.14	-73.4	-297.6	447.0	440.5	6.47	69.114		
2,000.0	1,993.4	1,930.1	1,909.1	4.3	5.6	169.99	-79.0	-314.0	473.7	466.9	6.81	69.524		
2,100.0	2,093.0	2,026.5	2,003.8	4.6	6.0	169.85	-84.6	-330.5	500.4	493.3	7.16	69.894		
2,200.0	2,192.6	2,122.8	2,098.6	4.8	6.3	169.73	-90.2	-346.9	527.2	519.6	7.51	70.231		
2,300.0	2,292.1	2,219.2	2,193.4	5.0	6.7	169.62	-95.8	-363.4	553.9	546.0	7.85	70.538		
2,400.0	2,391.7	2,315.5	2,288.1	5.3	7.0	169.51	-101.4	-379.8	580.6	572.4	8.20	70.820		
2,500.0	2,491.3	2,411.9	2,382.9	5.5	7.4	169.42	-107.0	-396.3	607.4	598.8	8.55	71.079		
2,600.0	2,590.8	2,508.2	2,477.7	5.8	7.7	169.34	-112.6	-412.7	634.1	625.2	8.89	71.318		
2,700.0	2,690.4	2,604.6	2,572.5	6.0	8.0	169.26	-118.2	-429.2	660.9	651.6	9.24	71.539		
2,800.0	2,790.0	2,700.9	2,667.2	6.2	8.4	169.19	-123.8	-445.6	687.6	678.0	9.58	71.744		
2,900.0	2,889.6	2,797.3	2,762.0	6.5	8.7	169.12	-129.4	-462.0	714.4	704.4	9.93	71.936		
3,000.0	2,989.1	2,893.6	2,856.8	6.7	9.1	169.06	-135.0	-478.5	741.1	730.8	10.28	72.114		
3,100.0	3,088.7	2,990.0	2,951.6	6.9	9.4	169.00	-140.6	-494.9	767.9	757.2	10.62	72.281		
3,200.0	3,188.3	3,086.3	3,046.3	7.2	9.8	168.95	-146.2	-511.4	794.6	783.6	10.97	72.438		
3,300.0	3,287.8	3,182.7	3,141.1	7.4	10.1	168.90	-151.7	-527.8	821.4	810.0	11.32	72.584		
3,400.0	3,387.4	3,279.0	3,235.9	7.7	10.5	168.85	-157.3	-544.3	848.1	836.4	11.66	72.723		
3,500.0	3,487.0	3,375.4	3,330.7	7.9	10.8	168.81	-162.9	-560.7	874.9	862.8	12.01	72.853		
3,600.0	3,586.5	3,471.8	3,425.4	8.1	11.2	168.77	-168.5	-577.2	901.6	889.3	12.35	72.976		
3,700.0	3,686.1	3,568.1	3,520.2	8.4	11.5	168.73	-174.1	-593.6	928.4	915.7	12.70	73.093		
3,800.0	3,785.7	3,664.5	3,615.0	8.6	11.9	168.69	-179.7	-610.1	955.1	942.1	13.05	73.203		
3,900.0	3,885.2	3,760.8	3,709.8	8.8	12.2	168.65	-185.3	-626.5	981.9	968.5	13.39	73.308		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4D-17H-P267 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.42	0.7	-69.9	69.9					
100.0	100.0	100.0	100.0	0.1	0.1	-89.42	0.7	-69.9	69.9	69.7	0.24	286.089		
200.0	200.0	200.0	200.0	0.3	0.3	-89.42	0.7	-69.9	69.9	69.3	0.59	117.801		
300.0	300.0	300.0	300.0	0.5	0.5	-89.42	0.7	-69.9	69.9	69.0	0.94	74.171	CC, ES	
400.0	400.0	399.2	399.2	0.6	0.6	-179.76	0.4	-70.2	71.9	70.6	1.29	55.779		
500.0	499.8	497.1	497.0	0.8	0.8	178.43	-2.1	-72.5	79.5	77.9	1.64	48.581		
566.2	565.8	561.3	561.1	1.0	0.9	176.61	-5.0	-75.2	87.8	85.9	1.87	46.951		
600.0	599.5	594.0	593.7	1.1	1.0	175.60	-6.9	-76.9	92.9	90.9	1.99	46.673		
700.0	699.0	689.9	689.1	1.3	1.2	172.41	-14.1	-83.5	109.7	107.3	2.35	46.597	SF	
800.0	798.6	784.6	782.9	1.5	1.5	169.21	-23.5	-92.1	129.3	126.6	2.73	47.438		
900.0	898.2	879.2	876.2	1.7	1.8	166.16	-35.2	-102.8	151.9	148.8	3.11	48.931		
1,000.0	997.7	974.6	970.0	2.0	2.1	163.59	-48.1	-114.7	176.3	172.8	3.49	50.537		
1,100.0	1,097.3	1,071.3	1,065.1	2.2	2.4	161.62	-61.2	-126.7	200.9	197.0	3.87	51.882		
1,200.0	1,196.9	1,168.1	1,160.2	2.4	2.8	160.07	-74.3	-138.7	225.6	221.4	4.25	53.034		
1,300.0	1,296.5	1,264.8	1,255.2	2.7	3.1	158.83	-87.4	-150.7	250.5	245.9	4.64	54.029		
1,400.0	1,396.0	1,361.5	1,350.3	2.9	3.5	157.82	-100.5	-162.7	275.5	270.5	5.02	54.896		
1,500.0	1,495.6	1,458.2	1,445.4	3.1	3.8	156.97	-113.6	-174.7	300.5	295.1	5.40	55.656		
1,600.0	1,595.2	1,555.0	1,540.5	3.4	4.2	156.26	-126.7	-186.8	325.6	319.9	5.78	56.328		
1,700.0	1,694.7	1,651.7	1,635.5	3.6	4.5	155.64	-139.8	-198.8	350.8	344.6	6.16	56.926		
1,800.0	1,794.3	1,748.4	1,730.6	3.8	4.8	155.11	-152.9	-210.8	376.0	369.4	6.54	57.461		
1,900.0	1,893.9	1,845.1	1,825.7	4.1	5.2	154.64	-166.0	-222.8	401.2	394.2	6.92	57.942		
2,000.0	1,993.4	1,941.9	1,920.8	4.3	5.6	154.23	-179.1	-234.8	426.4	419.1	7.30	58.377		
2,100.0	2,093.0	2,038.6	2,015.9	4.6	5.9	153.87	-192.1	-246.8	451.6	443.9	7.68	58.772		
2,200.0	2,192.6	2,135.3	2,110.9	4.8	6.3	153.54	-205.2	-258.8	476.9	468.8	8.06	59.132		
2,300.0	2,292.1	2,232.0	2,206.0	5.0	6.6	153.25	-218.3	-270.8	502.2	493.7	8.45	59.461		
2,400.0	2,391.7	2,328.8	2,301.1	5.3	7.0	152.99	-231.4	-282.8	527.4	518.6	8.83	59.764		
2,500.0	2,491.3	2,425.5	2,396.2	5.5	7.3	152.75	-244.5	-294.8	552.7	543.5	9.21	60.044		
2,600.0	2,590.8	2,522.2	2,491.3	5.8	7.7	152.53	-257.6	-306.8	578.0	568.4	9.59	60.302		
2,700.0	2,690.4	2,618.9	2,586.3	6.0	8.0	152.32	-270.7	-318.9	603.3	593.4	9.97	60.541		
2,800.0	2,790.0	2,715.7	2,681.4	6.2	8.4	152.14	-283.8	-330.9	628.6	618.3	10.35	60.764		
2,900.0	2,889.6	2,812.4	2,776.5	6.5	8.7	151.97	-296.9	-342.9	654.0	643.2	10.73	60.972		
3,000.0	2,989.1	2,909.1	2,871.6	6.7	9.1	151.81	-310.0	-354.9	679.3	668.2	11.11	61.166		
3,100.0	3,088.7	3,005.8	2,966.6	6.9	9.4	151.66	-323.1	-366.9	704.6	693.1	11.49	61.347		
3,200.0	3,188.3	3,102.6	3,061.7	7.2	9.8	151.53	-336.2	-378.9	729.9	718.1	11.87	61.518		
3,300.0	3,287.8	3,199.3	3,156.8	7.4	10.1	151.40	-349.3	-390.9	755.3	743.0	12.25	61.678		
3,400.0	3,387.4	3,296.0	3,251.9	7.7	10.5	151.28	-362.4	-402.9	780.6	768.0	12.63	61.829		
3,500.0	3,487.0	3,392.7	3,347.0	7.9	10.8	151.17	-375.4	-414.9	806.0	793.0	13.01	61.971		
3,600.0	3,586.5	3,489.5	3,442.0	8.1	11.2	151.06	-388.5	-426.9	831.3	817.9	13.39	62.106		
3,700.0	3,686.1	3,586.2	3,537.1	8.4	11.6	150.97	-401.6	-438.9	856.6	842.9	13.77	62.233		
3,800.0	3,785.7	3,682.9	3,632.2	8.6	11.9	150.87	-414.7	-451.0	882.0	867.9	14.14	62.354		
3,900.0	3,885.2	3,779.6	3,727.3	8.8	12.3	150.79	-427.8	-463.0	907.3	892.8	14.52	62.469		
4,000.0	3,984.8	3,876.4	3,822.4	9.1	12.6	150.70	-440.9	-475.0	932.7	917.8	14.90	62.578		
4,100.0	4,084.4	3,973.1	3,917.4	9.3	13.0	150.62	-454.0	-487.0	958.1	942.8	15.28	62.681		
4,200.0	4,183.9	4,069.8	4,012.5	9.6	13.3	150.55	-467.1	-499.0	983.4	967.7	15.66	62.780		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4E-17H-P267 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.33	0.7	-59.8	59.8					
100.0	100.0	100.0	100.0	0.1	0.1	-89.33	0.7	-59.8	59.8	59.6	0.24	244.896		
200.0	200.0	200.0	200.0	0.3	0.3	-89.33	0.7	-59.8	59.8	59.2	0.59	100.840		
300.0	300.0	300.0	300.0	0.5	0.5	-89.33	0.7	-59.8	59.8	58.9	0.94	63.492 CC, ES		
400.0	400.0	400.0	400.0	0.6	0.6	-179.42	0.7	-59.8	61.6	60.3	1.29	47.702		
500.0	499.8	498.5	498.5	0.8	0.8	179.34	-0.7	-60.8	67.8	66.1	1.64	41.403		
566.2	565.8	563.3	563.2	1.0	0.9	177.51	-3.1	-62.5	74.9	73.1	1.87	40.078		
600.0	599.5	596.3	596.1	1.1	1.0	176.40	-4.9	-63.6	79.3	77.4	1.99	39.894 SF		
700.0	699.0	693.2	692.7	1.3	1.2	172.72	-11.7	-68.3	94.0	91.7	2.35	39.950		
800.0	798.6	789.0	787.8	1.5	1.4	168.84	-21.1	-74.7	111.3	108.6	2.73	40.765		
900.0	898.2	883.7	881.4	1.7	1.7	165.08	-32.9	-82.8	131.4	128.3	3.12	42.146		
1,000.0	997.7	980.5	976.8	2.0	2.0	161.79	-46.7	-92.2	153.6	150.1	3.51	43.712		
1,100.0	1,097.3	1,077.7	1,072.5	2.2	2.3	159.32	-60.5	-101.7	176.1	172.2	3.91	45.055		
1,200.0	1,196.9	1,174.9	1,168.2	2.4	2.6	157.40	-74.3	-111.1	198.8	194.5	4.30	46.213		
1,300.0	1,296.5	1,272.0	1,264.0	2.7	3.0	155.88	-88.1	-120.5	221.8	217.1	4.70	47.217		
1,400.0	1,396.0	1,369.2	1,359.7	2.9	3.3	154.64	-101.9	-130.0	244.8	239.7	5.09	48.094		
1,500.0	1,495.6	1,466.4	1,455.4	3.1	3.6	153.62	-115.7	-139.4	267.9	262.5	5.48	48.864		
1,600.0	1,595.2	1,563.6	1,551.2	3.4	4.0	152.76	-129.5	-148.8	291.1	285.3	5.88	49.545		
1,700.0	1,694.7	1,660.8	1,646.9	3.6	4.3	152.02	-143.3	-158.3	314.4	308.1	6.27	50.151		
1,800.0	1,794.3	1,758.0	1,742.6	3.8	4.6	151.39	-157.1	-167.7	337.7	331.0	6.66	50.694		
1,900.0	1,893.9	1,855.2	1,838.4	4.1	5.0	150.84	-170.9	-177.1	361.0	354.0	7.05	51.182		
2,000.0	1,993.4	1,952.3	1,934.1	4.3	5.3	150.35	-184.7	-186.6	384.4	376.9	7.45	51.623		
2,100.0	2,093.0	2,049.5	2,029.9	4.6	5.6	149.92	-198.5	-196.0	407.8	399.9	7.84	52.024		
2,200.0	2,192.6	2,146.7	2,125.6	4.8	6.0	149.54	-212.3	-205.5	431.2	422.9	8.23	52.390		
2,300.0	2,292.1	2,243.9	2,221.3	5.0	6.3	149.20	-226.1	-214.9	454.6	446.0	8.62	52.724		
2,400.0	2,391.7	2,341.1	2,317.1	5.3	6.6	148.89	-239.8	-224.3	478.0	469.0	9.01	53.032		
2,500.0	2,491.3	2,438.3	2,412.8	5.5	7.0	148.61	-253.6	-233.8	501.5	492.1	9.41	53.315		
2,600.0	2,590.8	2,535.5	2,508.5	5.8	7.3	148.35	-267.4	-243.2	524.9	515.1	9.80	53.578		
2,700.0	2,690.4	2,632.6	2,604.3	6.0	7.6	148.12	-281.2	-252.6	548.4	538.2	10.19	53.821		
2,800.0	2,790.0	2,729.8	2,700.0	6.2	8.0	147.90	-295.0	-262.1	571.8	561.3	10.58	54.047		
2,900.0	2,889.6	2,827.0	2,795.7	6.5	8.3	147.70	-308.8	-271.5	595.3	584.4	10.97	54.257		
3,000.0	2,989.1	2,924.2	2,891.5	6.7	8.6	147.52	-322.6	-281.0	618.8	607.4	11.36	54.454		
3,100.0	3,088.7	3,021.4	2,987.2	6.9	9.0	147.35	-336.4	-290.4	642.3	630.5	11.76	54.638		
3,200.0	3,188.3	3,118.6	3,083.0	7.2	9.3	147.19	-350.2	-299.8	665.8	653.6	12.15	54.811		
3,300.0	3,287.8	3,215.7	3,178.7	7.4	9.7	147.05	-364.0	-309.3	689.3	676.8	12.54	54.974		
3,400.0	3,387.4	3,312.9	3,274.4	7.7	10.0	146.91	-377.8	-318.7	712.8	699.9	12.93	55.127		
3,500.0	3,487.0	3,410.1	3,370.2	7.9	10.3	146.78	-391.6	-328.1	736.3	723.0	13.32	55.271		
3,600.0	3,586.5	3,507.3	3,465.9	8.1	10.7	146.66	-405.4	-337.6	759.8	746.1	13.71	55.408		
3,700.0	3,686.1	3,604.5	3,561.6	8.4	11.0	146.55	-419.2	-347.0	783.3	769.2	14.10	55.537		
3,800.0	3,785.7	3,701.7	3,657.4	8.6	11.3	146.44	-433.0	-356.5	806.8	792.3	14.50	55.660		
3,900.0	3,885.2	3,798.9	3,753.1	8.8	11.7	146.34	-446.8	-365.9	830.4	815.5	14.89	55.776		
4,000.0	3,984.8	3,896.0	3,848.8	9.1	12.0	146.25	-460.6	-375.3	853.9	838.6	15.28	55.886		
4,100.0	4,084.4	3,993.2	3,944.6	9.3	12.4	146.16	-474.4	-384.8	877.4	861.7	15.67	55.991		
4,200.0	4,183.9	4,090.4	4,040.3	9.6	12.7	146.07	-488.2	-394.2	900.9	884.9	16.06	56.091		
4,300.0	4,283.5	4,187.6	4,136.1	9.8	13.0	145.99	-502.0	-403.6	924.5	908.0	16.45	56.187		
4,400.0	4,383.1	4,284.8	4,231.8	10.0	13.4	145.92	-515.8	-413.1	948.0	931.1	16.84	56.278		
4,500.0	4,482.7	4,382.0	4,327.5	10.3	13.7	145.84	-529.6	-422.5	971.5	954.3	17.24	56.365		
4,600.0	4,582.2	4,479.2	4,423.3	10.5	14.0	145.77	-543.4	-431.9	995.0	977.4	17.63	56.449		

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 Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4F-17H-P267 - DD - Plan #3													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	-89.58	0.4	-50.0	50.1					
100.0	100.0	100.0	100.0	0.1	0.1	-89.58	0.4	-50.0	50.1	49.8	0.24	204.835		
200.0	200.0	200.0	200.0	0.3	0.3	-89.58	0.4	-50.0	50.1	49.5	0.59	84.344		
300.0	300.0	300.0	300.0	0.5	0.5	-89.58	0.4	-50.0	50.1	49.1	0.94	53.105 CC, ES		
400.0	400.0	400.0	400.0	0.6	0.6	-179.67	0.4	-50.0	51.8	50.5	1.29	40.120		
500.0	499.8	499.4	499.4	0.8	0.8	179.91	0.0	-50.2	57.2	55.6	1.64	34.934		
566.2	565.8	564.7	564.7	1.0	0.9	178.37	-1.7	-51.0	63.4	61.5	1.87	33.937		
600.0	599.5	598.0	597.9	1.1	1.0	177.27	-3.1	-51.6	67.2	65.2	1.99	33.838 SF		
700.0	699.0	695.8	695.5	1.3	1.2	173.24	-9.2	-54.4	79.8	77.4	2.35	33.976		
800.0	798.6	792.8	792.0	1.5	1.4	168.65	-18.3	-58.5	94.6	91.8	2.73	34.675		
900.0	898.2	888.8	887.1	1.7	1.7	164.02	-30.2	-63.9	111.9	108.8	3.12	35.841		
1,000.0	997.7	986.6	983.7	2.0	1.9	160.01	-43.8	-70.1	131.0	127.5	3.53	37.135		
1,100.0	1,097.3	1,084.4	1,080.4	2.2	2.2	157.03	-57.5	-76.2	150.5	146.6	3.93	38.272		
1,200.0	1,196.9	1,182.2	1,177.0	2.4	2.5	154.74	-71.2	-82.4	170.4	166.0	4.34	39.264		
1,300.0	1,296.5	1,280.0	1,273.7	2.7	2.8	152.92	-84.8	-88.6	190.4	185.7	4.75	40.129		
1,400.0	1,396.0	1,377.8	1,370.3	2.9	3.1	151.45	-98.5	-94.8	210.6	205.5	5.15	40.889		
1,500.0	1,495.6	1,475.6	1,467.0	3.1	3.4	150.24	-112.1	-101.0	231.0	225.4	5.56	41.559		
1,600.0	1,595.2	1,573.4	1,563.6	3.4	3.7	149.22	-125.8	-107.1	251.4	245.4	5.96	42.153		
1,700.0	1,694.7	1,671.2	1,660.3	3.6	4.0	148.36	-139.4	-113.3	271.8	265.5	6.37	42.682		
1,800.0	1,794.3	1,769.0	1,756.9	3.8	4.3	147.62	-153.1	-119.5	292.3	285.6	6.77	43.157		
1,900.0	1,893.9	1,866.9	1,853.6	4.1	4.6	146.97	-166.7	-125.7	312.9	305.7	7.18	43.585		
2,000.0	1,993.4	1,964.7	1,950.2	4.3	4.9	146.41	-180.4	-131.9	333.5	325.9	7.58	43.972		
2,100.0	2,093.0	2,062.5	2,046.9	4.6	5.2	145.91	-194.0	-138.0	354.1	346.1	7.99	44.323		
2,200.0	2,192.6	2,160.3	2,143.5	4.8	5.5	145.46	-207.7	-144.2	374.7	366.3	8.39	44.644		
2,300.0	2,292.1	2,258.1	2,240.2	5.0	5.9	145.06	-221.4	-150.4	395.4	386.6	8.80	44.939		
2,400.0	2,391.7	2,355.9	2,336.9	5.3	6.2	144.70	-235.0	-156.6	416.1	406.9	9.20	45.209		
2,500.0	2,491.3	2,453.7	2,433.5	5.5	6.5	144.38	-248.7	-162.8	436.8	427.1	9.61	45.458		
2,600.0	2,590.8	2,551.5	2,530.2	5.8	6.8	144.08	-262.3	-168.9	457.5	447.4	10.01	45.689		
2,700.0	2,690.4	2,649.3	2,626.8	6.0	7.1	143.81	-276.0	-175.1	478.2	467.7	10.42	45.903		
2,800.0	2,790.0	2,747.1	2,723.5	6.2	7.4	143.57	-289.6	-181.3	498.9	488.1	10.82	46.101		
2,900.0	2,889.6	2,844.9	2,820.1	6.5	7.7	143.34	-303.3	-187.5	519.6	508.4	11.23	46.287		
3,000.0	2,989.1	2,942.7	2,916.8	6.7	8.0	143.13	-316.9	-193.7	540.4	528.7	11.63	46.460		
3,100.0	3,088.7	3,040.6	3,013.4	6.9	8.3	142.93	-330.6	-199.9	561.1	549.1	12.03	46.622		
3,200.0	3,188.3	3,138.4	3,110.1	7.2	8.7	142.75	-344.3	-206.0	581.8	569.4	12.44	46.775		
3,300.0	3,287.8	3,236.2	3,206.7	7.4	9.0	142.58	-357.9	-212.2	602.6	589.8	12.84	46.918		
3,400.0	3,387.4	3,334.0	3,303.4	7.7	9.3	142.43	-371.6	-218.4	623.4	610.1	13.25	47.053		
3,500.0	3,487.0	3,431.8	3,400.0	7.9	9.6	142.28	-385.2	-224.6	644.1	630.5	13.65	47.180		
3,600.0	3,586.5	3,529.6	3,496.7	8.1	9.9	142.14	-398.9	-230.8	664.9	650.8	14.06	47.300		
3,700.0	3,686.1	3,627.4	3,593.3	8.4	10.2	142.01	-412.5	-236.9	685.7	671.2	14.46	47.414		
3,800.0	3,785.7	3,725.2	3,690.0	8.6	10.5	141.89	-426.2	-243.1	706.4	691.6	14.87	47.522		
3,900.0	3,885.2	3,823.0	3,786.6	8.8	10.8	141.77	-439.8	-249.3	727.2	711.9	15.27	47.624		
4,000.0	3,984.8	3,920.8	3,883.3	9.1	11.1	141.67	-453.5	-255.5	748.0	732.3	15.67	47.722		
4,100.0	4,084.4	4,018.6	3,979.9	9.3	11.5	141.56	-467.1	-261.7	768.8	752.7	16.08	47.814		
4,200.0	4,183.9	4,116.4	4,076.6	9.6	11.8	141.47	-480.8	-267.8	789.5	773.1	16.48	47.903		
4,300.0	4,283.5	4,214.2	4,173.3	9.8	12.1	141.37	-494.5	-274.0	810.3	793.4	16.89	47.987		
4,400.0	4,383.1	4,312.1	4,269.9	10.0	12.4	141.29	-508.1	-280.2	831.1	813.8	17.29	48.067		
4,500.0	4,482.7	4,409.9	4,366.6	10.3	12.7	141.20	-521.8	-286.4	851.9	834.2	17.70	48.144		
4,600.0	4,582.2	4,507.7	4,463.2	10.5	13.0	141.12	-535.4	-292.6	872.7	854.6	18.10	48.217		
4,700.0	4,681.8	4,605.5	4,559.9	10.8	13.3	141.05	-549.1	-298.7	893.5	875.0	18.50	48.288		
4,800.0	4,781.4	4,703.3	4,656.5	11.0	13.6	140.97	-562.7	-304.9	914.3	895.4	18.91	48.355		
4,900.0	4,880.9	4,801.1	4,753.2	11.2	14.0	140.91	-576.4	-311.1	935.1	915.8	19.31	48.420		
5,000.0	4,980.5	4,898.9	4,849.8	11.5	14.3	140.84	-590.0	-317.3	955.9	936.2	19.72	48.482		

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 Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design												S17-T2N-R67W (Big Horn) - Bighorn 4F-17H-P267 - DD - Plan #3		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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty	Separation	Warning				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor					
5,100.0	5,080.1	4,996.7	4,946.5	11.7	14.6	140.78	-603.7	-323.5	976.7	956.5	20.12	48.542					
5,200.0	5,179.6	5,094.5	5,043.1	11.9	14.9	140.72	-617.4	-329.6	997.5	976.9	20.52	48.599					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4G-17H-P267 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.49	0.4	-40.0	40.0					
100.0	100.0	100.0	100.0	0.1	0.1	-89.49	0.4	-40.0	40.0	39.7	0.24	163.641		
200.0	200.0	200.0	200.0	0.3	0.3	-89.49	0.4	-40.0	40.0	39.4	0.59	67.382		
300.0	300.0	300.0	300.0	0.5	0.5	-89.49	0.4	-40.0	40.0	39.0	0.94	42.425	CC, ES	
400.0	400.0	400.0	400.0	0.6	0.6	-179.58	0.4	-40.0	41.7	40.4	1.29	32.323		
500.0	499.8	499.8	499.8	0.8	0.8	-179.63	0.4	-40.0	47.0	45.3	1.64	28.669		
566.2	565.8	565.5	565.5	1.0	0.9	179.54	-0.4	-40.2	52.5	50.6	1.87	28.123		
600.0	599.5	599.0	599.0	1.1	1.0	178.60	-1.3	-40.4	55.9	53.9	1.99	28.149		
700.0	699.0	697.7	697.6	1.3	1.2	174.51	-6.3	-41.5	66.6	64.3	2.34	28.429		
800.0	798.6	795.8	795.3	1.5	1.4	169.28	-14.5	-43.5	78.9	76.2	2.72	29.011		
900.0	898.2	893.1	891.9	1.7	1.6	163.67	-25.9	-46.1	93.3	90.2	3.12	29.888		
1,000.0	997.7	990.7	988.4	2.0	1.9	158.41	-39.8	-49.4	109.9	106.3	3.54	31.043		
1,100.0	1,097.3	1,088.9	1,085.5	2.2	2.2	154.43	-54.0	-52.8	127.2	123.3	3.96	32.113		
1,200.0	1,196.9	1,187.0	1,182.5	2.4	2.4	151.42	-68.2	-56.1	145.0	140.7	4.39	33.073		
1,300.0	1,296.5	1,285.2	1,279.6	2.7	2.7	149.07	-82.4	-59.4	163.1	158.3	4.81	33.926		
1,400.0	1,396.0	1,383.3	1,376.7	2.9	3.0	147.19	-96.6	-62.8	181.5	176.2	5.23	34.682		
1,500.0	1,495.6	1,481.5	1,473.7	3.1	3.3	145.65	-110.8	-66.1	200.0	194.3	5.66	35.355		
1,600.0	1,595.2	1,579.6	1,570.8	3.4	3.6	144.37	-125.0	-69.4	218.5	212.5	6.08	35.955		
1,700.0	1,694.7	1,677.8	1,667.8	3.6	3.9	143.30	-139.2	-72.8	237.2	230.7	6.50	36.492		
1,800.0	1,794.3	1,775.9	1,764.9	3.8	4.2	142.38	-153.4	-76.1	256.0	249.1	6.92	36.975		
1,900.0	1,893.9	1,874.1	1,862.0	4.1	4.5	141.59	-167.6	-79.5	274.8	267.4	7.35	37.411		
2,000.0	1,993.4	1,972.2	1,959.0	4.3	4.8	140.90	-181.8	-82.8	293.6	285.9	7.77	37.807		
2,100.0	2,093.0	2,070.4	2,056.1	4.6	5.1	140.29	-196.0	-86.1	312.5	304.3	8.19	38.167		
2,200.0	2,192.6	2,168.5	2,153.1	4.8	5.4	139.75	-210.2	-89.5	331.4	322.8	8.61	38.496		
2,300.0	2,292.1	2,266.7	2,250.2	5.0	5.7	139.27	-224.4	-92.8	350.4	341.4	9.03	38.797		
2,400.0	2,391.7	2,364.8	2,347.3	5.3	6.0	138.84	-238.6	-96.1	369.4	359.9	9.45	39.075		
2,500.0	2,491.3	2,463.0	2,444.3	5.5	6.3	138.45	-252.8	-99.5	388.3	378.5	9.87	39.331		
2,600.0	2,590.8	2,561.1	2,541.4	5.8	6.6	138.09	-267.0	-102.8	407.3	397.0	10.29	39.568		
2,700.0	2,690.4	2,659.3	2,638.4	6.0	6.9	137.77	-281.2	-106.1	426.3	415.6	10.72	39.788		
2,800.0	2,790.0	2,757.4	2,735.5	6.2	7.2	137.48	-295.4	-109.5	445.4	434.2	11.14	39.993		
2,900.0	2,889.6	2,855.5	2,832.6	6.5	7.5	137.21	-309.6	-112.8	464.4	452.9	11.56	40.183		
3,000.0	2,989.1	2,953.7	2,929.6	6.7	7.8	136.96	-323.8	-116.2	483.5	471.5	11.98	40.362		
3,100.0	3,088.7	3,051.8	3,026.7	6.9	8.1	136.73	-338.0	-119.5	502.5	490.1	12.40	40.529		
3,200.0	3,188.3	3,150.0	3,123.7	7.2	8.4	136.52	-352.2	-122.8	521.6	508.7	12.82	40.686		
3,300.0	3,287.8	3,248.1	3,220.8	7.4	8.7	136.32	-366.4	-126.2	540.6	527.4	13.24	40.833		
3,400.0	3,387.4	3,346.3	3,317.8	7.7	9.1	136.13	-380.6	-129.5	559.7	546.0	13.66	40.972		
3,500.0	3,487.0	3,444.4	3,414.9	7.9	9.4	135.96	-394.8	-132.8	578.8	564.7	14.08	41.103		
3,600.0	3,586.5	3,542.6	3,512.0	8.1	9.7	135.80	-409.0	-136.2	597.9	583.4	14.50	41.227		
3,700.0	3,686.1	3,640.7	3,609.0	8.4	10.0	135.65	-423.2	-139.5	616.9	602.0	14.92	41.344		
3,800.0	3,785.7	3,738.9	3,706.1	8.6	10.3	135.51	-437.4	-142.9	636.0	620.7	15.34	41.456		
3,900.0	3,885.2	3,837.0	3,803.1	8.8	10.6	135.37	-451.6	-146.2	655.1	639.4	15.76	41.561		
4,000.0	3,984.8	3,935.2	3,900.2	9.1	10.9	135.25	-465.8	-149.5	674.2	658.0	16.18	41.661		
4,100.0	4,084.4	4,033.3	3,997.3	9.3	11.2	135.13	-480.0	-152.9	693.3	676.7	16.60	41.757		
4,200.0	4,183.9	4,131.5	4,094.3	9.6	11.5	135.01	-494.2	-156.2	712.4	695.4	17.02	41.848		
4,300.0	4,283.5	4,229.6	4,191.4	9.8	11.8	134.91	-508.4	-159.5	731.5	714.1	17.44	41.935		
4,400.0	4,383.1	4,327.8	4,288.4	10.0	12.1	134.80	-522.6	-162.9	750.6	732.8	17.86	42.017		
4,500.0	4,482.7	4,425.9	4,385.5	10.3	12.4	134.71	-536.8	-166.2	769.7	751.5	18.29	42.097		
4,600.0	4,582.2	4,524.1	4,482.6	10.5	12.7	134.62	-551.0	-169.6	788.9	770.1	18.71	42.172		
4,700.0	4,681.8	4,622.2	4,579.6	10.8	13.0	134.53	-565.2	-172.9	808.0	788.8	19.13	42.245		
4,800.0	4,781.4	4,720.4	4,676.7	11.0	13.3	134.44	-579.4	-176.2	827.1	807.5	19.55	42.315		
4,900.0	4,880.9	4,818.5	4,773.7	11.2	13.6	134.36	-593.6	-179.6	846.2	826.2	19.97	42.381		
5,000.0	4,980.5	4,916.7	4,870.8	11.5	13.9	134.29	-607.8	-182.9	865.3	844.9	20.39	42.445		

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 Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4G-17H-P267 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		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	Separation Factor		
5,100.0	5,080.1	5,014.8	4,967.9	11.7	14.3	134.22	-622.0	-186.2	884.4	863.6	20.81	42.507		
5,200.0	5,179.6	5,113.0	5,064.9	11.9	14.6	134.15	-636.2	-189.6	903.6	882.3	21.23	42.566		
5,300.0	5,279.2	5,211.1	5,162.0	12.2	14.9	134.08	-650.4	-192.9	922.7	901.0	21.65	42.623		
5,400.0	5,378.8	5,309.3	5,259.0	12.4	15.2	134.01	-664.6	-196.2	941.8	919.7	22.07	42.678		
5,500.0	5,478.3	5,407.4	5,356.1	12.7	15.5	133.95	-678.8	-199.6	960.9	938.4	22.49	42.731		
5,600.0	5,577.9	5,505.6	5,453.2	12.9	15.8	133.89	-693.0	-202.9	980.0	957.1	22.91	42.782		
5,700.0	5,677.5	5,603.7	5,550.2	13.1	16.1	133.84	-707.2	-206.3	999.2	975.8	23.33	42.831		
6,800.0	6,772.5	7,941.9	7,267.0	15.8	14.4	-129.60	-13.8	-270.0	992.8	967.1	25.62	38.752		
6,850.0	6,821.5	7,950.6	7,267.0	15.9	14.4	-119.20	-5.1	-270.1	973.5	947.8	25.72	37.856		
6,900.0	6,869.5	7,963.6	7,267.0	16.0	14.4	-114.21	7.9	-270.4	956.8	931.0	25.81	37.072		
6,950.0	6,916.3	7,980.7	7,267.0	16.1	14.5	-111.18	25.0	-270.8	942.7	916.8	25.91	36.385		
7,000.0	6,961.3	8,001.9	7,267.0	16.3	14.6	-108.90	46.1	-271.2	931.3	905.3	26.04	35.764		
7,050.0	7,004.3	8,026.9	7,267.0	16.4	14.6	-106.89	71.2	-271.8	922.4	896.2	26.24	35.151		
7,100.0	7,045.0	8,055.6	7,267.0	16.6	14.7	-104.95	99.8	-272.4	916.0	889.4	26.51	34.554		
7,150.0	7,083.1	8,087.7	7,267.0	16.8	14.9	-102.99	132.0	-273.0	911.6	884.8	26.85	33.951		
7,200.0	7,118.2	8,123.1	7,267.0	17.0	15.1	-101.02	167.3	-273.8	909.2	881.8	27.32	33.279		
7,250.0	7,150.0	8,161.4	7,267.0	17.3	15.3	-99.06	205.6	-274.6	908.2	880.3	27.90	32.558		
7,261.5	7,156.9	8,170.6	7,267.0	17.3	15.4	-98.62	214.8	-274.8	908.2	880.2	28.04	32.386		
7,300.0	7,178.5	8,202.4	7,267.0	17.6	15.6	-97.17	246.6	-275.5	908.5	880.0	28.55	31.821		
7,350.0	7,203.3	8,245.7	7,267.0	17.9	15.9	-95.39	289.9	-276.4	909.6	880.3	29.34	31.008		
7,400.0	7,224.2	8,291.0	7,267.0	18.2	16.3	-93.78	335.2	-277.3	911.3	881.2	30.17	30.207		
7,450.0	7,241.1	8,337.9	7,267.0	18.6	16.7	-92.41	382.1	-278.3	913.3	882.2	31.10	29.369		
7,500.0	7,253.8	8,386.2	7,267.0	19.1	17.1	-91.31	430.4	-279.3	915.2	883.1	32.07	28.540		
7,550.0	7,262.3	8,435.4	7,267.0	19.5	17.6	-90.53	479.6	-280.4	916.9	883.8	33.11	27.697		
7,600.0	7,266.5	8,485.2	7,267.0	20.0	18.1	-90.09	529.4	-281.4	918.4	884.2	34.18	26.865		
7,623.5	7,267.0	8,508.7	7,267.0	20.2	18.4	-90.00	552.8	-281.9	918.9	884.2	34.71	26.476		
7,700.0	7,267.0	8,585.2	7,267.0	21.0	19.2	-90.00	629.3	-283.5	920.5	884.0	36.55	25.183		
7,800.0	7,267.0	8,685.2	7,267.0	22.2	20.5	-90.00	729.3	-285.7	922.6	883.5	39.11	23.592		
7,900.0	7,267.0	8,785.2	7,267.0	23.4	21.7	-90.00	829.2	-287.8	924.7	882.9	41.80	22.123		
8,000.0	7,267.0	8,885.1	7,267.0	24.6	23.1	-90.00	929.2	-289.9	926.9	882.3	44.61	20.778		
8,100.0	7,267.0	8,985.1	7,267.0	26.0	24.5	-90.00	1,029.2	-292.0	929.0	881.5	47.51	19.555		
8,200.0	7,267.0	9,085.1	7,267.0	27.3	25.9	-90.00	1,129.1	-294.1	931.1	880.6	50.48	18.444		
8,300.0	7,267.0	9,185.1	7,267.0	28.8	27.4	-90.00	1,229.1	-296.2	933.2	879.7	53.52	17.435		
8,400.0	7,267.0	9,285.0	7,267.0	30.2	28.9	-90.00	1,329.0	-298.3	935.3	878.7	56.62	16.520		
8,500.0	7,267.0	9,385.0	7,267.0	31.7	30.5	-90.00	1,429.0	-300.4	937.4	877.7	59.76	15.687		
8,600.0	7,267.0	9,485.0	7,267.0	33.2	32.0	-90.00	1,528.9	-302.6	939.5	876.6	62.94	14.928		
8,700.0	7,267.0	9,585.0	7,267.0	34.7	33.6	-90.00	1,628.9	-304.7	941.6	875.5	66.15	14.235		
8,800.0	7,267.0	9,685.0	7,267.0	36.3	35.2	-90.00	1,728.8	-306.8	943.8	874.4	69.39	13.601		
8,900.0	7,267.0	9,784.9	7,267.0	37.9	36.8	-90.00	1,828.8	-308.9	945.9	873.2	72.66	13.018		
9,000.0	7,267.0	9,884.9	7,267.0	39.4	38.4	-90.00	1,928.8	-311.0	948.0	872.0	75.94	12.483		
9,100.0	7,267.0	9,984.9	7,267.0	41.0	40.1	-90.00	2,028.7	-313.1	950.1	870.8	79.25	11.989		
9,200.0	7,267.0	10,084.9	7,267.0	42.7	41.7	-90.00	2,128.7	-315.2	952.2	869.6	82.57	11.532		
9,300.0	7,267.0	10,184.8	7,267.0	44.3	43.3	-90.00	2,228.6	-317.3	954.3	868.4	85.91	11.108		
9,400.0	7,267.0	10,284.8	7,267.0	45.9	45.0	-90.00	2,328.6	-319.4	956.4	867.2	89.26	10.715		
9,500.0	7,267.0	10,384.8	7,267.0	47.5	46.7	-90.00	2,428.5	-321.6	958.5	865.9	92.62	10.349		
9,600.0	7,267.0	10,484.8	7,267.0	49.2	48.3	-90.00	2,528.5	-323.7	960.7	864.7	96.00	10.007		
9,700.0	7,267.0	10,584.7	7,267.0	50.9	50.0	-90.00	2,628.4	-325.8	962.8	863.4	99.38	9.688		
9,800.0	7,267.0	10,684.7	7,267.0	52.5	51.7	-90.00	2,728.4	-327.9	964.9	862.1	102.77	9.389		
9,900.0	7,267.0	10,784.7	7,267.0	54.2	53.4	-90.00	2,828.4	-330.0	967.0	860.8	106.17	9.108		
10,000.0	7,267.0	10,884.7	7,267.0	55.9	55.1	-90.00	2,928.3	-332.1	969.1	859.5	109.57	8.845		
10,100.0	7,267.0	10,984.7	7,267.0	57.5	56.8	-90.00	3,028.3	-334.2	971.2	858.2	112.98	8.596		
10,200.0	7,267.0	11,084.6	7,267.0	59.2	58.5	-90.00	3,128.2	-336.3	973.3	856.9	116.40	8.362		

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 Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4G-17H-P267 - DD - Plan #2												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
10,300.0	7,267.0	11,184.6	7,267.0	60.9	60.2	-90.00	3,228.2	-338.5	975.4	855.6	119.82	8.141	
10,400.0	7,267.0	11,290.3	7,267.0	62.6	62.0	-90.00	3,333.8	-340.6	977.5	854.1	123.35	7.925	
10,500.0	7,267.0	11,410.9	7,267.0	64.3	64.0	-90.00	3,454.4	-341.2	977.9	850.8	127.13	7.693	
10,600.0	7,267.0	11,529.5	7,267.0	66.0	66.1	-90.00	3,573.0	-339.3	976.3	845.4	130.89	7.459	
10,700.0	7,267.0	11,629.5	7,267.0	67.7	67.8	-90.00	3,672.9	-336.8	973.8	839.5	134.33	7.250	
10,800.0	7,267.0	11,729.4	7,267.0	69.4	69.5	-90.00	3,772.9	-334.3	971.4	833.6	137.77	7.051	
10,900.0	7,267.0	11,829.4	7,267.0	71.1	71.2	-90.00	3,872.8	-331.8	968.9	827.7	141.22	6.861	
11,000.0	7,267.0	11,929.4	7,267.0	72.8	72.9	-90.00	3,972.8	-329.3	966.4	821.7	144.66	6.680	
11,100.0	7,267.0	12,029.3	7,267.0	74.5	74.6	-90.00	4,072.7	-326.9	963.9	815.8	148.12	6.508	
11,200.0	7,267.0	12,129.3	7,267.0	76.2	76.3	-90.00	4,172.6	-324.4	961.4	809.9	151.57	6.343	
11,300.0	7,267.0	12,229.3	7,267.0	77.9	78.1	-90.00	4,272.6	-321.9	959.0	803.9	155.03	6.186	
11,400.0	7,267.0	12,329.2	7,267.0	79.6	79.8	-90.00	4,372.5	-319.4	956.5	798.0	158.49	6.035	
11,500.0	7,267.0	12,429.2	7,267.0	81.4	81.5	-90.00	4,472.5	-316.9	954.0	792.0	161.95	5.891	
11,600.0	7,267.0	12,529.2	7,267.0	83.1	83.2	-90.00	4,572.4	-314.5	951.5	786.1	165.41	5.752	
11,700.0	7,267.0	12,629.1	7,267.0	84.8	85.0	-90.00	4,672.3	-312.0	949.0	780.2	168.88	5.620	
11,800.0	7,267.0	12,729.1	7,267.0	86.5	86.7	-90.00	4,772.3	-309.5	946.6	774.2	172.34	5.492	
11,900.0	7,267.0	12,829.1	7,267.0	88.2	88.4	-90.00	4,872.2	-307.0	944.1	768.3	175.81	5.370	
12,000.0	7,267.0	12,929.1	7,267.0	90.0	90.1	-90.00	4,972.1	-304.5	941.6	762.3	179.28	5.252	
12,100.0	7,267.0	13,029.0	7,267.0	91.7	91.9	-90.00	5,072.1	-302.1	939.1	756.4	182.75	5.139	
12,200.0	7,267.0	13,129.0	7,267.0	93.4	93.6	-90.00	5,172.0	-299.6	936.6	750.4	186.23	5.029	
12,300.0	7,267.0	13,229.0	7,267.0	95.1	95.3	-90.00	5,272.0	-297.1	934.1	744.4	189.70	4.924	
12,400.0	7,267.0	13,328.9	7,267.0	96.9	97.1	-90.00	5,371.9	-294.6	931.7	738.5	193.18	4.823	
12,500.0	7,267.0	13,428.9	7,267.0	98.6	98.8	-90.00	5,471.8	-292.1	929.2	732.5	196.65	4.725	
12,600.0	7,267.0	13,528.9	7,267.0	100.3	100.5	-90.00	5,571.8	-289.6	926.7	726.6	200.13	4.631	
12,700.0	7,267.0	13,628.8	7,267.0	102.1	102.3	-90.00	5,671.7	-287.2	924.2	720.6	203.61	4.539	
12,800.0	7,267.0	13,728.8	7,267.0	103.8	104.0	-90.00	5,771.7	-284.7	921.7	714.7	207.09	4.451	
12,900.0	7,267.0	13,828.8	7,267.0	105.5	105.7	-90.00	5,871.6	-282.2	919.3	708.7	210.57	4.366	
13,000.0	7,267.0	13,928.7	7,267.0	107.3	107.5	-90.00	5,971.5	-279.7	916.8	702.7	214.05	4.283	
13,100.0	7,267.0	14,028.7	7,267.0	109.0	109.2	-90.00	6,071.5	-277.2	914.3	696.8	217.53	4.203	
13,200.0	7,267.0	14,128.7	7,267.0	110.7	110.9	-90.00	6,171.4	-274.8	911.8	690.8	221.02	4.126	
13,300.0	7,267.0	14,228.7	7,267.0	112.5	112.7	-90.00	6,271.3	-272.3	909.3	684.8	224.50	4.051	
13,400.0	7,267.0	14,328.6	7,267.0	114.2	114.4	-90.00	6,371.3	-269.8	906.9	678.9	227.98	3.978	
13,500.0	7,267.0	14,428.6	7,267.0	115.9	116.1	-90.00	6,471.2	-267.3	904.4	672.9	231.47	3.907	
13,598.5	7,267.0	14,511.2	7,267.0	117.6	117.6	-90.00	6,553.8	-265.3	902.1	667.4	234.62	3.845 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4H-17H-P267 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.33	0.3	-29.9	29.9					
100.0	100.0	100.0	100.0	0.1	0.1	-89.33	0.3	-29.9	29.9	29.7	0.24	122.448		
200.0	200.0	200.0	200.0	0.3	0.3	-89.33	0.3	-29.9	29.9	29.3	0.59	50.420		
300.0	300.0	300.0	300.0	0.5	0.5	-89.33	0.3	-29.9	29.9	29.0	0.94	31.746 CC, ES		
400.0	400.0	400.0	400.0	0.6	0.6	-179.44	0.3	-29.9	31.7	30.4	1.29	24.527		
500.0	499.8	499.8	499.8	0.8	0.8	179.81	-0.1	-29.9	36.9	35.3	1.64	22.524		
566.2	565.8	565.7	565.7	1.0	0.9	177.24	-2.0	-29.9	42.3	40.5	1.87	22.636		
600.0	599.5	599.3	599.3	1.1	1.0	175.47	-3.5	-29.9	45.6	43.6	1.99	22.903		
700.0	699.0	698.4	698.1	1.3	1.2	169.13	-10.4	-30.0	55.8	53.4	2.36	23.605		
800.0	798.6	796.9	796.0	1.5	1.4	162.00	-20.6	-30.1	67.4	64.6	2.76	24.386		
900.0	898.2	895.1	893.4	1.7	1.7	155.07	-33.8	-30.2	81.0	77.8	3.19	25.396		
1,000.0	997.7	993.7	991.1	2.0	1.9	149.92	-47.4	-30.3	95.7	92.1	3.62	26.399		
1,100.0	1,097.3	1,092.3	1,088.7	2.2	2.2	146.15	-61.0	-30.4	110.9	106.9	4.06	27.309		
1,200.0	1,196.9	1,190.9	1,186.4	2.4	2.5	143.30	-74.6	-30.5	126.5	122.0	4.50	28.117		
1,300.0	1,296.5	1,289.5	1,284.0	2.7	2.7	141.07	-88.3	-30.6	142.3	137.4	4.94	28.829		
1,400.0	1,396.0	1,388.2	1,381.7	2.9	3.0	139.30	-101.9	-30.7	158.3	153.0	5.37	29.457		
1,500.0	1,495.6	1,486.8	1,479.4	3.1	3.3	137.85	-115.5	-30.8	174.4	168.6	5.81	30.012		
1,600.0	1,595.2	1,585.4	1,577.0	3.4	3.6	136.64	-129.1	-30.9	190.6	184.4	6.25	30.504		
1,700.0	1,694.7	1,684.0	1,674.7	3.6	3.9	135.62	-142.7	-31.0	206.9	200.2	6.69	30.944		
1,800.0	1,794.3	1,782.6	1,772.3	3.8	4.2	134.76	-156.4	-31.2	223.3	216.1	7.12	31.338		
1,900.0	1,893.9	1,881.2	1,870.0	4.1	4.5	134.01	-170.0	-31.3	239.6	232.1	7.56	31.693		
2,000.0	1,993.4	1,979.8	1,967.7	4.3	4.8	133.35	-183.6	-31.4	256.0	248.0	8.00	32.013		
2,100.0	2,093.0	2,078.4	2,065.3	4.6	5.0	132.78	-197.2	-31.5	272.5	264.0	8.43	32.305		
2,200.0	2,192.6	2,177.0	2,163.0	4.8	5.3	132.27	-210.8	-31.6	288.9	280.1	8.87	32.570		
2,300.0	2,292.1	2,275.6	2,260.6	5.0	5.6	131.81	-224.5	-31.7	305.4	296.1	9.31	32.814		
2,400.0	2,391.7	2,374.2	2,358.3	5.3	5.9	131.40	-238.1	-31.8	321.9	312.2	9.74	33.037		
2,500.0	2,491.3	2,472.8	2,456.0	5.5	6.2	131.04	-251.7	-31.9	338.4	328.2	10.18	33.243		
2,600.0	2,590.8	2,571.4	2,553.6	5.8	6.5	130.70	-265.3	-32.0	354.9	344.3	10.62	33.433		
2,700.0	2,690.4	2,670.0	2,651.3	6.0	6.8	130.40	-279.0	-32.1	371.5	360.4	11.05	33.609		
2,800.0	2,790.0	2,768.6	2,748.9	6.2	7.1	130.12	-292.6	-32.2	388.0	376.5	11.49	33.773		
2,900.0	2,889.6	2,867.2	2,846.6	6.5	7.4	129.86	-306.2	-32.3	404.6	392.6	11.92	33.926		
3,000.0	2,989.1	2,965.8	2,944.3	6.7	7.7	129.63	-319.8	-32.4	421.1	408.8	12.36	34.069		
3,100.0	3,088.7	3,064.4	3,041.9	6.9	8.0	129.41	-333.4	-32.6	437.7	424.9	12.80	34.202		
3,200.0	3,188.3	3,163.0	3,139.6	7.2	8.2	129.21	-347.1	-32.7	454.3	441.0	13.23	34.327		
3,300.0	3,287.8	3,261.7	3,237.2	7.4	8.5	129.02	-360.7	-32.8	470.8	457.2	13.67	34.445		
3,400.0	3,387.4	3,360.3	3,334.9	7.7	8.8	128.85	-374.3	-32.9	487.4	473.3	14.11	34.555		
3,500.0	3,487.0	3,458.9	3,432.6	7.9	9.1	128.68	-387.9	-33.0	504.0	489.5	14.54	34.660		
3,600.0	3,586.5	3,557.5	3,530.2	8.1	9.4	128.53	-401.6	-33.1	520.6	505.6	14.98	34.758		
3,700.0	3,686.1	3,656.1	3,627.9	8.4	9.7	128.39	-415.2	-33.2	537.2	521.8	15.41	34.852		
3,800.0	3,785.7	3,754.7	3,725.5	8.6	10.0	128.25	-428.8	-33.3	553.8	537.9	15.85	34.940		
3,900.0	3,885.2	3,853.3	3,823.2	8.8	10.3	128.12	-442.4	-33.4	570.4	554.1	16.29	35.024		
4,000.0	3,984.8	3,951.9	3,920.9	9.1	10.6	128.00	-456.0	-33.5	587.0	570.2	16.72	35.103		
4,100.0	4,084.4	4,050.5	4,018.5	9.3	10.9	127.89	-469.7	-33.6	603.6	586.4	17.16	35.179		
4,200.0	4,183.9	4,149.1	4,116.2	9.6	11.2	127.78	-483.3	-33.7	620.2	602.6	17.59	35.251		
4,300.0	4,283.5	4,247.7	4,213.8	9.8	11.5	127.68	-496.9	-33.8	636.8	618.7	18.03	35.320		
4,400.0	4,383.1	4,346.3	4,311.5	10.0	11.8	127.59	-510.5	-34.0	653.4	634.9	18.46	35.386		
4,500.0	4,482.7	4,444.9	4,409.2	10.3	12.0	127.49	-524.2	-34.1	670.0	651.1	18.90	35.449		
4,600.0	4,582.2	4,543.5	4,506.8	10.5	12.3	127.41	-537.8	-34.2	686.6	667.3	19.34	35.509		
4,700.0	4,681.8	4,642.1	4,604.5	10.8	12.6	127.32	-551.4	-34.3	703.2	683.4	19.77	35.566		
4,800.0	4,781.4	4,740.7	4,702.1	11.0	12.9	127.24	-565.0	-34.4	719.8	699.6	20.21	35.621		
4,900.0	4,880.9	4,839.3	4,799.8	11.2	13.2	127.17	-578.6	-34.5	736.4	715.8	20.64	35.674		
5,000.0	4,980.5	4,937.9	4,897.5	11.5	13.5	127.10	-592.3	-34.6	753.1	732.0	21.08	35.724		

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 Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4H-17H-P267 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,080.1	5,036.6	4,995.1	11.7	13.8	127.03	-605.9	-34.7	769.7	748.2	21.52	35.773		
5,200.0	5,179.6	5,135.2	5,092.8	11.9	14.1	126.96	-619.5	-34.8	786.3	764.3	21.95	35.820		
5,300.0	5,279.2	5,233.8	5,190.4	12.2	14.4	126.90	-633.1	-34.9	802.9	780.5	22.39	35.865		
5,400.0	5,378.8	5,332.4	5,288.1	12.4	14.7	126.84	-646.8	-35.0	819.5	796.7	22.82	35.908		
5,500.0	5,478.3	5,431.0	5,385.8	12.7	15.0	126.78	-660.4	-35.1	836.2	812.9	23.26	35.950		
5,600.0	5,577.9	5,529.6	5,483.4	12.9	15.3	126.72	-674.0	-35.2	852.8	829.1	23.69	35.990		
5,700.0	5,677.5	5,628.2	5,581.1	13.1	15.6	126.67	-687.6	-35.4	869.4	845.3	24.13	36.029		
5,800.0	5,777.0	5,726.8	5,678.7	13.4	15.9	126.62	-701.2	-35.5	886.0	861.5	24.57	36.067		
5,900.0	5,876.6	5,825.4	5,776.4	13.6	16.1	126.57	-714.9	-35.6	902.7	877.7	25.00	36.103		
6,000.0	5,976.2	5,924.0	5,874.0	13.9	16.4	126.52	-728.5	-35.7	919.3	893.8	25.44	36.138		
6,100.0	6,075.7	6,022.6	5,971.7	14.1	16.7	126.47	-742.1	-35.8	935.9	910.0	25.87	36.172		
6,200.0	6,175.3	6,121.2	6,069.4	14.3	17.0	126.43	-755.7	-35.9	952.5	926.2	26.31	36.205		
6,300.0	6,274.9	6,219.8	6,167.0	14.6	17.3	126.38	-769.3	-36.0	969.2	942.4	26.75	36.236		
6,400.0	6,374.5	6,318.4	6,264.7	14.8	17.6	126.34	-783.0	-36.1	985.8	958.6	27.18	36.267		
6,750.0	6,722.9	6,187.8	7,498.0	15.6	14.3	-155.77	6.5	-34.6	993.0	967.0	25.97	38.238		
6,800.0	6,772.5	8,192.3	7,498.0	15.8	14.3	-131.74	11.1	-34.5	957.7	931.6	26.09	36.704		
6,850.0	6,821.5	8,201.2	7,498.0	15.9	14.3	-123.57	19.9	-34.4	924.2	898.0	26.22	35.249		
6,900.0	6,869.5	8,214.3	7,498.0	16.0	14.3	-120.57	33.0	-34.3	892.7	866.4	26.33	33.900		
6,950.0	6,916.3	8,231.5	7,498.0	16.1	14.4	-119.32	50.3	-34.1	863.6	837.2	26.41	32.698		
7,000.0	6,961.3	8,252.8	7,498.0	16.3	14.5	-118.63	71.6	-33.9	836.9	810.5	26.45	31.639		
7,050.0	7,004.3	8,278.0	7,498.0	16.4	14.6	-118.04	96.7	-33.6	813.0	786.5	26.48	30.698		
7,100.0	7,045.0	8,306.8	7,498.0	16.6	14.7	-117.38	125.6	-33.3	791.8	765.2	26.54	29.829		
7,150.0	7,083.1	8,339.1	7,498.0	16.8	14.9	-116.59	157.8	-32.9	773.4	746.7	26.70	28.968		
7,200.0	7,118.2	8,374.5	7,498.0	17.0	15.1	-115.66	193.3	-32.6	757.6	730.7	26.93	28.127		
7,250.0	7,150.0	8,413.0	7,498.0	17.3	15.3	-114.63	231.7	-32.2	744.4	717.1	27.30	27.265		
7,300.0	7,178.5	8,454.0	7,498.0	17.6	15.6	-113.54	272.7	-31.7	733.5	705.7	27.83	26.355		
7,350.0	7,203.3	8,497.4	7,498.0	17.9	15.9	-112.45	316.1	-31.2	724.8	696.3	28.49	25.440		
7,400.0	7,224.2	8,542.8	7,498.0	18.2	16.3	-111.43	361.5	-30.8	717.9	688.5	29.32	24.487		
7,450.0	7,241.1	8,589.8	7,498.0	18.6	16.7	-110.54	408.5	-30.3	712.6	682.3	30.25	23.560		
7,500.0	7,253.8	8,638.1	7,498.0	19.1	17.2	-109.83	456.8	-29.7	708.7	677.4	31.30	22.646		
7,550.0	7,262.3	8,687.4	7,498.0	19.5	17.7	-109.36	506.1	-29.2	706.1	673.7	32.41	21.784		
7,600.0	7,266.5	8,737.2	7,498.0	20.0	18.2	-109.15	555.9	-28.7	704.6	671.0	33.60	20.968		
7,623.5	7,267.0	8,760.6	7,498.0	20.2	18.5	-109.15	579.3	-28.4	704.2	670.0	34.17	20.607		
7,700.0	7,267.0	8,837.2	7,498.0	21.0	19.4	-109.17	655.2	-27.6	703.4	667.5	35.90	19.592		
7,800.0	7,267.0	8,937.2	7,498.0	22.2	20.6	-109.20	755.9	-26.6	702.4	664.1	38.30	18.340		
7,900.0	7,267.0	9,037.1	7,498.0	23.4	22.0	-109.23	855.9	-25.5	701.4	660.6	40.82	17.182		
8,000.0	7,267.0	9,137.1	7,498.0	24.6	23.3	-109.26	955.8	-24.4	700.4	657.0	43.45	16.120		
8,100.0	7,267.0	9,237.1	7,498.0	26.0	24.7	-109.29	1,055.8	-23.3	699.4	653.2	46.17	15.150		
8,200.0	7,267.0	9,337.1	7,498.0	27.3	26.2	-109.32	1,155.8	-22.3	698.4	649.4	48.95	14.267		
8,300.0	7,267.0	9,437.1	7,498.0	28.8	27.7	-109.34	1,255.8	-21.2	697.4	645.6	51.80	13.464		
8,400.0	7,267.0	9,537.1	7,498.0	30.2	29.2	-109.37	1,355.8	-20.1	696.4	641.7	54.70	12.732		
8,500.0	7,267.0	9,637.1	7,498.0	31.7	30.8	-109.40	1,455.8	-19.1	695.4	637.7	57.64	12.065		
8,600.0	7,267.0	9,737.1	7,498.0	33.2	32.3	-109.43	1,555.8	-18.0	694.4	633.8	60.61	11.456		
8,700.0	7,267.0	9,837.1	7,498.0	34.7	33.9	-109.46	1,655.8	-16.9	693.4	629.7	63.62	10.899		
8,800.0	7,267.0	9,937.1	7,498.0	36.3	35.5	-109.49	1,755.8	-15.9	692.4	625.7	66.65	10.387		
8,900.0	7,267.0	10,037.1	7,498.0	37.9	37.1	-109.52	1,855.7	-14.8	691.3	621.6	69.71	9.917		
9,000.0	7,267.0	10,137.1	7,498.0	39.4	38.8	-109.55	1,955.7	-13.7	690.3	617.6	72.79	9.484		
9,100.0	7,267.0	10,237.1	7,498.0	41.0	40.4	-109.58	2,055.7	-12.7	689.3	613.5	75.88	9.084		
9,200.0	7,267.0	10,337.1	7,498.0	42.7	42.0	-109.61	2,155.7	-11.6	688.3	609.3	78.99	8.714		
9,300.0	7,267.0	10,437.1	7,498.0	44.3	43.7	-109.64	2,255.7	-10.5	687.3	605.2	82.11	8.370		
9,400.0	7,267.0	10,537.1	7,498.0	45.9	45.4	-109.67	2,355.7	-9.5	686.3	601.1	85.25	8.051		
9,500.0	7,267.0	10,637.1	7,498.0	47.5	47.0	-109.70	2,455.7	-8.4	685.3	596.9	88.39	7.753		

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 Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4H-17H-P267 - DD - Plan #2												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		
9,600.0	7,267.0	10,737.1	7,498.0	49.2	48.7	-109.73	2,555.7	-7.3	684.3	592.8	91.55	7.475	
9,700.0	7,267.0	10,837.0	7,498.0	50.9	50.4	-109.76	2,655.6	-6.3	683.3	588.6	94.71	7.215	
9,800.0	7,267.0	10,937.0	7,498.0	52.5	52.1	-109.79	2,755.6	-5.2	682.3	584.4	97.88	6.971	
9,900.0	7,267.0	11,037.0	7,498.0	54.2	53.8	-109.82	2,855.6	-4.1	681.3	580.2	101.05	6.742	
10,000.0	7,267.0	11,137.0	7,498.0	55.9	55.5	-109.85	2,955.6	-3.1	680.3	576.1	104.23	6.527	
10,100.0	7,267.0	11,237.0	7,498.0	57.5	57.2	-109.88	3,055.6	-2.0	679.3	571.9	107.42	6.324	
10,200.0	7,267.0	11,337.0	7,498.0	59.2	58.9	-109.91	3,155.6	-0.9	678.3	567.7	110.61	6.132	
10,300.0	7,267.0	11,436.5	7,498.0	60.9	60.6	-109.94	3,255.1	0.1	677.3	563.5	113.79	5.952	
10,362.7	7,267.0	11,493.0	7,498.0	62.0	61.5	-109.95	3,311.5	0.4	677.0	561.3	115.71	5.851	
10,400.0	7,267.0	11,526.5	7,498.0	62.6	62.1	-109.95	3,345.1	0.3	677.1	560.2	116.85	5.795	
10,500.0	7,267.0	11,622.7	7,498.0	64.3	63.7	-109.92	3,441.3	-0.7	678.1	558.1	120.03	5.649	
10,600.0	7,267.0	11,722.7	7,498.0	66.0	65.5	-109.88	3,541.2	-1.9	679.2	555.9	123.28	5.509	
10,700.0	7,267.0	11,822.7	7,498.0	67.7	67.2	-109.85	3,641.2	-3.1	680.3	553.8	126.54	5.376	
10,800.0	7,267.0	11,922.7	7,498.0	69.4	68.9	-109.82	3,741.2	-4.3	681.4	551.6	129.80	5.250	
10,900.0	7,267.0	12,022.7	7,498.0	71.1	70.6	-109.78	3,841.2	-5.4	682.5	549.5	133.07	5.129	
11,000.0	7,267.0	12,122.7	7,498.0	72.8	72.3	-109.75	3,941.2	-6.6	683.6	547.3	136.34	5.014	
11,100.0	7,267.0	12,222.6	7,498.0	74.5	74.0	-109.72	4,041.2	-7.8	684.8	545.1	139.61	4.905	
11,200.0	7,267.0	12,322.6	7,498.0	76.2	75.8	-109.68	4,141.2	-9.0	685.9	543.0	142.89	4.800	
11,300.0	7,267.0	12,422.6	7,498.0	77.9	77.5	-109.65	4,241.1	-10.2	687.0	540.8	146.17	4.700	
11,400.0	7,267.0	12,522.6	7,498.0	79.6	79.2	-109.62	4,341.1	-11.3	688.1	538.6	149.45	4.604	
11,500.0	7,267.0	12,622.6	7,498.0	81.4	80.9	-109.58	4,441.1	-12.5	689.2	536.5	152.74	4.512	
11,600.0	7,267.0	12,722.6	7,498.0	83.1	82.7	-109.55	4,541.1	-13.7	690.3	534.3	156.03	4.424	
11,700.0	7,267.0	12,822.6	7,498.0	84.8	84.4	-109.52	4,641.1	-14.9	691.4	532.1	159.33	4.340	
11,800.0	7,267.0	12,922.6	7,498.0	86.5	86.1	-109.49	4,741.1	-16.1	692.5	529.9	162.63	4.258	
11,900.0	7,267.0	13,022.6	7,498.0	88.2	87.9	-109.45	4,841.1	-17.2	693.7	527.7	165.93	4.180	
12,000.0	7,267.0	13,122.6	7,498.0	90.0	89.6	-109.42	4,941.0	-18.4	694.8	525.5	169.23	4.105	
12,100.0	7,267.0	13,222.6	7,498.0	91.7	91.3	-109.39	5,041.0	-19.6	695.9	523.4	172.54	4.033	
12,200.0	7,267.0	13,322.6	7,498.0	93.4	93.0	-109.36	5,141.0	-20.8	697.0	521.2	175.85	3.964	
12,300.0	7,267.0	13,422.6	7,498.0	95.1	94.8	-109.32	5,241.0	-22.0	698.1	519.0	179.16	3.897	
12,400.0	7,267.0	13,522.6	7,498.0	96.9	96.5	-109.29	5,341.0	-23.2	699.2	516.8	182.47	3.832	
12,500.0	7,267.0	13,622.6	7,498.0	98.6	98.3	-109.26	5,441.0	-24.3	700.3	514.6	185.78	3.770	
12,600.0	7,267.0	13,722.5	7,498.0	100.3	100.0	-109.23	5,541.0	-25.5	701.5	512.4	189.10	3.709	
12,700.0	7,267.0	13,822.5	7,498.0	102.1	101.7	-109.20	5,640.9	-26.7	702.6	510.2	192.42	3.651	
12,800.0	7,267.0	13,922.5	7,498.0	103.8	103.5	-109.17	5,740.9	-27.9	703.7	507.9	195.74	3.595	
12,900.0	7,267.0	14,022.5	7,498.0	105.5	105.2	-109.13	5,840.9	-29.1	704.8	505.7	199.07	3.541	
13,000.0	7,267.0	14,122.5	7,498.0	107.3	106.9	-109.10	5,940.9	-30.2	705.9	503.5	202.39	3.488	
13,100.0	7,267.0	14,222.5	7,498.0	109.0	108.7	-109.07	6,040.9	-31.4	707.0	501.3	205.72	3.437	
13,200.0	7,267.0	14,322.5	7,498.0	110.7	110.4	-109.04	6,140.9	-32.6	708.2	499.1	209.05	3.387	
13,300.0	7,267.0	14,422.5	7,498.0	112.5	112.2	-109.01	6,240.9	-33.8	709.3	496.9	212.38	3.340	
13,400.0	7,267.0	14,522.5	7,498.0	114.2	113.9	-108.98	6,340.8	-35.0	710.4	494.7	215.72	3.293	
13,500.0	7,267.0	14,622.5	7,498.0	115.9	115.6	-108.95	6,440.8	-36.1	711.5	492.4	219.05	3.248	
13,598.5	7,267.0	14,720.9	7,498.0	117.6	117.4	-108.92	6,539.3	-37.3	712.6	490.3	222.34	3.205 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4I-17H-P267 - DD - Plan #4													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	0.0	0.0	0.0	0.0	-89.02	0.3	-19.9	19.9					
100.0	100.0	100.0	100.0	0.1	0.1	-89.02	0.3	-19.9	19.9	19.6	0.24	81.257		
200.0	200.0	200.0	200.0	0.3	0.3	-89.02	0.3	-19.9	19.9	19.3	0.59	33.459		
300.0	300.0	300.0	300.0	0.5	0.5	-89.02	0.3	-19.9	19.9	18.9	0.94	21.067 CC, ES		
400.0	400.0	400.0	400.0	0.6	0.6	-179.16	0.3	-19.9	21.6	20.3	1.29	16.731		
500.0	499.8	499.8	499.8	0.8	0.8	178.81	-0.5	-19.8	26.8	25.2	1.64	16.367		
566.2	565.8	565.8	565.7	1.0	0.9	176.28	-2.1	-19.8	32.2	30.4	1.87	17.238		
600.0	599.5	599.4	599.4	1.1	1.0	174.87	-3.1	-19.8	35.4	33.4	1.99	17.810		
700.0	699.0	698.8	698.7	1.3	1.2	170.41	-7.5	-19.7	45.1	42.8	2.35	19.201		
800.0	798.6	798.1	797.7	1.5	1.4	165.79	-13.5	-19.6	55.3	52.6	2.72	20.328		
900.0	898.2	897.1	896.4	1.7	1.6	161.20	-21.2	-19.5	66.3	63.2	3.11	21.315		
1,000.0	997.7	995.8	994.7	2.0	1.8	156.75	-30.6	-19.3	78.2	74.7	3.52	22.237		
1,100.0	1,097.3	1,094.1	1,092.4	2.2	2.0	152.53	-41.6	-19.1	91.2	87.2	3.94	23.144		
1,200.0	1,196.9	1,192.1	1,189.6	2.4	2.3	148.57	-54.3	-18.9	105.4	101.0	4.38	24.070		
1,300.0	1,296.5	1,290.0	1,286.4	2.7	2.6	144.89	-68.6	-18.6	120.9	116.1	4.83	25.035		
1,400.0	1,396.0	1,388.0	1,383.2	2.9	2.9	141.76	-83.8	-18.4	137.3	132.0	5.28	25.997		
1,500.0	1,495.6	1,486.4	1,480.4	3.1	3.2	139.29	-99.0	-18.1	154.0	148.3	5.73	26.864		
1,600.0	1,595.2	1,584.8	1,577.6	3.4	3.5	137.30	-114.2	-17.9	171.0	164.8	6.18	27.648		
1,700.0	1,694.7	1,683.2	1,674.9	3.6	3.8	135.67	-129.5	-17.6	188.1	181.5	6.63	28.354		
1,800.0	1,794.3	1,781.6	1,772.1	3.8	4.1	134.32	-144.7	-17.3	205.3	198.2	7.08	28.993		
1,900.0	1,893.9	1,882.9	1,872.2	4.1	4.4	133.02	-160.2	-16.3	222.1	214.5	7.54	29.434		
2,000.0	1,993.4	1,984.8	1,972.9	4.3	4.7	131.65	-175.5	-13.5	237.5	229.5	8.02	29.624		
2,100.0	2,093.0	2,087.0	2,073.9	4.6	5.0	130.17	-190.5	-8.9	251.7	243.2	8.50	29.611		
2,200.0	2,192.6	2,186.2	2,171.8	4.8	5.3	128.76	-204.9	-3.5	265.3	256.3	8.98	29.555		
2,300.0	2,292.1	2,285.0	2,269.5	5.0	5.6	127.49	-219.2	2.0	279.0	269.5	9.45	29.521		
2,400.0	2,391.7	2,383.9	2,367.2	5.3	5.9	126.33	-233.6	7.4	292.8	282.8	9.92	29.504		
2,500.0	2,491.3	2,482.8	2,464.9	5.5	6.2	125.28	-247.9	12.8	306.7	296.3	10.40	29.500		
2,600.0	2,590.8	2,581.7	2,562.6	5.8	6.5	124.32	-262.2	18.3	320.7	309.8	10.87	29.505		
2,700.0	2,690.4	2,680.5	2,660.2	6.0	6.8	123.45	-276.6	23.7	334.8	323.5	11.34	29.518		
2,800.0	2,790.0	2,779.4	2,757.9	6.2	7.1	122.64	-290.9	29.1	349.0	337.2	11.81	29.537		
2,900.0	2,889.6	2,878.3	2,855.6	6.5	7.5	121.89	-305.3	34.6	363.2	350.9	12.29	29.561		
3,000.0	2,989.1	2,977.2	2,953.3	6.7	7.8	121.21	-319.6	40.0	377.5	364.7	12.76	29.587		
3,100.0	3,088.7	3,076.0	3,051.0	6.9	8.1	120.57	-333.9	45.5	391.8	378.6	13.23	29.617		
3,200.0	3,188.3	3,174.9	3,148.6	7.2	8.4	119.97	-348.3	50.9	406.2	392.5	13.70	29.648		
3,300.0	3,287.8	3,273.8	3,246.3	7.4	8.7	119.42	-362.6	56.3	420.6	406.4	14.17	29.681		
3,400.0	3,387.4	3,372.7	3,344.0	7.7	9.0	118.91	-376.9	61.8	435.1	420.4	14.64	29.714		
3,500.0	3,487.0	3,471.5	3,441.7	7.9	9.3	118.42	-391.3	67.2	449.6	434.5	15.11	29.748		
3,600.0	3,586.5	3,570.4	3,539.4	8.1	9.6	117.97	-405.6	72.6	464.1	448.5	15.58	29.782		
3,700.0	3,686.1	3,669.3	3,637.0	8.4	10.0	117.55	-419.9	78.1	478.6	462.6	16.05	29.817		
3,800.0	3,785.7	3,768.2	3,734.7	8.6	10.3	117.15	-434.3	83.5	493.2	476.7	16.52	29.851		
3,900.0	3,885.2	3,867.0	3,832.4	8.8	10.6	116.77	-448.6	89.0	507.8	490.8	16.99	29.885		
4,000.0	3,984.8	3,965.9	3,930.1	9.1	10.9	116.41	-463.0	94.4	522.4	504.9	17.46	29.919		
4,100.0	4,084.4	4,064.8	4,027.8	9.3	11.2	116.08	-477.3	99.8	537.0	519.1	17.93	29.952		
4,200.0	4,183.9	4,163.7	4,125.4	9.6	11.5	115.76	-491.6	105.3	551.7	533.3	18.40	29.985		
4,300.0	4,283.5	4,262.6	4,223.1	9.8	11.8	115.45	-506.0	110.7	566.3	547.5	18.87	30.017		
4,400.0	4,383.1	4,361.4	4,320.8	10.0	12.2	115.17	-520.3	116.1	581.0	561.7	19.34	30.049		
4,500.0	4,482.7	4,460.3	4,418.5	10.3	12.5	114.89	-534.6	121.6	595.7	575.9	19.80	30.080		
4,600.0	4,582.2	4,559.2	4,516.2	10.5	12.8	114.63	-549.0	127.0	610.4	590.1	20.27	30.110		
4,700.0	4,681.8	4,658.1	4,613.8	10.8	13.1	114.39	-563.3	132.5	625.1	604.4	20.74	30.140		
4,800.0	4,781.4	4,756.9	4,711.5	11.0	13.4	114.15	-577.6	137.9	639.8	618.6	21.21	30.169		
4,900.0	4,880.9	4,855.8	4,809.2	11.2	13.7	113.92	-592.0	143.3	654.6	632.9	21.68	30.197		
5,000.0	4,980.5	4,954.7	4,906.9	11.5	14.1	113.71	-606.3	148.8	669.3	647.2	22.14	30.225		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4I-17H-P267 - DD - Plan #4													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)				
5,100.0	5,080.1	5,053.6	5,004.6	11.7	14.4	113.50	-620.7	154.2	684.1	661.5	22.61	30.252		
5,200.0	5,179.6	5,152.4	5,102.2	11.9	14.7	113.30	-635.0	159.6	698.8	675.8	23.08	30.279		
5,300.0	5,279.2	5,251.3	5,199.9	12.2	15.0	113.12	-649.3	165.1	713.6	690.1	23.55	30.305		
5,400.0	5,378.8	5,350.2	5,297.6	12.4	15.3	112.93	-663.7	170.5	728.4	704.4	24.02	30.330		
5,500.0	5,478.3	5,449.1	5,395.3	12.7	15.6	112.76	-678.0	176.0	743.2	718.7	24.48	30.355		
5,600.0	5,577.9	5,547.9	5,493.0	12.9	16.0	112.59	-692.3	181.4	758.0	733.0	24.95	30.379		
5,700.0	5,677.5	5,646.8	5,590.7	13.1	16.3	112.43	-706.7	186.8	772.8	747.3	25.42	30.403		
5,800.0	5,777.0	5,745.7	5,688.3	13.4	16.6	112.27	-721.0	192.3	787.6	761.7	25.89	30.426		
5,900.0	5,876.6	5,844.6	5,786.0	13.6	16.9	112.12	-735.3	197.7	802.4	776.0	26.35	30.448		
6,000.0	5,976.2	5,943.4	5,883.7	13.9	17.2	111.98	-749.7	203.1	817.2	790.4	26.82	30.470		
6,100.0	6,075.7	6,042.3	5,981.4	14.1	17.6	111.84	-764.0	208.6	832.0	804.7	27.29	30.491		
6,200.0	6,175.3	6,141.2	6,079.1	14.3	17.9	111.71	-778.3	214.0	846.8	819.1	27.75	30.512		
6,300.0	6,274.9	6,240.1	6,176.7	14.6	18.2	111.58	-792.7	219.5	861.7	833.4	28.22	30.533		
6,400.0	6,374.5	6,339.0	6,274.4	14.8	18.5	111.45	-807.0	224.9	876.5	847.8	28.69	30.553		
6,500.0	6,474.0	7,953.0	7,267.0	15.0	14.8	179.94	-0.7	280.1	841.9	816.7	25.16	33.459		
6,600.0	6,573.6	7,953.0	7,267.0	15.3	14.8	179.94	-0.7	280.1	752.4	727.1	25.34	29.696		
6,700.0	6,673.2	7,953.0	7,267.0	15.5	14.8	179.94	-0.7	280.1	665.9	640.4	25.51	26.102		
6,723.4	6,696.4	7,953.0	7,267.0	15.6	14.8	179.94	-0.7	280.1	646.2	620.7	25.55	25.291		
6,750.0	6,722.9	7,953.6	7,267.0	15.6	14.8	-157.40	-0.1	280.1	624.2	598.6	25.62	24.362		
6,800.0	6,772.5	7,958.1	7,267.0	15.8	14.8	-134.84	4.4	280.1	583.9	558.1	25.82	22.616		
6,850.0	6,821.5	7,966.9	7,267.0	15.9	14.8	-127.38	13.2	280.1	545.7	519.7	26.00	20.987		
6,900.0	6,869.5	7,979.9	7,267.0	16.0	14.9	-124.44	26.3	280.1	510.0	483.9	26.09	19.547		
6,950.0	6,916.3	7,997.2	7,267.0	16.1	14.9	-122.70	43.5	280.1	477.5	451.4	26.07	18.315		
7,000.0	6,961.3	8,018.4	7,267.0	16.3	15.0	-121.05	64.7	280.1	448.5	422.4	26.05	17.217		
7,050.0	7,004.3	8,043.5	7,267.0	16.4	15.1	-119.12	89.8	280.1	423.5	397.4	26.04	16.261		
7,100.0	7,045.0	8,072.3	7,267.0	16.6	15.2	-116.76	118.6	280.1	402.7	376.5	26.10	15.425		
7,150.0	7,083.1	8,104.5	7,267.0	16.8	15.3	-113.97	150.9	280.1	386.1	359.8	26.31	14.677		
7,200.0	7,118.2	8,140.0	7,267.0	17.0	15.5	-110.80	186.3	280.1	373.7	346.9	26.75	13.968		
7,250.0	7,150.0	8,178.4	7,267.0	17.3	15.8	-107.38	224.7	280.1	365.0	337.6	27.39	13.326		
7,300.0	7,178.5	8,219.4	7,267.0	17.6	16.0	-103.86	265.7	280.1	359.4	331.2	28.22	12.739		
7,350.0	7,203.3	8,262.7	7,267.0	17.9	16.4	-100.41	309.0	280.1	356.4	327.2	29.19	12.212		
7,400.0	7,224.2	8,308.1	7,267.0	18.2	16.7	-97.24	354.4	280.1	355.2	325.0	30.21	11.760		
7,427.8	7,234.1	8,334.0	7,267.0	18.5	16.9	-95.65	380.4	280.1	355.1	324.3	30.81	11.527		
7,450.0	7,241.1	8,355.1	7,267.0	18.6	17.1	-94.49	401.4	280.1	355.2	323.9	31.27	11.358		
7,500.0	7,253.8	8,403.4	7,267.0	19.1	17.6	-92.32	449.7	280.1	355.6	323.3	32.30	11.009		
7,550.0	7,262.3	8,452.7	7,267.0	19.5	18.1	-90.83	499.0	280.1	356.2	322.9	33.36	10.677		
7,600.0	7,266.5	8,502.5	7,267.0	20.0	18.6	-90.09	548.8	280.1	356.6	322.2	34.41	10.362		
7,623.5	7,267.0	8,525.9	7,267.0	20.2	18.8	-90.00	572.2	280.1	356.6	321.7	34.93	10.210		
7,700.0	7,267.0	8,602.5	7,267.0	21.0	19.7	-90.00	648.8	280.1	356.6	319.8	36.78	9.696		
7,800.0	7,267.0	8,702.5	7,267.0	22.2	20.9	-90.00	748.8	280.1	356.6	317.3	39.35	9.063		
7,900.0	7,267.0	8,802.5	7,267.0	23.4	22.2	-90.00	848.8	280.1	356.6	314.6	42.06	8.479		
8,000.0	7,267.0	8,902.5	7,267.0	24.6	23.5	-90.00	948.8	280.1	356.6	311.7	44.88	7.947		
8,070.6	7,267.0	8,973.0	7,267.0	25.6	24.5	-90.00	1,019.3	280.1	356.6	309.7	46.93	7.600		
8,100.0	7,267.0	9,000.0	7,267.0	26.0	24.9	-90.00	1,046.3	280.1	356.6	308.9	47.75	7.469		
8,200.0	7,267.0	9,096.1	7,267.0	27.3	26.3	-90.00	1,142.4	279.2	357.6	306.9	50.67	7.057		
8,300.0	7,267.0	9,191.5	7,267.0	28.8	27.7	-90.00	1,237.8	276.8	360.1	306.5	53.65	6.713		
8,400.0	7,267.0	9,291.5	7,267.0	30.2	29.1	-90.00	1,337.7	273.7	363.2	306.5	56.75	6.401		
8,500.0	7,267.0	9,391.4	7,267.0	31.7	30.7	-90.00	1,437.6	270.7	366.2	306.4	59.89	6.116		
8,600.0	7,267.0	9,491.4	7,267.0	33.2	32.2	-90.00	1,537.5	267.6	369.3	306.2	63.07	5.856		
8,700.0	7,267.0	9,591.3	7,267.0	34.7	33.8	-90.00	1,637.4	264.6	372.3	306.1	66.28	5.618		
8,800.0	7,267.0	9,691.3	7,267.0	36.3	35.3	-90.00	1,737.3	261.5	375.4	305.9	69.52	5.400		
8,900.0	7,267.0	9,791.2	7,267.0	37.9	36.9	-90.00	1,837.2	258.5	378.4	305.7	72.79	5.199		

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 Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4I-17H-P267 - DD - Plan #4													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,267.0	9,891.2	7,267.0	39.4	38.6	-90.00	1,937.1	255.5	381.5	305.4	76.07	5.015		
9,100.0	7,267.0	9,991.1	7,267.0	41.0	40.2	-90.00	2,037.1	252.4	384.5	305.2	79.38	4.844		
9,200.0	7,267.0	10,091.1	7,267.0	42.7	41.8	-90.00	2,137.0	249.4	387.6	304.9	82.70	4.687		
9,300.0	7,267.0	10,191.1	7,267.0	44.3	43.5	-90.00	2,236.9	246.3	390.6	304.6	86.04	4.540		
9,400.0	7,267.0	10,291.0	7,267.0	45.9	45.1	-90.00	2,336.8	243.3	393.7	304.3	89.39	4.404		
9,500.0	7,267.0	10,391.0	7,267.0	47.5	46.8	-90.00	2,436.7	240.2	396.7	304.0	92.75	4.278		
9,600.0	7,267.0	10,490.9	7,267.0	49.2	48.4	-90.00	2,536.6	237.2	399.8	303.7	96.12	4.159		
9,700.0	7,267.0	10,590.9	7,267.0	50.9	50.1	-90.00	2,636.5	234.1	402.8	303.3	99.51	4.049		
9,800.0	7,267.0	10,690.8	7,267.0	52.5	51.8	-90.00	2,736.4	231.1	405.9	303.0	102.90	3.945		
9,900.0	7,267.0	10,790.8	7,267.0	54.2	53.5	-90.00	2,836.3	228.0	408.9	302.7	106.29	3.847		
10,000.0	7,267.0	10,890.7	7,267.0	55.9	55.1	-90.00	2,936.2	225.0	412.0	302.3	109.70	3.756		
10,100.0	7,267.0	10,990.7	7,267.0	57.5	56.8	-90.00	3,036.1	221.9	415.0	301.9	113.11	3.669		
10,200.0	7,267.0	11,090.6	7,267.0	59.2	58.5	-90.00	3,136.0	218.9	418.1	301.6	116.52	3.588		
10,300.0	7,267.0	11,190.6	7,267.0	60.9	60.2	-90.00	3,235.9	215.8	421.1	301.2	119.95	3.511		
10,400.0	7,267.0	11,290.5	7,267.0	62.6	61.9	-90.00	3,335.8	212.8	424.2	300.8	123.37	3.438		
10,500.0	7,267.0	11,390.5	7,267.0	64.3	63.6	-90.00	3,435.8	209.7	427.2	300.4	126.80	3.369		
10,600.0	7,267.0	11,490.4	7,267.0	66.0	65.3	-90.00	3,535.7	206.7	430.3	300.1	130.24	3.304		
10,700.0	7,267.0	11,590.4	7,267.0	67.7	67.0	-90.00	3,635.6	203.6	433.3	299.7	133.68	3.242		
10,800.0	7,267.0	11,690.4	7,267.0	69.4	68.8	-90.00	3,735.5	200.6	436.4	299.3	137.12	3.183		
10,900.0	7,267.0	11,790.3	7,267.0	71.1	70.5	-90.00	3,835.4	197.5	439.4	298.9	140.57	3.126		
11,000.0	7,267.0	11,890.3	7,267.0	72.8	72.2	-90.00	3,935.3	194.5	442.5	298.5	144.01	3.073		
11,100.0	7,267.0	11,990.2	7,267.0	74.5	73.9	-90.00	4,035.2	191.4	445.5	298.1	147.46	3.021		
11,200.0	7,267.0	12,090.2	7,267.0	76.2	75.6	-90.00	4,135.1	188.4	448.6	297.7	150.92	2.972		
11,300.0	7,267.0	12,190.1	7,267.0	77.9	77.3	-90.00	4,235.0	185.3	451.6	297.3	154.37	2.926		
11,400.0	7,267.0	12,290.1	7,267.0	79.6	79.1	-90.00	4,334.9	182.3	454.7	296.9	157.83	2.881		
11,500.0	7,267.0	12,390.0	7,267.0	81.4	80.8	-90.00	4,434.8	179.2	457.7	296.5	161.29	2.838		
11,600.0	7,267.0	12,490.0	7,267.0	83.1	82.5	-90.00	4,534.7	176.2	460.8	296.0	164.76	2.797		
11,700.0	7,267.0	12,589.9	7,267.0	84.8	84.2	-90.00	4,634.6	173.1	463.8	295.6	168.22	2.757		
11,800.0	7,267.0	12,689.9	7,267.0	86.5	86.0	-90.00	4,734.5	170.1	466.9	295.2	171.69	2.719		
11,900.0	7,267.0	12,789.8	7,267.0	88.2	87.7	-90.00	4,834.4	167.0	469.9	294.8	175.15	2.683		
12,000.0	7,267.0	12,889.8	7,267.0	90.0	89.4	-90.00	4,934.4	164.0	473.0	294.4	178.62	2.648		
12,100.0	7,267.0	12,989.8	7,267.0	91.7	91.1	-90.00	5,034.3	160.9	476.0	294.0	182.09	2.614		
12,200.0	7,267.0	13,089.7	7,267.0	93.4	92.9	-90.00	5,134.2	157.9	479.1	293.5	185.57	2.582		
12,300.0	7,267.0	13,189.7	7,267.0	95.1	94.6	-90.00	5,234.1	154.8	482.1	293.1	189.04	2.551		
12,400.0	7,267.0	13,293.4	7,267.0	96.9	96.4	-90.00	5,337.8	151.9	485.0	292.5	192.58	2.519		
12,500.0	7,267.0	13,402.7	7,267.0	98.6	98.3	-90.00	5,447.0	150.4	486.3	290.1	196.22	2.479		
12,600.0	7,267.0	13,512.0	7,267.0	100.3	100.2	-90.00	5,556.3	151.1	485.7	285.9	199.86	2.430		
12,700.0	7,267.0	13,621.2	7,267.0	102.1	102.1	-90.00	5,665.5	153.8	483.2	279.7	203.50	2.375		
12,800.0	7,267.0	13,724.1	7,267.0	103.8	103.9	-90.00	5,768.3	157.9	479.3	272.2	207.03	2.315		
12,900.0	7,267.0	13,824.0	7,267.0	105.5	105.6	-90.00	5,868.1	162.0	475.2	264.7	210.51	2.257		
13,000.0	7,267.0	13,923.9	7,267.0	107.3	107.4	-90.00	5,968.0	166.0	471.1	257.1	213.99	2.202		
13,100.0	7,267.0	14,023.8	7,267.0	109.0	109.1	-90.00	6,067.8	170.1	467.0	249.6	217.47	2.148		
13,200.0	7,267.0	14,123.7	7,267.0	110.7	110.8	-90.00	6,167.6	174.2	463.0	242.0	220.95	2.095		
13,300.0	7,267.0	14,223.7	7,267.0	112.5	112.6	-90.00	6,267.5	178.3	458.9	234.5	224.43	2.045		
13,400.0	7,267.0	14,323.6	7,267.0	114.2	114.3	-90.00	6,367.3	182.3	454.8	226.9	227.91	1.996		
13,500.0	7,267.0	14,423.5	7,267.0	115.9	116.1	-90.00	6,467.1	186.4	450.7	219.3	231.40	1.948		
13,598.5	7,267.0	14,506.9	7,267.0	117.6	117.5	-90.00	6,550.5	189.8	447.0	212.4	234.57	1.906 SF		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4J-17H-P267 - DD - Plan #3													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	-87.99	0.3	-9.8	9.8					
100.0	100.0	100.0	100.0	0.1	0.1	-87.99	0.3	-9.8	9.8	9.5	0.24	40.075		
200.0	200.0	200.0	200.0	0.3	0.3	-87.99	0.3	-9.8	9.8	9.2	0.59	16.502		
300.0	300.0	300.0	300.0	0.5	0.5	-87.99	0.3	-9.8	9.8	8.8	0.94	10.390	CC, ES	
400.0	400.0	400.2	400.2	0.6	0.6	-178.30	0.3	-9.3	11.1	9.8	1.29	8.595		
500.0	499.8	500.6	500.5	0.8	0.8	-178.64	0.3	-5.8	12.8	11.2	1.64	7.825		
566.2	565.8	566.8	566.6	1.0	1.0	-178.89	0.3	-2.0	14.4	12.6	1.87	7.716		
600.0	599.5	600.6	600.4	1.1	1.0	-179.02	0.3	-0.1	15.6	13.6	1.99	7.853		
700.0	699.0	700.5	700.1	1.3	1.2	-179.31	0.2	5.7	19.1	16.8	2.34	8.176		
800.0	798.6	800.5	799.9	1.5	1.4	-179.52	0.2	11.5	22.6	19.9	2.69	8.416		
900.0	898.2	900.4	899.7	1.7	1.6	-179.67	0.1	17.3	26.1	23.1	3.04	8.601		
1,000.0	997.7	1,000.4	999.5	2.0	1.8	-179.78	0.1	23.1	29.6	26.2	3.38	8.747		
1,100.0	1,097.3	1,100.3	1,099.2	2.2	2.0	-179.87	0.0	28.8	33.1	29.4	3.73	8.867		
1,200.0	1,196.9	1,200.2	1,199.0	2.4	2.2	-179.94	0.0	34.6	36.6	32.5	4.08	8.966		
1,300.0	1,296.5	1,300.2	1,298.8	2.7	2.4	180.00	-0.1	40.4	40.1	35.7	4.43	9.049		
1,400.0	1,396.0	1,400.1	1,398.5	2.9	2.6	179.95	-0.1	46.2	43.6	38.8	4.78	9.120		
1,500.0	1,495.6	1,500.1	1,498.3	3.1	2.8	179.91	-0.1	52.0	47.1	42.0	5.13	9.182		
1,600.0	1,595.2	1,600.0	1,598.1	3.4	3.0	179.87	-0.2	57.7	50.6	45.1	5.48	9.235		
1,700.0	1,694.7	1,699.9	1,697.9	3.6	3.2	179.84	-0.2	63.5	54.1	48.3	5.83	9.283		
1,800.0	1,794.3	1,799.9	1,797.6	3.8	3.4	179.81	-0.3	69.3	57.6	51.4	6.18	9.325		
1,900.0	1,893.9	1,899.8	1,897.4	4.1	3.6	179.78	-0.3	75.1	61.1	54.6	6.53	9.362		
2,000.0	1,993.4	1,999.8	1,997.2	4.3	3.8	179.76	-0.4	80.9	64.6	57.7	6.88	9.396		
2,100.0	2,093.0	2,099.7	2,096.9	4.6	4.0	179.74	-0.4	86.7	68.1	60.9	7.23	9.426		
2,200.0	2,192.6	2,199.6	2,196.7	4.8	4.2	179.72	-0.5	92.4	71.6	64.0	7.57	9.454		
2,300.0	2,292.1	2,299.6	2,296.5	5.0	4.4	179.71	-0.5	98.2	75.1	67.2	7.92	9.479		
2,400.0	2,391.7	2,399.5	2,396.3	5.3	4.6	179.69	-0.6	104.0	78.6	70.3	8.27	9.502		
2,500.0	2,491.3	2,499.4	2,496.0	5.5	4.8	179.68	-0.6	109.8	82.1	73.5	8.62	9.523		
2,600.0	2,590.8	2,599.4	2,595.8	5.8	5.0	179.67	-0.6	115.6	85.6	76.6	8.97	9.543		
2,700.0	2,690.4	2,699.3	2,696.6	6.0	5.2	179.65	-0.7	121.4	89.1	79.8	9.32	9.561		
2,800.0	2,790.0	2,799.3	2,795.3	6.2	5.4	179.64	-0.7	127.1	92.6	82.9	9.67	9.578		
2,900.0	2,889.6	2,899.2	2,895.1	6.5	5.6	179.63	-0.8	132.9	96.1	86.1	10.02	9.593		
3,000.0	2,989.1	2,999.1	2,994.9	6.7	5.8	179.62	-0.8	138.7	99.6	89.2	10.37	9.608		
3,100.0	3,088.7	3,099.1	3,094.7	6.9	6.0	179.62	-0.9	144.5	103.1	92.4	10.72	9.621		
3,200.0	3,188.3	3,199.0	3,194.4	7.2	6.2	179.61	-0.9	150.3	106.6	95.6	11.07	9.634		
3,300.0	3,287.8	3,299.0	3,294.2	7.4	6.4	179.60	-1.0	156.1	110.1	98.7	11.42	9.646		
3,400.0	3,387.4	3,398.9	3,394.0	7.7	6.6	179.59	-1.0	161.8	113.6	101.9	11.77	9.657		
3,500.0	3,487.0	3,498.8	3,493.7	7.9	6.8	179.59	-1.1	167.6	117.1	105.0	12.11	9.668		
3,600.0	3,586.5	3,598.8	3,593.5	8.1	7.0	179.58	-1.1	173.4	120.6	108.2	12.46	9.678		
3,700.0	3,686.1	3,698.7	3,693.3	8.4	7.2	179.58	-1.1	179.2	124.1	111.3	12.81	9.688		
3,800.0	3,785.7	3,798.6	3,793.1	8.6	7.4	179.57	-1.2	185.0	127.6	114.5	13.16	9.697		
3,900.0	3,885.2	3,898.6	3,892.8	8.8	7.6	179.56	-1.2	190.8	131.1	117.6	13.51	9.705		
4,000.0	3,984.8	3,998.5	3,992.6	9.1	7.8	179.56	-1.3	196.5	134.6	120.8	13.86	9.713		
4,100.0	4,084.4	4,098.5	4,092.4	9.3	8.0	179.55	-1.3	202.3	138.1	123.9	14.21	9.721		
4,200.0	4,183.9	4,198.4	4,192.1	9.6	8.2	179.55	-1.4	208.1	141.6	127.1	14.56	9.728		
4,300.0	4,283.5	4,298.3	4,291.9	9.8	8.4	179.55	-1.4	213.9	145.1	130.2	14.91	9.735		
4,400.0	4,383.1	4,398.3	4,391.7	10.0	8.6	179.54	-1.5	219.7	148.6	133.4	15.26	9.742		
4,500.0	4,482.7	4,498.2	4,491.5	10.3	8.8	179.54	-1.5	225.5	152.1	136.5	15.61	9.748		
4,600.0	4,582.2	4,598.2	4,591.2	10.5	9.0	179.53	-1.6	231.2	155.6	139.7	15.96	9.754		
4,700.0	4,681.8	4,698.1	4,691.0	10.8	9.2	179.53	-1.6	237.0	159.1	142.8	16.30	9.760		
4,800.0	4,781.4	4,798.0	4,790.8	11.0	9.4	179.53	-1.6	242.8	162.6	146.0	16.65	9.766		
4,900.0	4,880.9	4,898.0	4,890.5	11.2	9.6	179.52	-1.7	248.6	166.1	149.1	17.00	9.771		
5,000.0	4,980.5	4,997.9	4,990.3	11.5	9.8	179.52	-1.7	254.4	169.6	152.3	17.35	9.776		

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 Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4J-17H-P267 - DD - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,080.1	5,097.9	5,090.1	11.7	10.0	179.52	-1.8	260.2	173.1	155.4	17.70	9.781		
5,200.0	5,179.6	5,197.8	5,189.9	11.9	10.2	179.51	-1.8	265.9	176.6	158.6	18.05	9.786		
5,300.0	5,279.2	5,297.7	5,289.6	12.2	10.4	179.51	-1.9	271.7	180.1	161.7	18.40	9.790		
5,400.0	5,378.8	5,397.7	5,389.4	12.4	10.6	179.51	-1.9	277.5	183.6	164.9	18.75	9.795		
5,500.0	5,478.3	5,497.6	5,489.2	12.7	10.8	179.51	-2.0	283.3	187.1	168.0	19.10	9.799		
5,600.0	5,577.9	5,597.5	5,588.9	12.9	11.1	179.50	-2.0	289.1	190.6	171.2	19.45	9.803		
5,700.0	5,677.5	5,697.5	5,688.7	13.1	11.3	179.50	-2.1	294.9	194.1	174.3	19.80	9.807		
5,800.0	5,777.0	5,797.4	5,788.5	13.4	11.5	179.50	-2.1	300.6	197.6	177.5	20.15	9.811		
5,900.0	5,876.6	5,897.4	5,888.2	13.6	11.7	179.50	-2.1	306.4	201.1	180.6	20.49	9.814		
6,000.0	5,976.2	5,997.3	5,988.0	13.9	11.9	179.50	-2.2	312.2	204.6	183.8	20.84	9.818		
6,100.0	6,075.7	6,097.2	6,087.8	14.1	12.1	179.49	-2.2	318.0	208.1	186.9	21.19	9.821		
6,200.0	6,175.3	6,197.2	6,187.6	14.3	12.3	179.49	-2.3	323.8	211.6	190.1	21.54	9.825		
6,300.0	6,274.9	6,297.1	6,287.3	14.6	12.5	179.49	-2.3	329.6	215.1	193.3	21.89	9.828		
6,400.0	6,374.5	6,397.1	6,387.1	14.8	12.7	179.49	-2.4	335.3	218.6	196.4	22.24	9.831		
6,500.0	6,474.0	6,497.0	6,486.9	15.0	12.9	179.49	-2.4	341.1	222.1	199.6	22.59	9.834		
6,600.0	6,573.6	6,596.9	6,586.6	15.3	13.1	179.48	-2.5	346.9	225.6	202.7	22.94	9.837		
6,700.0	6,673.2	6,696.9	6,686.4	15.5	13.3	179.48	-2.5	352.7	229.1	205.9	23.29	9.840		
6,723.4	6,696.4	6,720.2	6,709.8	15.6	13.3	179.48	-2.5	354.0	230.0	206.6	23.37	9.840		
6,750.0	6,722.9	6,746.8	6,736.3	15.6	13.4	-154.08	-2.5	355.6	230.9	207.4	23.46	9.841		
6,800.0	6,772.5	6,796.6	6,786.0	15.8	13.5	-126.40	-2.6	358.5	232.7	209.1	23.64	9.846		
6,850.0	6,821.5	6,845.7	6,835.0	15.9	13.6	-116.36	-2.6	361.3	234.9	211.1	23.81	9.863		
6,900.0	6,869.5	6,894.0	6,883.2	16.0	13.7	-113.13	-2.6	364.1	237.8	213.8	23.99	9.912		
6,950.0	6,916.3	6,941.2	6,930.4	16.1	13.8	-113.03	-2.6	366.8	242.1	217.9	24.16	10.020		
7,000.0	6,961.3	6,992.5	6,981.4	16.3	13.9	-114.59	0.1	369.8	247.9	223.6	24.31	10.200		
7,050.0	7,004.3	7,045.7	7,034.0	16.4	14.0	-116.67	7.7	372.8	254.9	230.5	24.38	10.455		
7,100.0	7,045.0	7,101.2	7,087.8	16.6	14.1	-118.97	20.8	376.0	262.8	238.4	24.37	10.785		
7,150.0	7,083.1	7,159.1	7,142.4	16.8	14.2	-121.32	40.0	379.1	271.4	247.1	24.27	11.182		
7,200.0	7,118.2	7,219.7	7,197.1	17.0	14.4	-123.62	65.8	382.3	280.4	256.3	24.11	11.631		
7,250.0	7,150.0	7,283.1	7,251.0	17.3	14.6	-125.79	98.9	385.4	289.6	265.6	23.91	12.108		
7,300.0	7,178.5	7,349.4	7,303.2	17.6	14.8	-127.79	139.6	388.4	298.5	274.7	23.74	12.575		
7,350.0	7,203.3	7,418.7	7,352.3	17.9	15.1	-129.57	188.3	391.3	306.9	283.2	23.65	12.976		
7,400.0	7,224.2	7,490.9	7,396.9	18.2	15.5	-131.10	245.0	393.9	314.4	290.7	23.72	13.256		
7,450.0	7,241.1	7,565.8	7,435.2	18.6	16.0	-132.36	309.3	396.1	320.8	296.8	24.03	13.353		
7,500.0	7,253.8	7,643.0	7,465.6	19.1	16.6	-133.32	380.2	397.8	325.9	301.2	24.63	13.229		
7,550.0	7,262.3	7,722.1	7,486.6	19.5	17.4	-133.95	456.3	399.1	329.2	303.7	25.58	12.872		
7,600.0	7,266.5	7,802.2	7,497.0	20.0	18.2	-134.24	535.7	399.7	330.9	304.0	26.87	12.314		
7,623.5	7,267.0	7,838.8	7,498.0	20.2	18.6	-134.26	572.3	399.7	331.0	303.4	27.58	12.000		
7,700.0	7,267.0	7,918.7	7,498.0	21.0	19.5	-134.33	652.2	400.3	330.6	301.7	28.93	11.428		
7,800.0	7,267.0	8,019.8	7,498.0	22.2	20.8	-134.56	753.3	402.2	329.3	298.6	30.70	10.724		
7,900.0	7,267.0	8,119.8	7,498.0	23.4	22.1	-134.79	853.2	404.1	327.9	295.4	32.54	10.077		
8,000.0	7,267.0	8,219.7	7,498.0	24.6	23.4	-135.03	953.2	406.0	326.6	292.1	34.44	9.483		
8,100.0	7,267.0	8,319.7	7,498.0	26.0	24.8	-135.26	1,053.1	407.9	325.2	288.8	36.38	8.940		
8,200.0	7,267.0	8,419.7	7,498.0	27.3	26.3	-135.50	1,153.1	409.8	323.9	285.5	38.35	8.445		
8,300.0	7,267.0	8,519.7	7,498.0	28.8	27.8	-135.74	1,253.1	411.7	322.5	282.2	40.35	7.994		
8,400.0	7,267.0	8,619.7	7,498.0	30.2	29.3	-135.99	1,353.0	413.6	321.2	278.9	42.37	7.582		
8,500.0	7,267.0	8,719.7	7,498.0	31.7	30.8	-136.23	1,453.0	415.5	319.9	275.5	44.39	7.206		
8,600.0	7,267.0	8,819.6	7,498.0	33.2	32.4	-136.48	1,553.0	417.4	318.6	272.2	46.42	6.862		
8,700.0	7,267.0	8,919.6	7,498.0	34.7	34.0	-136.73	1,652.9	419.3	317.3	268.8	48.46	6.547		
8,800.0	7,267.0	9,019.6	7,498.0	36.3	35.6	-136.98	1,752.9	421.2	316.0	265.5	50.49	6.258		
8,900.0	7,267.0	9,119.6	7,498.0	37.9	37.2	-137.24	1,852.9	423.1	314.7	262.2	52.52	5.992		
9,000.0	7,267.0	9,219.6	7,498.0	39.4	38.8	-137.49	1,952.8	425.0	313.4	258.9	54.53	5.747		
9,100.0	7,267.0	9,319.5	7,498.0	41.0	40.4	-137.75	2,052.8	426.9	312.1	255.6	56.54	5.520		

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 Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4J-17H-P267 - DD - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,200.0	7,267.0	9,419.5	7,498.0	42.7	42.1	-138.01	2,152.7	428.8	310.8	252.3	58.53	5.310		
9,300.0	7,267.0	9,519.5	7,498.0	44.3	43.7	-138.27	2,252.7	430.7	309.6	249.0	60.51	5.115		
9,400.0	7,267.0	9,619.5	7,498.0	45.9	45.4	-138.53	2,352.7	432.6	308.3	245.8	62.48	4.934		
9,500.0	7,267.0	9,719.5	7,498.0	47.5	47.1	-138.80	2,452.6	434.6	307.0	242.6	64.42	4.766		
9,600.0	7,267.0	9,819.5	7,498.0	49.2	48.7	-139.07	2,552.6	436.5	305.8	239.4	66.35	4.609		
9,700.0	7,267.0	9,919.4	7,498.0	50.9	50.4	-139.34	2,652.6	438.4	304.5	236.3	68.26	4.462		
9,800.0	7,267.0	10,019.4	7,498.0	52.5	52.1	-139.61	2,752.5	440.3	303.3	233.2	70.14	4.324		
9,900.0	7,267.0	10,119.4	7,498.0	54.2	53.8	-139.89	2,852.5	442.2	302.1	230.1	72.00	4.195		
10,000.0	7,267.0	10,219.4	7,498.0	55.9	55.5	-140.17	2,952.5	444.1	300.8	227.0	73.84	4.074		
10,100.0	7,267.0	10,319.4	7,498.0	57.5	57.2	-140.45	3,052.4	446.0	299.6	224.0	75.65	3.961		
10,200.0	7,267.0	10,419.3	7,498.0	59.2	58.9	-140.73	3,152.4	447.9	298.4	221.0	77.44	3.854		
10,300.0	7,267.0	10,519.3	7,498.0	60.9	60.6	-141.01	3,252.3	449.8	297.2	218.0	79.20	3.753		
10,400.0	7,267.0	10,619.3	7,498.0	62.6	62.3	-141.30	3,352.3	451.7	296.0	215.1	80.93	3.657		
10,500.0	7,267.0	10,719.3	7,498.0	64.3	64.0	-141.59	3,452.3	453.6	294.8	212.2	82.64	3.568		
10,600.0	7,267.0	10,819.3	7,498.0	66.0	65.7	-141.88	3,552.2	455.5	293.6	209.3	84.32	3.483		
10,700.0	7,267.0	10,919.3	7,498.0	67.7	67.4	-142.17	3,652.2	457.4	292.5	206.5	85.96	3.402		
10,800.0	7,267.0	11,019.2	7,498.0	69.4	69.1	-142.47	3,752.2	459.3	291.3	203.7	87.58	3.326		
10,900.0	7,267.0	11,119.2	7,498.0	71.1	70.9	-142.77	3,852.1	461.2	290.2	201.0	89.16	3.254		
11,000.0	7,267.0	11,219.2	7,498.0	72.8	72.6	-143.07	3,952.1	463.1	289.0	198.3	90.72	3.186		
11,100.0	7,267.0	11,319.2	7,498.0	74.5	74.3	-143.37	4,052.1	465.0	287.9	195.6	92.24	3.121		
11,200.0	7,267.0	11,419.2	7,498.0	76.2	76.0	-143.68	4,152.0	466.9	286.7	193.0	93.72	3.059		
11,300.0	7,267.0	11,519.1	7,498.0	77.9	77.7	-143.98	4,252.0	468.8	285.6	190.4	95.18	3.001		
11,400.0	7,267.0	11,619.1	7,498.0	79.6	79.5	-144.29	4,351.9	470.7	284.5	187.9	96.60	2.945		
11,500.0	7,267.0	11,719.1	7,498.0	81.4	81.2	-144.61	4,451.9	472.7	283.4	185.4	97.98	2.892		
11,600.0	7,267.0	11,819.1	7,498.0	83.1	82.9	-144.92	4,551.9	474.6	282.3	183.0	99.33	2.842		
11,700.0	7,267.0	11,919.1	7,498.0	84.8	84.6	-145.24	4,651.8	476.5	281.2	180.6	100.64	2.794		
11,800.0	7,267.0	12,019.1	7,498.0	86.5	86.4	-145.56	4,751.8	478.4	280.1	178.2	101.91	2.749		
11,900.0	7,267.0	12,118.3	7,498.0	88.2	88.1	-145.87	4,851.0	480.2	279.1	175.9	103.17	2.705		
11,983.9	7,267.0	12,200.0	7,498.0	89.7	89.5	-145.97	4,932.7	480.8	278.8	174.2	104.57	2.666		
12,000.0	7,267.0	12,215.6	7,498.0	90.0	89.8	-145.96	4,948.3	480.7	278.8	173.9	104.89	2.658		
12,100.0	7,267.0	12,312.9	7,498.0	91.7	91.5	-145.77	5,045.7	479.6	279.4	172.1	107.28	2.604		
12,200.0	7,267.0	12,410.2	7,498.0	93.4	93.1	-145.31	5,142.9	476.9	281.0	170.6	110.36	2.546		
12,300.0	7,267.0	12,507.4	7,498.0	95.1	94.8	-144.58	5,239.9	472.5	283.6	169.5	114.14	2.485		
12,400.0	7,267.0	12,606.9	7,498.0	96.9	96.5	-143.68	5,339.3	466.9	286.9	168.4	118.42	2.422		
12,500.0	7,267.0	12,706.8	7,498.0	98.6	98.2	-142.80	5,439.0	461.4	290.2	167.5	122.73	2.364		
12,600.0	7,267.0	12,806.6	7,498.0	100.3	100.0	-141.93	5,538.7	455.9	293.6	166.5	127.05	2.311		
12,700.0	7,267.0	12,906.5	7,498.0	102.1	101.7	-141.09	5,638.4	450.3	297.0	165.7	131.38	2.261		
12,800.0	7,267.0	13,006.3	7,498.0	103.8	103.4	-140.27	5,738.1	444.8	300.6	164.8	135.71	2.215		
12,900.0	7,267.0	13,106.2	7,498.0	105.5	105.1	-139.47	5,837.8	439.3	304.1	164.1	140.05	2.172		
13,000.0	7,267.0	13,206.0	7,498.0	107.3	106.9	-138.68	5,937.5	433.7	307.8	163.4	144.39	2.131		
13,100.0	7,267.0	13,305.8	7,498.0	109.0	108.6	-137.92	6,037.2	428.2	311.5	162.7	148.74	2.094		
13,200.0	7,267.0	13,405.7	7,498.0	110.7	110.3	-137.17	6,136.9	422.6	315.2	162.1	153.08	2.059		
13,300.0	7,267.0	13,505.5	7,498.0	112.5	112.0	-136.44	6,236.6	417.1	319.0	161.6	157.42	2.027		
13,400.0	7,267.0	13,605.4	7,498.0	114.2	113.8	-135.73	6,336.3	411.6	322.9	161.1	161.75	1.996		
13,500.0	7,267.0	13,705.2	7,498.0	115.9	115.5	-135.03	6,436.0	406.0	326.8	160.7	166.08	1.968		
13,598.5	7,267.0	13,803.5	7,498.0	117.6	117.2	-134.36	6,534.1	400.6	330.7	160.3	170.34	1.941 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4L-17H-P267 - DD - Plan #3													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	0.0	0.0	0.0	0.0	90.05	0.0	10.1	10.1					
100.0	100.0	100.0	100.0	0.1	0.1	90.05	0.0	10.1	10.1	9.8	0.24	41.195		
200.0	200.0	200.0	200.0	0.3	0.3	90.05	0.0	10.1	10.1	9.5	0.59	16.963 CC, ES		
300.0	300.0	299.6	299.6	0.5	0.5	90.07	0.0	11.8	11.8	10.9	0.95	12.482		
400.0	400.0	399.1	398.9	0.6	0.7	0.05	0.0	17.0	15.3	14.0	1.29	11.841		
500.0	499.8	498.4	497.9	0.8	0.9	0.10	-0.1	25.6	18.7	17.1	1.64	11.437		
566.2	565.8	564.2	563.2	1.0	1.1	0.14	-0.1	33.2	21.0	19.1	1.87	11.237		
600.0	599.5	598.0	596.8	1.1	1.1	0.16	-0.1	37.3	22.0	20.0	1.98	11.087		
700.0	699.0	698.0	696.0	1.3	1.4	0.21	-0.2	49.6	25.1	22.7	2.33	10.734		
800.0	798.6	797.9	795.1	1.5	1.7	0.25	-0.2	61.9	28.1	25.4	2.68	10.474		
900.0	898.2	897.9	894.3	1.7	1.9	0.28	-0.2	74.3	31.2	28.1	3.03	10.274		
1,000.0	997.7	997.8	993.5	2.0	2.2	0.30	-0.3	86.6	34.2	30.8	3.38	10.115		
1,100.0	1,097.3	1,097.8	1,092.7	2.2	2.5	0.32	-0.3	98.9	37.3	33.5	3.73	9.986		
1,200.0	1,196.9	1,197.7	1,191.9	2.4	2.8	0.34	-0.4	111.2	40.3	36.3	4.08	9.879		
1,300.0	1,296.5	1,297.7	1,291.1	2.7	3.0	0.35	-0.4	123.5	43.4	39.0	4.43	9.790		
1,400.0	1,396.0	1,397.6	1,390.3	2.9	3.3	0.37	-0.5	135.8	46.4	41.7	4.78	9.713		
1,500.0	1,495.6	1,497.6	1,489.5	3.1	3.6	0.38	-0.5	148.1	49.5	44.4	5.13	9.647		
1,600.0	1,595.2	1,597.5	1,588.7	3.4	3.9	0.39	-0.6	160.4	52.6	47.1	5.48	9.589		
1,700.0	1,694.7	1,697.5	1,687.9	3.6	4.2	0.40	-0.6	172.7	55.6	49.8	5.83	9.538		
1,800.0	1,794.3	1,797.4	1,787.1	3.8	4.4	0.41	-0.6	185.0	58.7	52.5	6.18	9.493		
1,900.0	1,893.9	1,897.4	1,886.3	4.1	4.7	0.41	-0.7	197.4	61.7	55.2	6.53	9.453		
2,000.0	1,993.4	1,997.3	1,985.5	4.3	5.0	0.42	-0.7	209.7	64.8	57.9	6.88	9.417		
2,100.0	2,093.0	2,097.3	2,084.6	4.6	5.3	0.43	-0.8	222.0	67.8	60.6	7.23	9.384		
2,200.0	2,192.6	2,197.2	2,183.8	4.8	5.5	0.43	-0.8	234.3	70.9	63.3	7.58	9.355		
2,300.0	2,292.1	2,297.2	2,283.0	5.0	5.8	0.44	-0.9	246.6	73.9	66.0	7.93	9.328		
2,400.0	2,391.7	2,397.2	2,382.2	5.3	6.1	0.44	-0.9	258.9	77.0	68.7	8.28	9.303		
2,500.0	2,491.3	2,497.1	2,481.4	5.5	6.4	0.45	-1.0	271.2	80.1	71.4	8.63	9.280		
2,600.0	2,590.8	2,597.1	2,580.6	5.8	6.6	0.45	-1.0	283.5	83.1	74.1	8.98	9.259		
2,700.0	2,690.4	2,697.0	2,679.8	6.0	6.9	0.45	-1.0	295.8	86.2	76.8	9.33	9.240		
2,800.0	2,790.0	2,797.0	2,779.0	6.2	7.2	0.46	-1.1	308.1	89.2	79.5	9.67	9.222		
2,900.0	2,889.6	2,896.9	2,878.2	6.5	7.5	0.46	-1.1	320.5	92.3	82.2	10.02	9.205		
3,000.0	2,989.1	2,996.9	2,977.4	6.7	7.8	0.46	-1.2	332.8	95.3	85.0	10.37	9.190		
3,100.0	3,088.7	3,096.8	3,076.6	6.9	8.0	0.47	-1.2	345.1	98.4	87.7	10.72	9.175		
3,200.0	3,188.3	3,196.8	3,175.8	7.2	8.3	0.47	-1.3	357.4	101.4	90.4	11.07	9.161		
3,300.0	3,287.8	3,296.7	3,275.0	7.4	8.6	0.47	-1.3	369.7	104.5	93.1	11.42	9.149		
3,400.0	3,387.4	3,396.7	3,374.1	7.7	8.9	0.47	-1.4	382.0	107.6	95.8	11.77	9.137		
3,500.0	3,487.0	3,496.6	3,473.3	7.9	9.1	0.48	-1.4	394.3	110.6	98.5	12.12	9.125		
3,600.0	3,586.5	3,596.6	3,572.5	8.1	9.4	0.48	-1.5	406.6	113.7	101.2	12.47	9.115		
3,700.0	3,686.1	3,696.5	3,671.7	8.4	9.7	0.48	-1.5	418.9	116.7	103.9	12.82	9.104		
3,800.0	3,785.7	3,796.5	3,770.9	8.6	10.0	0.48	-1.5	431.2	119.8	106.6	13.17	9.095		
3,900.0	3,885.2	3,896.5	3,870.1	8.8	10.3	0.48	-1.6	443.5	122.8	109.3	13.52	9.086		
4,000.0	3,984.8	3,996.4	3,969.3	9.1	10.5	0.49	-1.6	455.9	125.9	112.0	13.87	9.077		
4,100.0	4,084.4	4,096.4	4,068.5	9.3	10.8	0.49	-1.7	468.2	128.9	114.7	14.22	9.069		
4,200.0	4,183.9	4,196.3	4,167.7	9.6	11.1	0.49	-1.7	480.5	132.0	117.4	14.57	9.061		
4,300.0	4,283.5	4,296.3	4,266.9	9.8	11.4	0.49	-1.8	492.8	135.0	120.1	14.92	9.054		
4,400.0	4,383.1	4,396.2	4,366.1	10.0	11.6	0.49	-1.8	505.1	138.1	122.8	15.27	9.046		
4,500.0	4,482.7	4,496.2	4,465.3	10.3	11.9	0.49	-1.9	517.4	141.2	125.5	15.62	9.040		
4,600.0	4,582.2	4,596.1	4,564.5	10.5	12.2	0.49	-1.9	529.7	144.2	128.3	15.97	9.033		
4,700.0	4,681.8	4,696.1	4,663.7	10.8	12.5	0.50	-1.9	542.0	147.3	131.0	16.31	9.027		
4,800.0	4,781.4	4,796.0	4,762.8	11.0	12.8	0.50	-2.0	554.3	150.3	133.7	16.66	9.021		
4,900.0	4,880.9	4,896.0	4,862.0	11.2	13.0	0.50	-2.0	566.6	153.4	136.4	17.01	9.015		
5,000.0	4,980.5	4,995.9	4,961.2	11.5	13.3	0.50	-2.1	579.0	156.4	139.1	17.36	9.010		

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 Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4L-17H-P267 - DD - Plan #3													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)				Between Centres (ft)	Between Ellipses (ft)	
5,100.0	5,080.1	5,095.9	5,060.4	11.7	13.6	0.50	-2.1	591.3	159.5	141.8	17.71	9.005		
5,200.0	5,179.6	5,195.8	5,159.6	11.9	13.9	0.50	-2.2	603.6	162.5	144.5	18.06	8.999		
5,300.0	5,279.2	5,295.8	5,258.8	12.2	14.1	0.50	-2.2	615.9	165.6	147.2	18.41	8.995		
5,400.0	5,378.8	5,395.8	5,358.0	12.4	14.4	0.50	-2.3	628.2	168.7	149.9	18.76	8.990		
5,500.0	5,478.3	5,495.7	5,457.2	12.7	14.7	0.50	-2.3	640.5	171.7	152.6	19.11	8.985		
5,600.0	5,577.9	5,595.7	5,556.4	12.9	15.0	0.50	-2.3	652.8	174.8	155.3	19.46	8.981		
5,700.0	5,677.5	5,695.6	5,655.6	13.1	15.3	0.51	-2.4	665.1	177.8	158.0	19.81	8.977		
5,800.0	5,777.0	5,795.6	5,754.8	13.4	15.5	0.51	-2.4	677.4	180.9	160.7	20.16	8.973		
5,900.0	5,876.6	5,895.5	5,854.0	13.6	15.8	0.51	-2.5	689.7	183.9	163.4	20.51	8.969		
6,000.0	5,976.2	5,995.5	5,953.2	13.9	16.1	0.51	-2.5	702.1	187.0	166.1	20.86	8.965		
6,100.0	6,075.7	6,095.4	6,052.3	14.1	16.4	0.51	-2.6	714.4	190.0	168.8	21.21	8.961		
6,200.0	6,175.3	6,195.4	6,151.5	14.3	16.6	0.51	-2.6	726.7	193.1	171.5	21.56	8.958		
6,300.0	6,274.9	6,295.3	6,250.7	14.6	16.9	0.51	-2.7	739.0	196.2	174.3	21.91	8.954		
6,400.0	6,374.5	6,395.3	6,349.9	14.8	17.2	0.51	-2.7	751.3	199.2	177.0	22.26	8.951		
6,500.0	6,474.0	6,495.2	6,449.1	15.0	17.5	0.51	-2.7	763.6	202.3	179.7	22.60	8.948		
6,600.0	6,573.6	6,595.2	6,548.3	15.3	17.8	0.51	-2.8	775.9	205.3	182.4	22.95	8.945		
6,700.0	6,673.2	6,695.1	6,647.5	15.5	18.0	0.51	-2.8	788.2	208.4	185.1	23.30	8.942		
6,723.4	6,696.4	6,718.5	6,670.7	15.6	18.1	0.51	-2.8	791.1	209.1	185.7	23.39	8.941		
6,750.0	6,722.9	6,745.1	6,697.1	15.6	18.2	27.10	-2.9	794.4	209.9	186.4	23.48	8.940		
6,800.0	6,772.5	6,794.9	6,746.5	15.8	18.3	56.74	-2.9	800.5	211.5	187.9	23.67	8.939		
6,850.0	6,821.5	6,844.0	6,795.3	15.9	18.4	70.80	-2.9	806.6	213.5	189.6	23.90	8.936		
6,900.0	6,869.5	6,892.3	6,843.1	16.0	18.6	79.79	-2.9	812.5	216.4	192.2	24.22	8.935		
6,950.0	6,916.3	6,939.2	6,889.7	16.1	18.7	86.98	-2.9	818.3	220.8	196.1	24.65	8.957		
7,000.0	6,961.3	6,985.1	6,935.2	16.3	18.8	93.40	-2.9	823.9	227.5	202.3	25.18	9.037		
7,050.0	7,004.3	7,036.8	6,986.4	16.4	19.0	99.60	-0.1	830.3	236.5	210.7	25.78	9.172		
7,100.0	7,045.0	7,091.0	7,039.7	16.6	19.1	105.07	7.9	836.9	247.1	220.7	26.35	9.375		
7,150.0	7,083.1	7,148.3	7,094.8	16.8	19.3	109.94	21.8	843.7	258.9	232.0	26.81	9.654		
7,200.0	7,118.2	7,208.9	7,151.3	17.0	19.5	114.27	42.5	850.7	271.5	244.3	27.13	10.005		
7,250.0	7,150.0	7,273.3	7,208.6	17.3	19.7	118.12	70.9	857.9	284.4	257.1	27.30	10.419		
7,300.0	7,178.5	7,341.8	7,265.7	17.6	19.9	121.50	108.0	864.9	297.3	269.9	27.32	10.881		
7,350.0	7,203.3	7,414.7	7,321.2	17.9	20.2	124.43	154.7	871.8	309.5	282.3	27.23	11.367		
7,400.0	7,224.2	7,492.2	7,373.1	18.2	20.5	126.91	211.7	878.3	320.6	293.6	27.06	11.849		
7,450.0	7,241.1	7,574.1	7,419.3	18.6	21.0	128.92	279.1	884.0	330.2	303.3	26.87	12.287		
7,500.0	7,253.8	7,660.0	7,456.9	19.1	21.5	130.43	356.1	888.7	337.8	311.0	26.72	12.640		
7,550.0	7,262.3	7,749.1	7,483.4	19.5	22.1	131.44	441.0	892.0	342.9	316.2	26.66	12.861		
7,600.0	7,266.5	7,840.3	7,496.7	20.0	22.9	131.91	531.1	893.6	345.4	318.6	26.76	12.908		
7,623.5	7,267.0	7,881.5	7,498.0	20.2	23.2	131.95	572.2	893.8	345.6	318.7	26.84	12.873		
7,700.0	7,267.0	7,958.0	7,498.0	21.0	23.9	131.95	648.8	893.8	345.6	317.3	28.30	12.211		
7,800.0	7,267.0	8,058.0	7,498.0	22.2	24.9	131.95	748.8	893.8	345.6	315.3	30.29	11.409		
7,900.0	7,267.0	8,158.0	7,498.0	23.4	26.0	131.95	848.8	893.8	345.6	313.2	32.37	10.677		
8,000.0	7,267.0	8,258.0	7,498.0	24.6	27.1	131.95	948.8	893.8	345.6	311.0	34.52	10.011		
8,100.0	7,267.0	8,358.0	7,498.0	26.0	28.4	131.95	1,048.8	893.8	345.6	308.8	36.73	9.407		
8,200.0	7,267.0	8,458.0	7,498.0	27.3	29.6	131.95	1,148.8	893.8	345.6	306.6	39.00	8.861		
8,300.0	7,267.0	8,558.0	7,498.0	28.8	30.9	131.95	1,248.8	893.8	345.6	304.2	41.30	8.366		
8,400.0	7,267.0	8,658.0	7,498.0	30.2	32.3	131.95	1,348.8	893.8	345.6	301.9	43.65	7.917		
8,500.0	7,267.0	8,758.0	7,498.0	31.7	33.7	131.95	1,448.8	893.8	345.6	299.5	46.02	7.509		
8,600.0	7,267.0	8,858.0	7,498.0	33.2	35.1	131.95	1,548.8	893.8	345.6	297.1	48.42	7.137		
8,700.0	7,267.0	8,958.0	7,498.0	34.7	36.6	131.95	1,648.8	893.8	345.6	294.7	50.84	6.797		
8,800.0	7,267.0	9,058.0	7,498.0	36.3	38.0	131.95	1,748.8	893.8	345.6	292.3	53.28	6.486		
8,900.0	7,267.0	9,158.0	7,498.0	37.9	39.5	131.95	1,848.8	893.8	345.6	289.8	55.73	6.200		
9,000.0	7,267.0	9,258.0	7,498.0	39.4	41.1	131.95	1,948.8	893.8	345.6	287.3	58.21	5.937		
9,100.0	7,267.0	9,358.0	7,498.0	41.0	42.6	131.95	2,048.8	893.8	345.6	284.9	60.69	5.694		

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 Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - Bighorn 4L-17H-P267 - DD - Plan #3												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
9,200.0	7,267.0	9,458.0	7,498.0	42.7	44.2	131.95	2,148.8	893.8	345.6	282.4	63.18	5.469	
9,300.0	7,267.0	9,558.0	7,498.0	44.3	45.7	131.95	2,248.8	893.8	345.6	279.9	65.69	5.261	
9,400.0	7,267.0	9,658.0	7,498.0	45.9	47.3	131.95	2,348.8	893.8	345.6	277.4	68.20	5.067	
9,500.0	7,267.0	9,758.0	7,498.0	47.5	48.9	131.95	2,448.8	893.8	345.6	274.8	70.72	4.886	
9,600.0	7,267.0	9,858.0	7,498.0	49.2	50.5	131.95	2,548.8	893.8	345.6	272.3	73.25	4.717	
9,700.0	7,267.0	9,958.0	7,498.0	50.9	52.1	131.95	2,648.8	893.8	345.6	269.8	75.79	4.560	
9,800.0	7,267.0	10,058.0	7,498.0	52.5	53.8	131.95	2,748.8	893.8	345.6	267.2	78.33	4.412	
9,900.0	7,267.0	10,158.0	7,498.0	54.2	55.4	131.95	2,848.8	893.8	345.6	264.7	80.87	4.273	
10,000.0	7,267.0	10,258.0	7,498.0	55.9	57.0	131.95	2,948.8	893.8	345.6	262.1	83.42	4.142	
10,100.0	7,267.0	10,358.0	7,498.0	57.5	58.7	131.95	3,048.8	893.8	345.6	259.6	85.98	4.019	
10,200.0	7,267.0	10,458.0	7,498.0	59.2	60.3	131.95	3,148.8	893.8	345.6	257.0	88.54	3.903	
10,300.0	7,267.0	10,558.0	7,498.0	60.9	62.0	131.95	3,248.8	893.8	345.6	254.5	91.10	3.793	
10,400.0	7,267.0	10,658.0	7,498.0	62.6	63.6	131.95	3,348.8	893.8	345.6	251.9	93.66	3.689	
10,500.0	7,267.0	10,758.0	7,498.0	64.3	65.3	131.95	3,448.8	893.8	345.6	249.3	96.23	3.591	
10,600.0	7,267.0	10,858.0	7,498.0	66.0	67.0	131.95	3,548.8	893.8	345.6	246.7	98.80	3.497	
10,700.0	7,267.0	10,958.0	7,498.0	67.7	68.7	131.95	3,648.8	893.8	345.6	244.2	101.38	3.409	
10,800.0	7,267.0	11,058.0	7,498.0	69.4	70.3	131.95	3,748.8	893.8	345.6	241.6	103.95	3.324	
10,900.0	7,267.0	11,158.0	7,498.0	71.1	72.0	131.95	3,848.8	893.8	345.6	239.0	106.53	3.244	
11,000.0	7,267.0	11,258.0	7,498.0	72.8	73.7	131.95	3,948.8	893.8	345.6	236.4	109.11	3.167	
11,100.0	7,267.0	11,358.0	7,498.0	74.5	75.4	131.95	4,048.8	893.8	345.6	233.9	111.70	3.094	
11,200.0	7,267.0	11,458.0	7,498.0	76.2	77.1	131.95	4,148.8	893.8	345.6	231.3	114.28	3.024	
11,300.0	7,267.0	11,558.0	7,498.0	77.9	78.8	131.95	4,248.8	893.8	345.6	228.7	116.87	2.957	
11,400.0	7,267.0	11,658.0	7,498.0	79.6	80.5	131.95	4,348.8	893.8	345.6	226.1	119.45	2.893	
11,500.0	7,267.0	11,758.0	7,498.0	81.4	82.2	131.95	4,448.8	893.8	345.6	223.5	122.04	2.831	
11,600.0	7,267.0	11,858.0	7,498.0	83.1	83.9	131.95	4,548.8	893.8	345.6	220.9	124.63	2.773	
11,700.0	7,267.0	11,958.0	7,498.0	84.8	85.6	131.95	4,648.8	893.8	345.6	218.3	127.23	2.716	
11,800.0	7,267.0	12,058.0	7,498.0	86.5	87.3	131.95	4,748.8	893.8	345.6	215.7	129.82	2.662	
11,900.0	7,267.0	12,158.0	7,498.0	88.2	89.0	131.95	4,848.8	893.8	345.6	213.1	132.41	2.610	
12,000.0	7,267.0	12,258.0	7,498.0	90.0	90.7	131.95	4,948.8	893.8	345.6	210.5	135.01	2.559	
12,100.0	7,267.0	12,358.0	7,498.0	91.7	92.4	131.95	5,048.8	893.8	345.6	207.9	137.60	2.511	
12,200.0	7,267.0	12,458.0	7,498.0	93.4	94.1	131.95	5,148.8	893.8	345.6	205.3	140.20	2.465	
12,300.0	7,267.0	12,558.0	7,498.0	95.1	95.9	131.95	5,248.8	893.8	345.6	202.8	142.80	2.420	
12,400.0	7,267.0	12,658.0	7,498.0	96.9	97.6	131.95	5,348.8	893.8	345.6	200.2	145.40	2.377	
12,500.0	7,267.0	12,758.0	7,498.0	98.6	99.3	131.95	5,448.8	893.8	345.6	197.6	148.00	2.335	
12,600.0	7,267.0	12,858.0	7,498.0	100.3	101.0	131.95	5,548.8	893.8	345.6	195.0	150.60	2.295	
12,700.0	7,267.0	12,960.3	7,498.0	102.1	102.8	131.98	5,651.1	893.5	345.4	192.2	153.17	2.255	
12,800.0	7,267.0	13,065.0	7,498.0	103.8	104.6	132.19	5,755.7	891.6	344.0	188.7	155.35	2.215	
12,900.0	7,267.0	13,167.0	7,498.0	105.5	106.3	132.57	5,857.7	888.2	341.6	184.5	157.07	2.175	
13,000.0	7,267.0	13,267.0	7,498.0	107.3	108.0	132.98	5,957.6	884.7	339.0	180.3	158.67	2.136	
13,100.0	7,267.0	13,366.9	7,498.0	109.0	109.7	133.39	6,057.5	881.1	336.4	176.1	160.22	2.099	
13,200.0	7,267.0	13,466.8	7,498.0	110.7	111.4	133.81	6,157.3	877.6	333.8	172.1	161.71	2.064	
13,300.0	7,267.0	13,566.8	7,498.0	112.5	113.2	134.24	6,257.2	874.0	331.2	168.1	163.14	2.030	
13,400.0	7,267.0	13,666.7	7,498.0	114.2	114.9	134.67	6,357.1	870.5	328.7	164.2	164.51	1.998	
13,500.0	7,267.0	13,766.6	7,498.0	115.9	116.6	135.11	6,457.0	866.9	326.2	160.3	165.82	1.967	
13,596.6	7,267.0	13,855.2	7,498.0	117.6	118.1	135.50	6,545.4	863.8	323.9	156.8	167.03	1.939	
13,598.5	7,267.0	13,855.2	7,498.0	117.6	118.1	135.50	6,545.4	863.8	323.9	156.8	167.05	1.939 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - DECHANT STATE V 16-12JI (EXISTING) - KMG - NO SURVEYS													Offset Site Error: 0.0 ft	
Survey Program: 8128-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		
7,500.0	7,253.8	7,237.8	7,237.8	19.1	12.6	75.23	1,212.4	1,277.5	996.8	969.4	27.39	36.397		
7,550.0	7,262.3	7,246.3	7,246.3	19.5	12.6	81.74	1,212.4	1,277.5	959.1	930.7	28.46	33.700		
7,600.0	7,266.5	7,250.5	7,250.5	20.0	12.7	87.57	1,212.4	1,277.5	922.4	893.2	29.23	31.553		
7,623.5	7,267.0	7,251.0	7,251.0	20.2	12.7	90.00	1,212.4	1,277.5	905.7	876.2	29.50	30.703		
7,700.0	7,267.0	7,251.0	7,251.0	21.0	12.7	90.00	1,212.4	1,277.5	853.3	822.8	30.45	28.018		
7,800.0	7,267.0	7,251.0	7,251.0	22.2	12.7	90.00	1,212.4	1,277.5	790.8	759.0	31.77	24.888		
7,900.0	7,267.0	7,251.0	7,251.0	23.4	12.7	90.00	1,212.4	1,277.5	736.7	703.5	33.16	22.215		
8,000.0	7,267.0	7,251.0	7,251.0	24.6	12.7	90.00	1,212.4	1,277.5	692.8	658.2	34.60	20.023		
8,100.0	7,267.0	7,251.0	7,251.0	26.0	12.7	90.00	1,212.4	1,277.5	661.2	625.2	36.08	18.327		
8,200.0	7,267.0	7,251.0	7,251.0	27.3	12.7	90.00	1,212.4	1,277.5	643.8	606.2	37.60	17.125		
8,263.6	7,267.0	7,251.0	7,251.0	28.2	12.7	90.00	1,212.4	1,277.5	640.7	602.1	38.58	16.607	CC, ES	
8,300.0	7,267.0	7,251.0	7,251.0	28.8	12.7	90.00	1,212.4	1,277.5	641.7	602.6	39.14	16.394		
8,400.0	7,267.0	7,251.0	7,251.0	30.2	12.7	90.00	1,212.4	1,277.5	655.0	614.3	40.71	16.089	SF	
8,500.0	7,267.0	7,251.0	7,251.0	31.7	12.7	90.00	1,212.4	1,277.5	682.9	640.6	42.30	16.143		
8,600.0	7,267.0	7,251.0	7,251.0	33.2	12.7	90.00	1,212.4	1,277.5	723.6	679.7	43.91	16.479		
8,700.0	7,267.0	7,251.0	7,251.0	34.7	12.7	90.00	1,212.4	1,277.5	775.2	729.7	45.54	17.024		
8,800.0	7,267.0	7,251.0	7,251.0	36.3	12.7	90.00	1,212.4	1,277.5	835.6	788.4	47.17	17.714		
8,900.0	7,267.0	7,251.0	7,251.0	37.9	12.7	90.00	1,212.4	1,277.5	903.1	854.2	48.82	18.498		
9,000.0	7,267.0	7,251.0	7,251.0	39.4	12.7	90.00	1,212.4	1,277.5	976.1	925.6	50.48	19.338		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - DECHANT STATE V 16-4JI (EXISTING) - KMG - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8250-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	7,267.0	7,240.0	7,240.0	62.6	12.6	90.00	3,742.7	1,515.5	963.0	888.8	74.22	12.974		
10,500.0	7,267.0	7,240.0	7,240.0	64.3	12.6	90.00	3,742.7	1,515.5	926.6	850.6	75.94	12.201		
10,600.0	7,267.0	7,240.0	7,240.0	66.0	12.6	90.00	3,742.7	1,515.5	899.9	822.2	77.66	11.587		
10,700.0	7,267.0	7,240.0	7,240.0	67.7	12.6	90.00	3,742.7	1,515.5	883.7	804.4	79.39	11.132		
10,793.9	7,267.0	7,240.0	7,240.0	69.3	12.6	90.00	3,742.7	1,515.5	878.7	797.7	81.01	10.848 CC		
10,800.0	7,267.0	7,240.0	7,240.0	69.4	12.6	90.00	3,742.7	1,515.5	878.8	797.6	81.11	10.834 ES		
10,900.0	7,267.0	7,240.0	7,240.0	71.1	12.6	90.00	3,742.7	1,515.5	885.1	802.3	82.84	10.685		
11,000.0	7,267.0	7,240.0	7,240.0	72.8	12.6	90.00	3,742.7	1,515.5	902.6	818.0	84.57	10.673 SF		
11,100.0	7,267.0	7,240.0	7,240.0	74.5	12.6	90.00	3,742.7	1,515.5	930.5	844.2	86.30	10.783		
11,200.0	7,267.0	7,240.0	7,240.0	76.2	12.6	90.00	3,742.7	1,515.5	968.0	880.0	88.03	10.997		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - DECHANT STATE V 16-5JI (EXISTING) - KMG - NO SURVEYS													Offset Site Error: 0.0 ft
Survey Program: 8200-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
8,600.0	7,267.0	7,256.0	7,256.0	33.2	12.7	90.00	2,250.6	1,277.4	950.2	906.3	43.92	21.634	
8,700.0	7,267.0	7,256.0	7,256.0	34.7	12.7	90.00	2,250.6	1,277.4	878.9	833.4	45.54	19.298	
8,800.0	7,267.0	7,256.0	7,256.0	36.3	12.7	90.00	2,250.6	1,277.4	813.7	766.6	47.18	17.247	
8,900.0	7,267.0	7,256.0	7,256.0	37.9	12.7	90.00	2,250.6	1,277.4	756.2	707.4	48.83	15.487	
9,000.0	7,267.0	7,256.0	7,256.0	39.4	12.7	90.00	2,250.6	1,277.4	708.1	657.7	50.49	14.027	
9,100.0	7,267.0	7,256.0	7,256.0	41.0	12.7	90.00	2,250.6	1,277.4	671.7	619.5	52.15	12.879	
9,200.0	7,267.0	7,256.0	7,256.0	42.7	12.7	90.00	2,250.6	1,277.4	648.7	594.8	53.82	12.052	
9,300.0	7,267.0	7,256.0	7,256.0	44.3	12.7	90.00	2,250.6	1,277.4	640.6	585.1	55.50	11.542	
9,301.8	7,267.0	7,256.0	7,256.0	44.3	12.7	90.00	2,250.6	1,277.4	640.6	585.1	55.53	11.536 CC, ES	
9,400.0	7,267.0	7,256.0	7,256.0	45.9	12.7	90.00	2,250.6	1,277.4	648.1	590.9	57.19	11.333 SF	
9,500.0	7,267.0	7,256.0	7,256.0	47.5	12.7	90.00	2,250.6	1,277.4	670.6	611.7	58.88	11.390	
9,600.0	7,267.0	7,256.0	7,256.0	49.2	12.7	90.00	2,250.6	1,277.4	706.6	646.1	60.57	11.666	
9,700.0	7,267.0	7,256.0	7,256.0	50.9	12.7	90.00	2,250.6	1,277.4	754.3	692.0	62.27	12.113	
9,800.0	7,267.0	7,256.0	7,256.0	52.5	12.7	90.00	2,250.6	1,277.4	811.6	747.6	63.97	12.686	
9,900.0	7,267.0	7,256.0	7,256.0	54.2	12.7	90.00	2,250.6	1,277.4	876.5	810.8	65.68	13.345	
10,000.0	7,267.0	7,256.0	7,256.0	55.9	12.7	90.00	2,250.6	1,277.4	947.6	880.2	67.39	14.062	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - DECHANT-STATE 3 (EXISTING) - FOUNDATION - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 5100-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		
4,800.0	4,781.4	4,777.4	4,777.4	11.0	8.3	15.05	-259.3	1,367.0	996.1	979.2	16.85	59.101		
4,900.0	4,880.9	4,876.9	4,876.9	11.2	8.5	15.19	-259.3	1,367.0	987.1	969.9	17.21	57.355		
5,000.0	4,980.5	4,976.5	4,976.5	11.5	8.7	15.33	-259.3	1,367.0	978.1	960.6	17.57	55.679		
5,100.0	5,080.1	5,076.1	5,076.1	11.7	8.9	15.48	-259.3	1,367.0	969.2	951.3	17.92	54.070		
5,200.0	5,179.6	5,100.0	5,100.0	11.9	8.9	15.51	-259.3	1,367.0	963.2	945.1	18.15	53.077		
5,210.5	5,190.1	5,100.0	5,100.0	12.0	8.9	15.51	-259.3	1,367.0	963.2	945.0	18.17	53.019	CC, ES	
5,300.0	5,279.2	5,100.0	5,100.0	12.2	8.9	15.51	-259.3	1,367.0	967.3	949.0	18.33	52.779	SF	
5,400.0	5,378.8	5,100.0	5,100.0	12.4	8.9	15.51	-259.3	1,367.0	981.6	963.1	18.51	53.039		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - DIER 1 (EXISTING) - ENCANA WELL - GYRO												Offset Site Error:	0.0 ft
Survey Program: 100-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)			
12,600.0	7,267.0	7,202.8	7,202.0	100.3	12.6	-87.25	6,360.8	158.6	942.6	830.5	112.16	8.405	
12,700.0	7,267.0	7,203.7	7,202.9	102.1	12.6	-87.35	6,360.8	158.5	858.0	744.1	113.91	7.533	
12,800.0	7,267.0	7,204.5	7,203.7	103.8	12.6	-87.45	6,360.8	158.5	777.0	661.4	115.66	6.718	
12,900.0	7,267.0	7,205.4	7,204.6	105.5	12.6	-87.56	6,360.8	158.5	701.0	583.6	117.41	5.971	
13,000.0	7,267.0	7,206.3	7,205.5	107.3	12.6	-87.66	6,360.8	158.4	631.6	512.5	119.16	5.301	
13,100.0	7,267.0	7,207.1	7,206.3	109.0	12.6	-87.76	6,360.8	158.4	571.4	450.5	120.91	4.726	
13,200.0	7,267.0	7,208.0	7,207.2	110.7	12.6	-87.87	6,360.8	158.4	523.6	400.9	122.66	4.269	
13,300.0	7,267.0	7,208.8	7,208.0	112.5	12.6	-87.97	6,360.8	158.4	491.7	367.2	124.41	3.952	
13,400.0	7,267.0	7,209.7	7,208.9	114.2	12.6	-88.07	6,360.9	158.3	478.9	352.7	126.16	3.796	
13,412.1	7,267.0	7,209.8	7,209.0	114.4	12.6	-88.09	6,360.9	158.3	478.7	352.3	126.37	3.788 CC, ES, SF	
13,500.0	7,267.0	7,210.6	7,209.8	115.9	12.6	-88.18	6,360.9	158.3	486.7	358.8	127.92	3.805	
13,598.5	7,267.0	7,211.4	7,210.6	117.6	12.6	-88.28	6,360.9	158.3	513.7	384.1	129.64	3.963	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design		S17-T2N-R67W (Big Horn) - DIER 44-8 (EXISTING) - ENCANA WELL - GYRO											Offset Site Error:		0.0 ft
Survey Program:		100-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)					
11,000.0	7,267.0	7,278.5	7,275.2	72.8	12.9	-96.67	4,777.3	258.4	911.9	827.7	84.14	10.838	3.839 CC, ES, SF		
11,100.0	7,267.0	7,275.3	7,272.0	74.5	12.9	-96.18	4,777.4	258.3	822.1	736.2	85.93	9.567			
11,200.0	7,267.0	7,271.9	7,268.6	76.2	12.9	-95.67	4,777.5	258.2	734.9	647.2	87.71	8.379			
11,300.0	7,267.0	7,268.4	7,265.2	77.9	12.9	-95.15	4,777.7	258.0	651.4	561.9	89.50	7.278			
11,400.0	7,267.0	7,264.9	7,261.6	79.6	12.9	-94.62	4,777.8	257.9	573.2	481.9	91.29	6.279			
11,500.0	7,267.0	7,261.2	7,258.0	81.4	12.9	-94.07	4,777.9	257.8	502.7	409.6	93.07	5.401			
11,600.0	7,267.0	7,257.5	7,254.2	83.1	12.9	-93.50	4,778.1	257.6	443.7	348.8	94.85	4.678			
11,700.0	7,267.0	7,253.6	7,250.3	84.8	12.9	-92.92	4,778.2	257.5	401.2	304.6	96.63	4.153			
11,800.0	7,267.0	7,249.6	7,246.3	86.5	12.9	-92.31	4,778.4	257.3	380.9	282.5	98.40	3.871			
11,829.7	7,267.0	7,248.4	7,245.1	87.0	12.9	-92.13	4,778.4	257.3	379.7	280.8	98.92	3.839			
11,900.0	7,267.0	7,245.5	7,242.2	88.2	12.9	-91.69	4,778.5	257.2	386.2	286.0	100.16	3.856			
12,000.0	7,267.0	7,241.2	7,238.0	90.0	12.9	-91.05	4,778.7	257.0	416.1	314.2	101.91	4.083			
12,100.0	7,267.0	7,236.8	7,233.6	91.7	12.9	-90.39	4,778.9	256.9	466.0	362.4	103.66	4.496			
12,200.0	7,267.0	7,232.3	7,229.1	93.4	12.9	-89.71	4,779.1	256.7	530.2	424.8	105.39	5.031			
12,300.0	7,267.0	7,227.6	7,224.4	95.1	12.9	-89.00	4,779.3	256.5	604.2	497.1	107.11	5.641			
12,400.0	7,267.0	7,222.8	7,219.5	96.9	12.9	-88.28	4,779.5	256.4	684.8	576.0	108.81	6.294			
12,500.0	7,267.0	7,217.7	7,214.5	98.6	12.9	-87.52	4,779.7	256.2	769.9	659.4	110.49	6.968			
12,600.0	7,267.0	7,212.6	7,209.4	100.3	12.8	-86.75	4,779.9	256.0	858.2	746.1	112.15	7.652			
12,700.0	7,267.0	7,207.2	7,204.0	102.1	12.8	-85.95	4,780.2	255.8	948.8	835.1	113.79	8.339			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - DIER 8-4-8 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 78-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,000.0	7,267.0	7,305.1	7,215.3	107.3	18.4	82.23	6,915.1	766.7	975.2	853.9	121.29	8.040		
13,100.0	7,267.0	7,306.7	7,216.9	109.0	18.4	82.93	6,915.1	766.7	876.2	753.0	123.20	7.112		
13,200.0	7,267.0	7,308.3	7,218.5	110.7	18.4	83.64	6,915.2	766.8	777.5	652.4	125.09	6.215		
13,300.0	7,267.0	7,310.0	7,220.2	112.5	18.4	84.36	6,915.2	766.8	679.1	552.1	126.98	5.348		
13,400.0	7,267.0	7,311.7	7,221.8	114.2	18.4	85.10	6,915.2	766.8	581.3	452.4	128.85	4.511		
13,500.0	7,267.0	7,313.4	7,223.6	115.9	18.4	85.85	6,915.2	766.8	484.3	353.6	130.71	3.705		
13,598.5	7,267.0	7,315.1	7,225.3	117.6	18.4	86.59	6,915.3	766.8	390.4	257.9	132.53	2.946 CC, ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - DIER 8-6-8 (EXISTING) - ENCANA WELL - SURVEYS												Offset Site Error:	0.0 ft
Survey Program: 52-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		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)					
11,700.0	7,267.0	7,352.2	7,243.3	84.8	21.3	94.21	5,624.0	776.1	985.2	882.5	102.62	9.600	
11,800.0	7,267.0	7,351.9	7,243.0	86.5	21.3	94.11	5,624.0	776.1	886.3	781.9	104.37	8.492	
11,900.0	7,267.0	7,351.7	7,242.8	88.2	21.3	94.02	5,624.0	776.1	787.7	681.6	106.11	7.423	
12,000.0	7,267.0	7,351.5	7,242.5	90.0	21.3	93.92	5,624.0	776.1	689.5	581.6	107.86	6.393	
12,100.0	7,267.0	7,351.2	7,242.3	91.7	21.3	93.82	5,624.0	776.1	591.9	482.3	109.60	5.401	
12,200.0	7,267.0	7,351.0	7,242.1	93.4	21.3	93.72	5,624.0	776.1	495.3	384.0	111.35	4.448	
12,300.0	7,267.0	7,350.7	7,241.8	95.1	21.3	93.62	5,624.0	776.2	400.4	287.3	113.10	3.540	
12,400.0	7,267.0	7,350.5	7,241.6	96.9	21.3	93.52	5,624.0	776.2	308.6	193.8	114.85	2.687	
12,500.0	7,267.0	7,350.2	7,241.3	98.6	21.3	93.42	5,624.0	776.2	224.1	107.5	116.60	1.922	
12,600.0	7,267.0	7,350.0	7,241.1	100.3	21.3	93.32	5,624.0	776.2	158.6	40.3	118.35	1.340	Level 3
12,675.2	7,267.0	7,349.8	7,240.9	101.6	21.3	93.25	5,624.0	776.2	139.7	20.0	119.66	1.167	Level 2, CC, ES, SF
12,700.0	7,267.0	7,349.8	7,240.8	102.1	21.3	93.22	5,624.0	776.2	141.8	21.7	120.10	1.181	Level 2
12,800.0	7,267.0	7,349.5	7,240.6	103.8	21.3	93.12	5,624.0	776.2	187.3	65.4	121.85	1.537	
12,900.0	7,267.0	7,349.3	7,240.4	105.5	21.3	93.02	5,624.0	776.2	264.6	141.0	123.60	2.141	
13,000.0	7,267.0	7,349.0	7,240.1	107.3	21.3	92.92	5,624.0	776.3	353.5	228.2	125.35	2.820	
13,100.0	7,267.0	7,348.8	7,239.9	109.0	21.3	92.82	5,624.0	776.3	447.2	320.1	127.10	3.518	
13,200.0	7,267.0	7,348.5	7,239.6	110.7	21.3	92.71	5,624.0	776.3	543.1	414.2	128.86	4.214	
13,300.0	7,267.0	7,348.3	7,239.4	112.5	21.3	92.61	5,624.0	776.3	640.2	509.6	130.61	4.902	
13,400.0	7,267.0	7,348.0	7,239.1	114.2	21.3	92.51	5,624.0	776.3	738.1	605.8	132.36	5.577	
13,500.0	7,267.0	7,347.8	7,238.9	115.9	21.3	92.41	5,624.0	776.3	836.5	702.4	134.12	6.237	
13,598.5	7,267.0	7,347.5	7,238.6	117.6	21.3	92.30	5,624.0	776.3	933.7	797.9	135.84	6.874	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - MILLER 1 (EXISTING) - SUNDANCE WELL - GYRO													Offset Site Error:	0.0 ft
Survey Program: 100-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		
10,000.0	7,267.0	7,210.1	7,209.2	55.9	12.7	-89.02	3,351.3	-233.1	958.6	891.3	67.30	14.244		
10,100.0	7,267.0	7,208.8	7,207.9	57.5	12.7	-88.94	3,351.3	-233.1	921.1	852.1	69.01	13.348		
10,200.0	7,267.0	7,207.5	7,206.5	59.2	12.7	-88.85	3,351.3	-233.0	893.3	822.5	70.72	12.632		
10,300.0	7,267.0	7,206.1	7,205.1	60.9	12.7	-88.76	3,351.3	-233.0	876.0	803.6	72.43	12.095		
10,400.0	7,267.0	7,204.7	7,203.7	62.6	12.7	-88.67	3,351.4	-233.0	870.0	795.9	74.14	11.734		
10,402.6	7,267.0	7,204.7	7,203.7	62.6	12.7	-88.66	3,351.4	-233.0	870.0	795.8	74.19	11.727 CC, ES		
10,500.0	7,267.0	7,203.3	7,202.3	64.3	12.7	-88.57	3,351.4	-232.9	875.4	799.6	75.86	11.541		
10,600.0	7,267.0	7,201.8	7,200.8	66.0	12.7	-88.47	3,351.4	-232.9	892.1	814.5	77.57	11.500 SF		
10,700.0	7,267.0	7,200.3	7,199.3	67.7	12.7	-88.37	3,351.4	-232.9	919.4	840.1	79.29	11.596		
10,800.0	7,267.0	7,198.9	7,197.9	69.4	12.6	-88.28	3,351.4	-232.8	956.5	875.4	81.01	11.807		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - MILLER 2-17 (EXISTING) - ENCANA WELL - GYRO													Offset Site Error: 0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
9,400.0	7,267.0	7,252.4	7,250.8	45.9	12.8	-90.83	2,754.4	-246.5	972.0	914.8	57.19	16.997	
9,500.0	7,267.0	7,250.6	7,249.0	47.5	12.8	-90.71	2,754.5	-246.5	934.7	875.8	58.87	15.876	
9,600.0	7,267.0	7,248.9	7,247.3	49.2	12.8	-90.60	2,754.5	-246.5	907.0	846.4	60.57	14.974	
9,700.0	7,267.0	7,247.2	7,245.6	50.9	12.8	-90.49	2,754.5	-246.5	889.6	827.4	62.26	14.288	
9,800.0	7,267.0	7,245.4	7,243.8	52.5	12.8	-90.38	2,754.5	-246.5	883.3	819.4	63.96	13.810	
9,805.8	7,267.0	7,245.3	7,243.7	52.6	12.8	-90.37	2,754.5	-246.5	883.3	819.3	64.06	13.788	CC, ES
9,900.0	7,267.0	7,243.7	7,242.1	54.2	12.8	-90.27	2,754.6	-246.5	888.3	822.7	65.67	13.528	
10,000.0	7,267.0	7,242.0	7,240.4	55.9	12.8	-90.16	2,754.6	-246.5	904.4	837.0	67.37	13.424	SF
10,100.0	7,267.0	7,240.3	7,238.7	57.5	12.8	-90.05	2,754.6	-246.6	931.0	861.9	69.08	13.477	
10,200.0	7,267.0	7,238.6	7,237.0	59.2	12.8	-89.93	2,754.6	-246.6	967.3	896.5	70.79	13.663	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - MILLER 3-17J (EXISTING) - ENCANA - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8150-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	-48.89	403.6	-462.5	614.6					
100.0	100.0	70.0	70.0	0.1	0.1	-48.89	403.6	-462.5	613.8	613.6	0.24	2,510.081		
200.0	200.0	170.0	170.0	0.3	0.3	-48.89	403.6	-462.5	613.8	613.2	0.59	1,034.061		
300.0	300.0	270.0	270.0	0.5	0.5	-48.89	403.6	-462.5	613.8	612.9	0.94	651.157 CC, ES		
400.0	400.0	370.0	370.0	0.6	0.6	-139.05	403.6	-462.5	615.1	613.9	1.29	475.875		
500.0	499.8	469.8	469.8	0.8	0.8	-139.31	403.6	-462.5	619.1	617.5	1.65	375.702		
566.2	565.8	535.8	535.8	1.0	0.9	-139.58	403.6	-462.5	623.2	621.3	1.89	330.186		
600.0	599.5	569.5	569.5	1.1	1.0	-139.77	403.6	-462.5	625.6	623.6	2.01	311.061		
700.0	699.0	669.0	669.0	1.3	1.2	-140.31	403.6	-462.5	632.7	630.3	2.38	265.979		
800.0	798.6	768.6	768.6	1.5	1.3	-140.84	403.6	-462.5	639.9	637.2	2.75	232.863		
900.0	898.2	868.2	868.2	1.7	1.5	-141.36	403.6	-462.5	647.1	644.0	3.12	207.571		
1,000.0	997.7	967.7	967.7	2.0	1.7	-141.86	403.6	-462.5	654.4	650.9	3.49	187.656		
1,100.0	1,097.3	1,067.3	1,067.3	2.2	1.9	-142.36	403.6	-462.5	661.7	657.9	3.86	171.584		
1,200.0	1,196.9	1,166.9	1,166.9	2.4	2.0	-142.84	403.6	-462.5	669.1	664.9	4.23	158.351		
1,300.0	1,296.5	1,266.5	1,266.5	2.7	2.2	-143.32	403.6	-462.5	676.6	672.0	4.59	147.271		
1,400.0	1,396.0	1,366.0	1,366.0	2.9	2.4	-143.78	403.6	-462.5	684.0	679.1	4.96	137.862		
1,500.0	1,495.6	1,465.6	1,465.6	3.1	2.6	-144.23	403.6	-462.5	691.6	686.2	5.33	129.776		
1,600.0	1,595.2	1,565.2	1,565.2	3.4	2.7	-144.68	403.6	-462.5	699.1	693.4	5.70	122.755		
1,700.0	1,694.7	1,664.7	1,664.7	3.6	2.9	-145.11	403.6	-462.5	706.7	700.7	6.06	116.602		
1,800.0	1,794.3	1,764.3	1,764.3	3.8	3.1	-145.54	403.6	-462.5	714.4	707.9	6.43	111.167		
1,900.0	1,893.9	1,863.9	1,863.9	4.1	3.3	-145.95	403.6	-462.5	722.0	715.2	6.79	106.333		
2,000.0	1,993.4	1,963.4	1,963.4	4.3	3.4	-146.36	403.6	-462.5	729.7	722.6	7.15	102.006		
2,100.0	2,093.0	2,063.0	2,063.0	4.6	3.6	-146.76	403.6	-462.5	737.5	730.0	7.52	98.111		
2,200.0	2,192.6	2,162.6	2,162.6	4.8	3.8	-147.15	403.6	-462.5	745.3	737.4	7.88	94.586		
2,300.0	2,292.1	2,262.1	2,262.1	5.0	3.9	-147.53	403.6	-462.5	753.1	744.9	8.24	91.383		
2,400.0	2,391.7	2,361.7	2,361.7	5.3	4.1	-147.91	403.6	-462.5	761.0	752.4	8.60	88.459		
2,500.0	2,491.3	2,461.3	2,461.3	5.5	4.3	-148.27	403.6	-462.5	768.8	759.9	8.96	85.779		
2,600.0	2,590.8	2,560.8	2,560.8	5.8	4.5	-148.63	403.6	-462.5	776.8	767.4	9.32	83.315		
2,700.0	2,690.4	2,660.4	2,660.4	6.0	4.6	-148.98	403.6	-462.5	784.7	775.0	9.68	81.042		
2,800.0	2,790.0	2,760.0	2,760.0	6.2	4.8	-149.33	403.6	-462.5	792.7	782.6	10.04	78.939		
2,900.0	2,889.6	2,859.6	2,859.6	6.5	5.0	-149.67	403.6	-462.5	800.7	790.3	10.40	76.987		
3,000.0	2,989.1	2,959.1	2,959.1	6.7	5.2	-150.00	403.6	-462.5	808.7	798.0	10.76	75.171		
3,100.0	3,088.7	3,058.7	3,058.7	6.9	5.3	-150.32	403.6	-462.5	816.8	805.7	11.12	73.478		
3,200.0	3,188.3	3,158.3	3,158.3	7.2	5.5	-150.64	403.6	-462.5	824.9	813.4	11.47	71.895		
3,300.0	3,287.8	3,257.8	3,257.8	7.4	5.7	-150.96	403.6	-462.5	833.0	821.1	11.83	70.412		
3,400.0	3,387.4	3,357.4	3,357.4	7.7	5.9	-151.26	403.6	-462.5	841.1	828.9	12.19	69.021		
3,500.0	3,487.0	3,457.0	3,457.0	7.9	6.0	-151.56	403.6	-462.5	849.2	836.7	12.54	67.712		
3,600.0	3,586.5	3,556.5	3,556.5	8.1	6.2	-151.86	403.6	-462.5	857.4	844.5	12.90	66.480		
3,700.0	3,686.1	3,656.1	3,656.1	8.4	6.4	-152.15	403.6	-462.5	865.6	852.4	13.25	65.317		
3,800.0	3,785.7	3,755.7	3,755.7	8.6	6.6	-152.43	403.6	-462.5	873.8	860.2	13.61	64.218		
3,900.0	3,885.2	3,855.2	3,855.2	8.8	6.7	-152.71	403.6	-462.5	882.1	868.1	13.96	63.178		
4,000.0	3,984.8	3,954.8	3,954.8	9.1	6.9	-152.98	403.6	-462.5	890.4	876.0	14.32	62.192		
4,100.0	4,084.4	4,054.4	4,054.4	9.3	7.1	-153.25	403.6	-462.5	898.6	884.0	14.67	61.257		
4,200.0	4,183.9	4,153.9	4,153.9	9.6	7.3	-153.52	403.6	-462.5	906.9	891.9	15.02	60.368		
4,300.0	4,283.5	4,253.5	4,253.5	9.8	7.4	-153.77	403.6	-462.5	915.3	899.9	15.38	59.522		
4,400.0	4,383.1	4,353.1	4,353.1	10.0	7.6	-154.03	403.6	-462.5	923.6	907.9	15.73	58.716		
4,500.0	4,482.7	4,452.7	4,452.7	10.3	7.8	-154.28	403.6	-462.5	932.0	915.9	16.08	57.948		
4,600.0	4,582.2	4,552.2	4,552.2	10.5	7.9	-154.52	403.6	-462.5	940.3	923.9	16.43	57.215		
4,700.0	4,681.8	4,651.8	4,651.8	10.8	8.1	-154.76	403.6	-462.5	948.7	931.9	16.79	56.514		
4,800.0	4,781.4	4,751.4	4,751.4	11.0	8.3	-155.00	403.6	-462.5	957.1	940.0	17.14	55.844		
4,900.0	4,880.9	4,850.9	4,850.9	11.2	8.5	-155.23	403.6	-462.5	965.5	948.1	17.49	55.203		
5,000.0	4,980.5	4,950.5	4,950.5	11.5	8.6	-155.46	403.6	-462.5	974.0	956.1	17.84	54.588		

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 Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design													S17-T2N-R67W (Big Horn) - MILLER 3-17J (EXISTING) - ENCANA - NO SURVEYS		Offset Site Error:		0.0 ft				
Survey Program:													8150-Geolink MWD		Offset Well Error:		0.0 ft				
Offset				Semi Major Axis			Distance														
Reference		Offset		Reference		Offset		Highside		Offset Wellbore Centre		Between		Between		Total		Separation		Warning	
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside															
Depth	Depth	Depth	Depth			Toolface															
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)															
5,100.0	5,080.1	5,050.1	5,050.1	11.7	8.8	-155.69		403.6	-462.5	982.4	964.2	18.19	53.999								
5,200.0	5,179.6	5,149.6	5,149.6	11.9	9.0	-155.91		403.6	-462.5	990.9	972.4	18.54	53.433								
5,300.0	5,279.2	5,249.2	5,249.2	12.2	9.2	-156.12		403.6	-462.5	999.4	980.5	18.90	52.889 SF								

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - MILLER 33-17J (EXISTING) - ENCANA - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 608-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	-96.98	-91.8	-750.2	756.2					
100.0	100.0	74.0	74.0	0.1	0.1	-96.98	-91.8	-750.2	755.8	755.5	0.25	3,005.040		
200.0	200.0	174.0	174.0	0.3	0.3	-96.98	-91.8	-750.2	755.8	755.2	0.60	1,258.504		
300.0	300.0	274.0	274.0	0.5	0.5	-96.98	-91.8	-750.2	755.8	754.8	0.95	795.916 CC, ES		
400.0	400.0	374.0	374.0	0.6	0.7	172.97	-91.8	-750.2	757.5	756.2	1.30	583.538		
500.0	499.8	473.8	473.8	0.8	0.8	173.00	-91.8	-750.2	762.7	761.1	1.65	463.522		
566.2	565.8	539.8	539.8	1.0	0.9	173.04	-91.8	-750.2	768.0	766.2	1.87	409.765		
600.0	599.5	573.5	573.5	1.1	1.0	173.07	-91.8	-750.2	771.2	769.2	1.99	387.060		
700.0	699.0	670.4	670.4	1.3	1.2	173.14	-91.9	-750.3	780.5	778.1	2.34	334.027		
800.0	798.6	768.6	768.6	1.5	1.3	173.20	-92.2	-750.7	790.2	787.5	2.68	294.482		
900.0	898.2	867.7	867.6	1.7	1.5	173.25	-92.7	-751.2	799.9	796.9	3.03	263.871		
1,000.0	997.7	966.7	966.7	2.0	1.7	173.28	-93.4	-751.7	809.7	806.3	3.38	239.585		
1,100.0	1,097.3	1,065.6	1,065.6	2.2	1.9	173.29	-94.3	-752.2	819.6	815.9	3.73	219.870		
1,200.0	1,196.9	1,164.3	1,164.3	2.4	2.0	173.31	-95.2	-752.9	829.5	825.5	4.08	203.554		
1,300.0	1,296.5	1,263.0	1,263.0	2.7	2.2	173.33	-96.0	-753.6	839.6	835.2	4.42	189.827		
1,400.0	1,396.0	1,361.5	1,361.5	2.9	2.4	173.36	-96.9	-754.5	849.8	845.0	4.77	178.144		
1,500.0	1,495.6	1,459.8	1,459.7	3.1	2.6	173.39	-97.5	-755.5	860.0	854.9	5.12	168.095		
1,600.0	1,595.2	1,558.0	1,558.0	3.4	2.7	173.45	-97.8	-756.6	870.5	865.0	5.46	159.350		
1,700.0	1,694.7	1,656.3	1,656.3	3.6	2.9	173.53	-97.8	-758.0	881.0	875.2	5.81	151.670		
1,800.0	1,794.3	1,754.8	1,754.7	3.8	3.1	173.60	-97.9	-759.4	891.7	885.6	6.16	144.862		
1,900.0	1,893.9	1,853.3	1,853.2	4.1	3.2	173.66	-98.1	-760.9	902.5	896.0	6.50	138.798		
2,000.0	1,993.4	1,951.5	1,951.4	4.3	3.4	173.71	-98.5	-762.6	913.4	906.5	6.85	133.369		
2,100.0	2,093.0	2,048.3	2,048.2	4.6	3.6	173.74	-99.2	-764.3	924.5	917.3	7.19	128.531		
2,200.0	2,192.6	2,150.2	2,150.1	4.8	3.8	173.79	-99.6	-766.3	935.7	928.1	7.54	124.012		
2,300.0	2,292.1	2,251.4	2,251.2	5.0	3.9	173.98	-97.8	-768.1	946.5	938.6	7.89	119.887		
2,400.0	2,391.7	2,348.3	2,348.1	5.3	4.1	174.16	-95.9	-769.9	957.4	949.2	8.24	116.221		
2,500.0	2,491.3	2,445.2	2,444.9	5.5	4.3	174.30	-94.6	-772.0	968.6	960.0	8.58	112.879		
2,600.0	2,590.8	2,544.0	2,543.7	5.8	4.5	174.41	-93.9	-774.3	980.0	971.1	8.93	109.778		
2,700.0	2,690.4	2,666.1	2,665.7	6.0	4.7	174.67	-90.6	-775.7	990.2	980.9	9.31	106.313		
2,800.0	2,790.0	2,765.7	2,765.3	6.2	4.9	174.95	-86.7	-776.0	999.3	989.6	9.66	103.424 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - MILLER 34-17J (EXISTING) - ENCANA - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 627-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	-98.16	-110.7	-772.3	780.6					
100.0	100.0	74.0	74.0	0.1	0.1	-98.16	-110.7	-772.3	780.2	779.9	0.25	3,102.019		
200.0	200.0	174.0	174.0	0.3	0.3	-98.16	-110.7	-772.3	780.2	779.6	0.60	1,299.119		
300.0	300.0	274.0	274.0	0.5	0.5	-98.16	-110.7	-772.3	780.2	779.2	0.95	821.602 CC, ES		
400.0	400.0	374.0	374.0	0.6	0.7	171.78	-110.7	-772.3	781.9	780.6	1.30	602.315		
500.0	499.8	473.8	473.8	0.8	0.8	171.82	-110.7	-772.3	787.1	785.4	1.65	478.298		
566.2	565.8	539.8	539.8	1.0	0.9	171.86	-110.7	-772.3	792.4	790.5	1.87	422.700		
600.0	599.5	573.5	573.5	1.1	1.0	171.89	-110.7	-772.3	795.5	793.5	1.99	399.213		
700.0	699.0	671.6	671.6	1.3	1.2	171.98	-110.8	-772.3	804.7	802.4	2.34	343.995		
800.0	798.6	767.8	767.8	1.5	1.3	172.04	-111.3	-772.6	814.3	811.6	2.68	303.528		
900.0	898.2	863.6	863.6	1.7	1.5	172.09	-111.9	-773.3	824.3	821.3	3.03	272.459		
1,000.0	997.7	959.2	959.2	2.0	1.7	172.14	-112.6	-774.4	834.8	831.4	3.37	247.864		
1,100.0	1,097.3	1,056.3	1,056.2	2.2	1.8	172.19	-113.3	-776.0	845.6	841.9	3.71	227.781		
1,200.0	1,196.9	1,158.9	1,158.9	2.4	2.0	172.24	-114.0	-777.6	856.4	852.4	4.07	210.573		
1,300.0	1,296.5	1,261.7	1,261.6	2.7	2.2	172.29	-114.6	-778.7	866.8	862.4	4.42	196.034		
1,400.0	1,396.0	1,363.6	1,363.5	2.9	2.4	172.34	-115.3	-779.5	876.9	872.1	4.78	183.633		
1,500.0	1,495.6	1,461.2	1,461.1	3.1	2.6	172.39	-115.8	-780.3	886.9	881.8	5.12	173.199		
1,600.0	1,595.2	1,558.7	1,558.7	3.4	2.7	172.45	-116.2	-781.3	897.1	891.7	5.47	164.128		
1,700.0	1,694.7	1,659.0	1,658.9	3.6	2.9	172.52	-116.6	-782.5	907.6	901.8	5.82	156.048		
1,800.0	1,794.3	1,756.8	1,756.8	3.8	3.1	172.59	-116.8	-783.8	918.1	912.0	6.16	149.000		
1,900.0	1,893.9	1,857.6	1,857.5	4.1	3.3	172.67	-116.8	-785.0	928.5	922.0	6.51	142.574		
2,000.0	1,993.4	1,958.3	1,958.2	4.3	3.4	172.76	-116.6	-786.1	938.8	931.9	6.86	136.787		
2,100.0	2,093.0	2,059.4	2,059.3	4.6	3.6	172.86	-116.3	-787.1	948.9	941.7	7.21	131.527		
2,200.0	2,192.6	2,160.9	2,160.8	4.8	3.8	172.94	-116.2	-787.8	958.8	951.2	7.57	126.716		
2,300.0	2,292.1	2,262.4	2,262.3	5.0	4.0	173.00	-116.4	-788.3	968.5	960.6	7.92	122.305		
2,400.0	2,391.7	2,363.0	2,362.9	5.3	4.1	173.05	-116.9	-788.5	978.0	969.7	8.27	118.268		
2,500.0	2,491.3	2,462.4	2,462.3	5.5	4.3	173.07	-117.6	-788.7	987.5	978.9	8.62	114.581		
2,600.0	2,590.8	2,561.8	2,561.7	5.8	4.5	173.08	-118.5	-788.9	997.0	988.1	8.97	111.181 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - MILLER 43-17J (EXISTING) - SUNDANCE - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8150-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
7,250.0	7,150.0	7,128.0	7,128.0	17.3	12.4	-51.03	1,048.0	97.3	978.4	953.3	25.15	38.903		
7,300.0	7,178.5	7,156.5	7,156.5	17.6	12.5	-55.27	1,048.0	97.3	945.7	920.3	25.37	37.279		
7,350.0	7,203.3	7,181.3	7,181.3	17.9	12.5	-60.17	1,048.0	97.3	911.5	885.7	25.79	35.335		
7,400.0	7,224.2	7,202.2	7,202.2	18.2	12.6	-65.61	1,048.0	97.3	876.3	849.9	26.40	33.192		
7,450.0	7,241.1	7,219.1	7,219.1	18.6	12.6	-71.37	1,048.0	97.3	840.6	813.4	27.11	31.000		
7,500.0	7,253.8	7,231.8	7,231.8	19.1	12.6	-77.20	1,048.0	97.3	804.8	776.9	27.86	28.891		
7,550.0	7,262.3	7,240.3	7,240.3	19.5	12.6	-82.78	1,048.0	97.3	769.4	740.9	28.56	26.941		
7,600.0	7,266.5	7,244.5	7,244.5	20.0	12.6	-87.86	1,048.0	97.3	735.0	705.8	29.20	25.169		
7,623.5	7,267.0	7,245.0	7,245.0	20.2	12.6	-90.00	1,048.0	97.3	719.3	689.8	29.49	24.394		
7,700.0	7,267.0	7,245.0	7,245.0	21.0	12.6	-90.00	1,048.0	97.3	671.1	640.7	30.44	22.045		
7,800.0	7,267.0	7,245.0	7,245.0	22.2	12.6	-90.00	1,048.0	97.3	616.9	585.2	31.76	19.422		
7,900.0	7,267.0	7,245.0	7,245.0	23.4	12.6	-90.00	1,048.0	97.3	575.1	541.9	33.15	17.348		
8,000.0	7,267.0	7,245.0	7,245.0	24.6	12.6	-90.00	1,048.0	97.3	548.5	513.9	34.59	15.859		
8,099.3	7,267.0	7,245.0	7,245.0	26.0	12.6	-90.00	1,048.0	97.3	539.5	503.4	36.06	14.961 CC		
8,100.0	7,267.0	7,245.0	7,245.0	26.0	12.6	-90.00	1,048.0	97.3	539.5	503.4	36.07	14.957 ES		
8,200.0	7,267.0	7,245.0	7,245.0	27.3	12.6	-90.00	1,048.0	97.3	548.8	511.2	37.59	14.601 SF		
8,300.0	7,267.0	7,245.0	7,245.0	28.8	12.6	-90.00	1,048.0	97.3	575.6	536.5	39.13	14.710		
8,400.0	7,267.0	7,245.0	7,245.0	30.2	12.6	-90.00	1,048.0	97.3	617.6	576.9	40.70	15.175		
8,500.0	7,267.0	7,245.0	7,245.0	31.7	12.6	-90.00	1,048.0	97.3	672.0	629.7	42.29	15.890		
8,600.0	7,267.0	7,245.0	7,245.0	33.2	12.6	-90.00	1,048.0	97.3	736.1	692.2	43.90	16.766		
8,700.0	7,267.0	7,245.0	7,245.0	34.7	12.6	-90.00	1,048.0	97.3	807.4	761.9	45.53	17.736		
8,800.0	7,267.0	7,245.0	7,245.0	36.3	12.6	-90.00	1,048.0	97.3	884.4	837.2	47.16	18.751		
8,900.0	7,267.0	7,245.0	7,245.0	37.9	12.6	-90.00	1,048.0	97.3	965.5	916.7	48.81	19.782		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - MILLER 44-17J (EXISTING) - ENCANA - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 642-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	-98.76	-111.1	-721.1	730.1					
100.0	100.0	74.0	74.0	0.1	0.1	-98.76	-111.1	-721.1	729.6	729.4	0.25	2,900.990		
200.0	200.0	174.0	174.0	0.3	0.3	-98.76	-111.1	-721.1	729.6	729.0	0.60	1,214.928		
300.0	300.0	274.0	274.0	0.5	0.5	-98.76	-111.1	-721.1	729.6	728.7	0.95	768.357		
400.0	400.0	374.0	374.0	0.6	0.7	171.19	-111.1	-721.1	731.3	730.0	1.30	563.361		
500.0	499.8	473.8	473.8	0.8	0.8	171.23	-111.1	-721.1	736.5	734.9	1.65	447.549		
566.2	565.8	539.8	539.8	1.0	0.9	171.28	-111.1	-721.1	741.8	739.9	1.87	395.689		
600.0	599.5	573.5	573.5	1.1	1.0	171.32	-111.1	-721.1	744.9	742.9	1.99	373.794		
700.0	699.0	674.5	674.5	1.3	1.2	171.45	-110.7	-721.1	754.1	751.7	2.34	321.596		
800.0	798.6	773.5	773.5	1.5	1.4	171.69	-108.9	-721.2	763.1	760.4	2.69	283.224		
900.0	898.2	872.5	872.5	1.7	1.5	171.93	-107.0	-721.4	772.2	769.2	3.04	253.698		
1,000.0	997.7	971.5	971.4	2.0	1.7	172.18	-105.0	-721.7	781.4	778.0	3.39	230.287		
1,100.0	1,097.3	1,067.7	1,067.6	2.2	1.9	172.42	-103.0	-722.2	790.8	787.1	3.74	211.488		
1,200.0	1,196.9	1,163.8	1,163.7	2.4	2.0	172.66	-100.9	-723.2	800.7	796.6	4.09	195.993		
1,300.0	1,296.5	1,259.8	1,259.7	2.7	2.2	172.91	-98.6	-724.5	811.0	806.6	4.43	183.026		
1,400.0	1,396.0	1,365.3	1,365.1	2.9	2.4	173.16	-96.5	-725.9	821.3	816.6	4.79	171.550		
1,500.0	1,495.6	1,474.4	1,474.2	3.1	2.6	173.29	-95.8	-726.1	830.6	825.4	5.15	161.299		
1,600.0	1,595.2	1,583.8	1,583.6	3.4	2.8	173.31	-96.6	-724.7	838.7	833.2	5.51	152.155		
1,700.0	1,694.7	1,673.0	1,672.8	3.6	2.9	173.36	-96.7	-723.5	846.6	840.8	5.84	144.858		
1,800.0	1,794.3	1,789.8	1,789.5	3.8	3.1	173.65	-93.4	-722.6	854.8	848.5	6.23	137.285		
1,900.0	1,893.9	1,903.3	1,902.9	4.1	3.3	173.93	-90.0	-718.8	860.3	853.7	6.60	130.320		
2,000.0	1,993.4	1,991.8	1,991.4	4.3	3.5	174.00	-89.5	-715.9	866.2	859.3	6.93	125.000		
2,100.0	2,093.0	2,088.0	2,087.5	4.6	3.7	174.01	-90.0	-713.3	872.9	865.6	7.27	120.043		
2,200.0	2,192.6	2,184.7	2,184.2	4.8	3.8	174.03	-90.4	-711.2	879.9	872.3	7.61	115.560		
2,300.0	2,292.1	2,281.8	2,281.3	5.0	4.0	174.07	-90.6	-709.4	887.3	879.4	7.96	111.488		
2,400.0	2,391.7	2,378.9	2,378.4	5.3	4.2	174.12	-90.6	-707.8	895.0	886.7	8.30	107.792		
2,500.0	2,491.3	2,477.0	2,476.5	5.5	4.3	174.18	-90.4	-706.6	902.9	894.3	8.65	104.392		
2,600.0	2,590.8	2,577.2	2,576.7	5.8	4.5	174.27	-89.8	-705.4	910.9	901.9	9.00	101.205		
2,700.0	2,690.4	2,677.5	2,676.9	6.0	4.7	174.38	-88.8	-704.1	918.8	909.5	9.35	98.253		
2,800.0	2,790.0	2,780.4	2,779.8	6.2	4.9	174.52	-87.3	-702.8	926.6	916.9	9.71	95.472		
2,900.0	2,889.6	2,885.3	2,884.7	6.5	5.1	174.49	-88.6	-700.3	933.7	923.6	10.06	92.796		
3,000.0	2,989.1	2,979.8	2,979.1	6.7	5.2	174.42	-90.3	-698.3	940.9	930.5	10.40	90.467		
3,100.0	3,088.7	3,074.2	3,073.5	6.9	5.4	174.39	-91.6	-696.8	948.7	938.0	10.74	88.340		
3,200.0	3,188.3	3,168.7	3,168.0	7.2	5.6	174.38	-92.4	-695.9	957.1	946.0	11.08	86.389		
3,300.0	3,287.8	3,263.6	3,262.9	7.4	5.7	174.39	-93.1	-695.5	966.0	954.6	11.42	84.594		
3,400.0	3,387.4	3,358.4	3,357.7	7.7	5.9	174.41	-93.7	-695.6	975.3	963.6	11.76	82.945		
3,500.0	3,487.0	3,453.2	3,452.5	7.9	6.0	174.44	-94.1	-696.2	985.2	973.1	12.10	81.429		
3,600.0	3,586.5	3,548.6	3,547.9	8.1	6.2	174.49	-94.2	-697.2	995.5	983.1	12.44	80.020		
5,600.0	5,577.9	6,035.0	5,970.2	12.9	12.3	166.95	-209.7	-392.4	989.3	968.4	20.91	47.311		
5,700.0	5,677.5	6,116.9	6,042.6	13.1	12.8	165.83	-221.0	-355.8	956.3	934.9	21.41	44.674		
5,800.0	5,777.0	6,220.1	6,133.2	13.4	13.5	164.25	-236.1	-308.9	923.3	901.2	22.05	41.878		
5,900.0	5,876.6	6,291.4	6,196.3	13.6	14.0	163.09	-246.8	-277.4	892.1	869.5	22.58	39.508		
6,000.0	5,976.2	6,394.1	6,286.4	13.9	14.7	161.19	-263.8	-231.1	861.0	837.6	23.36	36.862		
6,100.0	6,075.7	6,504.0	6,381.3	14.1	15.6	158.73	-285.1	-180.0	830.0	805.7	24.33	34.115		
6,200.0	6,175.3	6,575.8	6,443.7	14.3	16.1	157.11	-297.8	-146.7	799.9	774.8	25.06	31.915		
6,300.0	6,274.9	6,683.8	6,538.1	14.6	17.0	154.76	-313.1	-96.6	769.5	743.4	26.10	29.482		
6,400.0	6,374.5	6,754.0	6,600.4	14.8	17.5	153.26	-322.1	-65.6	741.7	714.9	26.85	27.625		
6,500.0	6,474.0	6,831.6	6,669.9	15.0	18.1	151.50	-332.8	-32.7	717.1	689.4	27.72	25.869		
6,600.0	6,573.6	6,902.3	6,733.9	15.3	18.6	149.87	-343.1	-4.7	696.3	667.7	28.55	24.390		
6,700.0	6,673.2	6,973.0	6,799.5	15.5	19.0	148.43	-351.9	20.1	679.4	650.1	29.32	23.171		
6,723.4	6,696.4	6,992.1	6,817.5	15.6	19.1	148.07	-354.0	26.3	676.0	646.5	29.51	22.905		
6,750.0	6,722.9	7,013.3	6,837.5	15.6	19.3	173.87	-356.3	33.0	672.7	643.0	29.76	22.609		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - MILLER 44-17J (EXISTING) - ENCANA - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 642-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)				
6,800.0	6,772.5	7,062.9	6,884.5	15.8	19.5	-159.05	-361.4	48.0	668.9	638.7	30.19	22.158		
6,850.0	6,821.5	7,113.3	6,932.1	15.9	19.8	-148.74	-366.3	63.8	667.2	636.7	30.51	21.871		
6,851.6	6,823.0	7,114.6	6,933.3	15.9	19.8	-148.53	-366.4	64.1	667.2	636.7	30.51	21.868	CC, ES, SF	
6,900.0	6,869.5	7,149.0	6,966.0	16.0	20.0	-143.84	-369.4	74.4	669.0	638.5	30.52	21.923		
6,950.0	6,916.3	7,181.7	6,997.4	16.1	20.2	-141.11	-371.9	83.2	674.8	644.5	30.32	22.259		
7,000.0	6,961.3	7,215.4	7,030.0	16.3	20.3	-139.44	-374.1	91.3	684.7	654.7	29.96	22.853		
7,050.0	7,004.3	7,247.0	7,060.8	16.4	20.4	-138.13	-376.0	98.3	698.6	669.1	29.45	23.721		
7,100.0	7,045.0	7,281.0	7,094.1	16.6	20.6	-137.12	-377.7	104.9	716.4	687.5	28.85	24.829		
7,150.0	7,083.1	7,314.5	7,127.0	16.8	20.7	-136.12	-379.1	111.0	737.8	709.6	28.19	26.169		
7,200.0	7,118.2	7,345.6	7,157.7	17.0	20.8	-134.93	-380.3	116.4	762.8	735.2	27.53	27.707		
7,250.0	7,150.0	7,373.6	7,185.2	17.3	20.9	-133.37	-381.3	121.0	791.1	764.1	26.94	29.366		
7,300.0	7,178.5	7,396.6	7,207.9	17.6	21.0	-131.20	-382.0	124.6	822.5	796.0	26.52	31.016		
7,350.0	7,203.3	7,417.4	7,228.5	17.9	21.0	-128.44	-382.7	127.6	856.9	830.6	26.38	32.484		
7,400.0	7,224.2	7,437.0	7,247.9	18.2	21.1	-125.04	-383.3	130.4	893.9	867.3	26.59	33.618		
7,450.0	7,241.1	7,451.6	7,262.4	18.6	21.1	-120.52	-383.7	132.4	933.0	905.8	27.21	34.289		
7,500.0	7,253.8	7,461.9	7,272.6	19.1	21.1	-114.74	-383.9	133.8	974.1	945.9	28.20	34.536		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - PACE 1 (EXISTING) - TEXAS TEA OIL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 5000-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	-119.02	-357.7	-644.8	737.7					
100.0	100.0	77.0	77.0	0.1	0.1	-119.02	-357.7	-644.8	737.4	737.1	0.26	2,871.780		
200.0	200.0	177.0	177.0	0.3	0.3	-119.02	-357.7	-644.8	737.4	736.8	0.61	1,217.122		
300.0	300.0	277.0	277.0	0.5	0.5	-119.02	-357.7	-644.8	737.4	736.4	0.95	772.198 CC, ES		
400.0	400.0	377.0	377.0	0.6	0.7	150.96	-357.7	-644.8	738.9	737.6	1.30	566.536		
500.0	499.8	476.8	476.8	0.8	0.8	151.11	-357.7	-644.8	743.5	741.8	1.66	449.018		
566.2	565.8	542.8	542.8	1.0	0.9	151.26	-357.7	-644.8	748.2	746.3	1.89	395.784		
600.0	599.5	576.5	576.5	1.1	1.0	151.38	-357.7	-644.8	750.9	748.9	2.01	373.325		
700.0	699.0	676.0	676.0	1.3	1.2	151.71	-357.7	-644.8	759.1	756.7	2.37	320.226		
800.0	798.6	775.6	775.6	1.5	1.4	152.04	-357.7	-644.8	767.3	764.6	2.73	281.015		
900.0	898.2	875.2	875.2	1.7	1.5	152.36	-357.7	-644.8	775.5	772.4	3.09	250.918		
1,000.0	997.7	974.7	974.7	2.0	1.7	152.68	-357.7	-644.8	783.7	780.3	3.45	227.109		
1,100.0	1,097.3	1,074.3	1,074.3	2.2	1.9	152.99	-357.7	-644.8	792.0	788.2	3.81	207.813		
1,200.0	1,196.9	1,173.9	1,173.9	2.4	2.0	153.29	-357.7	-644.8	800.3	796.1	4.17	191.865		
1,300.0	1,296.5	1,273.5	1,273.5	2.7	2.2	153.58	-357.7	-644.8	808.6	804.1	4.53	178.468		
1,400.0	1,396.0	1,373.0	1,373.0	2.9	2.4	153.87	-357.7	-644.8	816.9	812.0	4.89	167.056		
1,500.0	1,495.6	1,472.6	1,472.6	3.1	2.6	154.15	-357.7	-644.8	825.3	820.0	5.25	157.220		
1,600.0	1,595.2	1,572.2	1,572.2	3.4	2.7	154.43	-357.7	-644.8	833.6	828.0	5.61	148.657		
1,700.0	1,694.7	1,671.7	1,671.7	3.6	2.9	154.70	-357.7	-644.8	842.0	836.1	5.97	141.135		
1,800.0	1,794.3	1,771.3	1,771.3	3.8	3.1	154.97	-357.7	-644.8	850.4	844.1	6.32	134.476		
1,900.0	1,893.9	1,870.9	1,870.9	4.1	3.3	155.23	-357.7	-644.8	858.8	852.2	6.68	128.540		
2,000.0	1,993.4	1,970.4	1,970.4	4.3	3.4	155.49	-357.7	-644.8	867.3	860.2	7.04	123.215		
2,100.0	2,093.0	2,070.0	2,070.0	4.6	3.6	155.74	-357.7	-644.8	875.7	868.3	7.40	118.413		
2,200.0	2,192.6	2,169.6	2,169.6	4.8	3.8	155.99	-357.7	-644.8	884.2	876.5	7.75	114.059		
2,300.0	2,292.1	2,269.1	2,269.1	5.0	4.0	156.23	-357.7	-644.8	892.7	884.6	8.11	110.095		
2,400.0	2,391.7	2,368.7	2,368.7	5.3	4.1	156.47	-357.7	-644.8	901.2	892.7	8.46	106.471		
2,500.0	2,491.3	2,468.3	2,468.3	5.5	4.3	156.70	-357.7	-644.8	909.7	900.9	8.82	103.144		
2,600.0	2,590.8	2,567.8	2,567.8	5.8	4.5	156.93	-357.7	-644.8	918.3	909.1	9.18	100.080		
2,700.0	2,690.4	2,667.4	2,667.4	6.0	4.7	157.15	-357.7	-644.8	926.8	917.3	9.53	97.249		
2,800.0	2,790.0	2,767.0	2,767.0	6.2	4.8	157.38	-357.7	-644.8	935.4	925.5	9.89	94.625		
2,900.0	2,889.6	2,866.6	2,866.6	6.5	5.0	157.59	-357.7	-644.8	944.0	933.7	10.24	92.187		
3,000.0	2,989.1	2,966.1	2,966.1	6.7	5.2	157.80	-357.7	-644.8	952.5	941.9	10.59	89.915		
3,100.0	3,088.7	3,065.7	3,065.7	6.9	5.4	158.01	-357.7	-644.8	961.1	950.2	10.95	87.793		
3,200.0	3,188.3	3,165.3	3,165.3	7.2	5.5	158.22	-357.7	-644.8	969.8	958.5	11.30	85.808		
3,300.0	3,287.8	3,264.8	3,264.8	7.4	5.7	158.42	-357.7	-644.8	978.4	966.7	11.65	83.945		
3,400.0	3,387.4	3,364.4	3,364.4	7.7	5.9	158.62	-357.7	-644.8	987.0	975.0	12.01	82.195		
3,500.0	3,487.0	3,464.0	3,464.0	7.9	6.0	158.81	-357.7	-644.8	995.7	983.3	12.36	80.547 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - PACE 3 (EXISTING) - TEXAS TEA OIL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 5050-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	135.09	-158.5	158.0	224.6					
100.0	100.0	80.0	80.0	0.1	0.1	135.09	-158.5	158.0	223.8	223.5	0.26	854.045		
200.0	200.0	180.0	180.0	0.3	0.3	135.09	-158.5	158.0	223.8	223.1	0.61	366.179		
300.0	300.0	280.0	280.0	0.5	0.5	135.09	-158.5	158.0	223.8	222.8	0.96	233.051		
400.0	400.0	380.0	380.0	0.6	0.7	45.35	-158.5	158.0	222.5	221.2	1.31	169.821		
500.0	499.8	479.8	479.8	0.8	0.8	46.38	-158.5	158.0	218.9	217.2	1.67	131.260		
566.2	565.8	545.8	545.8	1.0	1.0	47.47	-158.5	158.0	215.2	213.3	1.91	112.624		
600.0	599.5	579.5	579.5	1.1	1.0	48.09	-158.5	158.0	213.1	211.0	2.04	104.600		
700.0	699.0	679.0	679.0	1.3	1.2	49.99	-158.5	158.0	207.0	204.6	2.42	85.676		
800.0	798.6	778.6	778.6	1.5	1.4	52.01	-158.5	158.0	201.1	198.3	2.80	71.795		
900.0	898.2	878.2	878.2	1.7	1.5	54.15	-158.5	158.0	195.5	192.4	3.19	61.239		
1,000.0	997.7	977.7	977.7	2.0	1.7	56.41	-158.5	158.0	190.2	186.7	3.59	52.986		
1,100.0	1,097.3	1,077.3	1,077.3	2.2	1.9	58.79	-158.5	158.0	185.3	181.3	3.99	46.394		
1,200.0	1,196.9	1,176.9	1,176.9	2.4	2.1	61.30	-158.5	158.0	180.6	176.2	4.40	41.039		
1,300.0	1,296.5	1,276.5	1,276.5	2.7	2.2	63.94	-158.5	158.0	176.3	171.5	4.81	36.633		
1,400.0	1,396.0	1,376.0	1,376.0	2.9	2.4	66.70	-158.5	158.0	172.4	167.2	5.23	32.971		
1,500.0	1,495.6	1,475.6	1,475.6	3.1	2.6	69.58	-158.5	158.0	169.0	163.3	5.65	29.906		
1,600.0	1,595.2	1,575.2	1,575.2	3.4	2.7	72.57	-158.5	158.0	165.9	159.9	6.07	27.328		
1,700.0	1,694.7	1,674.7	1,674.7	3.6	2.9	75.66	-158.5	158.0	163.4	156.9	6.50	25.152		
1,800.0	1,794.3	1,774.3	1,774.3	3.8	3.1	78.84	-158.5	158.0	161.3	154.4	6.92	23.314		
1,900.0	1,893.9	1,873.9	1,873.9	4.1	3.3	82.10	-158.5	158.0	159.8	152.5	7.34	21.761		
2,000.0	1,993.4	1,973.4	1,973.4	4.3	3.4	85.40	-158.5	158.0	158.8	151.0	7.76	20.453		
2,100.0	2,093.0	2,073.0	2,073.0	4.6	3.6	88.73	-158.5	158.0	158.3	150.1	8.18	19.354		
2,137.9	2,130.7	2,110.7	2,110.7	4.7	3.7	90.00	-158.5	158.0	158.3	149.9	8.34	18.987	CC	
2,200.0	2,192.6	2,172.6	2,172.6	4.8	3.8	92.08	-158.5	158.0	158.4	149.8	8.59	18.437	ES	
2,300.0	2,292.1	2,272.1	2,272.1	5.0	4.0	95.41	-158.5	158.0	159.0	150.0	8.99	17.676		
2,400.0	2,391.7	2,371.7	2,371.7	5.3	4.1	98.70	-158.5	158.0	160.1	150.7	9.39	17.052		
2,500.0	2,491.3	2,471.3	2,471.3	5.5	4.3	101.94	-158.5	158.0	161.8	152.0	9.78	16.545		
2,600.0	2,590.8	2,570.8	2,570.8	5.8	4.5	105.10	-158.5	158.0	164.0	153.8	10.16	16.139		
2,700.0	2,690.4	2,670.4	2,670.4	6.0	4.7	108.17	-158.5	158.0	166.6	156.1	10.53	15.822		
2,800.0	2,790.0	2,770.0	2,770.0	6.2	4.8	111.13	-158.5	158.0	169.8	158.9	10.90	15.580		
2,900.0	2,889.6	2,869.6	2,869.6	6.5	5.0	113.98	-158.5	158.0	173.3	162.1	11.25	15.403		
3,000.0	2,989.1	2,969.1	2,969.1	6.7	5.2	116.71	-158.5	158.0	177.3	165.7	11.60	15.282		
3,100.0	3,088.7	3,068.7	3,068.7	6.9	5.4	119.32	-158.5	158.0	181.7	169.8	11.95	15.207		
3,200.0	3,188.3	3,168.3	3,168.3	7.2	5.5	121.80	-158.5	158.0	186.4	174.1	12.29	15.172		
3,300.0	3,287.8	3,267.8	3,267.8	7.4	5.7	124.15	-158.5	158.0	191.5	178.9	12.62	15.171	SF	
3,400.0	3,387.4	3,367.4	3,367.4	7.7	5.9	126.38	-158.5	158.0	196.9	183.9	12.95	15.197		
3,500.0	3,487.0	3,467.0	3,467.0	7.9	6.1	128.49	-158.5	158.0	202.5	189.2	13.28	15.247		
3,600.0	3,586.5	3,566.5	3,566.5	8.1	6.2	130.48	-158.5	158.0	208.4	194.8	13.61	15.317		
3,700.0	3,686.1	3,666.1	3,666.1	8.4	6.4	132.36	-158.5	158.0	214.6	200.7	13.93	15.402		
3,800.0	3,785.7	3,765.7	3,765.7	8.6	6.6	134.13	-158.5	158.0	221.0	206.7	14.26	15.499		
3,900.0	3,885.2	3,865.2	3,865.2	8.8	6.7	135.81	-158.5	158.0	227.5	213.0	14.58	15.607		
4,000.0	3,984.8	3,964.8	3,964.8	9.1	6.9	137.38	-158.5	158.0	234.3	219.4	14.90	15.723		
4,100.0	4,084.4	4,064.4	4,064.4	9.3	7.1	138.87	-158.5	158.0	241.2	226.0	15.22	15.846		
4,200.0	4,183.9	4,163.9	4,163.9	9.6	7.3	140.28	-158.5	158.0	248.3	232.8	15.54	15.973		
4,300.0	4,283.5	4,263.5	4,263.5	9.8	7.4	141.61	-158.5	158.0	255.5	239.6	15.87	16.104		
4,400.0	4,383.1	4,363.1	4,363.1	10.0	7.6	142.86	-158.5	158.0	262.9	246.7	16.19	16.237		
4,500.0	4,482.7	4,462.7	4,462.7	10.3	7.8	144.05	-158.5	158.0	270.3	253.8	16.51	16.371		
4,600.0	4,582.2	4,562.2	4,562.2	10.5	8.0	145.17	-158.5	158.0	277.9	261.1	16.84	16.507		
4,700.0	4,681.8	4,661.8	4,661.8	10.8	8.1	146.23	-158.5	158.0	285.6	268.4	17.16	16.642		
4,800.0	4,781.4	4,761.4	4,761.4	11.0	8.3	147.24	-158.5	158.0	293.3	275.9	17.48	16.778		
4,900.0	4,880.9	4,860.9	4,860.9	11.2	8.5	148.19	-158.5	158.0	301.2	283.4	17.81	16.912		

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 Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - PACE 3 (EXISTING) - TEXAS TEA OIL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 5050-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,000.0	4,980.5	4,960.5	4,960.5	11.5	8.7	149.10	-158.5	158.0	309.1	291.0	18.14	17.045		
5,100.0	5,080.1	5,050.0	5,050.0	11.7	8.8	149.87	-158.5	158.0	317.3	298.8	18.45	17.198		
5,200.0	5,179.6	5,050.0	5,050.0	11.9	8.8	149.87	-158.5	158.0	343.2	324.5	18.64	18.410		
5,300.0	5,279.2	5,050.0	5,050.0	12.2	8.8	149.87	-158.5	158.0	393.6	374.7	18.83	20.895		
5,400.0	5,378.8	5,050.0	5,050.0	12.4	8.8	149.87	-158.5	158.0	460.4	441.4	19.03	24.198		
5,500.0	5,478.3	5,050.0	5,050.0	12.7	8.8	149.87	-158.5	158.0	537.7	518.4	19.22	27.974		
5,600.0	5,577.9	5,050.0	5,050.0	12.9	8.8	149.87	-158.5	158.0	621.4	602.0	19.41	32.012		
5,700.0	5,677.5	5,050.0	5,050.0	13.1	8.8	149.87	-158.5	158.0	709.4	689.8	19.61	36.185		
5,800.0	5,777.0	5,050.0	5,050.0	13.4	8.8	149.87	-158.5	158.0	800.2	780.5	19.80	40.420		
5,900.0	5,876.6	5,050.0	5,050.0	13.6	8.8	149.87	-158.5	158.0	893.0	873.0	19.99	44.671		
6,000.0	5,976.2	5,050.0	5,050.0	13.9	8.8	149.87	-158.5	158.0	987.2	967.0	20.18	48.911		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S17-T2N-R67W (Big Horn) - STANLEY 2 (EXISTING) - GERRITY OIL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 5175-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)				
4,000.0	3,984.8	4,012.8	4,012.8	9.1	7.0	17.81	-304.1	1,276.7	993.3	979.2	14.15	70.207		
4,100.0	4,084.4	4,112.4	4,112.4	9.3	7.2	17.97	-304.1	1,276.7	984.5	970.0	14.51	67.860		
4,200.0	4,183.9	4,211.9	4,211.9	9.6	7.4	18.14	-304.1	1,276.7	975.7	960.8	14.87	65.626		
4,300.0	4,283.5	4,311.5	4,311.5	9.8	7.5	18.31	-304.1	1,276.7	966.9	951.6	15.23	63.496		
4,400.0	4,383.1	4,411.1	4,411.1	10.0	7.7	18.48	-304.1	1,276.7	958.0	942.5	15.59	61.463		
4,500.0	4,482.7	4,510.7	4,510.7	10.3	7.9	18.66	-304.1	1,276.7	949.2	933.3	15.95	59.522		
4,600.0	4,582.2	4,610.2	4,610.2	10.5	8.0	18.84	-304.1	1,276.7	940.5	924.2	16.31	57.665		
4,700.0	4,681.8	4,709.8	4,709.8	10.8	8.2	19.03	-304.1	1,276.7	931.7	915.0	16.67	55.888		
4,800.0	4,781.4	4,809.4	4,809.4	11.0	8.4	19.21	-304.1	1,276.7	922.9	905.9	17.03	54.186		
4,900.0	4,880.9	4,908.9	4,908.9	11.2	8.6	19.41	-304.1	1,276.7	914.2	896.8	17.39	52.553		
5,000.0	4,980.5	5,008.5	5,008.5	11.5	8.7	19.60	-304.1	1,276.7	905.4	887.6	17.76	50.987		
5,100.0	5,080.1	5,108.1	5,108.1	11.7	8.9	19.80	-304.1	1,276.7	896.7	878.5	18.12	49.482		
5,200.0	5,179.6	5,175.0	5,175.0	11.9	9.0	19.93	-304.1	1,276.7	888.5	870.1	18.43	48.223		
5,245.0	5,224.4	5,175.0	5,175.0	12.1	9.0	19.93	-304.1	1,276.7	887.4	868.9	18.51	47.947 CC, ES		
5,300.0	5,279.2	5,175.0	5,175.0	12.2	9.0	19.93	-304.1	1,276.7	889.1	870.5	18.61	47.778 SF		
5,400.0	5,378.8	5,175.0	5,175.0	12.4	9.0	19.93	-304.1	1,276.7	900.8	882.0	18.79	47.937		
5,500.0	5,478.3	5,175.0	5,175.0	12.7	9.0	19.93	-304.1	1,276.7	923.3	904.3	18.98	48.659		
5,600.0	5,577.9	5,175.0	5,175.0	12.9	9.0	19.93	-304.1	1,276.7	955.8	936.6	19.16	49.888		
5,700.0	5,677.5	5,175.0	5,175.0	13.1	9.0	19.93	-304.1	1,276.7	997.3	977.9	19.34	51.560		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bighorn 4K-17H-P267
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4983.0ft
Reference Site:	S17-T2N-R67W (Big Horn)	MD Reference:	WELL @ 4983.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Bighorn 4K-17H-P267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4983.0ft

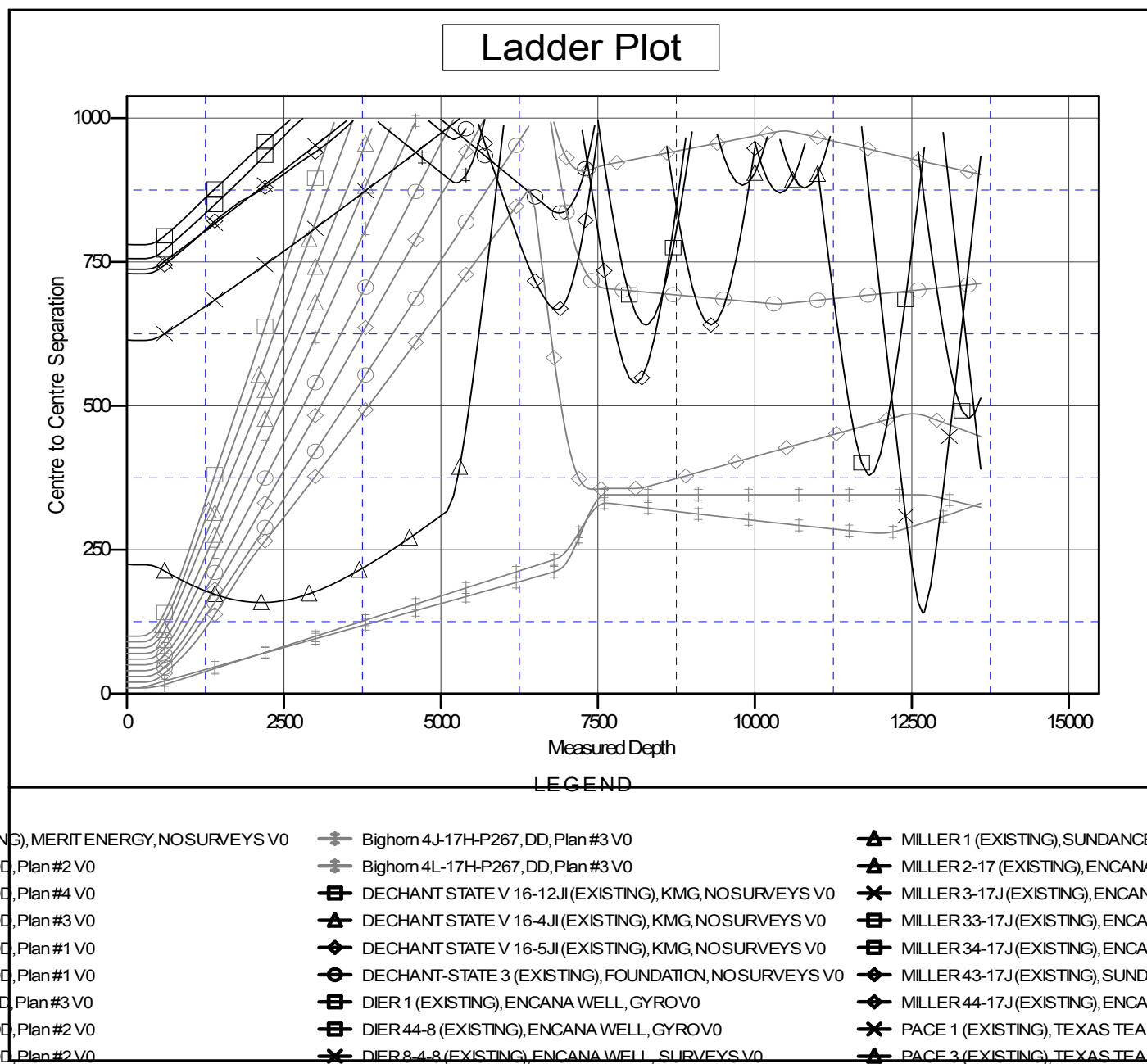
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Bighorn 4K-17H-P267

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.38°



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