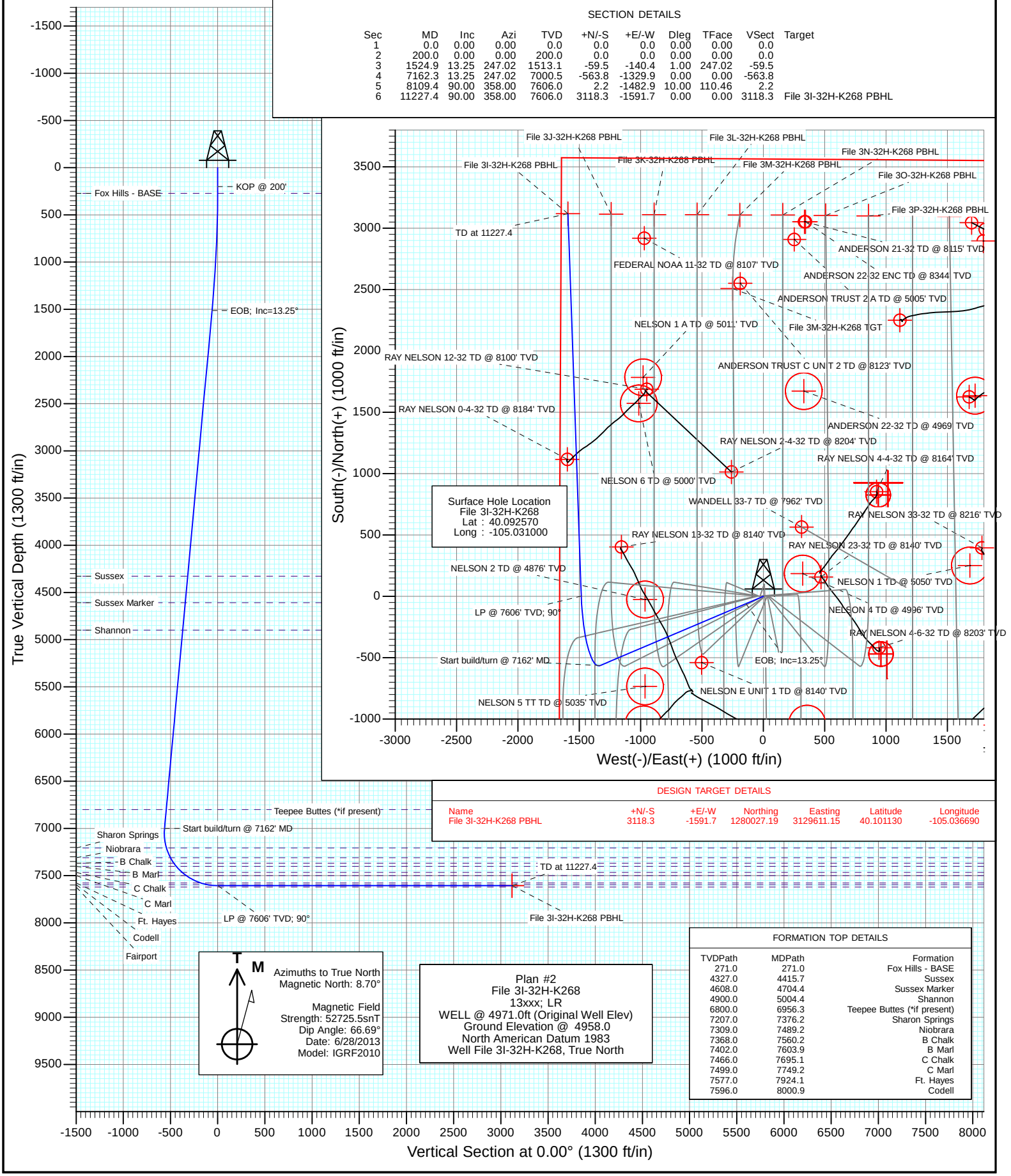
Project: DJ Wattenberg
Site: S32-T2N-R68W (File/Hwy 52)
Well: File 3I-32H-K268
Wellbore: Hz
Design: Plan #2

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1524.9	13.25	247.02	1513.1	-59.5	-140.4	1.00	247.02	-59.5	
4	7162.3	13.25	247.02	7000.5	-563.8	-1329.9	0.00	0.00	-563.8	
5	8109.4	90.00	358.00	7606.0	2.2	-1482.9	10.00	110.46	2.2	
6	11227.4	90.00	358.00	7606.0	3118.3	-1591.7	0.00	0.00	3118.3	File 3I-32H-K268 PBHL



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
File 3I-32H-K268 PBHL	3118.3	-1591.7	1280027.19	3129611.15	40.101130	-105.036690

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
271.0	271.0	Fox Hills - BASE
4327.0	4415.7	Sussex
4608.0	4704.4	Sussex Marker
4900.0	5004.4	Shannon
6800.0	6956.3	Teepee Buttes (*if present)
7207.0	7376.2	Sharon Springs
7309.0	7489.2	Niobrara
7368.0	7560.2	B Chalk
7402.0	7603.9	B Marl
7466.0	7695.1	C Chalk
7499.0	7749.2	C Marl
7577.0	7924.1	Ft. Hayes
7596.0	8000.9	Codell

T M
Azimuths to True North
Magnetic North: 8.70°

Magnetic Field
Strength: 52725.5snT
Dip Angle: 66.69°
Date: 6/28/2013
Model: IGRF2010

Plan #2
File 3I-32H-K268
13xxx; LR
WELL @ 4971.0ft (Original Well Elev)
Ground Elevation @ 4958.0
North American Datum 1983
Well File 3I-32H-K268, True North

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File/Hwy 52)	**North Reference:**	True
Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
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 S32-T2N-R68W (File/Hwy 52)

Site Position:		**Northing:**	1,275,973.93 ft	**Latitude:**	40.089950
From:	Lat/Long	**Easting:**	3,133,277.97 ft	**Longitude:**	-105.023660
Position Uncertainty:	0.0 ft	**Slot Radius:**	13.200 in	**Grid Convergence:**	0.31 °

Well File 3I-32H-K268

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,276,917.36 ft	**Latitude:**	40.092570
	+E/-W	0.0 ft	**Easting:**	3,131,219.34 ft	**Longitude:**	-105.031000
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,958.0 ft

Wellbore Hz

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/28/2013	8.71	66.69	52,726

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,524.9	13.25	247.02	1,513.1	-59.5	-140.4	1.00	1.00	0.00	247.02	
7,162.3	13.25	247.02	7,000.5	-563.8	-1,329.9	0.00	0.00	0.00	0.00	
8,109.4	90.00	358.00	7,606.0	2.2	-1,482.9	10.00	8.10	11.72	110.46	
11,227.4	90.00	358.00	7,606.0	3,118.3	-1,591.7	0.00	0.00	0.00	0.00	File 3I-32H-K268 PBH

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File/Hwy 52)	**North Reference:**	True
Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
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	KOP @ 200'
271.0	0.71	247.02	271.0	-0.2	-0.4	-0.2	1.00	1.00	Fox Hills - BASE
300.0	1.00	247.02	300.0	-0.3	-0.8	-0.3	1.00	1.00	
400.0	2.00	247.02	400.0	-1.4	-3.2	-1.4	1.00	1.00	
500.0	3.00	247.02	499.9	-3.1	-7.2	-3.1	1.00	1.00	
600.0	4.00	247.02	599.7	-5.4	-12.8	-5.4	1.00	1.00	
700.0	5.00	247.02	699.4	-8.5	-20.1	-8.5	1.00	1.00	
800.0	6.00	247.02	798.9	-12.3	-28.9	-12.3	1.00	1.00	
900.0	7.00	247.02	898.3	-16.7	-39.3	-16.7	1.00	1.00	
1,000.0	8.00	247.02	997.4	-21.8	-51.3	-21.8	1.00	1.00	
1,100.0	9.00	247.02	1,096.3	-27.5	-64.9	-27.5	1.00	1.00	
1,200.0	10.00	247.02	1,194.9	-34.0	-80.1	-34.0	1.00	1.00	
1,300.0	11.00	247.02	1,293.3	-41.1	-96.9	-41.1	1.00	1.00	
1,400.0	12.00	247.02	1,391.2	-48.9	-115.3	-48.9	1.00	1.00	
1,500.0	13.00	247.02	1,488.9	-57.3	-135.2	-57.3	1.00	1.00	
1,524.9	13.25	247.02	1,513.1	-59.5	-140.4	-59.5	1.00	1.00	EOB; Inc=13.25°
1,600.0	13.25	247.02	1,586.2	-66.2	-156.3	-66.2	0.00	0.00	
1,700.0	13.25	247.02	1,683.6	-75.2	-177.4	-75.2	0.00	0.00	
1,800.0	13.25	247.02	1,780.9	-84.1	-198.5	-84.1	0.00	0.00	
1,900.0	13.25	247.02	1,878.2	-93.1	-219.6	-93.1	0.00	0.00	
2,000.0	13.25	247.02	1,975.6	-102.0	-240.7	-102.0	0.00	0.00	
2,100.0	13.25	247.02	2,072.9	-111.0	-261.8	-111.0	0.00	0.00	
2,200.0	13.25	247.02	2,170.3	-119.9	-282.9	-119.9	0.00	0.00	
2,300.0	13.25	247.02	2,267.6	-128.9	-304.0	-128.9	0.00	0.00	
2,400.0	13.25	247.02	2,364.9	-137.8	-325.1	-137.8	0.00	0.00	
2,500.0	13.25	247.02	2,462.3	-146.8	-346.2	-146.8	0.00	0.00	
2,600.0	13.25	247.02	2,559.6	-155.7	-367.3	-155.7	0.00	0.00	
2,700.0	13.25	247.02	2,656.9	-164.7	-388.4	-164.7	0.00	0.00	
2,800.0	13.25	247.02	2,754.3	-173.6	-409.5	-173.6	0.00	0.00	
2,900.0	13.25	247.02	2,851.6	-182.5	-430.6	-182.5	0.00	0.00	
3,000.0	13.25	247.02	2,949.0	-191.5	-451.7	-191.5	0.00	0.00	
3,100.0	13.25	247.02	3,046.3	-200.4	-472.8	-200.4	0.00	0.00	
3,200.0	13.25	247.02	3,143.6	-209.4	-493.9	-209.4	0.00	0.00	
3,300.0	13.25	247.02	3,241.0	-218.3	-515.0	-218.3	0.00	0.00	
3,400.0	13.25	247.02	3,338.3	-227.3	-536.1	-227.3	0.00	0.00	
3,500.0	13.25	247.02	3,435.7	-236.2	-557.2	-236.2	0.00	0.00	
3,600.0	13.25	247.02	3,533.0	-245.2	-578.3	-245.2	0.00	0.00	
3,700.0	13.25	247.02	3,630.3	-254.1	-599.4	-254.1	0.00	0.00	
3,800.0	13.25	247.02	3,727.7	-263.1	-620.5	-263.1	0.00	0.00	
3,900.0	13.25	247.02	3,825.0	-272.0	-641.6	-272.0	0.00	0.00	
4,000.0	13.25	247.02	3,922.3	-280.9	-662.7	-280.9	0.00	0.00	
4,100.0	13.25	247.02	4,019.7	-289.9	-683.8	-289.9	0.00	0.00	
4,200.0	13.25	247.02	4,117.0	-298.8	-704.9	-298.8	0.00	0.00	
4,300.0	13.25	247.02	4,214.4	-307.8	-726.0	-307.8	0.00	0.00	
4,400.0	13.25	247.02	4,311.7	-316.7	-747.1	-316.7	0.00	0.00	
4,415.7	13.25	247.02	4,327.0	-318.1	-750.4	-318.1	0.00	0.00	Sussex
4,500.0	13.25	247.02	4,409.0	-325.7	-768.2	-325.7	0.00	0.00	
4,600.0	13.25	247.02	4,506.4	-334.6	-789.3	-334.6	0.00	0.00	
4,700.0	13.25	247.02	4,603.7	-343.6	-810.4	-343.6	0.00	0.00	
4,704.4	13.25	247.02	4,608.0	-344.0	-811.3	-344.0	0.00	0.00	Sussex Marker

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Project:	DJ Wattenberg	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File/Hwy 52)	**North Reference:**	True
Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
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	13.25	247.02	4,701.1	-352.5	-831.5	-352.5	0.00	0.00	
4,900.0	13.25	247.02	4,798.4	-361.5	-852.6	-361.5	0.00	0.00	
5,000.0	13.25	247.02	4,895.7	-370.4	-873.7	-370.4	0.00	0.00	
5,004.4	13.25	247.02	4,900.0	-370.8	-874.6	-370.8	0.00	0.00	Shannon
5,100.0	13.25	247.02	4,993.1	-379.4	-894.8	-379.4	0.00	0.00	
5,200.0	13.25	247.02	5,090.4	-388.3	-915.9	-388.3	0.00	0.00	
5,300.0	13.25	247.02	5,187.7	-397.2	-937.0	-397.2	0.00	0.00	
5,400.0	13.25	247.02	5,285.1	-406.2	-958.1	-406.2	0.00	0.00	
5,500.0	13.25	247.02	5,382.4	-415.1	-979.2	-415.1	0.00	0.00	
5,600.0	13.25	247.02	5,479.8	-424.1	-1,000.3	-424.1	0.00	0.00	
5,700.0	13.25	247.02	5,577.1	-433.0	-1,021.4	-433.0	0.00	0.00	
5,800.0	13.25	247.02	5,674.4	-442.0	-1,042.5	-442.0	0.00	0.00	
5,900.0	13.25	247.02	5,771.8	-450.9	-1,063.6	-450.9	0.00	0.00	
6,000.0	13.25	247.02	5,869.1	-459.9	-1,084.7	-459.9	0.00	0.00	
6,100.0	13.25	247.02	5,966.4	-468.8	-1,105.8	-468.8	0.00	0.00	
6,200.0	13.25	247.02	6,063.8	-477.8	-1,126.9	-477.8	0.00	0.00	
6,300.0	13.25	247.02	6,161.1	-486.7	-1,148.0	-486.7	0.00	0.00	
6,400.0	13.25	247.02	6,258.5	-495.6	-1,169.1	-495.6	0.00	0.00	
6,500.0	13.25	247.02	6,355.8	-504.6	-1,190.2	-504.6	0.00	0.00	
6,600.0	13.25	247.02	6,453.1	-513.5	-1,211.3	-513.5	0.00	0.00	
6,700.0	13.25	247.02	6,550.5	-522.5	-1,232.4	-522.5	0.00	0.00	
6,800.0	13.25	247.02	6,647.8	-531.4	-1,253.5	-531.4	0.00	0.00	
6,900.0	13.25	247.02	6,745.2	-540.4	-1,274.6	-540.4	0.00	0.00	
6,956.3	13.25	247.02	6,800.0	-545.4	-1,286.5	-545.4	0.00	0.00	Teepee Buttes (*if present)
7,000.0	13.25	247.02	6,842.5	-549.3	-1,295.7	-549.3	0.00	0.00	
7,100.0	13.25	247.02	6,939.8	-558.3	-1,316.8	-558.3	0.00	0.00	
7,162.3	13.25	247.02	7,000.5	-563.8	-1,329.9	-563.8	0.00	0.00	Start build/turn @ 7162' MD
7,200.0	12.43	263.64	7,037.2	-566.0	-1,337.9	-566.0	10.00	-2.16	
7,300.0	15.32	304.60	7,134.5	-559.7	-1,359.6	-559.7	10.00	2.88	
7,376.2	20.68	322.37	7,207.0	-543.3	-1,376.1	-543.3	10.00	7.04	Sharon Springs
7,400.0	22.61	326.14	7,229.2	-536.1	-1,381.2	-536.1	10.00	8.12	
7,489.2	30.41	336.00	7,309.0	-501.2	-1,400.0	-501.2	10.00	8.73	Niobrara
7,500.0	31.38	336.87	7,318.2	-496.1	-1,402.2	-496.1	10.00	9.08	
7,560.2	36.94	341.00	7,368.0	-464.6	-1,414.2	-464.6	10.00	9.23	B Chalk
7,600.0	40.68	343.18	7,399.0	-440.8	-1,421.9	-440.8	10.00	9.39	
7,603.9	41.05	343.38	7,402.0	-438.4	-1,422.6	-438.4	10.00	9.45	B Marl
7,695.1	49.74	347.27	7,466.0	-375.6	-1,438.9	-375.6	10.00	9.53	C Chalk
7,700.0	50.21	347.45	7,469.1	-372.0	-1,439.7	-372.0	10.00	9.60	
7,749.2	54.94	349.13	7,499.0	-333.7	-1,447.6	-333.7	10.00	9.63	C Marl
7,800.0	59.86	350.67	7,526.4	-291.6	-1,455.1	-291.6	10.00	9.67	
7,900.0	69.57	353.30	7,569.0	-202.2	-1,467.6	-202.2	10.00	9.71	
7,924.1	71.92	353.88	7,577.0	-179.5	-1,470.2	-179.5	10.00	9.74	Ft. Hayes
8,000.0	79.32	355.62	7,595.8	-106.4	-1,476.9	-106.4	10.00	9.75	
8,000.9	79.41	355.64	7,596.0	-105.5	-1,476.9	-105.5	10.00	9.76	Codell
8,100.0	89.08	357.80	7,605.9	-7.2	-1,482.6	-7.2	10.00	9.76	
8,109.4	90.00	358.00	7,606.0	2.2	-1,482.9	2.2	10.00	9.77	LP @ 7606' TVD; 90°
8,200.0	90.00	358.00	7,606.0	92.7	-1,486.1	92.7	0.00	0.00	
8,300.0	90.00	358.00	7,606.0	192.7	-1,489.5	192.7	0.00	0.00	
8,400.0	90.00	358.00	7,606.0	292.6	-1,493.0	292.6	0.00	0.00	
8,500.0	90.00	358.00	7,606.0	392.6	-1,496.5	392.6	0.00	0.00	
8,600.0	90.00	358.00	7,606.0	492.5	-1,500.0	492.5	0.00	0.00	
8,700.0	90.00	358.00	7,606.0	592.4	-1,503.5	592.4	0.00	0.00	

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Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File/Hwy 52)	**North Reference:**	True
Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
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
8,800.0	90.00	358.00	7,606.0	692.4	-1,507.0	692.4	0.00	0.00	
8,900.0	90.00	358.00	7,606.0	792.3	-1,510.5	792.3	0.00	0.00	
9,000.0	90.00	358.00	7,606.0	892.3	-1,514.0	892.3	0.00	0.00	
9,100.0	90.00	358.00	7,606.0	992.2	-1,517.5	992.2	0.00	0.00	
9,200.0	90.00	358.00	7,606.0	1,092.1	-1,521.0	1,092.1	0.00	0.00	
9,300.0	90.00	358.00	7,606.0	1,192.1	-1,524.4	1,192.1	0.00	0.00	
9,400.0	90.00	358.00	7,606.0	1,292.0	-1,527.9	1,292.0	0.00	0.00	
9,500.0	90.00	358.00	7,606.0	1,392.0	-1,531.4	1,392.0	0.00	0.00	
9,600.0	90.00	358.00	7,606.0	1,491.9	-1,534.9	1,491.9	0.00	0.00	
9,700.0	90.00	358.00	7,606.0	1,591.8	-1,538.4	1,591.8	0.00	0.00	
9,800.0	90.00	358.00	7,606.0	1,691.8	-1,541.9	1,691.8	0.00	0.00	
9,900.0	90.00	358.00	7,606.0	1,791.7	-1,545.4	1,791.7	0.00	0.00	
10,000.0	90.00	358.00	7,606.0	1,891.7	-1,548.9	1,891.7	0.00	0.00	
10,100.0	90.00	358.00	7,606.0	1,991.6	-1,552.4	1,991.6	0.00	0.00	
10,200.0	90.00	358.00	7,606.0	2,091.5	-1,555.9	2,091.5	0.00	0.00	
10,300.0	90.00	358.00	7,606.0	2,191.5	-1,559.3	2,191.5	0.00	0.00	
10,400.0	90.00	358.00	7,606.0	2,291.4	-1,562.8	2,291.4	0.00	0.00	
10,500.0	90.00	358.00	7,606.0	2,391.3	-1,566.3	2,391.3	0.00	0.00	
10,600.0	90.00	358.00	7,606.0	2,491.3	-1,569.8	2,491.3	0.00	0.00	
10,700.0	90.00	358.00	7,606.0	2,591.2	-1,573.3	2,591.2	0.00	0.00	
10,800.0	90.00	358.00	7,606.0	2,691.2	-1,576.8	2,691.2	0.00	0.00	
10,900.0	90.00	358.00	7,606.0	2,791.1	-1,580.3	2,791.1	0.00	0.00	
11,000.0	90.00	358.00	7,606.0	2,891.0	-1,583.8	2,891.0	0.00	0.00	
11,100.0	90.00	358.00	7,606.0	2,991.0	-1,587.3	2,991.0	0.00	0.00	
11,200.0	90.00	358.00	7,606.0	3,090.9	-1,590.8	3,090.9	0.00	0.00	
11,227.4	90.00	358.00	7,606.0	3,118.3	-1,591.7	3,118.3	0.00	0.00	TD at 11227.4 - File 3I-32H-K268 PBHL

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
File 3I-32H-K268 PBHL - plan hits target center - Point	0.00	0.00	7,606.0	3,118.3	-1,591.7	1,280,027.19	3,129,611.15	40.101130	-105.036690

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File/Hwy 52)	**North Reference:**	True
Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
271.0	271.0	Fox Hills - BASE			
4,415.7	4,327.0	Sussex			
4,704.4	4,608.0	Sussex Marker			
5,004.4	4,900.0	Shannon			
6,956.3	6,800.0	Teepee Buttes (*if present)			
7,376.2	7,207.0	Sharon Springs			
7,489.2	7,309.0	Niobrara			
7,560.2	7,368.0	B Chalk			
7,603.9	7,402.0	B Marl			
7,695.1	7,466.0	C Chalk			
7,749.2	7,499.0	C Marl			
7,924.1	7,577.0	Ft. Hayes			
8,000.9	7,596.0	Codell			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
200.0	200.0	0.0	0.0	KOP @ 200'
1,524.9	1,513.1	-59.5	-140.4	EOB; Inc=13.25°
7,162.3	7,000.5	-563.8	-1,329.9	Start build/turn @ 7162' MD
8,109.4	7,606.0	2.2	-1,482.9	LP @ 7606' TVD; 90°
11,227.4	7,606.0	3,118.3	-1,591.7	TD at 11227.4

EnCana Oil & Gas (USA) Inc

DJ Wattenberg
S32-T2N-R68W (File/Hwy 52)
File 3I-32H-K268
Hz
Plan #2

Anticollision Report

09 July, 2013

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Reference	Plan #2

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	**Error Model:**	Systematic Ellipse
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 500.0ft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**		

Survey Tool Program **Date** 7/9/2013

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	11,227.4	Plan #2 (Hz)	Geolink MWD	Geolink MWD

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
S32-T2N-R68W (File/Hwy 52)						
ANDERSON 21-32 (EXISTING) - ENCANA WELL - NO S						Out of range
ANDERSON 22-32 (EXISTING) - KPK WELL - NO SURV						Out of range
ANDERSON 22-32 ENC (EXISTING) - ENCANA WELL -						Out of range
ANDERSON 31-32 (EXISTING) - ENCANA WELL - PLAN						Out of range
ANDERSON 32-32 (EXISTING) - ENCANA WELL - SUR						Out of range
ANDERSON 32-7 (EXISTING) - KPK WELL - NO SURVE						Out of range
ANDERSON 41-32 (EXISTING) - ENCANA WELL - NO S						Out of range
ANDERSON 42-32 (EXISTING) - BASIN EXP WELL - NO						Out of range
ANDERSON 4-2-32 (EXISTING) - ENCANA WELL - SUR						Out of range
ANDERSON 6-4-32 (EXISTING) - ENCANA WELL - SUR						Out of range
ANDERSON TRUST 1 (EXISTING) - KPK WELL - NO S						Out of range
ANDERSON TRUST 1 A (EXISTING) - ENCANA WELL -						Out of range
ANDERSON TRUST 2 A (EXISTING) - ENCANA WELL -						Out of range
ANDERSON TRUST 32-2 (EXISTING) - ENCANA WELL						Out of range
ANDERSON TRUST 32-8 (EXISTING) - ENCANA WELL						Out of range
ANDERSON TRUST C 1 (EXISTING) - ENCANA WELL						Out of range
ANDERSON TRUST C UNIT 2 (EXISTING) - ENCANA W						Out of range
BROWN 22-5 (EXISTING) - ENCANA WELL - NO SURV						Out of range
BROWN 31-5 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
BROWN 41-5 (EXISTING) - ENCANA WELL - ENCANA						Out of range
BROWN 5-3 (EXISTING) - ENCANA WELL - NO SURVE						Out of range
BROWN 5-5 (EXISTING) - ENCANA WELL - NO SURVE						Out of range
BROWN C UNIT 1 (EXISTING) - ENCANA WELL - NO S						Out of range
BROWN C UNIT 2 (EXISTING) - ENCANA WELL - NO S						Out of range
BULTHAUP 39-6 (EXISTING) - KERR-MCGEE WELL - S						Out of range
BULTHAUP 40-6 (EXISTING) - KERR-MCGEE WELL - S						Out of range
CANINO 1-X (EXISTING) - ENCANA WELL - NO SURVE						Out of range
CANINO 2 (EXISTING) - HUGHES CW WELL - NO SUR						Out of range
CANINO 3 (EXISTING) - HUGHES CW WELL - NO SUR						Out of range
FEDERAL NOAA 11-32 (EXISTING) - ENCANA WELL - N						Out of range
File 3A-32H-K268 - Hz - Plan #2	200.0	199.0	61.6	60.9	94.546	CC
File 3A-32H-K268 - Hz - Plan #2	600.0	594.9	62.1	60.1	30.306	ES
File 3A-32H-K268 - Hz - Plan #2	7,200.0	7,261.9	283.3	231.4	5.452	SF
File 3B-32H-K268 - Hz - Plan #1	710.6	705.6	51.4	48.9	20.859	CC
File 3B-32H-K268 - Hz - Plan #1	800.0	794.2	51.7	48.8	18.394	ES
File 3B-32H-K268 - Hz - Plan #1	7,800.0	7,877.9	104.5	74.3	3.457	SF
File 3C-32H-K268 - Hz - Plan #1	1,186.4	1,180.4	30.9	26.2	6.553	CC
File 3C-32H-K268 - Hz - Plan #1	1,300.0	1,293.7	31.4	25.9	5.724	ES
File 3C-32H-K268 - Hz - Plan #1	1,600.0	1,593.0	37.4	29.6	4.791	SF
File 3D-32H-K268 - Hz - Plan #1	833.7	830.1	28.9	25.9	9.653	CC, ES
File 3D-32H-K268 - Hz - Plan #1	1,000.0	995.4	32.4	28.6	8.532	SF
File 3E-32H-K268 - Hz - Plan #1	751.0	749.9	13.8	11.1	5.147	CC, ES
File 3E-32H-K268 - Hz - Plan #1	800.0	798.6	14.5	11.6	5.021	SF
File 3F-32H-K268 - Hz - Plan #1	699.5	698.9	13.2	10.7	5.315	CC
File 3F-32H-K268 - Hz - Plan #1	700.0	699.4	13.2	10.7	5.311	ES, SF
File 3G-32H-K268 - Hz - Plan #1	641.4	641.1	7.1	4.8	3.135	CC, ES, SF
File 3H-32H-K268 - Hz - Plan #1	532.1	532.0	7.9	6.1	4.314	CC, ES, SF
File 3J-32H-K268 - Hz - Plan #1	200.0	200.0	6.7	6.0	10.232	CC, ES
File 3J-32H-K268 - Hz - Plan #1	1,500.0	1,502.4	19.6	14.0	3.460	SF
File 3K-32H-K268 - Hz - Plan #1	200.0	200.0	11.2	10.5	17.144	CC, ES
File 3K-32H-K268 - Hz - Plan #1	1,300.0	1,303.0	43.8	39.0	8.992	SF
File 3L-32H-K268 - Hz - Plan #1	200.0	200.0	14.5	13.8	22.147	CC, ES
File 3L-32H-K268 - Hz - Plan #1	600.0	600.3	26.6	24.5	12.971	SF

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
S32-T2N-R68W (File/Hwy 52)						
File 3M-32H-K268 - Hz - Plan #1	200.0	200.0	30.8	30.1	47.147	CC, ES
File 3M-32H-K268 - Hz - Plan #1	800.0	800.2	50.8	47.9	17.261	SF
File 3N-32H-K268 - Hz - Plan #1	200.0	200.0	33.8	33.1	51.735	CC, ES
File 3N-32H-K268 - Hz - Plan #1	700.0	698.8	56.4	54.0	23.084	SF
File 3O-32H-K268 - Hz - Plan #1	200.0	200.0	39.2	38.5	60.005	CC, ES
File 3O-32H-K268 - Hz - Plan #1	600.0	597.5	58.7	56.7	28.427	SF
File 3P-32H-K268 - Hz - Plan #1	200.0	200.0	44.9	44.3	68.804	CC, ES
File 3P-32H-K268 - Hz - Plan #1	600.0	596.3	68.6	66.5	33.230	SF
FOSTER 33-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 43-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 4-5 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
FOSTER 4-6-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 6-4-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 6-4-5X (EXISTING) - ENCANA WELL - SURVE						Out of range
FOSTER 6-8-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 8-8-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER E UNIT 1 (EXISTING) - ENCANA WELL - NO S						Out of range
GENE 11-5 (EXISTING) - KERR-MCGEE WELL - NO SU						Out of range
HIGHLAND 21-5 (EXISTING) - KPK WELL - NO SURVE						Out of range
HOPE 31-5 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
Hwy 52 4A-32H-O268 - Hz - Plan #1						Out of range
Hwy 52 4B-32H-O268 - Hz - Plan #1						Out of range
Hwy 52 4C-32H-O268 - Hz - Plan #1						Out of range
Hwy 52 4D-32H-O268 - Hz - Plan #1						Out of range
Hwy 52 4E-32H-O268 - Hz - Plan #1						Out of range
Hwy 52 4F-32H-O268 - Hz - Plan #1						Out of range
Hwy 52 4G-32H-O268 - Hz - Plan #1						Out of range
Hwy 52 4H-32H-O268 - Hz - Plan #1						Out of range
Hwy 52 4I-32H-O268 - Hz - Plan #1						Out of range
Hwy 52 4J-32H-O268 - Hz - Plan #1						Out of range
Hwy 52 4K-32H-O268 - Hz - Plan #1						Out of range
Hwy 52 4L-32H-O268 - Hz - Plan #1						Out of range
Hwy 52 4M-32H-O268 - Hz - Plan #1						Out of range
Hwy 52 4N-32H-O268 - Hz - Plan #1						Out of range
Hwy 52 4O-32H-O268 - Hz - Plan #1						Out of range
Hwy 52 4P-32H-O268 - Hz - Plan #1						Out of range
LAURIE 32-5 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
NATALIE 33-5 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
NELSON 1 (EXISTING) - TEXAS TEA WELL - NO SURV						Out of range
NELSON 1 A (EXISTING) - TEXAS TEA WELL - NO SUR						Out of range
NELSON 2 (EXISTING) - TEXAS TEA WELL - NO SURV	4,773.6	4,647.3	352.6	326.4	13.415	CC
NELSON 2 (EXISTING) - TEXAS TEA WELL - NO SURV	4,800.0	4,673.1	352.7	326.3	13.336	ES
NELSON 2 (EXISTING) - TEXAS TEA WELL - NO SURV	5,000.0	4,867.7	356.4	328.9	12.953	SF
NELSON 3 (EXISTING) - TEXAS TEA WELL - NO SURV						Out of range
NELSON 4 (EXISTING) - TEXAS TEA WELL - NO SURV	200.0	199.0	371.5	370.9	552.158	CC, ES
NELSON 4 (EXISTING) - TEXAS TEA WELL - NO SURV	1,400.0	1,390.2	496.0	491.2	103.177	SF
NELSON 5 (EXISTING) - VESSELS WELL - NO SURVE						Out of range
NELSON 5 TT (EXISTING) - TEXAS TEA WELL - NO SU	5,208.5	5,035.0	350.5	323.9	13.189	CC, ES, SF
NELSON 6 (EXISTING) - VESSELS WELL - NO SURVE						Out of range
NELSON E UNIT 1 (EXISTING) - ENCANA WELL - NO S	3,797.5	3,714.2	300.9	280.6	14.797	CC
NELSON E UNIT 1 (EXISTING) - ENCANA WELL - NO S	3,800.0	3,716.7	300.9	280.5	14.786	ES
NELSON E UNIT 1 (EXISTING) - ENCANA WELL - NO S	4,100.0	4,008.7	308.8	286.9	14.102	SF
NELSON E UNIT 2 (EXISTING) - ENCANA WELL - NO S						Out of range

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
S32-T2N-R68W (File/Hwy 52)						
PAQUETTE 13-5 (EXISTING) - KERR-MCGEE WELL - N						Out of range
PAQUETTE 14-5 (EXISTING) - KERR-MCGEE WELL - N						Out of range
RAY NELSON 0-4-32 (EXISTING) - ENCANA WELL - NO	9,224.3	7,673.7	76.8	34.2	1.803	CC, ES, SF
RAY NELSON 12-32 (EXISTING) - ENCANA WELL - NO						Out of range
RAY NELSON 13-32 (EXISTING) - ENCANA WELL - SU	3,659.7	3,627.6	294.4	274.0	14.409	CC
RAY NELSON 13-32 (EXISTING) - ENCANA WELL - SU	3,700.0	3,666.1	294.6	273.9	14.238	ES
RAY NELSON 13-32 (EXISTING) - ENCANA WELL - SU	8,500.0	7,764.9	333.8	292.3	8.055	SF
RAY NELSON 14-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 23-32 (EXISTING) - ENCANA WELL - NO	200.0	103.0	496.0	495.5	979.655	CC, ES
RAY NELSON 23-32 (EXISTING) - ENCANA WELL - NO	400.0	303.0	499.5	498.3	414.864	SF
RAY NELSON 24-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 2-4-32 (EXISTING) - ENCANA WELL - NO						Out of range
RAY NELSON 33-32 (EXISTING) - ENCANA WELL - EN						Out of range
RAY NELSON 34-32 (EXISTING) - ENCANA WELL - EN						Out of range
RAY NELSON 44-32 (EXISTING) - ENCANA WELL - EN						Out of range
RAY NELSON 4-4-32 (EXISTING) - ENCANA WELL - SU	125.7	128.7	499.3	498.9	1,264.445	CC, ES
RAY NELSON 4-4-32 (EXISTING) - ENCANA WELL - SU	200.0	195.9	499.8	499.2	779.378	SF
RAY NELSON 4-6-32 (EXISTING) - ENCANA WELL - SU	189.1	192.1	499.6	499.0	812.492	CC
RAY NELSON 4-6-32 (EXISTING) - ENCANA WELL - SU	200.0	201.9	499.6	499.0	767.345	ES, SF
RAY NELSON 4-8-32 (EXISTING) - ENCANA WELL - PL						Out of range
RAY NELSON 6-8-32 (EXISTING) - ENCANA WELL - PL						Out of range
Ray Nelson 7-8-32 - DD - Plan #1						Out of range
RAY NELSON 8-4-32 (EXISTING) - ENCANA WELL - PL						Out of range
RAY NELSON 8-6-32 (EXISTING) - ENCANA WELL - PL						Out of range
RAY NELSON 8-8-32 (EXISTING) - ENCANA WELL - SU						Out of range
SCHRINER 11-5 (EXISTING) - KERR-MCGEE WELL - N						Out of range
SCHRINER 12-5 (EXISTING) - KERR-MCGEE WELL - N						Out of range
WANDELL 33-7 (EXISTING) - ENCANA WELL - Plan #1						Out of range
WANDELL 41-7 (EXISTING) - ENCANA WELL - Plan #1						Out of range
WANDELL 42-7 (EXISTING) - ENCANA WELL - Plan #1						Out of range
WANDELL 43-7 (EXISTING) - ENCANA WELL - Plan #1						Out of range

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3A-32H-K268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-61.6	61.6				
100.0	100.0	99.0	99.0	0.2	0.2	-90.00	0.0	-61.6	61.6	61.2	0.30	203.695	
200.0	200.0	199.0	199.0	0.3	0.3	-90.00	0.0	-61.6	61.6	60.9	0.65	94.546	CC
300.0	300.0	298.0	298.0	0.5	0.5	23.12	-0.2	-62.4	61.6	60.6	1.00	61.670	
400.0	400.0	396.9	396.9	0.7	0.7	23.52	-0.8	-64.8	61.7	60.3	1.35	45.797	
500.0	499.9	495.9	495.8	0.9	0.9	24.19	-1.7	-69.0	61.9	60.2	1.70	36.457	
600.0	599.7	594.9	594.5	1.1	1.1	25.11	-3.1	-74.8	62.1	60.1	2.05	30.306	ES
700.0	699.4	693.8	693.2	1.3	1.3	26.29	-4.8	-82.3	62.5	60.1	2.41	25.948	
800.0	798.9	792.8	791.7	1.5	1.5	27.70	-6.9	-91.4	63.0	60.2	2.78	22.692	
900.0	898.3	891.7	890.0	1.8	1.7	29.34	-9.4	-102.2	63.7	60.5	3.16	20.157	
1,000.0	997.4	990.6	988.1	2.0	2.0	31.18	-12.3	-114.6	64.5	60.9	3.56	18.115	
1,100.0	1,096.3	1,089.6	1,086.0	2.3	2.3	33.21	-15.6	-128.7	65.5	61.5	3.99	16.421	
1,200.0	1,194.9	1,188.5	1,183.6	2.7	2.6	35.40	-19.2	-144.4	66.7	62.3	4.45	14.981	
1,300.0	1,293.3	1,287.4	1,280.9	3.0	3.0	37.72	-23.3	-161.8	68.2	63.2	4.97	13.733	
1,400.0	1,391.2	1,386.3	1,377.9	3.4	3.3	40.14	-27.7	-180.8	69.9	64.4	5.53	12.636	
1,500.0	1,488.9	1,485.2	1,474.5	3.8	3.8	42.63	-32.5	-201.4	71.9	65.8	6.17	11.663	
1,600.0	1,586.2	1,584.1	1,570.7	4.2	4.2	44.90	-37.6	-223.6	74.6	67.8	6.86	10.881	
1,700.0	1,683.6	1,683.8	1,667.4	4.7	4.6	46.54	-43.1	-247.1	78.3	70.7	7.56	10.356	
1,800.0	1,780.9	1,783.7	1,764.3	5.1	5.1	48.03	-48.6	-270.7	82.0	73.8	8.29	9.901	
1,900.0	1,878.2	1,883.6	1,861.2	5.5	5.5	49.38	-54.1	-294.3	85.8	76.8	9.03	9.504	
2,000.0	1,975.6	1,983.5	1,958.2	5.9	6.0	50.62	-59.5	-317.9	89.7	79.9	9.80	9.156	
2,100.0	2,072.9	2,083.4	2,055.1	6.4	6.4	51.76	-65.0	-341.5	93.6	83.0	10.57	8.850	
2,200.0	2,170.3	2,183.3	2,152.0	6.8	6.9	52.81	-70.5	-365.1	97.5	86.1	11.36	8.581	
2,300.0	2,267.6	2,283.2	2,248.9	7.3	7.4	53.77	-76.0	-388.7	101.5	89.3	12.16	8.341	
2,400.0	2,364.9	2,383.1	2,345.9	7.7	7.8	54.66	-81.5	-412.3	105.4	92.5	12.97	8.128	
2,500.0	2,462.3	2,483.0	2,442.8	8.1	8.3	55.49	-86.9	-435.9	109.4	95.7	13.79	7.938	
2,600.0	2,559.6	2,583.0	2,539.7	8.6	8.7	56.26	-92.4	-459.5	113.5	98.9	14.61	7.767	
2,700.0	2,656.9	2,682.9	2,636.6	9.0	9.2	56.97	-97.9	-483.1	117.5	102.1	15.44	7.612	
2,800.0	2,754.3	2,782.8	2,733.6	9.4	9.7	57.64	-103.4	-506.7	121.6	105.3	16.27	7.473	
2,900.0	2,851.6	2,882.7	2,830.5	9.9	10.1	58.27	-108.9	-530.3	125.7	108.5	17.11	7.346	
3,000.0	2,949.0	2,982.6	2,927.4	10.3	10.6	58.85	-114.3	-553.9	129.7	111.8	17.95	7.230	
3,100.0	3,046.3	3,082.5	3,024.3	10.8	11.1	59.40	-119.8	-577.5	133.8	115.1	18.79	7.124	
3,200.0	3,143.6	3,182.4	3,121.3	11.2	11.5	59.92	-125.3	-601.1	138.0	118.3	19.63	7.027	
3,300.0	3,241.0	3,282.3	3,218.2	11.7	12.0	60.40	-130.8	-624.7	142.1	121.6	20.48	6.938	
3,400.0	3,338.3	3,382.2	3,315.1	12.1	12.4	60.86	-136.3	-648.3	146.2	124.9	21.33	6.855	
3,500.0	3,435.7	3,482.1	3,412.0	12.5	12.9	61.30	-141.8	-671.9	150.4	128.2	22.18	6.779	
3,600.0	3,533.0	3,582.0	3,509.0	13.0	13.4	61.71	-147.2	-695.5	154.5	131.5	23.03	6.708	
3,700.0	3,630.3	3,681.9	3,605.9	13.4	13.8	62.10	-152.7	-719.1	158.7	134.8	23.89	6.643	
3,800.0	3,727.7	3,781.8	3,702.8	13.9	14.3	62.47	-158.2	-742.7	162.8	138.1	24.74	6.581	
3,900.0	3,825.0	3,881.8	3,799.7	14.3	14.8	62.82	-163.7	-766.3	167.0	141.4	25.60	6.524	
4,000.0	3,922.3	3,981.7	3,896.7	14.7	15.2	63.15	-169.2	-789.9	171.2	144.7	26.46	6.471	
4,100.0	4,019.7	4,081.6	3,993.6	15.2	15.7	63.47	-174.6	-813.5	175.4	148.1	27.32	6.420	
4,200.0	4,117.0	4,181.5	4,090.5	15.6	16.2	63.77	-180.1	-837.2	179.6	151.4	28.17	6.373	
4,300.0	4,214.4	4,281.4	4,187.4	16.1	16.6	64.06	-185.6	-860.8	183.8	154.7	29.04	6.329	
4,400.0	4,311.7	4,381.3	4,284.4	16.5	17.1	64.34	-191.1	-884.4	188.0	158.1	29.90	6.287	
4,500.0	4,409.0	4,481.2	4,381.3	17.0	17.6	64.60	-196.6	-908.0	192.2	161.4	30.76	6.248	
4,600.0	4,506.4	4,581.1	4,478.2	17.4	18.0	64.86	-202.0	-931.6	196.4	164.7	31.62	6.210	
4,700.0	4,603.7	4,681.0	4,575.1	17.8	18.5	65.10	-207.5	-955.2	200.6	168.1	32.48	6.175	
4,800.0	4,701.1	4,780.9	4,672.1	18.3	19.0	65.33	-213.0	-978.8	204.8	171.4	33.34	6.142	
4,900.0	4,798.4	4,880.8	4,769.0	18.7	19.4	65.55	-218.5	-1,002.4	209.0	174.8	34.21	6.110	
5,000.0	4,895.7	4,980.7	4,865.9	19.2	19.9	65.77	-224.0	-1,026.0	213.2	178.2	35.07	6.080	
5,100.0	4,993.1	5,080.6	4,962.9	19.6	20.4	65.97	-229.4	-1,049.6	217.5	181.5	35.94	6.051	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3A-32H-K268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,090.4	5,180.6	5,059.8	20.1	20.8	66.17	-234.9	-1,073.2	221.7	184.9	36.80	6.024	
5,300.0	5,187.7	5,280.5	5,156.7	20.5	21.3	66.36	-240.4	-1,096.8	225.9	188.2	37.66	5.998	
5,400.0	5,285.1	5,380.4	5,253.6	21.0	21.8	66.54	-245.9	-1,120.4	230.1	191.6	38.53	5.973	
5,500.0	5,382.4	5,480.3	5,350.6	21.4	22.2	66.72	-251.4	-1,144.0	234.4	195.0	39.39	5.949	
5,600.0	5,479.8	5,580.2	5,447.5	21.8	22.7	66.89	-256.9	-1,167.6	238.6	198.3	40.26	5.926	
5,700.0	5,577.1	5,680.1	5,544.4	22.3	23.2	67.06	-262.3	-1,191.2	242.8	201.7	41.13	5.905	
5,800.0	5,674.4	5,780.0	5,641.3	22.7	23.6	67.22	-267.8	-1,214.8	247.1	205.1	41.99	5.884	
5,900.0	5,771.8	5,879.9	5,738.3	23.2	24.1	67.37	-273.3	-1,238.4	251.3	208.5	42.86	5.864	
6,000.0	5,869.1	5,979.8	5,835.2	23.6	24.6	67.52	-278.8	-1,262.0	255.6	211.8	43.72	5.845	
6,100.0	5,966.4	6,079.7	5,932.1	24.1	25.0	67.66	-284.3	-1,285.6	259.8	215.2	44.59	5.826	
6,200.0	6,063.8	6,179.6	6,029.0	24.5	25.5	67.80	-289.7	-1,309.2	264.1	218.6	45.46	5.809	
6,300.0	6,161.1	6,279.5	6,126.0	24.9	26.0	67.94	-295.2	-1,332.8	268.3	222.0	46.32	5.792	
6,400.0	6,258.5	6,379.4	6,222.9	25.4	26.5	68.07	-300.7	-1,356.4	272.5	225.4	47.19	5.775	
6,500.0	6,355.8	6,479.4	6,319.8	25.8	26.9	68.19	-306.2	-1,380.0	276.8	228.7	48.06	5.760	
6,600.0	6,453.1	6,579.3	6,416.7	26.3	27.4	68.32	-311.7	-1,403.6	281.0	232.1	48.92	5.745	
6,700.0	6,550.5	6,679.2	6,513.7	26.7	27.9	68.44	-317.1	-1,427.2	285.3	235.5	49.79	5.730	
6,800.0	6,647.8	6,779.1	6,610.6	27.2	28.3	68.55	-322.6	-1,450.8	289.6	238.9	50.66	5.716	
6,900.0	6,745.2	6,879.0	6,707.5	27.6	28.8	68.66	-328.1	-1,474.4	293.8	242.3	51.53	5.702	
7,000.0	6,842.5	6,978.9	6,804.4	28.1	29.3	68.77	-333.6	-1,498.0	298.1	245.7	52.39	5.689	
7,100.0	6,939.8	7,111.0	6,932.0	28.5	29.9	68.10	-347.0	-1,529.0	299.5	246.3	53.21	5.629	
7,200.0	7,037.2	7,261.9	7,070.1	28.9	30.8	45.22	-396.3	-1,562.3	283.3	231.4	51.97	5.452	SF
7,300.0	7,134.5	7,374.9	7,162.9	29.3	31.5	-10.68	-456.6	-1,584.4	249.0	204.7	44.38	5.611	
7,400.0	7,229.2	7,443.1	7,212.7	29.5	31.9	-48.12	-501.7	-1,596.1	218.2	183.5	34.74	6.282	
7,452.8	7,277.1	7,464.7	7,227.3	29.6	32.1	-59.85	-517.2	-1,599.6	212.8	181.1	31.76	6.700	
7,500.0	7,318.2	7,477.4	7,235.7	29.6	32.1	-66.36	-526.5	-1,601.5	217.5	187.0	30.53	7.124	
7,600.0	7,399.0	7,488.7	7,243.0	29.7	32.2	-70.16	-535.1	-1,603.2	256.5	225.7	30.80	8.330	
7,700.0	7,469.1	7,485.1	7,240.7	29.8	32.2	-63.36	-532.3	-1,602.7	322.5	289.5	33.07	9.752	
7,800.0	7,526.4	7,471.4	7,231.8	29.8	32.1	-50.06	-522.1	-1,600.6	400.6	366.8	33.86	11.832	
7,900.0	7,569.0	7,450.0	7,217.4	29.8	32.0	-35.73	-506.6	-1,597.2	482.1	451.8	30.28	15.920	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3B-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-86.27	3.6	-56.0	56.1				
100.0	100.0	99.0	99.0	0.2	0.2	-86.27	3.6	-56.0	56.1	55.8	0.30	185.570	
200.0	200.0	199.0	199.0	0.3	0.3	-86.27	3.6	-56.0	56.1	55.4	0.65	86.133	
300.0	300.0	299.0	299.0	0.5	0.5	27.11	3.6	-56.0	55.3	54.3	1.00	55.285	
400.0	400.0	398.0	398.0	0.7	0.7	28.40	3.7	-56.8	53.8	52.5	1.35	39.914	
500.0	499.9	497.1	497.1	0.9	0.8	30.64	4.0	-59.3	52.6	50.9	1.70	30.956	
600.0	599.7	596.1	596.0	1.1	1.0	33.87	4.4	-63.6	51.7	49.7	2.06	25.170	
700.0	699.4	695.2	694.9	1.3	1.2	38.06	4.9	-69.5	51.4	48.9	2.42	21.205	
710.6	709.9	705.6	705.3	1.3	1.2	38.56	5.0	-70.2	51.4	48.9	2.46	20.859 CC	
800.0	798.9	794.2	793.6	1.5	1.4	43.11	5.6	-77.2	51.7	48.8	2.81	18.394 ES	
900.0	898.3	893.2	892.2	1.8	1.7	48.83	6.5	-86.5	52.8	49.6	3.23	16.368	
1,000.0	997.4	992.2	990.5	2.0	1.9	54.91	7.5	-97.5	55.0	51.3	3.69	14.903	
1,100.0	1,096.3	1,091.1	1,088.6	2.3	2.2	61.02	8.7	-110.2	58.4	54.2	4.22	13.854	
1,200.0	1,194.9	1,189.9	1,186.4	2.7	2.5	66.88	10.1	-124.6	63.1	58.2	4.81	13.121	
1,300.0	1,293.3	1,288.7	1,283.8	3.0	2.8	72.24	11.6	-140.7	69.0	63.5	5.46	12.629	
1,400.0	1,391.2	1,387.4	1,380.9	3.4	3.1	77.01	13.2	-158.4	76.2	70.0	6.18	12.316	
1,500.0	1,488.9	1,486.7	1,478.3	3.8	3.5	81.47	15.0	-177.3	84.2	77.3	6.96	12.099	
1,600.0	1,586.2	1,586.1	1,575.9	4.2	3.8	85.94	16.7	-196.4	92.6	84.9	7.77	11.922	
1,700.0	1,683.6	1,685.5	1,673.5	4.7	4.2	89.69	18.5	-215.4	101.5	93.0	8.58	11.830	
1,800.0	1,780.9	1,784.9	1,771.0	5.1	4.5	92.84	20.3	-234.4	110.8	101.4	9.39	11.797	
1,900.0	1,878.2	1,884.3	1,868.6	5.5	4.9	95.49	22.1	-253.4	120.3	110.1	10.20	11.802	
2,000.0	1,975.6	1,983.7	1,966.1	5.9	5.3	97.75	23.8	-272.4	130.1	119.1	11.00	11.830	
2,100.0	2,072.9	2,083.1	2,063.7	6.4	5.7	99.69	25.6	-291.4	140.0	128.2	11.79	11.874	
2,200.0	2,170.3	2,182.5	2,161.2	6.8	6.0	101.38	27.4	-310.4	150.1	137.5	12.58	11.928	
2,300.0	2,267.6	2,281.9	2,258.8	7.3	6.4	102.85	29.2	-329.4	160.3	146.9	13.37	11.986	
2,400.0	2,364.9	2,381.3	2,356.3	7.7	6.8	104.14	30.9	-348.4	170.5	156.4	14.16	12.047	
2,500.0	2,462.3	2,480.7	2,453.9	8.1	7.2	105.29	32.7	-367.4	180.9	165.9	14.94	12.109	
2,600.0	2,559.6	2,580.1	2,551.4	8.6	7.5	106.31	34.5	-386.4	191.3	175.6	15.72	12.171	
2,700.0	2,656.9	2,679.5	2,649.0	9.0	7.9	107.23	36.3	-405.4	201.8	185.3	16.49	12.232	
2,800.0	2,754.3	2,778.9	2,746.5	9.4	8.3	108.06	38.0	-424.4	212.3	195.0	17.27	12.291	
2,900.0	2,851.6	2,878.3	2,844.1	9.9	8.7	108.81	39.8	-443.4	222.8	204.8	18.05	12.348	
3,000.0	2,949.0	2,977.7	2,941.6	10.3	9.0	109.49	41.6	-462.4	233.4	214.6	18.82	12.403	
3,100.0	3,046.3	3,077.1	3,039.2	10.8	9.4	110.11	43.4	-481.5	244.0	224.4	19.59	12.456	
3,200.0	3,143.6	3,176.5	3,136.7	11.2	9.8	110.68	45.1	-500.5	254.7	234.3	20.36	12.507	
3,300.0	3,241.0	3,275.9	3,234.3	11.7	10.2	111.21	46.9	-519.5	265.3	244.2	21.13	12.556	
3,400.0	3,338.3	3,375.3	3,331.8	12.1	10.5	111.69	48.7	-538.5	276.0	254.1	21.90	12.603	
3,500.0	3,435.7	3,474.7	3,429.4	12.5	10.9	112.14	50.5	-557.5	286.7	264.0	22.67	12.648	
3,600.0	3,533.0	3,574.1	3,526.9	13.0	11.3	112.55	52.2	-576.5	297.4	274.0	23.44	12.691	
3,700.0	3,630.3	3,673.5	3,624.5	13.4	11.7	112.94	54.0	-595.5	308.2	284.0	24.21	12.732	
3,800.0	3,727.7	3,772.9	3,722.0	13.9	12.1	113.30	55.8	-614.5	318.9	293.9	24.97	12.771	
3,900.0	3,825.0	3,872.3	3,819.6	14.3	12.4	113.64	57.5	-633.5	329.7	303.9	25.74	12.809	
4,000.0	3,922.3	3,971.7	3,917.1	14.7	12.8	113.95	59.3	-652.5	340.4	313.9	26.50	12.845	
4,100.0	4,019.7	4,071.1	4,014.7	15.2	13.2	114.25	61.1	-671.5	351.2	324.0	27.27	12.879	
4,200.0	4,117.0	4,170.6	4,112.2	15.6	13.6	114.53	62.9	-690.5	362.0	334.0	28.04	12.912	
4,300.0	4,214.4	4,270.0	4,209.8	16.1	14.0	114.79	64.6	-709.5	372.8	344.0	28.80	12.944	
4,400.0	4,311.7	4,369.4	4,307.3	16.5	14.3	115.04	66.4	-728.5	383.6	354.0	29.57	12.975	
4,500.0	4,409.0	4,468.8	4,404.9	17.0	14.7	115.27	68.2	-747.5	394.4	364.1	30.33	13.004	
4,600.0	4,506.4	4,568.2	4,502.4	17.4	15.1	115.50	70.0	-766.6	405.2	374.1	31.09	13.032	
4,700.0	4,603.7	4,667.6	4,600.0	17.8	15.5	115.71	71.7	-785.6	416.1	384.2	31.86	13.059	
4,800.0	4,701.1	4,767.0	4,697.5	18.3	15.9	115.91	73.5	-804.6	426.9	394.3	32.62	13.085	
4,900.0	4,798.4	4,866.4	4,795.1	18.7	16.2	116.09	75.3	-823.6	437.7	404.3	33.39	13.111	
5,000.0	4,895.7	4,965.8	4,892.6	19.2	16.6	116.28	77.1	-842.6	448.5	414.4	34.15	13.135	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3B-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	4,993.1	5,065.2	4,990.2	19.6	17.0	116.45	78.8	-861.6	459.4	424.5	34.91	13.158	
5,200.0	5,090.4	5,164.6	5,087.8	20.1	17.4	116.61	80.6	-880.6	470.2	434.6	35.68	13.180	
5,300.0	5,187.7	5,264.0	5,185.3	20.5	17.8	116.77	82.4	-899.6	481.1	444.6	36.44	13.202	
5,400.0	5,285.1	5,363.4	5,282.9	21.0	18.1	116.92	84.2	-918.6	491.9	454.7	37.20	13.223	
7,300.0	7,134.5	8,160.3	7,606.0	29.3	29.2	-176.71	-559.7	-1,371.2	472.6	421.3	51.28	9.215	
7,400.0	7,229.2	8,136.8	7,606.0	29.5	29.1	176.85	-536.1	-1,371.2	378.0	324.9	53.10	7.118	
7,500.0	7,318.2	8,096.8	7,606.0	29.6	28.8	169.96	-496.1	-1,371.2	290.4	240.6	49.86	5.824	
7,600.0	7,399.0	8,033.3	7,605.5	29.7	28.4	160.05	-432.6	-1,371.1	213.7	169.4	44.36	4.819	
7,700.0	7,469.1	7,950.8	7,596.3	29.8	28.0	142.36	-350.8	-1,369.4	147.7	110.8	36.89	4.005	
7,800.0	7,526.4	7,877.9	7,578.6	29.8	27.6	117.92	-280.2	-1,365.9	104.5	74.3	30.23	3.457	SF
7,841.9	7,546.1	7,849.2	7,569.2	29.8	27.5	105.62	-253.1	-1,364.1	99.6	71.1	28.56	3.489	
7,900.0	7,569.0	7,810.7	7,554.6	29.8	27.3	88.39	-217.6	-1,361.2	108.3	81.2	27.16	3.989	
8,000.0	7,595.8	7,750.0	7,526.9	29.9	27.0	64.93	-163.9	-1,355.8	150.2	125.5	24.69	6.084	
8,100.0	7,605.9	7,685.9	7,491.8	30.0	26.8	49.29	-110.7	-1,349.0	203.4	181.7	21.70	9.373	
8,200.0	7,606.0	7,629.7	7,456.4	30.2	26.6	42.94	-67.7	-1,342.1	261.9	241.1	20.71	12.641	
8,300.0	7,606.0	7,582.2	7,423.3	30.5	26.4	38.77	-34.3	-1,335.7	328.9	308.6	20.31	16.193	
8,400.0	7,606.0	7,550.0	7,399.4	30.9	26.3	36.35	-13.2	-1,331.0	402.5	382.2	20.34	19.786	
8,500.0	7,606.0	7,500.0	7,360.1	31.4	26.2	33.15	16.7	-1,323.3	480.8	460.6	20.25	23.747	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3C-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-50.4	50.4				
100.0	100.0	99.0	99.0	0.2	0.2	-90.00	0.0	-50.4	50.4	50.1	0.30	166.659	
200.0	200.0	199.0	199.0	0.3	0.3	-90.00	0.0	-50.4	50.4	49.7	0.65	77.356	
300.0	300.0	299.0	299.0	0.5	0.5	23.37	0.0	-50.4	49.6	48.6	1.00	49.550	
400.0	400.0	399.0	399.0	0.7	0.7	24.64	0.0	-50.4	47.2	45.8	1.35	34.943	
500.0	499.9	498.2	498.1	0.9	0.8	26.70	-0.2	-51.2	44.0	42.3	1.70	25.909	
600.0	599.7	597.4	597.4	1.1	1.0	29.39	-0.9	-53.6	41.1	39.0	2.05	19.996	
700.0	699.4	696.7	696.6	1.3	1.2	32.83	-1.9	-57.8	38.3	35.9	2.42	15.853	
800.0	798.9	796.0	795.7	1.5	1.4	37.12	-3.5	-63.6	35.9	33.1	2.80	12.817	
900.0	898.3	895.5	894.8	1.8	1.6	42.37	-5.4	-71.1	33.8	30.6	3.21	10.526	
1,000.0	997.4	994.9	993.9	2.0	1.8	48.58	-7.8	-80.2	32.2	28.5	3.67	8.773	
1,100.0	1,096.3	1,094.4	1,092.8	2.3	2.1	55.64	-10.6	-91.0	31.2	27.0	4.19	7.435	
1,186.4	1,181.5	1,180.4	1,178.0	2.6	2.3	62.23	-13.4	-101.7	30.9	26.2	4.72	6.553	CC
1,200.0	1,194.9	1,194.0	1,191.5	2.7	2.3	63.30	-13.9	-103.5	30.9	26.1	4.80	6.437	
1,300.0	1,293.3	1,293.7	1,290.0	3.0	2.6	71.14	-17.6	-117.6	31.4	25.9	5.49	5.724	ES
1,400.0	1,391.2	1,393.3	1,388.4	3.4	2.9	78.72	-21.7	-133.5	32.7	26.5	6.24	5.244	
1,500.0	1,488.9	1,493.2	1,486.6	3.8	3.3	86.47	-26.2	-150.5	34.7	27.7	7.03	4.938	
1,600.0	1,586.2	1,593.0	1,584.9	4.2	3.6	95.11	-30.6	-167.5	37.4	29.6	7.80	4.791	SF
1,700.0	1,683.6	1,692.8	1,683.1	4.7	3.9	102.56	-35.1	-184.6	40.8	32.3	8.50	4.796	
1,800.0	1,780.9	1,792.6	1,781.4	5.1	4.3	108.77	-39.6	-201.7	44.7	35.6	9.13	4.897	
1,900.0	1,878.2	1,892.4	1,879.6	5.5	4.6	113.93	-44.0	-218.8	49.1	39.4	9.72	5.054	
2,000.0	1,975.6	1,992.2	1,977.9	5.9	4.9	118.21	-48.5	-235.8	53.9	43.6	10.27	5.243	
2,100.0	2,072.9	2,092.1	2,076.1	6.4	5.3	121.78	-52.9	-252.9	58.9	48.1	10.80	5.448	
2,200.0	2,170.3	2,191.9	2,174.3	6.8	5.6	124.78	-57.4	-270.0	64.0	52.7	11.32	5.659	
2,300.0	2,267.6	2,291.7	2,272.6	7.3	6.0	127.33	-61.9	-287.0	69.4	57.5	11.82	5.870	
2,400.0	2,364.9	2,391.5	2,370.8	7.7	6.3	129.51	-66.3	-304.1	74.8	62.5	12.31	6.076	
2,500.0	2,462.3	2,491.3	2,469.1	8.1	6.7	131.40	-70.8	-321.2	80.4	67.6	12.80	6.277	
2,600.0	2,559.6	2,591.1	2,567.3	8.6	7.0	133.04	-75.3	-338.2	86.0	72.7	13.29	6.469	
2,700.0	2,656.9	2,690.9	2,665.5	9.0	7.4	134.47	-79.7	-355.3	91.7	77.9	13.77	6.654	
2,800.0	2,754.3	2,790.7	2,763.8	9.4	7.7	135.74	-84.2	-372.4	97.4	83.1	14.26	6.831	
2,900.0	2,851.6	2,890.6	2,862.0	9.9	8.1	136.87	-88.6	-389.4	103.2	88.4	14.74	6.999	
3,000.0	2,949.0	2,990.4	2,960.3	10.3	8.4	137.88	-93.1	-406.5	109.0	93.7	15.22	7.159	
3,100.0	3,046.3	3,090.2	3,058.5	10.8	8.8	138.78	-97.6	-423.6	114.8	99.1	15.70	7.311	
3,200.0	3,143.6	3,190.0	3,156.8	11.2	9.2	139.60	-102.0	-440.6	120.7	104.5	16.18	7.456	
3,300.0	3,241.0	3,289.8	3,255.0	11.7	9.5	140.34	-106.5	-457.7	126.5	109.9	16.67	7.593	
3,400.0	3,338.3	3,389.6	3,353.2	12.1	9.9	141.02	-110.9	-474.8	132.4	115.3	17.15	7.724	
3,500.0	3,435.7	3,489.4	3,451.5	12.5	10.2	141.64	-115.4	-491.8	138.4	120.7	17.63	7.849	
3,600.0	3,533.0	3,589.3	3,549.7	13.0	10.6	142.20	-119.9	-508.9	144.3	126.2	18.11	7.968	
3,700.0	3,630.3	3,689.1	3,648.0	13.4	10.9	142.73	-124.3	-526.0	150.3	131.7	18.59	8.081	
3,800.0	3,727.7	3,788.9	3,746.2	13.9	11.3	143.21	-128.8	-543.0	156.2	137.1	19.08	8.189	
3,900.0	3,825.0	3,888.7	3,844.5	14.3	11.6	143.66	-133.3	-560.1	162.2	142.6	19.56	8.292	
4,000.0	3,922.3	3,988.5	3,942.7	14.7	12.0	144.07	-137.7	-577.2	168.2	148.1	20.04	8.391	
4,100.0	4,019.7	4,088.3	4,040.9	15.2	12.3	144.46	-142.2	-594.2	174.2	153.6	20.52	8.485	
4,200.0	4,117.0	4,188.1	4,139.2	15.6	12.7	144.82	-146.6	-611.3	180.1	159.1	21.01	8.575	
4,300.0	4,214.4	4,288.0	4,237.4	16.1	13.1	145.16	-151.1	-628.4	186.2	164.7	21.49	8.661	
4,400.0	4,311.7	4,387.8	4,335.7	16.5	13.4	145.47	-155.6	-645.4	192.2	170.2	21.98	8.744	
4,500.0	4,409.0	4,487.6	4,433.9	17.0	13.8	145.77	-160.0	-662.5	198.2	175.7	22.46	8.823	
4,600.0	4,506.4	4,587.4	4,532.2	17.4	14.1	146.05	-164.5	-679.6	204.2	181.2	22.94	8.899	
4,700.0	4,603.7	4,687.2	4,630.4	17.8	14.5	146.31	-168.9	-696.6	210.2	186.8	23.43	8.972	
4,800.0	4,701.1	4,787.0	4,728.6	18.3	14.8	146.56	-173.4	-713.7	216.2	192.3	23.91	9.043	
4,900.0	4,798.4	4,886.8	4,826.9	18.7	15.2	146.80	-177.9	-730.8	222.3	197.9	24.40	9.110	
5,000.0	4,895.7	4,986.7	4,925.1	19.2	15.6	147.02	-182.3	-747.9	228.3	203.4	24.88	9.175	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3C-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	4,993.1	5,086.5	5,023.4	19.6	15.9	147.23	-186.8	-764.9	234.3	209.0	25.37	9.238	
5,200.0	5,090.4	5,186.3	5,121.6	20.1	16.3	147.44	-191.3	-782.0	240.4	214.5	25.85	9.298	
5,300.0	5,187.7	5,286.1	5,219.9	20.5	16.6	147.63	-195.7	-799.1	246.4	220.1	26.34	9.356	
5,400.0	5,285.1	5,385.9	5,318.1	21.0	17.0	147.81	-200.2	-816.1	252.5	225.7	26.82	9.412	
5,500.0	5,382.4	5,485.7	5,416.3	21.4	17.3	147.98	-204.6	-833.2	258.5	231.2	27.31	9.466	
5,600.0	5,479.8	5,585.5	5,514.6	21.8	17.7	148.15	-209.1	-850.3	264.6	236.8	27.80	9.519	
5,700.0	5,577.1	5,685.4	5,612.8	22.3	18.0	148.31	-213.6	-867.3	270.6	242.4	28.28	9.569	
5,800.0	5,674.4	5,785.2	5,711.1	22.7	18.4	148.46	-218.0	-884.4	276.7	247.9	28.77	9.618	
5,900.0	5,771.8	5,885.0	5,809.3	23.2	18.8	148.60	-222.5	-901.5	282.7	253.5	29.25	9.665	
6,000.0	5,869.1	5,984.8	5,907.6	23.6	19.1	148.74	-227.0	-918.5	288.8	259.1	29.74	9.711	
6,100.0	5,966.4	6,084.6	6,005.8	24.1	19.5	148.87	-231.4	-935.6	294.9	264.6	30.23	9.755	
6,200.0	6,063.8	6,184.4	6,104.0	24.5	19.8	149.00	-235.9	-952.7	300.9	270.2	30.71	9.798	
6,300.0	6,161.1	6,284.2	6,202.3	24.9	20.2	149.12	-240.3	-969.7	307.0	275.8	31.20	9.840	
6,400.0	6,258.5	6,384.0	6,300.5	25.4	20.5	149.24	-244.8	-986.8	313.1	281.4	31.69	9.880	
6,500.0	6,355.8	6,483.9	6,398.8	25.8	20.9	149.36	-249.3	-1,003.9	319.1	287.0	32.17	9.919	
6,600.0	6,453.1	6,583.7	6,497.0	26.3	21.3	149.47	-253.7	-1,020.9	325.2	292.5	32.66	9.957	
6,700.0	6,550.5	6,683.5	6,595.2	26.7	21.6	149.57	-258.2	-1,038.0	331.3	298.1	33.15	9.994	
6,800.0	6,647.8	6,783.3	6,693.5	27.2	22.0	149.67	-262.6	-1,055.1	337.3	303.7	33.63	10.030	
6,900.0	6,745.2	6,883.1	6,791.7	27.6	22.3	149.77	-267.1	-1,072.1	343.4	309.3	34.12	10.065	
7,000.0	6,842.5	7,030.4	6,935.8	28.1	22.9	150.68	-281.7	-1,097.5	346.1	311.9	34.27	10.100	
7,100.0	6,939.8	7,211.1	7,100.7	28.5	23.8	157.10	-346.8	-1,128.1	326.4	294.8	31.59	10.333	
7,200.0	7,037.2	7,350.2	7,209.2	28.9	24.7	154.16	-430.7	-1,149.7	289.2	262.4	26.75	10.812	
7,300.0	7,134.5	7,435.4	7,264.5	29.3	25.3	133.20	-494.4	-1,161.5	246.3	219.2	27.08	9.095	
7,400.0	7,229.2	7,477.6	7,288.3	29.5	25.7	125.06	-528.9	-1,166.8	222.8	191.2	31.62	7.047	
7,412.5	7,240.6	7,480.7	7,289.9	29.5	25.7	124.27	-531.4	-1,167.1	222.5	190.6	31.93	6.967	
7,500.0	7,318.2	7,492.3	7,295.9	29.6	25.8	117.51	-541.3	-1,168.5	238.9	206.8	32.19	7.424	
7,600.0	7,399.0	7,489.7	7,294.6	29.7	25.8	105.52	-539.0	-1,168.2	291.0	261.4	29.69	9.803	
7,700.0	7,469.1	7,476.0	7,287.4	29.8	25.7	89.07	-527.5	-1,166.6	362.6	335.5	27.13	13.363	
7,800.0	7,526.4	7,450.0	7,273.0	29.8	25.5	70.78	-506.1	-1,163.3	441.4	415.8	25.57	17.262	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3D-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-85.35	3.6	-44.8	44.9				
100.0	100.0	99.0	99.0	0.2	0.2	-85.35	3.6	-44.8	44.9	44.6	0.30	148.631	
200.0	200.0	199.0	199.0	0.3	0.3	-85.35	3.6	-44.8	44.9	44.3	0.65	68.988	
300.0	300.0	299.0	299.0	0.5	0.5	28.16	3.6	-44.8	44.1	43.1	1.00	44.132	
400.0	400.0	399.0	399.0	0.7	0.7	29.86	3.6	-44.8	41.9	40.5	1.35	30.994	
500.0	499.9	498.9	498.9	0.9	0.8	33.14	3.6	-44.8	38.1	36.4	1.70	22.389	
600.0	599.7	598.1	598.1	1.1	1.0	38.74	3.8	-45.6	34.0	32.0	2.06	16.501	
700.0	699.4	697.4	697.3	1.3	1.2	47.33	4.2	-48.1	30.8	28.4	2.44	12.634	
800.0	798.9	796.7	796.6	1.5	1.4	59.05	4.9	-52.3	29.1	26.2	2.85	10.208	
833.7	832.4	830.1	830.0	1.6	1.4	63.53	5.2	-54.1	28.9	25.9	3.00	9.653	CC, ES
900.0	898.3	896.0	895.7	1.8	1.6	72.69	5.9	-58.3	29.5	26.2	3.30	8.925	
1,000.0	997.4	995.4	994.8	2.0	1.8	85.87	7.1	-65.9	32.4	28.6	3.79	8.532	SF
1,100.0	1,096.3	1,094.7	1,093.6	2.3	2.0	96.68	8.6	-75.2	37.6	33.3	4.31	8.735	
1,200.0	1,194.9	1,194.2	1,192.5	2.7	2.2	105.04	10.4	-85.9	44.8	39.9	4.84	9.259	
1,300.0	1,293.3	1,293.6	1,291.3	3.0	2.5	112.59	12.2	-96.8	53.3	47.9	5.36	9.938	
1,400.0	1,391.2	1,392.8	1,390.0	3.4	2.7	119.35	14.0	-107.6	63.3	57.4	5.87	10.778	
1,500.0	1,488.9	1,491.9	1,488.4	3.8	2.9	125.29	15.7	-118.4	75.0	68.6	6.37	11.775	
1,600.0	1,586.2	1,590.8	1,586.7	4.2	3.2	130.28	17.5	-129.2	88.0	81.2	6.84	12.876	
1,700.0	1,683.6	1,689.7	1,685.0	4.7	3.4	134.01	19.3	-140.0	101.6	94.3	7.30	13.920	
1,800.0	1,780.9	1,788.5	1,783.2	5.1	3.7	136.85	21.1	-150.8	115.5	107.8	7.76	14.885	
1,900.0	1,878.2	1,887.4	1,881.5	5.5	3.9	139.07	22.8	-161.6	129.7	121.5	8.22	15.770	
2,000.0	1,975.6	1,986.3	1,979.8	5.9	4.2	140.86	24.6	-172.4	144.0	135.3	8.69	16.577	
2,100.0	2,072.9	2,085.2	2,078.1	6.4	4.4	142.32	26.4	-183.2	158.4	149.2	9.15	17.315	
2,200.0	2,170.3	2,184.1	2,176.3	6.8	4.7	143.54	28.2	-193.9	172.9	163.3	9.61	17.989	
2,300.0	2,267.6	2,283.0	2,274.6	7.3	4.9	144.58	29.9	-204.7	187.4	177.3	10.07	18.606	
2,400.0	2,364.9	2,381.8	2,372.9	7.7	5.2	145.46	31.7	-215.5	202.0	191.5	10.54	19.173	
2,500.0	2,462.3	2,480.7	2,471.2	8.1	5.4	146.22	33.5	-226.3	216.7	205.7	11.00	19.694	
2,600.0	2,559.6	2,579.6	2,569.5	8.6	5.7	146.89	35.3	-237.1	231.3	219.9	11.47	20.176	
2,700.0	2,656.9	2,678.5	2,667.7	9.0	5.9	147.47	37.0	-247.9	246.0	234.1	11.93	20.621	
2,800.0	2,754.3	2,777.4	2,766.0	9.4	6.2	147.99	38.8	-258.7	260.8	248.4	12.40	21.034	
2,900.0	2,851.6	2,876.3	2,864.3	9.9	6.5	148.46	40.6	-269.5	275.5	262.7	12.86	21.417	
3,000.0	2,949.0	2,975.1	2,962.6	10.3	6.7	148.88	42.3	-280.3	290.3	276.9	13.33	21.775	
3,100.0	3,046.3	3,074.0	3,060.8	10.8	7.0	149.26	44.1	-291.1	305.1	291.3	13.80	22.109	
3,200.0	3,143.6	3,172.9	3,159.1	11.2	7.2	149.60	45.9	-301.9	319.8	305.6	14.26	22.421	
3,300.0	3,241.0	3,271.8	3,257.4	11.7	7.5	149.91	47.7	-312.7	334.6	319.9	14.73	22.714	
3,400.0	3,338.3	3,370.7	3,355.7	12.1	7.7	150.20	49.4	-323.4	349.4	334.2	15.20	22.989	
3,500.0	3,435.7	3,469.6	3,453.9	12.5	8.0	150.46	51.2	-334.2	364.3	348.6	15.67	23.248	
3,600.0	3,533.0	3,568.5	3,552.2	13.0	8.2	150.70	53.0	-345.0	379.1	362.9	16.14	23.492	
3,700.0	3,630.3	3,667.3	3,650.5	13.4	8.5	150.92	54.8	-355.8	393.9	377.3	16.60	23.723	
3,800.0	3,727.7	3,766.2	3,748.8	13.9	8.8	151.13	56.5	-366.6	408.7	391.7	17.07	23.941	
3,900.0	3,825.0	3,865.1	3,847.1	14.3	9.0	151.32	58.3	-377.4	423.6	406.0	17.54	24.147	
4,000.0	3,922.3	3,964.0	3,945.3	14.7	9.3	151.50	60.1	-388.2	438.4	420.4	18.01	24.343	
4,100.0	4,019.7	4,062.9	4,043.6	15.2	9.5	151.67	61.9	-399.0	453.3	434.8	18.48	24.529	
4,200.0	4,117.0	4,161.8	4,141.9	15.6	9.8	151.83	63.6	-409.8	468.1	449.2	18.95	24.705	
4,300.0	4,214.4	4,260.6	4,240.2	16.1	10.0	151.98	65.4	-420.6	483.0	463.5	19.42	24.874	
4,400.0	4,311.7	4,359.5	4,338.4	16.5	10.3	152.12	67.2	-431.4	497.8	477.9	19.89	25.034	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3E-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.01	0.0	-30.8	30.8				
100.0	100.0	100.0	100.0	0.2	0.2	-90.01	0.0	-30.8	30.8	30.5	0.30	101.338	
200.0	200.0	200.0	200.0	0.3	0.3	-90.01	0.0	-30.8	30.8	30.1	0.65	47.147	
300.0	300.0	300.0	300.0	0.5	0.5	23.62	0.0	-30.8	30.0	29.0	1.00	29.917	
400.0	400.0	400.0	400.0	0.7	0.7	25.81	0.0	-30.8	27.6	26.2	1.35	20.416	
500.0	499.9	499.9	499.9	0.9	0.8	30.42	0.0	-30.8	23.7	22.0	1.70	13.935	
600.0	599.7	599.7	599.7	1.1	1.0	39.94	0.0	-30.8	18.7	16.7	2.07	9.069	
700.0	699.4	699.1	699.1	1.3	1.2	60.57	0.3	-31.6	14.5	12.0	2.46	5.895	
751.0	750.2	749.9	749.8	1.4	1.3	76.43	0.8	-32.6	13.8	11.1	2.68	5.147	CC, ES
800.0	798.9	798.6	798.6	1.5	1.4	92.45	1.3	-33.9	14.5	11.6	2.89	5.021	SF
900.0	898.3	898.1	898.0	1.8	1.6	116.95	3.0	-37.9	19.7	16.5	3.28	6.021	
1,000.0	997.4	997.6	997.3	2.0	1.7	131.60	4.8	-42.2	28.1	24.5	3.64	7.730	
1,100.0	1,096.3	1,096.8	1,096.5	2.3	1.9	140.90	6.7	-46.6	38.9	34.9	4.00	9.724	
1,200.0	1,194.9	1,195.9	1,195.4	2.7	2.1	147.16	8.5	-50.9	51.6	47.2	4.35	11.860	
1,300.0	1,293.3	1,294.7	1,294.1	3.0	2.3	151.62	10.4	-55.2	66.2	61.5	4.71	14.076	
1,400.0	1,391.2	1,393.2	1,392.6	3.4	2.5	154.96	12.2	-59.5	82.7	77.6	5.06	16.342	
1,500.0	1,488.9	1,491.5	1,490.7	3.8	2.7	157.56	14.0	-63.8	100.9	95.5	5.41	18.643	
1,600.0	1,586.2	1,589.5	1,588.6	4.2	2.9	159.60	15.8	-68.1	120.5	114.7	5.77	20.872	
1,700.0	1,683.6	1,687.5	1,686.4	4.7	3.0	161.09	17.7	-72.4	140.1	134.0	6.13	22.850	
1,800.0	1,780.9	1,785.4	1,784.3	5.1	3.2	162.22	19.5	-76.7	159.9	153.4	6.50	24.612	
1,900.0	1,878.2	1,883.4	1,882.2	5.5	3.4	163.10	21.3	-81.0	179.7	172.9	6.86	26.189	
2,000.0	1,975.6	1,981.4	1,980.1	5.9	3.6	163.80	23.1	-85.3	199.6	192.3	7.23	27.607	
2,100.0	2,072.9	2,079.4	2,077.9	6.4	3.8	164.38	24.9	-89.6	219.4	211.8	7.60	28.889	
2,200.0	2,170.3	2,177.4	2,175.8	6.8	4.0	164.86	26.7	-93.9	239.3	231.3	7.96	30.054	
2,300.0	2,267.6	2,275.4	2,273.7	7.3	4.2	165.26	28.6	-98.1	259.2	250.9	8.33	31.116	
2,400.0	2,364.9	2,373.4	2,371.6	7.7	4.4	165.61	30.4	-102.4	279.1	270.4	8.70	32.088	
2,500.0	2,462.3	2,471.3	2,469.4	8.1	4.5	165.92	32.2	-106.7	299.0	289.9	9.07	32.981	
2,600.0	2,559.6	2,569.3	2,567.3	8.6	4.7	166.18	34.0	-111.0	318.9	309.5	9.43	33.805	
2,700.0	2,656.9	2,667.3	2,665.2	9.0	4.9	166.41	35.8	-115.3	338.9	329.1	9.80	34.566	
2,800.0	2,754.3	2,765.3	2,763.1	9.4	5.1	166.62	37.7	-119.6	358.8	348.6	10.17	35.273	
2,900.0	2,851.6	2,863.3	2,860.9	9.9	5.3	166.81	39.5	-123.9	378.7	368.2	10.54	35.930	
3,000.0	2,949.0	2,961.3	2,958.8	10.3	5.5	166.97	41.3	-128.2	398.7	387.8	10.91	36.542	
3,100.0	3,046.3	3,059.3	3,056.7	10.8	5.7	167.13	43.1	-132.5	418.6	407.3	11.28	37.114	
3,200.0	3,143.6	3,157.2	3,154.6	11.2	5.9	167.26	44.9	-136.7	438.6	426.9	11.65	37.650	
3,300.0	3,241.0	3,255.2	3,252.4	11.7	6.0	167.39	46.8	-141.0	458.5	446.5	12.02	38.153	
3,400.0	3,338.3	3,353.2	3,350.3	12.1	6.2	167.50	48.6	-145.3	478.4	466.1	12.39	38.626	
3,500.0	3,435.7	3,451.2	3,448.2	12.5	6.4	167.61	50.4	-149.6	498.4	485.6	12.76	39.071	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3F-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-81.78	3.6	-25.2	25.4				
100.0	100.0	100.0	100.0	0.2	0.2	-81.78	3.6	-25.2	25.4	25.1	0.30	83.774	
200.0	200.0	200.0	200.0	0.3	0.3	-81.78	3.6	-25.2	25.4	24.8	0.65	38.975	
300.0	300.0	300.0	300.0	0.5	0.5	32.25	3.6	-25.2	24.7	23.7	1.00	24.649	
400.0	400.0	400.0	400.0	0.7	0.7	35.82	3.6	-25.2	22.5	21.2	1.35	16.655	
500.0	499.9	499.9	499.9	0.9	0.8	43.49	3.6	-25.2	19.2	17.5	1.71	11.216	
600.0	599.7	599.7	599.7	1.1	1.0	59.42	3.6	-25.2	15.3	13.2	2.08	7.360	
699.5	698.9	698.9	698.9	1.3	1.2	90.00	3.6	-25.2	13.2	10.7	2.48	5.315	CC
700.0	699.4	699.4	699.4	1.3	1.2	90.18	3.6	-25.2	13.2	10.7	2.48	5.311	ES, SF
800.0	798.9	798.9	798.9	1.5	1.4	125.99	3.6	-25.2	16.3	13.5	2.84	5.751	
900.0	898.3	898.3	898.3	1.8	1.5	147.63	3.6	-25.2	24.7	21.6	3.15	7.851	
1,000.0	997.4	997.4	997.4	2.0	1.7	158.62	3.6	-25.2	36.5	33.0	3.47	10.496	
1,100.0	1,096.3	1,096.3	1,096.3	2.3	1.9	164.70	3.6	-25.2	50.5	46.7	3.80	13.284	
1,200.0	1,194.9	1,194.9	1,194.9	2.7	2.1	168.42	3.6	-25.2	66.6	62.5	4.14	16.102	
1,300.0	1,293.3	1,293.3	1,293.3	3.0	2.2	170.87	3.6	-25.2	84.5	80.1	4.47	18.915	
1,400.0	1,391.2	1,391.2	1,391.2	3.4	2.4	172.58	3.6	-25.2	104.3	99.5	4.80	21.715	
1,500.0	1,488.9	1,488.9	1,488.9	3.8	2.6	173.83	3.6	-25.2	125.8	120.6	5.13	24.500	
1,600.0	1,586.2	1,586.2	1,586.2	4.2	2.7	174.77	3.6	-25.2	148.5	143.1	5.47	27.144	
1,700.0	1,683.6	1,683.6	1,683.6	4.7	2.9	175.47	3.6	-25.2	171.4	165.6	5.81	29.479	
1,800.0	1,780.9	1,780.9	1,780.9	5.1	3.1	176.00	3.6	-25.2	194.2	188.1	6.16	31.555	
1,900.0	1,878.2	1,878.2	1,878.2	5.5	3.3	176.43	3.6	-25.2	217.1	210.6	6.50	33.415	
2,000.0	1,975.6	1,975.6	1,975.6	5.9	3.4	176.77	3.6	-25.2	240.0	233.1	6.84	35.089	
2,100.0	2,072.9	2,072.9	2,072.9	6.4	3.6	177.05	3.6	-25.2	262.9	255.7	7.18	36.604	
2,200.0	2,170.3	2,170.3	2,170.3	6.8	3.8	177.28	3.6	-25.2	285.8	278.2	7.52	37.981	
2,300.0	2,267.6	2,267.6	2,267.6	7.3	3.9	177.49	3.6	-25.2	308.7	300.8	7.87	39.239	
2,400.0	2,364.9	2,364.9	2,364.9	7.7	4.1	177.66	3.6	-25.2	331.6	323.4	8.21	40.392	
2,500.0	2,462.3	2,462.3	2,462.3	8.1	4.3	177.81	3.6	-25.2	354.5	345.9	8.55	41.453	
2,600.0	2,559.6	2,559.6	2,559.6	8.6	4.4	177.94	3.6	-25.2	377.4	368.5	8.89	42.432	
2,700.0	2,656.9	2,656.9	2,656.9	9.0	4.6	178.06	3.6	-25.2	400.3	391.0	9.24	43.339	
2,800.0	2,754.3	2,754.3	2,754.3	9.4	4.8	178.17	3.6	-25.2	423.2	413.6	9.58	44.181	
2,900.0	2,851.6	2,851.6	2,851.6	9.9	5.0	178.26	3.6	-25.2	446.1	436.2	9.92	44.965	
3,000.0	2,949.0	2,949.0	2,949.0	10.3	5.1	178.35	3.6	-25.2	469.0	458.7	10.26	45.697	
3,100.0	3,046.3	3,046.3	3,046.3	10.8	5.3	178.42	3.6	-25.2	491.9	481.3	10.61	46.382	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3G-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-19.6	19.6				
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-19.6	19.6	19.3	0.30	64.488	
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-19.6	19.6	18.9	0.65	30.002	
300.0	300.0	300.0	300.0	0.5	0.5	24.02	0.0	-19.6	18.8	17.8	1.00	18.748	
400.0	400.0	400.0	400.0	0.7	0.7	27.75	0.0	-19.6	16.4	15.1	1.35	12.152	
500.0	499.9	499.9	499.9	0.9	0.8	36.95	0.0	-19.6	12.7	11.0	1.71	7.461	
600.0	599.7	599.8	599.8	1.1	1.0	66.17	0.0	-18.7	8.0	5.9	2.09	3.852	
641.4	641.0	641.1	641.1	1.2	1.1	94.86	0.1	-17.8	7.1	4.8	2.25	3.135	CC, ES, SF
700.0	699.4	699.3	699.2	1.3	1.2	137.28	0.2	-16.1	9.5	7.1	2.44	3.913	
800.0	798.9	798.2	798.0	1.5	1.4	166.29	0.4	-11.9	21.2	18.5	2.75	7.717	
900.0	898.3	896.9	896.7	1.8	1.6	174.72	0.6	-7.1	36.6	33.5	3.09	11.863	
1,000.0	997.4	995.3	995.0	2.0	1.7	178.19	0.8	-2.3	54.0	50.6	3.43	15.773	
1,100.0	1,096.3	1,093.5	1,093.0	2.3	1.9	179.97	1.1	2.4	73.3	69.5	3.76	19.460	
1,200.0	1,194.9	1,191.2	1,190.6	2.7	2.1	-179.00	1.3	7.2	94.3	90.1	4.10	22.971	
1,300.0	1,293.3	1,288.6	1,287.9	3.0	2.3	-178.37	1.5	11.9	117.0	112.5	4.44	26.344	
1,400.0	1,391.2	1,385.6	1,384.7	3.4	2.5	-177.96	1.7	16.6	141.4	136.6	4.77	29.612	
1,500.0	1,488.9	1,482.1	1,481.2	3.8	2.7	-177.70	2.0	21.2	167.5	162.4	5.11	32.796	
1,600.0	1,586.2	1,578.3	1,577.2	4.2	2.9	-177.53	2.2	25.9	194.8	189.3	5.45	35.767	
1,700.0	1,683.6	1,674.5	1,673.3	4.7	3.0	-177.40	2.4	30.6	222.2	216.4	5.79	38.379	
1,800.0	1,780.9	1,770.6	1,769.4	5.1	3.2	-177.30	2.6	35.2	249.5	243.4	6.13	40.700	
1,900.0	1,878.2	1,866.8	1,865.4	5.5	3.4	-177.22	2.9	39.9	276.9	270.4	6.47	42.774	
2,000.0	1,975.6	1,963.0	1,961.5	5.9	3.6	-177.15	3.1	44.5	304.3	297.4	6.82	44.641	
2,100.0	2,072.9	2,059.2	2,057.6	6.4	3.8	-177.10	3.3	49.2	331.6	324.5	7.16	46.328	
2,200.0	2,170.3	2,155.4	2,153.6	6.8	4.0	-177.05	3.5	53.8	359.0	351.5	7.50	47.862	
2,300.0	2,267.6	2,251.6	2,249.7	7.3	4.2	-177.01	3.8	58.5	386.4	378.5	7.84	49.261	
2,400.0	2,364.9	2,347.7	2,345.8	7.7	4.3	-176.98	4.0	63.2	413.7	405.6	8.19	50.543	
2,500.0	2,462.3	2,443.9	2,441.9	8.1	4.5	-176.95	4.2	67.8	441.1	432.6	8.53	51.723	
2,600.0	2,559.6	2,540.1	2,537.9	8.6	4.7	-176.92	4.4	72.5	468.5	459.6	8.87	52.811	
2,700.0	2,656.9	2,636.3	2,634.0	9.0	4.9	-176.90	4.7	77.1	495.9	486.6	9.21	53.818	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3H-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-75.40	3.6	-14.0	14.5				
100.0	100.0	100.0	100.0	0.2	0.2	-75.40	3.6	-14.0	14.5	14.2	0.30	47.599	
200.0	200.0	200.0	200.0	0.3	0.3	-75.40	3.6	-14.0	14.5	13.8	0.65	22.145	
300.0	300.0	300.0	300.0	0.5	0.5	39.79	3.6	-14.0	13.8	12.8	1.00	13.744	
400.0	400.0	400.0	400.0	0.7	0.7	48.44	3.7	-13.8	11.7	10.3	1.35	8.633	
500.0	499.9	500.0	500.0	0.9	0.9	78.04	3.8	-12.0	8.4	6.7	1.72	4.870	
532.1	531.9	532.0	532.0	0.9	0.9	96.55	3.9	-11.1	7.9	6.1	1.84	4.314	CC, ES, SF
600.0	599.7	599.5	599.5	1.1	1.0	137.07	4.1	-8.6	10.4	8.4	2.07	5.030	
700.0	699.4	698.5	698.3	1.3	1.2	164.93	4.5	-3.4	21.1	18.7	2.40	8.792	
800.0	798.9	796.7	796.3	1.5	1.4	174.79	5.0	3.4	36.7	33.9	2.74	13.374	
900.0	898.3	894.1	893.2	1.8	1.6	179.36	5.6	11.7	56.0	52.9	3.08	18.153	
1,000.0	997.4	990.7	989.4	2.0	1.8	-178.09	6.4	21.6	78.6	75.2	3.42	22.980	
1,100.0	1,096.3	1,087.5	1,085.6	2.3	2.1	-176.66	7.2	31.9	103.5	99.7	3.76	27.516	
1,200.0	1,194.9	1,183.9	1,181.5	2.7	2.3	-175.83	8.0	42.2	130.0	125.9	4.10	31.733	
1,300.0	1,293.3	1,279.8	1,276.8	3.0	2.5	-175.32	8.8	52.4	158.3	153.9	4.43	35.702	
1,400.0	1,391.2	1,375.2	1,371.7	3.4	2.8	-175.00	9.6	62.6	188.2	183.5	4.77	39.480	
1,500.0	1,488.9	1,470.1	1,466.0	3.8	3.0	-174.81	10.4	72.7	219.8	214.7	5.10	43.107	
1,600.0	1,586.2	1,564.6	1,560.0	4.2	3.2	-174.70	11.2	82.7	252.6	247.1	5.44	46.442	
1,700.0	1,683.6	1,659.1	1,653.9	4.7	3.5	-174.63	11.9	92.8	285.4	279.6	5.78	49.367	
1,800.0	1,780.9	1,753.5	1,747.8	5.1	3.7	-174.57	12.7	102.9	318.2	312.1	6.12	51.963	
1,900.0	1,878.2	1,848.0	1,841.7	5.5	4.0	-174.52	13.5	112.9	351.1	344.6	6.47	54.283	
2,000.0	1,975.6	1,942.4	1,935.7	5.9	4.2	-174.48	14.3	123.0	383.9	377.1	6.81	56.368	
2,100.0	2,072.9	2,036.9	2,029.6	6.4	4.4	-174.45	15.1	133.1	416.7	409.5	7.15	58.253	
2,200.0	2,170.3	2,131.3	2,123.5	6.8	4.7	-174.42	15.8	143.1	449.5	442.0	7.50	59.964	
2,300.0	2,267.6	2,225.8	2,217.4	7.3	4.9	-174.40	16.6	153.2	482.3	474.5	7.84	61.525	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3J-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	56.90	3.6	5.6	6.7				
100.0	100.0	100.0	100.0	0.2	0.2	56.90	3.6	5.6	6.7	6.4	0.30	21.993	
200.0	200.0	200.0	200.0	0.3	0.3	56.90	3.6	5.6	6.7	6.0	0.65	10.232	CC, ES
300.0	300.0	300.1	300.1	0.5	0.5	170.89	3.5	5.4	7.3	6.3	1.00	7.309	
400.0	400.0	400.2	400.2	0.7	0.7	172.68	2.8	3.8	8.2	6.8	1.35	6.048	
500.0	499.9	500.3	500.3	0.9	0.9	174.88	1.2	0.7	9.0	7.3	1.70	5.304	
600.0	599.7	600.5	600.3	1.1	1.1	177.38	-1.2	-4.0	9.9	7.8	2.05	4.818	
700.0	699.4	700.7	700.2	1.3	1.3	-179.89	-4.4	-10.2	10.7	8.3	2.40	4.479	
800.0	798.9	800.9	800.0	1.5	1.5	-176.99	-8.3	-18.0	11.6	8.9	2.75	4.235	
900.0	898.3	901.1	899.7	1.8	1.7	-173.98	-13.0	-27.4	12.6	9.5	3.10	4.053	
1,000.0	997.4	1,001.3	999.1	2.0	2.0	-170.90	-18.6	-38.3	13.5	10.1	3.46	3.912	
1,100.0	1,096.3	1,101.5	1,098.4	2.3	2.3	-167.79	-24.9	-50.8	14.6	10.7	3.84	3.798	
1,200.0	1,194.9	1,201.8	1,197.4	2.7	2.6	-164.69	-32.0	-64.8	15.7	11.4	4.24	3.700	
1,300.0	1,293.3	1,302.0	1,296.1	3.0	2.9	-161.62	-39.8	-80.3	16.9	12.2	4.68	3.608	
1,400.0	1,391.2	1,402.3	1,394.5	3.4	3.3	-158.62	-48.5	-97.4	18.1	13.0	5.15	3.518	
1,500.0	1,488.9	1,502.4	1,492.5	3.8	3.7	-155.95	-57.8	-115.9	19.6	14.0	5.68	3.460	SF
1,600.0	1,586.2	1,602.4	1,590.3	4.2	4.0	-154.77	-67.3	-134.6	22.1	15.9	6.19	3.569	
1,700.0	1,683.6	1,702.4	1,688.0	4.7	4.4	-153.88	-76.7	-153.2	24.6	17.9	6.71	3.665	
1,800.0	1,780.9	1,802.3	1,785.8	5.1	4.8	-153.15	-86.2	-171.9	27.1	19.9	7.24	3.743	
1,900.0	1,878.2	1,902.3	1,883.5	5.5	5.2	-152.55	-95.6	-190.5	29.6	21.8	7.77	3.809	
2,000.0	1,975.6	2,002.3	1,981.3	5.9	5.6	-152.04	-105.0	-209.2	32.1	23.8	8.31	3.863	
2,100.0	2,072.9	2,102.2	2,079.0	6.4	6.0	-151.61	-114.5	-227.9	34.6	25.8	8.86	3.910	
2,200.0	2,170.3	2,202.2	2,176.8	6.8	6.4	-151.23	-123.9	-246.5	37.1	27.7	9.41	3.949	
2,300.0	2,267.6	2,302.2	2,274.6	7.3	6.8	-150.91	-133.4	-265.2	39.7	29.7	9.96	3.983	
2,400.0	2,364.9	2,402.1	2,372.3	7.7	7.2	-150.62	-142.8	-283.8	42.2	31.7	10.51	4.013	
2,500.0	2,462.3	2,502.1	2,470.1	8.1	7.6	-150.36	-152.2	-302.5	44.7	33.6	11.07	4.039	
2,600.0	2,559.6	2,602.1	2,567.8	8.6	8.0	-150.13	-161.7	-321.1	47.2	35.6	11.62	4.063	
2,700.0	2,656.9	2,702.0	2,665.6	9.0	8.5	-149.93	-171.1	-339.8	49.7	37.6	12.18	4.083	
2,800.0	2,754.3	2,802.0	2,763.3	9.4	8.9	-149.74	-180.6	-358.5	52.3	39.5	12.74	4.101	
2,900.0	2,851.6	2,902.0	2,861.1	9.9	9.3	-149.57	-190.0	-377.1	54.8	41.5	13.30	4.118	
3,000.0	2,949.0	3,001.9	2,958.9	10.3	9.7	-149.42	-199.5	-395.8	57.3	43.4	13.87	4.133	
3,100.0	3,046.3	3,101.9	3,056.6	10.8	10.1	-149.28	-208.9	-414.4	59.8	45.4	14.43	4.146	
3,200.0	3,143.6	3,201.9	3,154.4	11.2	10.5	-149.15	-218.3	-433.1	62.4	47.4	14.99	4.158	
3,300.0	3,241.0	3,301.8	3,252.1	11.7	10.9	-149.03	-227.8	-451.8	64.9	49.3	15.56	4.170	
3,400.0	3,338.3	3,401.8	3,349.9	12.1	11.3	-148.92	-237.2	-470.4	67.4	51.3	16.13	4.180	
3,500.0	3,435.7	3,501.8	3,447.6	12.5	11.7	-148.82	-246.7	-489.1	69.9	53.2	16.69	4.189	
3,600.0	3,533.0	3,601.8	3,545.4	13.0	12.1	-148.72	-256.1	-507.7	72.4	55.2	17.26	4.198	
3,700.0	3,630.3	3,701.7	3,643.2	13.4	12.5	-148.63	-265.5	-526.4	75.0	57.1	17.83	4.206	
3,800.0	3,727.7	3,801.7	3,740.9	13.9	12.9	-148.55	-275.0	-545.0	77.5	59.1	18.39	4.213	
3,900.0	3,825.0	3,901.7	3,838.7	14.3	13.3	-148.47	-284.4	-563.7	80.0	61.1	18.96	4.220	
4,000.0	3,922.3	4,001.6	3,936.4	14.7	13.7	-148.40	-293.9	-582.4	82.5	63.0	19.53	4.227	
4,100.0	4,019.7	4,101.6	4,034.2	15.2	14.2	-148.33	-303.3	-601.0	85.1	65.0	20.10	4.233	
4,200.0	4,117.0	4,201.6	4,131.9	15.6	14.6	-148.26	-312.8	-619.7	87.6	66.9	20.67	4.238	
4,300.0	4,214.4	4,301.5	4,229.7	16.1	15.0	-148.20	-322.2	-638.3	90.1	68.9	21.24	4.244	
4,400.0	4,311.7	4,401.5	4,327.4	16.5	15.4	-148.14	-331.6	-657.0	92.6	70.8	21.81	4.248	
4,500.0	4,409.0	4,501.5	4,425.2	17.0	15.8	-148.09	-341.1	-675.7	95.2	72.8	22.38	4.253	
4,600.0	4,506.4	4,601.4	4,523.0	17.4	16.2	-148.04	-350.5	-694.3	97.7	74.7	22.95	4.257	
4,700.0	4,603.7	4,701.4	4,620.7	17.8	16.6	-147.99	-360.0	-713.0	100.2	76.7	23.52	4.262	
4,800.0	4,701.1	4,801.4	4,718.5	18.3	17.0	-147.94	-369.4	-731.6	102.7	78.7	24.09	4.266	
4,900.0	4,798.4	4,901.3	4,816.2	18.7	17.4	-147.90	-378.8	-750.3	105.3	80.6	24.66	4.269	
5,000.0	4,895.7	5,001.3	4,914.0	19.2	17.8	-147.85	-388.3	-768.9	107.8	82.6	25.23	4.273	
5,100.0	4,993.1	5,101.3	5,011.7	19.6	18.2	-147.81	-397.7	-787.6	110.3	84.5	25.80	4.276	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3J-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,090.4	5,201.2	5,109.5	20.1	18.7	-147.78	-407.2	-806.3	112.8	86.5	26.37	4.279	
5,300.0	5,187.7	5,301.2	5,207.3	20.5	19.1	-147.74	-416.6	-824.9	115.4	88.4	26.94	4.282	
5,400.0	5,285.1	5,401.2	5,305.0	21.0	19.5	-147.70	-426.0	-843.6	117.9	90.4	27.51	4.285	
5,500.0	5,382.4	5,501.1	5,402.8	21.4	19.9	-147.67	-435.5	-862.2	120.4	92.3	28.08	4.288	
5,600.0	5,479.8	5,601.1	5,500.5	21.8	20.3	-147.64	-444.9	-880.9	122.9	94.3	28.66	4.290	
5,700.0	5,577.1	5,701.1	5,598.3	22.3	20.7	-147.60	-454.4	-899.6	125.5	96.2	29.23	4.293	
5,800.0	5,674.4	5,801.0	5,696.0	22.7	21.1	-147.57	-463.8	-918.2	128.0	98.2	29.80	4.295	
5,900.0	5,771.8	5,901.0	5,793.8	23.2	21.5	-147.55	-473.3	-936.9	130.5	100.2	30.37	4.298	
6,000.0	5,869.1	6,001.0	5,891.6	23.6	21.9	-147.52	-482.7	-955.5	133.1	102.1	30.94	4.300	
6,100.0	5,966.4	6,101.0	5,989.3	24.1	22.3	-147.49	-492.1	-974.2	135.6	104.1	31.52	4.302	
6,200.0	6,063.8	6,200.9	6,087.1	24.5	22.7	-147.47	-501.6	-992.8	138.1	106.0	32.09	4.304	
6,300.0	6,161.1	6,300.9	6,184.8	24.9	23.2	-147.44	-511.0	-1,011.5	140.6	108.0	32.66	4.306	
6,400.0	6,258.5	6,400.9	6,282.6	25.4	23.6	-147.42	-520.5	-1,030.2	143.2	109.9	33.23	4.308	
6,500.0	6,355.8	6,500.8	6,380.3	25.8	24.0	-147.39	-529.9	-1,048.8	145.7	111.9	33.81	4.309	
6,600.0	6,453.1	6,600.8	6,478.1	26.3	24.4	-147.37	-539.3	-1,067.5	148.2	113.8	34.38	4.311	
6,700.0	6,550.5	6,700.8	6,575.8	26.7	24.8	-147.35	-548.8	-1,086.1	150.7	115.8	34.95	4.313	
6,800.0	6,647.8	6,800.7	6,673.6	27.2	25.2	-147.33	-558.2	-1,104.8	153.3	117.7	35.52	4.314	
6,900.0	6,745.2	6,901.2	6,771.8	27.6	25.6	-147.34	-567.6	-1,123.5	155.8	119.7	36.08	4.318	
7,000.0	6,842.5	7,004.8	6,873.4	28.1	25.9	-151.33	-566.3	-1,142.9	156.8	122.4	34.40	4.556	
7,100.0	6,939.8	7,101.6	6,966.7	28.5	26.1	-160.99	-548.2	-1,160.7	158.7	128.8	29.86	5.313	
7,200.0	7,037.2	7,188.0	7,046.5	28.9	26.2	169.98	-518.7	-1,176.0	169.0	143.2	25.76	6.561	
7,300.0	7,134.5	7,268.6	7,116.1	29.3	26.2	118.27	-480.6	-1,189.3	188.7	162.7	25.99	7.259	
7,400.0	7,229.2	7,350.0	7,180.4	29.5	26.2	88.36	-432.3	-1,201.5	213.2	184.6	28.61	7.452	
7,500.0	7,318.2	7,420.1	7,229.9	29.6	26.1	72.32	-383.7	-1,211.0	238.7	208.5	30.29	7.883	
7,600.0	7,399.0	7,492.4	7,274.6	29.7	26.1	62.28	-327.4	-1,219.5	263.3	232.8	30.54	8.622	
7,700.0	7,469.1	7,563.2	7,311.1	29.8	26.0	55.76	-267.2	-1,226.5	285.3	256.0	29.35	9.721	
7,800.0	7,526.4	7,632.9	7,339.7	29.8	26.0	51.48	-204.0	-1,231.9	303.8	276.6	27.19	11.176	
7,900.0	7,569.0	7,700.0	7,360.0	29.8	26.0	48.79	-140.2	-1,235.8	318.3	293.6	24.66	12.906	
8,000.0	7,595.8	7,770.0	7,373.1	29.9	26.0	47.30	-71.5	-1,238.3	328.2	305.6	22.62	14.511	
8,100.0	7,605.9	7,838.0	7,378.0	30.0	26.0	46.88	-3.7	-1,239.2	333.4	311.7	21.72	15.354	
8,200.0	7,606.0	7,934.5	7,378.0	30.2	26.2	47.25	92.7	-1,239.2	336.0	313.5	22.50	14.933	
8,300.0	7,606.0	8,034.4	7,378.0	30.5	26.4	47.65	192.7	-1,239.2	338.6	315.0	23.61	14.340	
8,400.0	7,606.0	8,134.4	7,378.0	30.9	26.8	48.05	292.6	-1,239.2	341.2	316.2	24.96	13.669	
8,500.0	7,606.0	8,234.3	7,378.0	31.4	27.3	48.44	392.6	-1,239.2	343.8	317.3	26.52	12.962	
8,600.0	7,606.0	8,334.2	7,378.0	31.9	27.9	48.82	492.5	-1,239.2	346.4	318.1	28.27	12.254	
8,700.0	7,606.0	8,434.2	7,378.0	32.6	28.5	49.20	592.4	-1,239.2	349.0	318.9	30.17	11.567	
8,800.0	7,606.0	8,534.1	7,378.0	33.3	29.3	49.57	692.4	-1,239.2	351.7	319.5	32.22	10.914	
8,900.0	7,606.0	8,634.1	7,378.0	34.1	30.2	49.93	792.3	-1,239.2	354.3	320.0	34.39	10.304	
9,000.0	7,606.0	8,734.0	7,378.0	35.0	31.1	50.29	892.3	-1,239.2	357.0	320.4	36.66	9.739	
9,100.0	7,606.0	8,833.9	7,378.0	35.9	32.1	50.65	992.2	-1,239.2	359.7	320.7	39.02	9.219	
9,200.0	7,606.0	8,933.9	7,378.0	36.9	33.2	51.00	1,092.1	-1,239.2	362.4	321.0	41.46	8.741	
9,300.0	7,606.0	9,033.8	7,378.0	38.0	34.3	51.34	1,192.1	-1,239.2	365.1	321.2	43.97	8.304	
9,400.0	7,606.0	9,133.8	7,378.0	39.1	35.5	51.68	1,292.0	-1,239.2	367.9	321.3	46.55	7.903	
9,500.0	7,606.0	9,233.7	7,378.0	40.3	36.7	52.02	1,392.0	-1,239.2	370.6	321.4	49.18	7.537	
9,600.0	7,606.0	9,333.6	7,378.0	41.4	37.9	52.35	1,491.9	-1,239.2	373.4	321.5	51.86	7.200	
9,700.0	7,606.0	9,433.6	7,378.0	42.7	39.2	52.67	1,591.8	-1,239.2	376.1	321.6	54.58	6.891	
9,800.0	7,606.0	9,533.5	7,378.0	44.0	40.6	52.99	1,691.8	-1,239.2	378.9	321.6	57.35	6.607	
9,900.0	7,606.0	9,633.5	7,378.0	45.3	41.9	53.31	1,791.7	-1,239.2	381.7	321.6	60.16	6.345	
10,000.0	7,606.0	9,733.4	7,378.0	46.6	43.3	53.62	1,891.7	-1,239.2	384.5	321.5	63.00	6.103	
10,100.0	7,606.0	9,833.3	7,378.0	48.0	44.7	53.92	1,991.6	-1,239.2	387.3	321.5	65.88	5.880	
10,200.0	7,606.0	9,933.3	7,378.0	49.3	46.2	54.23	2,091.5	-1,239.2	390.2	321.4	68.78	5.672	
10,300.0	7,606.0	10,033.2	7,378.0	50.7	47.7	54.52	2,191.5	-1,239.2	393.0	321.3	71.72	5.480	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3J-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,400.0	7,606.0	10,133.2	7,378.0	52.2	49.1	54.82	2,291.4	-1,239.2	395.9	321.2	74.68	5.301	
10,500.0	7,606.0	10,233.1	7,378.0	53.6	50.6	55.10	2,391.3	-1,239.2	398.7	321.0	77.67	5.134	
10,600.0	7,606.0	10,333.0	7,378.0	55.1	52.2	55.39	2,491.3	-1,239.2	401.6	320.9	80.67	4.978	
10,700.0	7,606.0	10,433.0	7,378.0	56.6	53.7	55.67	2,591.2	-1,239.2	404.5	320.7	83.71	4.832	
10,800.0	7,606.0	10,532.9	7,378.0	58.1	55.2	55.95	2,691.2	-1,239.2	407.3	320.6	86.76	4.695	
10,900.0	7,606.0	10,632.8	7,378.0	59.6	56.8	56.22	2,791.1	-1,239.2	410.2	320.4	89.83	4.567	
11,000.0	7,606.0	10,732.8	7,378.0	61.1	58.4	56.49	2,891.0	-1,239.2	413.1	320.2	92.92	4.446	
11,100.0	7,606.0	10,832.7	7,378.0	62.7	59.9	56.75	2,991.0	-1,239.2	416.1	320.0	96.03	4.333	
11,200.0	7,606.0	10,932.7	7,378.0	64.2	61.5	57.02	3,090.9	-1,239.2	419.0	319.8	99.15	4.226	
11,227.4	7,606.0	10,956.4	7,378.0	64.6	61.9	57.08	3,114.6	-1,239.2	419.8	319.9	99.95	4.200	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3K-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	89.98	0.0	11.2	11.2				
100.0	100.0	100.0	100.0	0.2	0.2	89.98	0.0	11.2	11.2	10.9	0.30	36.850	
200.0	200.0	200.0	200.0	0.3	0.3	89.98	0.0	11.2	11.2	10.5	0.65	17.144	CC, ES
300.0	300.0	300.0	300.0	0.5	0.5	-158.67	0.0	11.2	12.0	11.0	1.00	11.977	
400.0	400.0	400.1	400.1	0.7	0.7	-162.01	-0.1	11.0	14.3	12.9	1.35	10.568	
500.0	499.9	500.3	500.3	0.9	0.9	-163.62	-1.1	9.6	16.9	15.2	1.70	9.945	
600.0	599.7	600.5	600.4	1.1	1.0	-163.80	-3.1	6.7	19.7	17.6	2.05	9.594	
700.0	699.4	700.8	700.6	1.3	1.2	-163.08	-6.1	2.4	22.6	20.2	2.41	9.387	
800.0	798.9	801.1	800.7	1.5	1.4	-161.77	-10.1	-3.4	25.7	22.9	2.77	9.262	
900.0	898.3	901.5	900.6	1.8	1.6	-160.09	-15.2	-10.6	28.9	25.7	3.15	9.184	
1,000.0	997.4	1,001.9	1,000.5	2.0	1.9	-158.16	-21.2	-19.2	32.3	28.8	3.54	9.130	
1,100.0	1,096.3	1,102.3	1,100.1	2.3	2.1	-156.09	-28.2	-29.3	35.9	31.9	3.95	9.083	
1,200.0	1,194.9	1,202.7	1,199.6	2.7	2.4	-153.94	-36.2	-40.8	39.7	35.3	4.40	9.031	
1,300.0	1,293.3	1,303.0	1,298.6	3.0	2.7	-151.87	-45.2	-53.6	43.8	39.0	4.88	8.992	SF
1,400.0	1,391.2	1,402.8	1,397.2	3.4	3.0	-150.88	-54.3	-66.7	49.3	43.9	5.36	9.191	
1,500.0	1,488.9	1,502.6	1,495.7	3.8	3.3	-150.96	-63.4	-79.7	56.2	50.4	5.83	9.638	
1,600.0	1,586.2	1,602.3	1,594.1	4.2	3.6	-151.58	-72.4	-92.7	64.3	58.0	6.30	10.208	
1,700.0	1,683.6	1,701.9	1,692.5	4.7	4.0	-152.09	-81.5	-105.8	72.4	65.6	6.76	10.705	
1,800.0	1,780.9	1,801.6	1,790.9	5.1	4.3	-152.50	-90.6	-118.8	80.5	73.3	7.23	11.135	
1,900.0	1,878.2	1,901.3	1,889.2	5.5	4.6	-152.83	-99.7	-131.9	88.6	80.9	7.70	11.511	
2,000.0	1,975.6	2,000.9	1,987.6	5.9	4.9	-153.11	-108.8	-144.9	96.7	88.6	8.17	11.843	
2,100.0	2,072.9	2,100.6	2,086.0	6.4	5.2	-153.34	-117.9	-158.0	104.9	96.2	8.64	12.137	
2,200.0	2,170.3	2,200.3	2,184.4	6.8	5.6	-153.54	-127.0	-171.0	113.0	103.9	9.11	12.400	
2,300.0	2,267.6	2,300.0	2,282.8	7.3	5.9	-153.72	-136.1	-184.0	121.1	111.5	9.58	12.636	
2,400.0	2,364.9	2,399.6	2,381.2	7.7	6.2	-153.87	-145.2	-197.1	129.2	119.2	10.06	12.850	
2,500.0	2,462.3	2,499.3	2,479.6	8.1	6.5	-154.00	-154.3	-210.1	137.3	126.8	10.53	13.043	
2,600.0	2,559.6	2,599.0	2,578.0	8.6	6.9	-154.12	-163.3	-223.2	145.5	134.5	11.00	13.219	
2,700.0	2,656.9	2,698.6	2,676.4	9.0	7.2	-154.23	-172.4	-236.2	153.6	142.1	11.48	13.381	
2,800.0	2,754.3	2,798.3	2,774.8	9.4	7.5	-154.32	-181.5	-249.2	161.7	149.8	11.95	13.529	
2,900.0	2,851.6	2,898.0	2,873.2	9.9	7.8	-154.41	-190.6	-262.3	169.8	157.4	12.43	13.666	
3,000.0	2,949.0	2,997.6	2,971.6	10.3	8.2	-154.49	-199.7	-275.3	178.0	165.1	12.90	13.792	
3,100.0	3,046.3	3,097.3	3,070.0	10.8	8.5	-154.56	-208.8	-288.4	186.1	172.7	13.38	13.909	
3,200.0	3,143.6	3,197.0	3,168.4	11.2	8.8	-154.63	-217.9	-301.4	194.2	180.4	13.86	14.018	
3,300.0	3,241.0	3,296.6	3,266.8	11.7	9.1	-154.69	-227.0	-314.4	202.3	188.0	14.33	14.119	
3,400.0	3,338.3	3,396.3	3,365.1	12.1	9.5	-154.74	-236.1	-327.5	210.5	195.7	14.81	14.214	
3,500.0	3,435.7	3,496.0	3,463.5	12.5	9.8	-154.79	-245.2	-340.5	218.6	203.3	15.28	14.302	
3,600.0	3,533.0	3,595.7	3,561.9	13.0	10.1	-154.84	-254.2	-353.6	226.7	211.0	15.76	14.385	
3,700.0	3,630.3	3,695.3	3,660.3	13.4	10.4	-154.89	-263.3	-366.6	234.9	218.6	16.24	14.464	
3,800.0	3,727.7	3,795.0	3,758.7	13.9	10.8	-154.93	-272.4	-379.7	243.0	226.3	16.71	14.537	
3,900.0	3,825.0	3,894.7	3,857.1	14.3	11.1	-154.97	-281.5	-392.7	251.1	233.9	17.19	14.607	
4,000.0	3,922.3	3,994.3	3,955.5	14.7	11.4	-155.00	-290.6	-405.7	259.2	241.6	17.67	14.672	
4,100.0	4,019.7	4,094.0	4,053.9	15.2	11.8	-155.04	-299.7	-418.8	267.4	249.2	18.15	14.734	
4,200.0	4,117.0	4,193.7	4,152.3	15.6	12.1	-155.07	-308.8	-431.8	275.5	256.9	18.62	14.793	
4,300.0	4,214.4	4,293.3	4,250.7	16.1	12.4	-155.10	-317.9	-444.9	283.6	264.5	19.10	14.849	
4,400.0	4,311.7	4,393.0	4,349.1	16.5	12.7	-155.13	-327.0	-457.9	291.8	272.2	19.58	14.902	
4,500.0	4,409.0	4,492.7	4,447.5	17.0	13.1	-155.16	-336.1	-470.9	299.9	279.8	20.06	14.952	
4,600.0	4,506.4	4,592.3	4,545.9	17.4	13.4	-155.18	-345.1	-484.0	308.0	287.5	20.53	15.001	
4,700.0	4,603.7	4,692.0	4,644.3	17.8	13.7	-155.21	-354.2	-497.0	316.1	295.1	21.01	15.046	
4,800.0	4,701.1	4,791.7	4,742.7	18.3	14.1	-155.23	-363.3	-510.1	324.3	302.8	21.49	15.090	
4,900.0	4,798.4	4,891.3	4,841.0	18.7	14.4	-155.25	-372.4	-523.1	332.4	310.4	21.97	15.132	
5,000.0	4,895.7	4,991.0	4,939.4	19.2	14.7	-155.27	-381.5	-536.1	340.5	318.1	22.44	15.172	
5,100.0	4,993.1	5,090.7	5,037.8	19.6	15.0	-155.29	-390.6	-549.2	348.7	325.7	22.92	15.210	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3K-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,090.4	5,190.4	5,136.2	20.1	15.4	-155.31	-399.7	-562.2	356.8	333.4	23.40	15.247	
5,300.0	5,187.7	5,290.0	5,234.6	20.5	15.7	-155.33	-408.8	-575.3	364.9	341.0	23.88	15.282	
5,400.0	5,285.1	5,389.7	5,333.0	21.0	16.0	-155.35	-417.9	-588.3	373.0	348.7	24.36	15.316	
5,500.0	5,382.4	5,489.4	5,431.4	21.4	16.4	-155.36	-427.0	-601.3	381.2	356.3	24.83	15.349	
5,600.0	5,479.8	5,589.0	5,529.8	21.8	16.7	-155.38	-436.1	-614.4	389.3	364.0	25.31	15.380	
5,700.0	5,577.1	5,688.7	5,628.2	22.3	17.0	-155.40	-445.1	-627.4	397.4	371.6	25.79	15.410	
5,800.0	5,674.4	5,788.4	5,726.6	22.7	17.3	-155.41	-454.2	-640.5	405.6	379.3	26.27	15.439	
5,900.0	5,771.8	5,888.0	5,825.0	23.2	17.7	-155.42	-463.3	-653.5	413.7	386.9	26.75	15.467	
6,000.0	5,869.1	5,987.7	5,923.4	23.6	18.0	-155.44	-472.4	-666.6	421.8	394.6	27.22	15.494	
6,100.0	5,966.4	6,087.4	6,021.8	24.1	18.3	-155.45	-481.5	-679.6	429.9	402.2	27.70	15.520	
6,200.0	6,063.8	6,187.0	6,120.2	24.5	18.7	-155.46	-490.6	-692.6	438.1	409.9	28.18	15.545	
6,300.0	6,161.1	6,286.7	6,218.5	24.9	19.0	-155.48	-499.7	-705.7	446.2	417.5	28.66	15.569	
6,400.0	6,258.5	6,386.4	6,316.9	25.4	19.3	-155.49	-508.8	-718.7	454.3	425.2	29.14	15.592	
6,500.0	6,355.8	6,486.1	6,415.3	25.8	19.6	-155.50	-517.9	-731.8	462.5	432.8	29.62	15.615	
6,600.0	6,453.1	6,585.7	6,513.7	26.3	20.0	-155.51	-527.0	-744.8	470.6	440.5	30.09	15.637	
6,700.0	6,550.5	6,685.4	6,612.1	26.7	20.3	-155.52	-536.0	-757.8	478.7	448.1	30.57	15.658	
6,800.0	6,647.8	6,785.1	6,710.5	27.2	20.6	-155.53	-545.1	-770.9	486.8	455.8	31.05	15.679	
6,900.0	6,745.2	6,884.7	6,808.9	27.6	21.0	-155.54	-554.2	-783.9	495.0	463.4	31.53	15.699	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3L-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	75.39	3.6	14.0	14.5				
100.0	100.0	100.0	100.0	0.2	0.2	75.39	3.6	14.0	14.5	14.2	0.30	47.602	
200.0	200.0	200.0	200.0	0.3	0.3	75.39	3.6	14.0	14.5	13.8	0.65	22.147	CC, ES
300.0	300.0	300.0	300.0	0.5	0.5	-172.11	3.6	14.0	15.3	14.3	1.00	15.294	
400.0	400.0	400.0	400.0	0.7	0.7	-173.26	3.6	14.0	17.9	16.6	1.35	13.267	
500.0	499.9	500.0	500.0	0.9	0.9	-174.33	3.5	13.8	22.1	20.4	1.70	12.983	
600.0	599.7	600.3	600.3	1.1	1.0	-173.97	2.3	12.6	26.6	24.5	2.05	12.971	SF
700.0	699.4	700.7	700.6	1.3	1.2	-172.62	-0.1	10.0	31.2	28.8	2.40	13.028	
800.0	798.9	801.0	800.8	1.5	1.4	-170.68	-3.7	6.2	36.1	33.4	2.75	13.130	
900.0	898.3	901.5	901.0	1.8	1.6	-168.40	-8.6	1.1	41.3	38.2	3.11	13.260	
1,000.0	997.4	1,002.0	1,001.1	2.0	1.8	-165.92	-14.6	-5.3	46.7	43.2	3.49	13.399	
1,100.0	1,096.3	1,102.5	1,101.1	2.3	2.0	-163.34	-21.8	-13.0	52.5	48.6	3.88	13.532	
1,200.0	1,194.9	1,202.3	1,200.2	2.7	2.3	-161.23	-29.7	-21.3	59.2	54.9	4.28	13.825	
1,300.0	1,293.3	1,301.9	1,299.2	3.0	2.5	-160.06	-37.5	-29.6	67.6	62.9	4.69	14.408	
1,400.0	1,391.2	1,401.4	1,398.0	3.4	2.8	-159.59	-45.3	-37.9	77.7	72.6	5.11	15.215	
1,500.0	1,488.9	1,500.7	1,496.7	3.8	3.0	-159.62	-53.2	-46.2	89.4	83.9	5.52	16.202	
1,600.0	1,586.2	1,599.9	1,595.2	4.2	3.3	-159.90	-61.0	-54.5	102.3	96.4	5.93	17.244	
1,700.0	1,683.6	1,699.0	1,693.7	4.7	3.5	-160.14	-68.8	-62.7	115.2	108.9	6.35	18.150	
1,800.0	1,780.9	1,798.2	1,792.2	5.1	3.8	-160.33	-76.6	-71.0	128.2	121.4	6.77	18.940	
1,900.0	1,878.2	1,897.4	1,890.7	5.5	4.0	-160.49	-84.4	-79.3	141.1	133.9	7.19	19.636	
2,000.0	1,975.6	1,996.5	1,989.2	5.9	4.3	-160.62	-92.2	-87.6	154.0	146.4	7.61	20.253	
2,100.0	2,072.9	2,095.7	2,087.7	6.4	4.6	-160.73	-100.0	-95.8	167.0	158.9	8.03	20.803	
2,200.0	2,170.3	2,194.8	2,186.2	6.8	4.8	-160.82	-107.8	-104.1	179.9	171.4	8.45	21.297	
2,300.0	2,267.6	2,294.0	2,284.7	7.3	5.1	-160.90	-115.6	-112.4	192.8	184.0	8.87	21.742	
2,400.0	2,364.9	2,393.2	2,383.2	7.7	5.3	-160.98	-123.4	-120.6	205.8	196.5	9.29	22.146	
2,500.0	2,462.3	2,492.3	2,481.7	8.1	5.6	-161.04	-131.2	-128.9	218.7	209.0	9.71	22.514	
2,600.0	2,559.6	2,591.5	2,580.2	8.6	5.8	-161.09	-139.0	-137.2	231.6	221.5	10.14	22.851	
2,700.0	2,656.9	2,690.6	2,678.8	9.0	6.1	-161.14	-146.8	-145.4	244.6	234.0	10.56	23.159	
2,800.0	2,754.3	2,789.8	2,777.3	9.4	6.4	-161.19	-154.6	-153.7	257.5	246.5	10.98	23.444	
2,900.0	2,851.6	2,889.0	2,875.8	9.9	6.6	-161.23	-162.4	-162.0	270.4	259.0	11.41	23.706	
3,000.0	2,949.0	2,988.1	2,974.3	10.3	6.9	-161.27	-170.2	-170.2	283.4	271.5	11.83	23.950	
3,100.0	3,046.3	3,087.3	3,072.8	10.8	7.2	-161.30	-178.0	-178.5	296.3	284.0	12.26	24.176	
3,200.0	3,143.6	3,186.4	3,171.3	11.2	7.4	-161.33	-185.8	-186.8	309.2	296.5	12.68	24.387	
3,300.0	3,241.0	3,285.6	3,269.8	11.7	7.7	-161.36	-193.6	-195.0	322.2	309.1	13.10	24.583	
3,400.0	3,338.3	3,384.8	3,368.3	12.1	7.9	-161.38	-201.4	-203.3	335.1	321.6	13.53	24.767	
3,500.0	3,435.7	3,483.9	3,466.8	12.5	8.2	-161.41	-209.2	-211.6	348.0	334.1	13.95	24.940	
3,600.0	3,533.0	3,583.1	3,565.3	13.0	8.5	-161.43	-217.0	-219.9	361.0	346.6	14.38	25.102	
3,700.0	3,630.3	3,682.2	3,663.8	13.4	8.7	-161.45	-224.8	-228.1	373.9	359.1	14.80	25.255	
3,800.0	3,727.7	3,781.4	3,762.3	13.9	9.0	-161.47	-232.6	-236.4	386.8	371.6	15.23	25.399	
3,900.0	3,825.0	3,880.6	3,860.8	14.3	9.3	-161.49	-240.4	-244.7	399.8	384.1	15.66	25.535	
4,000.0	3,922.3	3,979.7	3,959.3	14.7	9.5	-161.51	-248.2	-252.9	412.7	396.6	16.08	25.664	
4,100.0	4,019.7	4,078.9	4,057.8	15.2	9.8	-161.52	-256.0	-261.2	425.6	409.1	16.51	25.786	
4,200.0	4,117.0	4,178.0	4,156.3	15.6	10.0	-161.54	-263.8	-269.5	438.6	421.6	16.93	25.901	
4,300.0	4,214.4	4,277.2	4,254.8	16.1	10.3	-161.55	-271.6	-277.7	451.5	434.1	17.36	26.011	
4,400.0	4,311.7	4,376.4	4,353.4	16.5	10.6	-161.57	-279.4	-286.0	464.4	446.7	17.78	26.116	
4,500.0	4,409.0	4,475.5	4,451.9	17.0	10.8	-161.58	-287.2	-294.3	477.4	459.2	18.21	26.216	
4,600.0	4,506.4	4,574.7	4,550.4	17.4	11.1	-161.59	-295.0	-302.5	490.3	471.7	18.64	26.310	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3M-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	89.99	0.0	30.8	30.8				
100.0	100.0	100.0	100.0	0.2	0.2	89.99	0.0	30.8	30.8	30.5	0.30	101.338	
200.0	200.0	200.0	200.0	0.3	0.3	89.99	0.0	30.8	30.8	30.1	0.65	47.147	CC, ES
300.0	300.0	300.2	300.2	0.5	0.5	-156.17	-0.8	30.4	31.3	30.3	1.00	31.159	
400.0	400.0	400.4	400.3	0.7	0.7	-153.73	-3.2	29.5	32.7	31.4	1.36	24.103	
500.0	499.9	500.5	500.3	0.9	0.9	-150.12	-7.3	27.8	35.3	33.6	1.72	20.492	
600.0	599.7	600.5	600.2	1.1	1.1	-145.90	-13.0	25.5	39.1	37.0	2.11	18.576	
700.0	699.4	700.4	699.8	1.3	1.3	-141.57	-20.2	22.6	44.2	41.7	2.51	17.609	
800.0	798.9	800.2	799.2	1.5	1.5	-137.85	-28.8	19.1	50.8	47.9	2.94	17.261	SF
900.0	898.3	899.9	898.4	1.8	1.7	-136.05	-37.5	15.6	58.7	55.4	3.39	17.343	
1,000.0	997.4	999.5	997.5	2.0	2.0	-135.70	-46.2	12.1	68.0	64.1	3.84	17.688	
1,100.0	1,096.3	1,098.9	1,096.5	2.3	2.2	-136.31	-54.9	8.6	78.4	74.1	4.31	18.218	
1,200.0	1,194.9	1,198.2	1,195.4	2.7	2.4	-137.51	-63.5	5.1	90.2	85.4	4.77	18.894	
1,300.0	1,293.3	1,297.3	1,294.0	3.0	2.7	-139.06	-72.1	1.6	103.3	98.1	5.24	19.698	
1,400.0	1,391.2	1,396.2	1,392.5	3.4	2.9	-140.77	-80.8	-1.9	117.8	112.1	5.71	20.618	
1,500.0	1,488.9	1,494.8	1,490.7	3.8	3.1	-142.55	-89.4	-5.4	133.7	127.6	6.18	21.644	
1,600.0	1,586.2	1,593.2	1,588.7	4.2	3.4	-144.29	-97.9	-8.8	150.8	144.2	6.64	22.707	
1,700.0	1,683.6	1,691.7	1,686.7	4.7	3.6	-145.70	-106.5	-12.3	168.0	160.9	7.10	23.655	
1,800.0	1,780.9	1,790.1	1,784.7	5.1	3.8	-146.85	-115.1	-15.8	185.3	177.8	7.56	24.501	
1,900.0	1,878.2	1,888.5	1,882.7	5.5	4.1	-147.80	-123.7	-19.2	202.7	194.7	8.02	25.260	
2,000.0	1,975.6	1,987.0	1,980.6	5.9	4.3	-148.60	-132.3	-22.7	220.1	211.6	8.48	25.944	
2,100.0	2,072.9	2,085.4	2,078.6	6.4	4.5	-149.29	-140.8	-26.2	237.5	228.6	8.94	26.562	
2,200.0	2,170.3	2,183.8	2,176.6	6.8	4.8	-149.88	-149.4	-29.7	255.0	245.6	9.40	27.124	
2,300.0	2,267.6	2,282.3	2,274.6	7.3	5.0	-150.39	-158.0	-33.1	272.5	262.6	9.86	27.636	
2,400.0	2,364.9	2,380.7	2,372.6	7.7	5.2	-150.85	-166.6	-36.6	290.0	279.7	10.32	28.105	
2,500.0	2,462.3	2,479.1	2,470.6	8.1	5.5	-151.25	-175.2	-40.1	307.5	296.7	10.78	28.536	
2,600.0	2,559.6	2,577.6	2,568.6	8.6	5.7	-151.61	-183.7	-43.5	325.1	313.8	11.23	28.934	
2,700.0	2,656.9	2,676.0	2,666.6	9.0	5.9	-151.93	-192.3	-47.0	342.6	330.9	11.69	29.301	
2,800.0	2,754.3	2,774.4	2,764.6	9.4	6.2	-152.22	-200.9	-50.5	360.2	348.0	12.15	29.642	
2,900.0	2,851.6	2,872.8	2,862.6	9.9	6.4	-152.48	-209.5	-53.9	377.7	365.1	12.61	29.958	
3,000.0	2,949.0	2,971.3	2,960.6	10.3	6.6	-152.72	-218.1	-57.4	395.3	382.2	13.07	30.253	
3,100.0	3,046.3	3,069.7	3,058.6	10.8	6.9	-152.94	-226.6	-60.9	412.9	399.4	13.52	30.529	
3,200.0	3,143.6	3,168.1	3,156.6	11.2	7.1	-153.14	-235.2	-64.3	430.5	416.5	13.98	30.787	
3,300.0	3,241.0	3,266.6	3,254.6	11.7	7.4	-153.33	-243.8	-67.8	448.1	433.6	14.44	31.029	
3,400.0	3,338.3	3,365.0	3,352.6	12.1	7.6	-153.50	-252.4	-71.3	465.7	450.8	14.90	31.257	
3,500.0	3,435.7	3,463.4	3,450.6	12.5	7.8	-153.66	-261.0	-74.8	483.3	467.9	15.36	31.471	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3N-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	83.80	3.6	33.6	33.8				
100.0	100.0	100.0	100.0	0.2	0.2	83.80	3.6	33.6	33.8	33.5	0.30	111.201	
200.0	200.0	200.0	200.0	0.3	0.3	83.80	3.6	33.6	33.8	33.1	0.65	51.735	CC, ES
300.0	300.0	300.0	300.0	0.5	0.5	-163.64	3.6	33.6	34.6	33.6	1.00	34.545	
400.0	400.0	399.9	399.9	0.7	0.7	-163.43	2.8	33.7	37.2	35.8	1.35	27.518	
500.0	499.9	499.7	499.7	0.9	0.9	-161.54	0.2	34.3	41.6	39.9	1.71	24.406	
600.0	599.7	599.4	599.3	1.1	1.0	-158.67	-4.0	35.1	48.0	45.9	2.07	23.209	
700.0	699.4	698.8	698.5	1.3	1.2	-155.44	-10.0	36.3	56.4	54.0	2.44	23.084	SF
800.0	798.9	797.9	797.3	1.5	1.4	-152.28	-17.6	37.8	66.9	64.1	2.84	23.598	
900.0	898.3	896.9	895.9	1.8	1.7	-149.62	-26.5	39.6	79.6	76.3	3.25	24.510	
1,000.0	997.4	995.9	994.4	2.0	1.9	-148.15	-35.6	41.4	93.8	90.2	3.67	25.586	
1,100.0	1,096.3	1,094.6	1,092.7	2.3	2.1	-147.54	-44.7	43.3	109.6	105.5	4.10	26.747	
1,200.0	1,194.9	1,193.1	1,190.8	2.7	2.3	-147.48	-53.7	45.1	126.8	122.3	4.54	27.961	
1,300.0	1,293.3	1,291.4	1,288.6	3.0	2.6	-147.78	-62.8	46.9	145.5	140.5	4.98	29.216	
1,400.0	1,391.2	1,389.3	1,386.1	3.4	2.8	-148.31	-71.8	48.7	165.6	160.2	5.43	30.506	
1,500.0	1,488.9	1,486.9	1,483.3	3.8	3.0	-148.98	-80.7	50.5	187.2	181.3	5.88	31.831	
1,600.0	1,586.2	1,584.3	1,580.2	4.2	3.2	-149.75	-89.7	52.3	209.9	203.6	6.34	33.112	
1,700.0	1,683.6	1,681.6	1,677.1	4.7	3.5	-150.40	-98.6	54.1	232.7	225.9	6.80	34.218	
1,800.0	1,780.9	1,779.0	1,774.0	5.1	3.7	-150.93	-107.6	55.8	255.5	248.2	7.26	35.184	
1,900.0	1,878.2	1,876.3	1,870.9	5.5	3.9	-151.38	-116.5	57.6	278.3	270.6	7.72	36.034	
2,000.0	1,975.6	1,973.7	1,967.9	5.9	4.2	-151.75	-125.5	59.4	301.1	292.9	8.18	36.788	
2,100.0	2,072.9	2,071.0	2,064.8	6.4	4.4	-152.08	-134.4	61.2	323.9	315.3	8.65	37.460	
2,200.0	2,170.3	2,168.3	2,161.7	6.8	4.6	-152.36	-143.4	63.0	346.8	337.7	9.11	38.064	
2,300.0	2,267.6	2,265.7	2,258.6	7.3	4.9	-152.61	-152.3	64.8	369.6	360.0	9.57	38.609	
2,400.0	2,364.9	2,363.0	2,355.5	7.7	5.1	-152.83	-161.3	66.6	392.5	382.4	10.04	39.104	
2,500.0	2,462.3	2,460.4	2,452.4	8.1	5.3	-153.02	-170.2	68.4	415.3	404.8	10.50	39.554	
2,600.0	2,559.6	2,557.7	2,549.4	8.6	5.6	-153.20	-179.2	70.2	438.2	427.2	10.96	39.966	
2,700.0	2,656.9	2,655.1	2,646.3	9.0	5.8	-153.35	-188.1	72.0	461.1	449.6	11.43	40.345	
2,800.0	2,754.3	2,752.4	2,743.2	9.4	6.0	-153.50	-197.1	73.8	483.9	472.0	11.89	40.693	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3O-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	89.99	0.0	39.2	39.2				
100.0	100.0	100.0	100.0	0.2	0.2	89.99	0.0	39.2	39.2	38.9	0.30	128.976	
200.0	200.0	200.0	200.0	0.3	0.3	89.99	0.0	39.2	39.2	38.5	0.65	60.005	CC, ES
300.0	300.0	299.8	299.8	0.5	0.5	-157.27	-0.2	39.3	40.1	39.1	1.00	40.047	
400.0	400.0	399.3	399.2	0.7	0.7	-156.80	-1.5	40.4	43.6	42.3	1.35	32.265	
500.0	499.9	498.6	498.5	0.9	0.9	-155.65	-4.2	42.5	49.8	48.1	1.71	29.204	
600.0	599.7	597.5	597.3	1.1	1.0	-154.20	-8.2	45.8	58.7	56.7	2.07	28.427	SF
700.0	699.4	696.1	695.6	1.3	1.2	-152.71	-13.5	50.0	70.4	67.9	2.43	28.903	
800.0	798.9	794.1	793.3	1.5	1.5	-151.35	-20.1	55.3	84.8	82.0	2.82	30.111	
900.0	898.3	891.5	890.2	1.8	1.7	-150.17	-28.0	61.6	101.9	98.7	3.21	31.754	
1,000.0	997.4	989.5	987.5	2.0	1.9	-149.37	-36.7	68.6	121.2	117.6	3.61	33.559	
1,100.0	1,096.3	1,087.3	1,084.7	2.3	2.2	-149.12	-45.3	75.5	142.1	138.0	4.02	35.297	
1,200.0	1,194.9	1,184.8	1,181.5	2.7	2.4	-149.22	-54.0	82.4	164.3	159.9	4.44	36.981	
1,300.0	1,293.3	1,281.9	1,278.0	3.0	2.7	-149.53	-62.6	89.3	188.1	183.2	4.87	38.621	
1,400.0	1,391.2	1,378.6	1,374.1	3.4	2.9	-149.99	-71.1	96.2	213.3	208.0	5.30	40.231	
1,500.0	1,488.9	1,475.0	1,469.9	3.8	3.2	-150.53	-79.7	103.0	240.0	234.3	5.74	41.819	
1,600.0	1,586.2	1,571.0	1,565.2	4.2	3.4	-151.17	-88.2	109.9	267.8	261.7	6.18	43.305	
1,700.0	1,683.6	1,667.0	1,660.6	4.7	3.7	-151.72	-96.7	116.7	295.7	289.1	6.63	44.578	
1,800.0	1,780.9	1,763.0	1,756.0	5.1	3.9	-152.18	-105.2	123.5	323.6	316.5	7.08	45.688	
1,900.0	1,878.2	1,859.0	1,851.4	5.5	4.2	-152.56	-113.7	130.3	351.5	344.0	7.53	46.663	
2,000.0	1,975.6	1,955.0	1,946.8	5.9	4.4	-152.89	-122.2	137.1	379.4	371.4	7.98	47.527	
2,100.0	2,072.9	2,051.0	2,042.2	6.4	4.7	-153.17	-130.7	144.0	407.3	398.9	8.43	48.296	
2,200.0	2,170.3	2,147.0	2,137.5	6.8	4.9	-153.42	-139.2	150.8	435.3	426.4	8.89	48.986	
2,300.0	2,267.6	2,243.0	2,232.9	7.3	5.2	-153.64	-147.7	157.6	463.2	453.9	9.34	49.608	
2,400.0	2,364.9	2,339.0	2,328.3	7.7	5.4	-153.83	-156.2	164.4	491.2	481.4	9.79	50.172	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - File 3P-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	85.34	3.6	44.8	44.9				
100.0	100.0	100.0	100.0	0.2	0.2	85.34	3.6	44.8	44.9	44.6	0.30	147.889	
200.0	200.0	200.0	200.0	0.3	0.3	85.34	3.6	44.8	44.9	44.3	0.65	68.804	CC, ES
300.0	300.0	299.4	299.4	0.5	0.5	-161.30	3.1	45.4	46.4	45.4	1.00	46.327	
400.0	400.0	398.7	398.6	0.7	0.7	-160.27	1.5	47.5	50.8	49.5	1.35	37.592	
500.0	499.9	497.7	497.5	0.9	0.9	-158.91	-1.1	50.9	58.2	56.5	1.70	34.131	
600.0	599.7	596.3	596.0	1.1	1.1	-157.49	-4.7	55.6	68.6	66.5	2.06	33.230	SF
700.0	699.4	694.3	693.7	1.3	1.3	-156.19	-9.4	61.6	81.9	79.5	2.43	33.742	
800.0	798.9	791.8	790.7	1.5	1.5	-155.07	-15.0	68.9	98.2	95.4	2.80	35.089	
900.0	898.3	888.4	886.7	1.8	1.7	-154.13	-21.6	77.4	117.4	114.3	3.18	36.947	
1,000.0	997.4	984.1	981.7	2.0	2.0	-153.36	-29.1	87.2	139.6	136.0	3.57	39.120	
1,100.0	1,096.3	1,079.2	1,075.7	2.3	2.3	-152.72	-37.5	98.0	164.6	160.6	3.97	41.491	
1,200.0	1,194.9	1,175.4	1,170.9	2.7	2.6	-152.34	-46.4	109.5	191.6	187.2	4.38	43.775	
1,300.0	1,293.3	1,271.3	1,265.7	3.0	2.9	-152.23	-55.2	120.9	220.0	215.3	4.79	45.914	
1,400.0	1,391.2	1,366.7	1,360.0	3.4	3.1	-152.31	-64.0	132.3	250.0	244.8	5.22	47.937	
1,500.0	1,488.9	1,461.6	1,453.8	3.8	3.4	-152.50	-72.7	143.6	281.4	275.8	5.64	49.865	
1,600.0	1,586.2	1,556.2	1,547.3	4.2	3.7	-152.85	-81.5	154.9	313.9	307.9	6.08	51.608	
1,700.0	1,683.6	1,650.7	1,640.7	4.7	4.0	-153.17	-90.2	166.2	346.5	340.0	6.53	53.087	
1,800.0	1,780.9	1,745.2	1,734.2	5.1	4.3	-153.43	-98.9	177.4	379.1	372.1	6.97	54.365	
1,900.0	1,878.2	1,839.8	1,827.6	5.5	4.6	-153.65	-107.6	188.7	411.7	404.2	7.42	55.481	
2,000.0	1,975.6	1,934.3	1,921.1	5.9	4.9	-153.84	-116.3	200.0	444.2	436.4	7.87	56.462	
2,100.0	2,072.9	2,028.8	2,014.6	6.4	5.2	-154.01	-125.0	211.3	476.8	468.5	8.32	57.333	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - NELSON 2 (EXISTING) - TEXAS TEA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 4876-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
3,300.0	3,241.0	3,213.0	3,213.0	11.7	5.6	47.01	-25.5	-963.5	488.3	473.3	14.94	32.675	
3,400.0	3,338.3	3,310.3	3,310.3	12.1	5.8	49.01	-25.5	-963.5	472.7	457.1	15.66	30.194	
3,500.0	3,435.7	3,407.7	3,407.7	12.5	5.9	51.14	-25.5	-963.5	457.8	441.4	16.39	27.927	
3,600.0	3,533.0	3,505.0	3,505.0	13.0	6.1	53.41	-25.5	-963.5	443.5	426.4	17.15	25.859	
3,700.0	3,630.3	3,602.3	3,602.3	13.4	6.3	55.82	-25.5	-963.5	430.0	412.1	17.93	23.980	
3,800.0	3,727.7	3,699.7	3,699.7	13.9	6.5	58.37	-25.5	-963.5	417.3	398.6	18.73	22.279	
3,900.0	3,825.0	3,797.0	3,797.0	14.3	6.6	61.07	-25.5	-963.5	405.5	386.0	19.55	20.747	
4,000.0	3,922.3	3,894.3	3,894.3	14.7	6.8	63.92	-25.5	-963.5	394.7	374.3	20.37	19.375	
4,100.0	4,019.7	3,991.7	3,991.7	15.2	7.0	66.92	-25.5	-963.5	385.0	363.8	21.20	18.157	
4,200.0	4,117.0	4,089.0	4,089.0	15.6	7.1	70.06	-25.5	-963.5	376.4	354.3	22.03	17.084	
4,300.0	4,214.4	4,186.4	4,186.4	16.1	7.3	73.32	-25.5	-963.5	369.0	346.1	22.85	16.150	
4,400.0	4,311.7	4,283.7	4,283.7	16.5	7.5	76.70	-25.5	-963.5	362.9	339.2	23.64	15.349	
4,500.0	4,409.0	4,381.0	4,381.0	17.0	7.6	80.18	-25.5	-963.5	358.2	333.8	24.41	14.673	
4,600.0	4,506.4	4,478.4	4,478.4	17.4	7.8	83.73	-25.5	-963.5	354.9	329.7	25.14	14.117	
4,700.0	4,603.7	4,575.7	4,575.7	17.8	8.0	87.34	-25.5	-963.5	353.1	327.2	25.82	13.673	
4,773.6	4,675.3	4,647.3	4,647.3	18.2	8.1	90.00	-25.5	-963.5	352.6	326.4	26.29	13.415	CC
4,800.0	4,701.1	4,673.1	4,673.1	18.3	8.2	90.96	-25.5	-963.5	352.7	326.3	26.45	13.336	ES
4,900.0	4,798.4	4,770.4	4,770.4	18.7	8.3	94.57	-25.5	-963.5	353.8	326.8	27.01	13.098	
5,000.0	4,895.7	4,867.7	4,867.7	19.2	8.5	98.15	-25.5	-963.5	356.4	328.9	27.52	12.953	SF
5,100.0	4,993.1	4,876.0	4,876.0	19.6	8.5	98.45	-25.5	-963.5	371.3	343.4	27.96	13.280	
5,200.0	5,090.4	4,876.0	4,876.0	20.1	8.5	98.45	-25.5	-963.5	410.7	382.3	28.40	14.460	
5,300.0	5,187.7	4,876.0	4,876.0	20.5	8.5	98.45	-25.5	-963.5	468.4	439.6	28.84	16.242	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - NELSON 4 (EXISTING) - TEXAS TEA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 4996-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	60.00	185.8	321.7	371.5				
100.0	100.0	99.0	99.0	0.2	0.2	60.00	185.8	321.7	371.5	371.2	0.32	1,145.923	
200.0	200.0	199.0	199.0	0.3	0.3	60.00	185.8	321.7	371.5	370.9	0.67	552.158	CC, ES
300.0	300.0	299.0	299.0	0.5	0.5	172.99	185.8	321.7	372.4	371.4	1.02	364.582	
400.0	400.0	399.0	399.0	0.7	0.7	173.03	185.8	321.7	375.0	373.6	1.37	273.768	
500.0	499.9	498.9	498.9	0.9	0.9	173.11	185.8	321.7	379.3	377.6	1.72	220.832	
600.0	599.7	598.7	598.7	1.1	1.0	173.21	185.8	321.7	385.4	383.3	2.07	186.613	
700.0	699.4	698.4	698.4	1.3	1.2	173.33	185.8	321.7	393.2	390.8	2.41	163.010	
800.0	798.9	797.9	797.9	1.5	1.4	173.48	185.8	321.7	402.7	399.9	2.76	146.011	
900.0	898.3	897.3	897.3	1.8	1.6	173.65	185.8	321.7	413.9	410.8	3.10	133.399	
1,000.0	997.4	996.4	996.4	2.0	1.7	173.83	185.8	321.7	426.9	423.5	3.45	123.853	
1,100.0	1,096.3	1,095.3	1,095.3	2.3	1.9	174.02	185.8	321.7	441.6	437.8	3.79	116.535	
1,200.0	1,194.9	1,193.9	1,193.9	2.7	2.1	174.22	185.8	321.7	458.0	453.9	4.13	110.888	
1,300.0	1,293.3	1,292.3	1,292.3	3.0	2.2	174.42	185.8	321.7	476.2	471.7	4.47	106.526	
1,400.0	1,391.2	1,390.2	1,390.2	3.4	2.4	174.62	185.8	321.7	496.0	491.2	4.81	103.177	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - NELSON 5 TT (EXISTING) - TEXAS TEA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 5035-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
4,300.0	4,214.4	4,192.4	4,192.4	16.1	7.3	-38.64	-734.0	-963.6	488.0	469.1	18.86	25.868	
4,400.0	4,311.7	4,289.7	4,289.7	16.5	7.5	-40.36	-734.0	-963.6	470.1	450.5	19.61	23.977	
4,500.0	4,409.0	4,387.0	4,387.0	17.0	7.7	-42.22	-734.0	-963.6	452.7	432.3	20.38	22.210	
4,600.0	4,506.4	4,484.4	4,484.4	17.4	7.8	-44.22	-734.0	-963.6	435.8	414.6	21.19	20.563	
4,700.0	4,603.7	4,581.7	4,581.7	17.8	8.0	-46.37	-734.0	-963.6	419.4	397.4	22.04	19.032	
4,800.0	4,701.1	4,679.1	4,679.1	18.3	8.2	-48.69	-734.0	-963.6	403.7	380.8	22.92	17.615	
4,900.0	4,798.4	4,776.4	4,776.4	18.7	8.3	-51.19	-734.0	-963.6	388.7	364.9	23.83	16.310	
5,000.0	4,895.7	4,873.7	4,873.7	19.2	8.5	-53.88	-734.0	-963.6	374.5	349.8	24.78	15.114	
5,100.0	4,993.1	4,971.1	4,971.1	19.6	8.7	-56.76	-734.0	-963.6	361.3	335.5	25.75	14.027	
5,200.0	5,090.4	5,035.0	5,035.0	20.1	8.8	-58.76	-734.0	-963.6	350.6	324.0	26.54	13.209	
5,208.5	5,098.7	5,035.0	5,035.0	20.1	8.8	-58.76	-734.0	-963.6	350.5	323.9	26.57	13.189	CC, ES, SF
5,300.0	5,187.7	5,035.0	5,035.0	20.5	8.8	-58.76	-734.0	-963.6	362.2	335.3	26.93	13.451	
5,400.0	5,285.1	5,035.0	5,035.0	21.0	8.8	-58.76	-734.0	-963.6	399.4	372.1	27.32	14.619	
5,500.0	5,382.4	5,035.0	5,035.0	21.4	8.8	-58.76	-734.0	-963.6	455.9	428.2	27.71	16.452	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - NELSON E UNIT 1 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8140-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
2,100.0	2,072.9	2,061.9	2,061.9	6.4	3.6	-38.47	-539.9	-502.5	491.8	483.4	8.45	58.232	
2,200.0	2,170.3	2,159.3	2,159.3	6.8	3.8	-40.17	-539.9	-502.5	473.9	464.9	9.01	52.623	
2,300.0	2,267.6	2,256.6	2,256.6	7.3	3.9	-42.01	-539.9	-502.5	456.4	446.8	9.59	47.602	
2,400.0	2,364.9	2,353.9	2,353.9	7.7	4.1	-43.98	-539.9	-502.5	439.4	429.3	10.20	43.102	
2,500.0	2,462.3	2,451.3	2,451.3	8.1	4.3	-46.11	-539.9	-502.5	423.0	412.2	10.83	39.066	
2,600.0	2,559.6	2,548.6	2,548.6	8.6	4.4	-48.40	-539.9	-502.5	407.3	395.8	11.49	35.450	
2,700.0	2,656.9	2,645.9	2,645.9	9.0	4.6	-50.86	-539.9	-502.5	392.2	380.0	12.17	32.213	
2,800.0	2,754.3	2,743.3	2,743.3	9.4	4.8	-53.51	-539.9	-502.5	377.9	365.0	12.89	29.323	
2,900.0	2,851.6	2,840.6	2,840.6	9.9	5.0	-56.36	-539.9	-502.5	364.5	350.9	13.62	26.752	
3,000.0	2,949.0	2,938.0	2,938.0	10.3	5.1	-59.41	-539.9	-502.5	352.1	337.7	14.38	24.476	
3,100.0	3,046.3	3,035.3	3,035.3	10.8	5.3	-62.66	-539.9	-502.5	340.7	325.6	15.16	22.475	
3,200.0	3,143.6	3,132.6	3,132.6	11.2	5.5	-66.11	-539.9	-502.5	330.6	314.6	15.95	20.730	
3,300.0	3,241.0	3,230.0	3,230.0	11.7	5.6	-69.75	-539.9	-502.5	321.8	305.0	16.74	19.225	
3,400.0	3,338.3	3,327.3	3,327.3	12.1	5.8	-73.58	-539.9	-502.5	314.4	296.9	17.52	17.944	
3,500.0	3,435.7	3,424.7	3,424.7	12.5	6.0	-77.56	-539.9	-502.5	308.5	290.2	18.28	16.873	
3,600.0	3,533.0	3,522.0	3,522.0	13.0	6.1	-81.67	-539.9	-502.5	304.3	285.3	19.02	15.999	
3,700.0	3,630.3	3,619.3	3,619.3	13.4	6.3	-85.87	-539.9	-502.5	301.7	282.0	19.71	15.308	
3,797.5	3,725.2	3,714.2	3,714.2	13.9	6.5	-90.00	-539.9	-502.5	300.9	280.6	20.33	14.797	CC
3,800.0	3,727.7	3,716.7	3,716.7	13.9	6.5	-90.11	-539.9	-502.5	300.9	280.5	20.35	14.786	ES
3,900.0	3,825.0	3,814.0	3,814.0	14.3	6.7	-94.35	-539.9	-502.5	301.8	280.9	20.93	14.420	
4,000.0	3,922.3	3,911.3	3,911.3	14.7	6.8	-98.54	-539.9	-502.5	304.4	283.0	21.45	14.196	
4,100.0	4,019.7	4,008.7	4,008.7	15.2	7.0	-102.64	-539.9	-502.5	308.8	286.9	21.90	14.102	SF
4,200.0	4,117.0	4,106.0	4,106.0	15.6	7.2	-106.62	-539.9	-502.5	314.7	292.4	22.28	14.123	
4,300.0	4,214.4	4,203.4	4,203.4	16.1	7.3	-110.43	-539.9	-502.5	322.2	299.6	22.61	14.248	
4,400.0	4,311.7	4,300.7	4,300.7	16.5	7.5	-114.07	-539.9	-502.5	331.1	308.2	22.89	14.463	
4,500.0	4,409.0	4,398.0	4,398.0	17.0	7.7	-117.51	-539.9	-502.5	341.3	318.1	23.12	14.758	
4,600.0	4,506.4	4,495.4	4,495.4	17.4	7.8	-120.75	-539.9	-502.5	352.7	329.3	23.32	15.121	
4,700.0	4,603.7	4,592.7	4,592.7	17.8	8.0	-123.79	-539.9	-502.5	365.1	341.6	23.49	15.541	
4,800.0	4,701.1	4,690.1	4,690.1	18.3	8.2	-126.62	-539.9	-502.5	378.6	354.9	23.65	16.011	
4,900.0	4,798.4	4,787.4	4,787.4	18.7	8.4	-129.26	-539.9	-502.5	392.9	369.1	23.78	16.521	
5,000.0	4,895.7	4,884.7	4,884.7	19.2	8.5	-131.72	-539.9	-502.5	408.0	384.1	23.91	17.065	
5,100.0	4,993.1	4,982.1	4,982.1	19.6	8.7	-134.00	-539.9	-502.5	423.8	399.8	24.04	17.634	
5,200.0	5,090.4	5,079.4	5,079.4	20.1	8.9	-136.12	-539.9	-502.5	440.3	416.1	24.16	18.224	
5,300.0	5,187.7	5,176.7	5,176.7	20.5	9.0	-138.09	-539.9	-502.5	457.3	433.0	24.29	18.830	
5,400.0	5,285.1	5,274.1	5,274.1	21.0	9.2	-139.91	-539.9	-502.5	474.8	450.4	24.41	19.447	
5,500.0	5,382.4	5,371.4	5,371.4	21.4	9.4	-141.61	-539.9	-502.5	492.7	468.2	24.55	20.071	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - RAY NELSON 0-4-32 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 47-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
8,800.0	7,606.0	7,675.3	7,585.4	33.3	20.1	-91.80	1,113.7	-1,598.5	431.2	394.5	36.61	11.776	
8,900.0	7,606.0	7,674.9	7,585.1	34.1	20.1	-91.54	1,113.7	-1,598.6	333.2	295.3	37.94	8.783	
9,000.0	7,606.0	7,674.5	7,584.7	35.0	20.1	-91.27	1,113.7	-1,598.6	237.0	197.7	39.33	6.027	
9,100.0	7,606.0	7,674.2	7,584.3	35.9	20.1	-91.00	1,113.7	-1,598.6	146.1	105.3	40.76	3.584	
9,200.0	7,606.0	7,673.8	7,584.0	36.9	20.1	-90.73	1,113.7	-1,598.6	80.6	38.3	42.24	1.907	
9,224.3	7,606.0	7,673.7	7,583.9	37.2	20.1	-90.67	1,113.7	-1,598.6	76.8	34.2	42.60	1.803	CC, ES, SF
9,300.0	7,606.0	7,673.5	7,583.6	38.0	20.1	-90.47	1,113.7	-1,598.6	107.9	64.1	43.75	2.466	
9,400.0	7,606.0	7,673.1	7,583.3	39.1	20.1	-90.20	1,113.7	-1,598.6	191.8	146.5	45.28	4.235	
9,500.0	7,606.0	7,672.7	7,582.9	40.3	20.1	-89.93	1,113.7	-1,598.6	286.2	239.4	46.84	6.111	
9,600.0	7,606.0	7,672.4	7,582.6	41.4	20.1	-89.67	1,113.7	-1,598.6	383.5	335.1	48.42	7.920	
9,700.0	7,606.0	7,672.0	7,582.2	42.7	20.1	-89.40	1,113.7	-1,598.6	481.9	431.9	50.02	9.635	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - RAY NELSON 13-32 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 119-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
2,500.0	2,462.3	2,549.0	2,506.7	8.1	8.2	-11.39	-413.9	-744.1	480.6	468.1	12.51	38.410	
2,600.0	2,559.6	2,636.9	2,591.4	8.6	8.7	-8.92	-391.8	-751.8	451.9	438.8	13.07	34.585	
2,700.0	2,656.9	2,728.8	2,680.0	9.0	9.1	-5.98	-368.9	-760.6	424.9	411.2	13.64	31.137	
2,800.0	2,754.3	2,820.0	2,767.8	9.4	9.6	-2.68	-346.0	-769.7	399.5	385.2	14.23	28.078	
2,900.0	2,851.6	2,912.8	2,857.4	9.9	10.0	0.94	-323.8	-779.2	376.1	361.3	14.82	25.377	
3,000.0	2,949.0	3,006.1	2,947.4	10.3	10.5	5.08	-301.1	-789.0	354.8	339.3	15.47	22.936	
3,100.0	3,046.3	3,094.2	3,032.1	10.8	10.9	9.53	-279.1	-799.3	336.6	320.5	16.15	20.846	
3,200.0	3,143.6	3,184.6	3,118.9	11.2	11.4	14.46	-257.0	-811.1	322.5	305.6	16.88	19.100	
3,300.0	3,241.0	3,280.1	3,210.9	11.7	11.9	19.81	-235.1	-824.0	311.8	294.1	17.67	17.646	
3,400.0	3,338.3	3,379.1	3,306.7	12.1	12.3	25.53	-213.1	-836.2	303.1	284.6	18.49	16.388	
3,500.0	3,435.7	3,472.4	3,397.0	12.5	12.8	31.13	-192.5	-847.4	297.2	277.9	19.27	15.422	
3,600.0	3,533.0	3,568.7	3,490.4	13.0	13.2	36.82	-172.5	-859.4	294.8	274.7	20.01	14.731	
3,659.7	3,591.1	3,627.6	3,547.7	13.2	13.5	40.32	-160.4	-866.4	294.4	274.0	20.43	14.409	CC
3,700.0	3,630.3	3,666.1	3,585.1	13.4	13.6	42.59	-152.6	-870.8	294.6	273.9	20.69	14.238	ES
3,800.0	3,727.7	3,761.8	3,678.2	13.9	14.0	48.14	-133.5	-881.9	297.4	276.1	21.30	13.963	
3,900.0	3,825.0	3,859.6	3,773.4	14.3	14.5	53.84	-113.5	-892.4	302.6	280.8	21.85	13.853	
4,000.0	3,922.3	3,955.8	3,867.1	14.7	14.9	59.17	-94.3	-902.3	310.2	287.9	22.32	13.898	
4,100.0	4,019.7	4,045.8	3,954.7	15.2	15.3	63.83	-76.3	-912.4	321.2	298.5	22.76	14.113	
4,200.0	4,117.0	4,135.2	4,041.3	15.6	15.7	68.17	-57.3	-923.4	336.3	313.1	23.19	14.500	
4,300.0	4,214.4	4,233.9	4,136.8	16.1	16.2	72.60	-35.5	-935.8	354.2	330.6	23.63	14.990	
4,400.0	4,311.7	4,340.9	4,241.1	16.5	16.6	76.92	-14.5	-947.5	371.0	346.9	24.11	15.389	
4,500.0	4,409.0	4,433.0	4,331.0	17.0	17.0	80.21	2.6	-957.8	388.8	364.1	24.63	15.784	
4,600.0	4,506.4	4,520.0	4,415.7	17.4	17.4	83.03	19.4	-968.1	408.7	383.5	25.18	16.229	
4,700.0	4,603.7	4,605.5	4,498.6	17.8	17.8	85.52	37.4	-979.4	431.9	406.1	25.78	16.756	
4,800.0	4,701.1	4,696.5	4,586.1	18.3	18.3	88.06	59.2	-991.2	458.5	432.1	26.41	17.359	
4,900.0	4,798.4	4,801.5	4,687.6	18.7	18.8	90.88	83.5	-1,002.8	484.4	457.3	27.11	17.865	
8,200.0	7,606.0	7,759.2	7,608.1	30.2	26.4	88.98	388.6	-1,162.8	438.2	399.2	39.06	11.220	
8,300.0	7,606.0	7,761.1	7,610.0	30.5	26.4	89.31	388.6	-1,162.8	381.0	341.3	39.69	9.600	
8,400.0	7,606.0	7,763.0	7,611.9	30.9	26.4	89.63	388.6	-1,162.8	343.9	303.4	40.49	8.494	
8,484.5	7,606.0	7,764.6	7,613.5	31.3	26.4	89.91	388.7	-1,162.8	333.4	292.1	41.29	8.075	
8,500.0	7,606.0	7,764.9	7,613.8	31.4	26.4	89.96	388.7	-1,162.8	333.8	292.3	41.44	8.055	SF
8,600.0	7,606.0	7,766.7	7,615.7	31.9	26.4	90.28	388.7	-1,162.8	352.8	310.3	42.50	8.301	
8,700.0	7,606.0	7,768.6	7,617.5	32.6	26.4	90.61	388.7	-1,162.8	397.0	353.3	43.67	9.090	
8,800.0	7,606.0	7,770.5	7,619.4	33.3	26.4	90.93	388.8	-1,162.8	459.0	414.1	44.93	10.217	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - RAY NELSON 23-32 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8140-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
100.0	100.0	3.0	3.0	0.2	0.0	71.46	157.7	470.3	496.0	495.9	0.16	3,153.883	
200.0	200.0	103.0	103.0	0.3	0.2	71.46	157.7	470.3	496.0	495.5	0.51	979.655	CC, ES
300.0	300.0	203.0	203.0	0.5	0.4	-175.57	157.7	470.3	496.9	496.1	0.86	580.960	
400.0	400.0	303.0	303.0	0.7	0.5	-175.59	157.7	470.3	499.5	498.3	1.20	414.864	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - RAY NELSON 4-4-32 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 60-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	3.2	3.2	0.0	0.0	67.78	189.1	462.7	499.9				
100.0	100.0	105.3	105.3	0.2	0.2	67.63	190.1	461.7	499.3	499.0	0.31	1,615.667	
125.7	125.7	128.7	128.7	0.2	0.2	67.57	190.5	461.5	499.3	498.9	0.39	1,264.445	CC, ES
200.0	200.0	195.9	195.8	0.3	0.3	67.38	192.2	461.3	499.8	499.2	0.64	779.378	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - RAY NELSON 4-6-32 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 60-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
100.0	100.0	105.0	105.0	0.2	0.2	70.04	170.6	469.9	499.9	499.6	0.31	1,627.479	
189.1	189.1	192.1	192.1	0.3	0.3	70.24	168.9	470.2	499.6	499.0	0.61	812.492	CC
200.0	200.0	201.9	201.9	0.3	0.3	70.27	168.7	470.3	499.6	499.0	0.65	767.345	ES, SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3I-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3I-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 4971.0ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: File 3I-32H-K268
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.30°