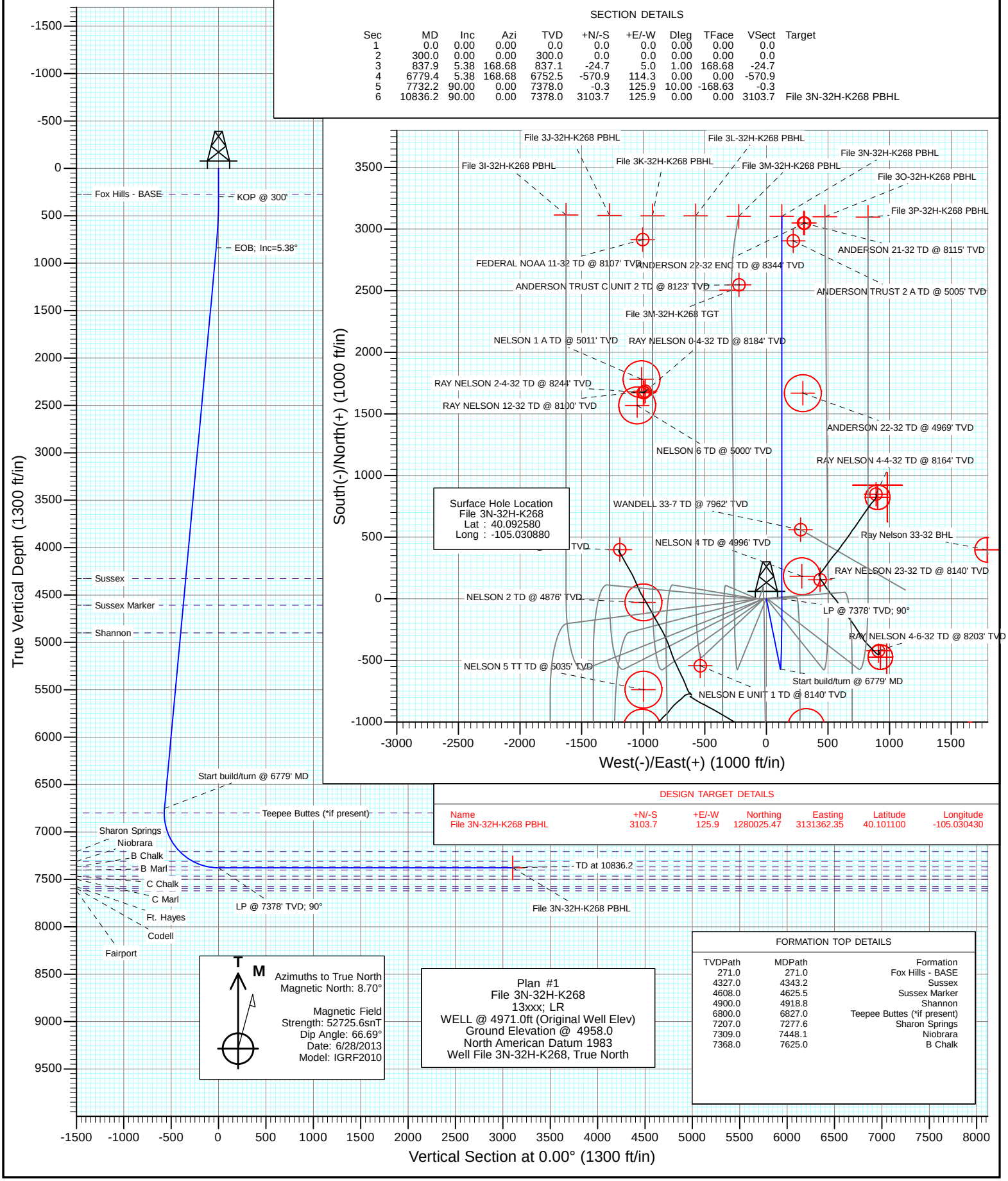
encana natural gas

Project: DJ Wattenberg
Site: S32-T2N-R68W (File)
Well: File 3N-32H-K268
Wellbore: Hz
Design: Plan #1

CATHEDRAL

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	300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.0	
3	837.9	5.38	168.68	837.1	-24.7	5.0	1.00	168.68	-24.7	
4	6779.4	5.38	168.68	6752.5	-570.9	114.3	0.00	0.00	-570.9	
5	7732.2	90.00	0.00	7378.0	-0.3	125.9	10.00	-168.63	-0.3	
6	10836.2	90.00	0.00	7378.0	3103.7	125.9	0.00	0.00	3103.7	File 3N-32H-K268 PBHL



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
File 3N-32H-K268 PBHL	3103.7	125.9	1280025.47	3131362.35	40.101100	-105.030430

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
271.0	271.0	Fox Hills - BASE
4327.0	4343.2	Sussex
4608.0	4625.5	Sussex Marker
4900.0	4918.8	Shannon
6800.0	6827.0	Teepee Buttes (*if present)
7207.0	7277.6	Sharon Springs
7309.0	7448.1	Niobrara
7368.0	7625.0	B Chalk

T M

Azimuths to True North
Magnetic North: 8.70°

Magnetic Field
Strength: 52725.6snT
Dip Angle: 66.69°
Date: 6/28/2013
Model: IGRF2010

Plan #1
File 3N-32H-K268
13xxx; LR
WELL @ 4971.0ft (Original Well Elev)
Ground Elevation @ 4958.0
North American Datum 1983
Well File 3N-32H-K268, True North

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well File 3N-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)	**North Reference:**	True
Well:	File 3N-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Project DJ Wattenberg

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

Site S32-T2N-R68W (File)

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 3N-32H-K268

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,276,921.19 ft	**Latitude:**	40.092580
	+E/-W	0.0 ft	**Easting:**	3,131,252.89 ft	**Longitude:**	-105.030880
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 #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	0.00

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
837.9	5.38	168.68	837.1	-24.7	5.0	1.00	1.00	0.00	168.68	
6,779.4	5.38	168.68	6,752.5	-570.9	114.3	0.00	0.00	0.00	0.00	
7,732.2	90.00	0.00	7,378.0	-0.3	125.9	10.00	8.88	-17.70	-168.63	
10,836.2	90.00	0.00	7,378.0	3,103.7	125.9	0.00	0.00	0.00	0.00	File 3N-32H-K268 PB

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
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Project:	DJ Wattenberg	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File)	**North Reference:**	True
Well:	File 3N-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
271.0	0.00	0.00	271.0	0.0	0.0	0.0	0.00	0.00	Fox Hills - BASE
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	KOP @ 300'
400.0	1.00	168.68	400.0	-0.9	0.2	-0.9	1.00	1.00	
500.0	2.00	168.68	500.0	-3.4	0.7	-3.4	1.00	1.00	
600.0	3.00	168.68	599.9	-7.7	1.5	-7.7	1.00	1.00	
700.0	4.00	168.68	699.7	-13.7	2.7	-13.7	1.00	1.00	
800.0	5.00	168.68	799.4	-21.4	4.3	-21.4	1.00	1.00	
837.9	5.38	168.68	837.1	-24.7	5.0	-24.7	1.00	1.00	EOB; Inc=5.38°
900.0	5.38	168.68	898.9	-30.4	6.1	-30.4	0.00	0.00	
1,000.0	5.38	168.68	998.5	-39.6	7.9	-39.6	0.00	0.00	
1,100.0	5.38	168.68	1,098.1	-48.8	9.8	-48.8	0.00	0.00	
1,200.0	5.38	168.68	1,197.6	-58.0	11.6	-58.0	0.00	0.00	
1,300.0	5.38	168.68	1,297.2	-67.2	13.5	-67.2	0.00	0.00	
1,400.0	5.38	168.68	1,396.7	-76.4	15.3	-76.4	0.00	0.00	
1,500.0	5.38	168.68	1,496.3	-85.6	17.1	-85.6	0.00	0.00	
1,600.0	5.38	168.68	1,595.9	-94.8	19.0	-94.8	0.00	0.00	
1,700.0	5.38	168.68	1,695.4	-104.0	20.8	-104.0	0.00	0.00	
1,800.0	5.38	168.68	1,795.0	-113.2	22.7	-113.2	0.00	0.00	
1,900.0	5.38	168.68	1,894.5	-122.4	24.5	-122.4	0.00	0.00	
2,000.0	5.38	168.68	1,994.1	-131.6	26.3	-131.6	0.00	0.00	
2,100.0	5.38	168.68	2,093.7	-140.7	28.2	-140.7	0.00	0.00	
2,200.0	5.38	168.68	2,193.2	-149.9	30.0	-149.9	0.00	0.00	
2,300.0	5.38	168.68	2,292.8	-159.1	31.9	-159.1	0.00	0.00	
2,400.0	5.38	168.68	2,392.3	-168.3	33.7	-168.3	0.00	0.00	
2,500.0	5.38	168.68	2,491.9	-177.5	35.5	-177.5	0.00	0.00	
2,600.0	5.38	168.68	2,591.5	-186.7	37.4	-186.7	0.00	0.00	
2,700.0	5.38	168.68	2,691.0	-195.9	39.2	-195.9	0.00	0.00	
2,800.0	5.38	168.68	2,790.6	-205.1	41.1	-205.1	0.00	0.00	
2,900.0	5.38	168.68	2,890.1	-214.3	42.9	-214.3	0.00	0.00	
3,000.0	5.38	168.68	2,989.7	-223.5	44.8	-223.5	0.00	0.00	
3,100.0	5.38	168.68	3,089.2	-232.7	46.6	-232.7	0.00	0.00	
3,200.0	5.38	168.68	3,188.8	-241.9	48.4	-241.9	0.00	0.00	
3,300.0	5.38	168.68	3,288.4	-251.0	50.3	-251.0	0.00	0.00	
3,400.0	5.38	168.68	3,387.9	-260.2	52.1	-260.2	0.00	0.00	
3,500.0	5.38	168.68	3,487.5	-269.4	54.0	-269.4	0.00	0.00	
3,600.0	5.38	168.68	3,587.0	-278.6	55.8	-278.6	0.00	0.00	
3,700.0	5.38	168.68	3,686.6	-287.8	57.6	-287.8	0.00	0.00	
3,800.0	5.38	168.68	3,786.2	-297.0	59.5	-297.0	0.00	0.00	
3,900.0	5.38	168.68	3,885.7	-306.2	61.3	-306.2	0.00	0.00	
4,000.0	5.38	168.68	3,985.3	-315.4	63.2	-315.4	0.00	0.00	
4,100.0	5.38	168.68	4,084.8	-324.6	65.0	-324.6	0.00	0.00	
4,200.0	5.38	168.68	4,184.4	-333.8	66.8	-333.8	0.00	0.00	
4,300.0	5.38	168.68	4,284.0	-343.0	68.7	-343.0	0.00	0.00	
4,343.2	5.38	168.68	4,327.0	-346.9	69.5	-346.9	0.00	0.00	Sussex
4,400.0	5.38	168.68	4,383.5	-352.2	70.5	-352.2	0.00	0.00	
4,500.0	5.38	168.68	4,483.1	-361.4	72.4	-361.4	0.00	0.00	
4,600.0	5.38	168.68	4,582.6	-370.5	74.2	-370.5	0.00	0.00	
4,625.5	5.38	168.68	4,608.0	-372.9	74.7	-372.9	0.00	0.00	Sussex Marker
4,700.0	5.38	168.68	4,682.2	-379.7	76.0	-379.7	0.00	0.00	

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Project:	DJ Wattenberg	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File)	**North Reference:**	True
Well:	File 3N-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,800.0	5.38	168.68	4,781.8	-388.9	77.9	-388.9	0.00	0.00	
4,900.0	5.38	168.68	4,881.3	-398.1	79.7	-398.1	0.00	0.00	
4,918.8	5.38	168.68	4,900.0	-399.8	80.1	-399.8	0.00	0.00	Shannon
5,000.0	5.38	168.68	4,980.9	-407.3	81.6	-407.3	0.00	0.00	
5,100.0	5.38	168.68	5,080.4	-416.5	83.4	-416.5	0.00	0.00	
5,200.0	5.38	168.68	5,180.0	-425.7	85.2	-425.7	0.00	0.00	
5,300.0	5.38	168.68	5,279.6	-434.9	87.1	-434.9	0.00	0.00	
5,400.0	5.38	168.68	5,379.1	-444.1	88.9	-444.1	0.00	0.00	
5,500.0	5.38	168.68	5,478.7	-453.3	90.8	-453.3	0.00	0.00	
5,600.0	5.38	168.68	5,578.2	-462.5	92.6	-462.5	0.00	0.00	
5,700.0	5.38	168.68	5,677.8	-471.7	94.4	-471.7	0.00	0.00	
5,800.0	5.38	168.68	5,777.4	-480.8	96.3	-480.8	0.00	0.00	
5,900.0	5.38	168.68	5,876.9	-490.0	98.1	-490.0	0.00	0.00	
6,000.0	5.38	168.68	5,976.5	-499.2	100.0	-499.2	0.00	0.00	
6,100.0	5.38	168.68	6,076.0	-508.4	101.8	-508.4	0.00	0.00	
6,200.0	5.38	168.68	6,175.6	-517.6	103.7	-517.6	0.00	0.00	
6,300.0	5.38	168.68	6,275.2	-526.8	105.5	-526.8	0.00	0.00	
6,400.0	5.38	168.68	6,374.7	-536.0	107.3	-536.0	0.00	0.00	
6,500.0	5.38	168.68	6,474.3	-545.2	109.2	-545.2	0.00	0.00	
6,600.0	5.38	168.68	6,573.8	-554.4	111.0	-554.4	0.00	0.00	
6,700.0	5.38	168.68	6,673.4	-563.6	112.9	-563.6	0.00	0.00	
6,779.4	5.38	168.68	6,752.5	-570.9	114.3	-570.9	0.00	0.00	Start build/turn @ 6779' MD
6,800.0	3.39	161.80	6,773.0	-572.4	114.7	-572.4	10.00	-9.69	
6,827.0	1.18	115.89	6,800.0	-573.3	115.2	-573.3	10.00	-8.17	Teepee Buttes (*if present)
6,900.0	6.86	8.83	6,872.8	-569.3	116.5	-569.3	10.00	7.79	
7,000.0	16.81	3.51	6,970.5	-548.9	118.3	-548.9	10.00	9.95	
7,100.0	26.80	2.10	7,063.3	-511.8	120.1	-511.8	10.00	9.99	
7,200.0	36.80	1.42	7,148.2	-459.2	121.6	-459.2	10.00	9.99	
7,277.6	44.56	1.08	7,207.0	-408.7	122.7	-408.7	10.00	10.00	Sharon Springs
7,300.0	46.79	1.00	7,222.6	-392.7	123.0	-392.7	10.00	10.00	
7,400.0	56.79	0.69	7,284.4	-314.2	124.2	-314.2	10.00	10.00	
7,448.1	61.59	0.57	7,309.0	-273.0	124.6	-273.0	10.00	10.00	Niobrara
7,500.0	66.79	0.45	7,331.6	-226.2	125.0	-226.2	10.00	10.00	
7,600.0	76.78	0.25	7,362.8	-131.3	125.6	-131.3	10.00	10.00	
7,625.0	79.28	0.20	7,368.0	-106.9	125.7	-106.9	10.00	10.00	B Chalk
7,700.0	86.78	0.06	7,377.1	-32.5	125.9	-32.5	10.00	10.00	
7,732.2	90.00	0.00	7,378.0	-0.3	125.9	-0.3	10.00	10.00	LP @ 7378' TVD; 90°
7,800.0	90.00	0.00	7,378.0	67.5	125.9	67.5	0.00	0.00	
7,900.0	90.00	0.00	7,378.0	167.5	125.9	167.5	0.00	0.00	
8,000.0	90.00	0.00	7,378.0	267.5	125.9	267.5	0.00	0.00	
8,100.0	90.00	0.00	7,378.0	367.5	125.9	367.5	0.00	0.00	
8,200.0	90.00	0.00	7,378.0	467.5	125.9	467.5	0.00	0.00	
8,300.0	90.00	0.00	7,378.0	567.5	125.9	567.5	0.00	0.00	
8,400.0	90.00	0.00	7,378.0	667.5	125.9	667.5	0.00	0.00	
8,500.0	90.00	0.00	7,378.0	767.5	125.9	767.5	0.00	0.00	
8,600.0	90.00	0.00	7,378.0	867.5	125.9	867.5	0.00	0.00	
8,700.0	90.00	0.00	7,378.0	967.5	125.9	967.5	0.00	0.00	
8,800.0	90.00	0.00	7,378.0	1,067.5	125.9	1,067.5	0.00	0.00	
8,900.0	90.00	0.00	7,378.0	1,167.5	125.9	1,167.5	0.00	0.00	
9,000.0	90.00	0.00	7,378.0	1,267.5	125.9	1,267.5	0.00	0.00	
9,100.0	90.00	0.00	7,378.0	1,367.5	125.9	1,367.5	0.00	0.00	
9,200.0	90.00	0.00	7,378.0	1,467.5	125.9	1,467.5	0.00	0.00	

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Site:	S32-T2N-R68W (File)	**North Reference:**	True
Well:	File 3N-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
9,300.0	90.00	0.00	7,378.0	1,567.5	125.9	1,567.5	0.00	0.00	
9,400.0	90.00	0.00	7,378.0	1,667.5	125.9	1,667.5	0.00	0.00	
9,500.0	90.00	0.00	7,378.0	1,767.5	125.9	1,767.5	0.00	0.00	
9,600.0	90.00	0.00	7,378.0	1,867.5	125.9	1,867.5	0.00	0.00	
9,700.0	90.00	0.00	7,378.0	1,967.5	125.9	1,967.5	0.00	0.00	
9,800.0	90.00	0.00	7,378.0	2,067.5	125.9	2,067.5	0.00	0.00	
9,900.0	90.00	0.00	7,378.0	2,167.5	125.9	2,167.5	0.00	0.00	
10,000.0	90.00	0.00	7,378.0	2,267.5	125.9	2,267.5	0.00	0.00	
10,100.0	90.00	0.00	7,378.0	2,367.5	125.9	2,367.5	0.00	0.00	
10,200.0	90.00	0.00	7,378.0	2,467.5	125.9	2,467.5	0.00	0.00	
10,300.0	90.00	0.00	7,378.0	2,567.5	125.9	2,567.5	0.00	0.00	
10,400.0	90.00	0.00	7,378.0	2,667.5	125.9	2,667.5	0.00	0.00	
10,500.0	90.00	0.00	7,378.0	2,767.5	125.9	2,767.5	0.00	0.00	
10,600.0	90.00	0.00	7,378.0	2,867.5	125.9	2,867.5	0.00	0.00	
10,700.0	90.00	0.00	7,378.0	2,967.5	125.9	2,967.5	0.00	0.00	
10,800.0	90.00	0.00	7,378.0	3,067.5	125.9	3,067.5	0.00	0.00	
10,836.2	90.00	0.00	7,378.0	3,103.7	125.9	3,103.7	0.00	0.00	TD at 10836.2

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 3N-32H-K268 PBHL - plan hits target center - Point	0.00	0.00	7,378.0	3,103.7	125.9	1,280,025.47	3,131,362.35	40.101100	-105.030430

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
271.0	271.0	Fox Hills - BASE			
4,343.2	4,327.0	Sussex			
4,625.5	4,608.0	Sussex Marker			
4,918.8	4,900.0	Shannon			
6,827.0	6,800.0	Teepee Buttes (*if present)			
7,277.6	7,207.0	Sharon Springs			
7,448.1	7,309.0	Niobrara			
7,625.0	7,368.0	B Chalk			

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well File 3N-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)	**North Reference:**	True
Well:	File 3N-32H-K268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
300.0	300.0	0.0	0.0	KOP @ 300'
837.9	837.1	-24.7	5.0	EOB; Inc=5.38°
6,779.4	6,752.5	-570.9	114.3	Start build/turn @ 6779' MD
7,732.2	7,378.0	-0.3	125.9	LP @ 7378' TVD; 90°
10,836.2	7,378.0	3,103.7	125.9	TD at 10836.2

EnCana Oil & Gas (USA) Inc

DJ Wattenberg
S32-T2N-R68W (File)
File 3N-32H-K268
Hz
Plan #1

Anticollision Report

28 June, 2013

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Reference	Plan #1

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

Survey Tool Program **Date** 6/28/2013

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	10,836.2	Plan #1 (Hz)	Geolink MWD	Geolink MWD

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**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)						
ANDERSON 21-32 (EXISTING) - ENCANA WELL - NO S	10,781.5	7,344.0	176.2	106.6	2.532	CC, ES, SF
ANDERSON 22-32 (EXISTING) - KPK WELL - NO SURV						Out of range
ANDERSON 22-32 ENC (EXISTING) - ENCANA WELL -	10,781.5	7,344.0	184.6	115.0	2.652	CC, ES, SF
ANDERSON TRUST 2 A (EXISTING) - ENCANA WELL -						Out of range
ANDERSON TRUST C UNIT 2 (EXISTING) - ENCANA W	10,280.3	6,773.0	347.2	287.0	5.774	CC, ES
ANDERSON TRUST C UNIT 2 (EXISTING) - ENCANA W	10,300.0	6,773.0	347.7	287.3	5.752	SF
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 - Plan #2						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 2 (EXISTING) - ENCANA WELL - NO S						Out of range
FEDERAL NOAA 11-32 (EXISTING) - ENCANA WELL - N						Out of range
File 3A-32H-K268 - Hz - Plan #1	200.0	199.0	95.2	94.5	146.224	CC, ES
File 3A-32H-K268 - Hz - Plan #1	1,100.0	1,075.1	176.7	172.8	44.358	SF
File 3B-32H-K268 - Hz - Plan #1	300.0	299.0	89.5	88.5	89.521	CC, ES
File 3B-32H-K268 - Hz - Plan #1	1,000.0	982.2	145.5	142.0	40.969	SF
File 3C-32H-K268 - Hz - Plan #1	300.0	299.0	84.0	83.0	84.005	CC
File 3C-32H-K268 - Hz - Plan #1	400.0	399.0	84.1	82.8	62.343	ES
File 3C-32H-K268 - Hz - Plan #1	1,100.0	1,084.3	138.4	134.4	34.704	SF
File 3D-32H-K268 - Hz - Plan #1	300.0	299.0	78.3	77.3	78.331	CC
File 3D-32H-K268 - Hz - Plan #1	400.0	399.0	78.5	77.2	58.167	ES
File 3D-32H-K268 - Hz - Plan #1	900.0	891.3	103.2	100.0	32.527	SF
File 3E-32H-K268 - Hz - Plan #1	300.0	300.0	64.5	63.4	64.334	CC
File 3E-32H-K268 - Hz - Plan #1	400.0	400.0	64.6	63.2	47.782	ES
File 3E-32H-K268 - Hz - Plan #1	7,400.0	7,531.6	483.6	455.6	17.304	SF
File 3F-32H-K268 - Hz - Plan #1	300.0	300.0	58.8	57.8	58.646	CC
File 3F-32H-K268 - Hz - Plan #1	400.0	400.0	58.9	57.6	43.602	ES
File 3F-32H-K268 - Hz - Plan #1	7,713.0	7,408.1	146.0	119.6	5.535	SF
File 3G-32H-K268 - Hz - Plan #1	796.6	798.5	52.8	50.0	18.908	CC
File 3G-32H-K268 - Hz - Plan #1	800.0	801.9	52.8	50.0	18.825	ES
File 3G-32H-K268 - Hz - Plan #1	7,442.9	7,413.5	145.3	117.7	5.252	SF
File 3H-32H-K268 - Hz - Plan #1	801.1	803.5	41.0	38.2	14.598	CC, ES
File 3H-32H-K268 - Hz - Plan #1	1,000.0	1,001.5	46.5	42.9	12.967	SF
File 3I-32H-K268 - Hz - Plan #1	200.0	200.0	33.8	33.1	51.735	CC, ES
File 3I-32H-K268 - Hz - Plan #1	700.0	695.8	56.5	54.0	23.150	SF
File 3J-32H-K268 - Hz - Plan #1	233.4	233.4	28.0	27.2	36.367	CC
File 3J-32H-K268 - Hz - Plan #1	300.0	299.8	28.2	27.2	28.130	ES
File 3J-32H-K268 - Hz - Plan #1	600.0	598.0	39.1	37.0	18.917	SF
File 3K-32H-K268 - Hz - Plan #1	300.0	300.0	22.7	21.7	22.635	CC
File 3K-32H-K268 - Hz - Plan #1	400.0	399.8	22.9	21.6	16.960	ES
File 3K-32H-K268 - Hz - Plan #1	600.0	599.0	28.4	26.3	13.748	SF
File 3L-32H-K268 - Hz - Plan #1	300.0	300.0	19.6	18.6	19.549	CC
File 3L-32H-K268 - Hz - Plan #1	400.0	400.0	19.8	18.4	14.631	ES
File 3L-32H-K268 - Hz - Plan #1	600.0	599.6	23.4	21.4	11.363	SF
File 3M-32H-K268 - Hz - Plan #1	200.0	200.0	4.6	3.9	7.037	CC, ES
File 3M-32H-K268 - Hz - Plan #1	10,837.1	11,073.3	417.4	319.0	4.239	SF
File 3O-32H-K268 - Hz - Plan #1	233.5	233.5	6.7	5.9	8.676	CC
File 3O-32H-K268 - Hz - Plan #1	300.0	299.9	6.9	5.9	6.870	ES
File 3O-32H-K268 - Hz - Plan #1	10,837.1	11,077.4	417.5	319.1	4.245	SF
File 3P-32H-K268 - Hz - Plan #1	200.0	200.0	11.2	10.5	17.144	CC, ES
File 3P-32H-K268 - Hz - Plan #1	500.0	499.4	16.8	15.1	9.808	SF
GENE 11-5 (EXISTING) - KERR-MCGEE WELL - NO SU						Out of range

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 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**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)						
HIGHLAND 21-5 (EXISTING) - KPK WELL - NO SURVE						Out of range
HOPE 31-5 (EXISTING) - KPK WELL - NO SURVEYS						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 A (EXISTING) - TEXAS TEA WELL - NO SUR						Out of range
NELSON 2 (EXISTING) - TEXAS TEA WELL - NO SURV						Out of range
NELSON 3 (EXISTING) - TEXAS TEA WELL - NO SURV						Out of range
NELSON 4 (EXISTING) - TEXAS TEA WELL - NO SURV	300.0	299.0	340.9	339.9	333.724	CC
NELSON 4 (EXISTING) - TEXAS TEA WELL - NO SURV	400.0	399.0	341.2	339.8	248.930	ES
NELSON 4 (EXISTING) - TEXAS TEA WELL - NO SURV	3,300.0	3,287.4	494.2	482.1	40.640	SF
NELSON 5 (EXISTING) - VESSELS WELL - NO SURVE						Out of range
NELSON 5 TT (EXISTING) - TEXAS TEA WELL - NO SU						Out of range
NELSON 6 (EXISTING) - VESSELS WELL - NO SURVE						Out of range
NELSON E UNIT 1 (EXISTING) - ENCANA WELL - NO S						Out of range
PAQUETTE 13-5 (EXISTING) - KERR-MCGEE WELL - N						Out of range
PAQUETTE 14-5 (EXISTING) - KERR-MCGEE WELL - N						Out of range
RAY NELSON 0-4-32 (EXISTING) - ENCANA WELL - NO						Out of range
RAY NELSON 12-32 (EXISTING) - ENCANA WELL - NO						Out of range
RAY NELSON 13-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 14-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 23-32 (EXISTING) - ENCANA WELL - NO	7,886.6	7,281.0	310.8	284.0	11.598	CC, ES
RAY NELSON 23-32 (EXISTING) - ENCANA WELL - NO	7,900.0	7,281.0	311.1	284.3	11.581	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 - DD - Plan #1						Out of range
Ray Nelson 34-32 - DD - Plan #2						Out of range
Ray Nelson 44-32 - DD - Plan #2						Out of range
RAY NELSON 4-4-32 (EXISTING) - ENCANA WELL - SU	123.8	126.9	466.9	466.5	1,198.022	CC, ES
RAY NELSON 4-4-32 (EXISTING) - ENCANA WELL - SU	600.0	544.6	497.6	495.6	246.461	SF
RAY NELSON 4-6-32 (EXISTING) - ENCANA WELL - SU	191.5	194.6	466.9	466.2	744.494	CC
RAY NELSON 4-6-32 (EXISTING) - ENCANA WELL - SU	200.0	202.2	466.9	466.2	711.890	ES
RAY NELSON 4-6-32 (EXISTING) - ENCANA WELL - SU	1,000.0	984.4	496.3	492.1	117.598	SF
Ray Nelson 7-8-32 - DD - Plan #1						Out of range
Ray Nelson 8-8-32 - DD - Plan #2						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	8,263.5	7,538.5	209.9	177.4	6.455	CC, ES, SF
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 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - ANDERSON 21-32 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8115-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	7,378.0	7,344.0	7,344.0	50.4	12.8	90.00	3,049.0	302.1	420.3	357.1	63.14	6.656	
10,500.0	7,378.0	7,344.0	7,344.0	52.1	12.8	90.00	3,049.0	302.1	332.1	267.3	64.83	5.123	
10,600.0	7,378.0	7,344.0	7,344.0	53.8	12.8	90.00	3,049.0	302.1	253.0	186.5	66.53	3.803	
10,700.0	7,378.0	7,344.0	7,344.0	55.5	12.8	90.00	3,049.0	302.1	194.2	126.0	68.23	2.846	
10,781.5	7,378.0	7,344.0	7,344.0	56.8	12.8	90.00	3,049.0	302.1	176.2	106.6	69.62	2.532	CC, ES, SF
10,800.0	7,378.0	7,344.0	7,344.0	57.2	12.8	90.00	3,049.0	302.1	177.2	107.3	69.93	2.534	
10,837.1	7,378.0	7,344.0	7,344.0	57.8	12.8	90.00	3,049.0	302.1	184.8	114.2	70.56	2.619	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - ANDERSON 22-32 ENC (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8344-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	7,378.0	7,344.0	7,344.0	50.4	12.8	90.00	3,049.0	310.5	423.9	360.7	63.14	6.713	
10,500.0	7,378.0	7,344.0	7,344.0	52.1	12.8	90.00	3,049.0	310.5	336.7	271.8	64.83	5.193	
10,600.0	7,378.0	7,344.0	7,344.0	53.8	12.8	90.00	3,049.0	310.5	258.9	192.4	66.53	3.892	
10,700.0	7,378.0	7,344.0	7,344.0	55.5	12.8	90.00	3,049.0	310.5	201.8	133.6	68.23	2.958	
10,781.5	7,378.0	7,344.0	7,344.0	56.8	12.8	90.00	3,049.0	310.5	184.6	115.0	69.62	2.652	CC, ES, SF
10,800.0	7,378.0	7,344.0	7,344.0	57.2	12.8	90.00	3,049.0	310.5	185.6	115.6	69.93	2.653	
10,837.1	7,378.0	7,344.0	7,344.0	57.8	12.8	90.00	3,049.0	310.5	192.8	122.2	70.56	2.732	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - ANDERSON TRUST C UNIT 2 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8123-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
10,000.0	7,378.0	6,773.0	6,773.0	43.7	11.8	-90.00	2,547.8	-221.3	446.2	390.8	55.42	8.051	
10,100.0	7,378.0	6,773.0	6,773.0	45.3	11.8	-90.00	2,547.8	-221.3	391.2	334.1	57.09	6.852	
10,200.0	7,378.0	6,773.0	6,773.0	47.0	11.8	-90.00	2,547.8	-221.3	356.3	297.6	58.77	6.063	
10,280.3	7,378.0	6,773.0	6,773.0	48.3	11.8	-90.00	2,547.8	-221.3	347.2	287.0	60.12	5.774	CC, ES
10,300.0	7,378.0	6,773.0	6,773.0	48.7	11.8	-90.00	2,547.8	-221.3	347.7	287.3	60.45	5.752	SF
10,400.0	7,378.0	6,773.0	6,773.0	50.4	11.8	-90.00	2,547.8	-221.3	367.2	305.1	62.14	5.910	
10,500.0	7,378.0	6,773.0	6,773.0	52.1	11.8	-90.00	2,547.8	-221.3	410.8	347.0	63.83	6.436	
10,600.0	7,378.0	6,773.0	6,773.0	53.8	11.8	-90.00	2,547.8	-221.3	472.0	406.4	65.53	7.202	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - File 3A-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	-92.19	-3.6	-95.1	95.2				
100.0	100.0	99.0	99.0	0.2	0.2	-92.19	-3.6	-95.1	95.2	94.9	0.30	315.032	
200.0	200.0	199.0	199.0	0.3	0.3	-92.19	-3.6	-95.1	95.2	94.5	0.65	146.224	CC, ES
300.0	300.0	297.4	297.4	0.5	0.5	-92.24	-3.7	-95.9	96.0	95.0	1.00	96.289	
400.0	400.0	395.7	395.6	0.7	0.7	99.42	-4.1	-98.4	98.7	97.4	1.34	73.447	
500.0	500.0	493.8	493.7	0.9	0.9	100.56	-4.6	-102.6	103.4	101.7	1.69	61.047	
600.0	599.9	591.7	591.4	1.0	1.1	102.33	-5.4	-108.4	110.2	108.2	2.05	53.746	
700.0	699.7	689.3	688.7	1.2	1.3	104.52	-6.3	-115.8	119.2	116.8	2.42	49.320	
800.0	799.4	786.4	785.4	1.4	1.5	106.92	-7.5	-124.9	130.5	127.7	2.80	46.670	
900.0	898.9	883.1	881.5	1.7	1.7	109.33	-8.9	-135.5	144.1	140.9	3.19	45.231	
1,000.0	998.5	979.3	976.9	1.9	2.0	111.21	-10.4	-147.6	159.6	156.0	3.58	44.544	
1,100.0	1,098.1	1,075.1	1,071.7	2.1	2.3	112.59	-12.2	-161.3	176.7	172.8	3.98	44.358	SF
1,200.0	1,197.6	1,170.3	1,165.7	2.4	2.6	113.56	-14.2	-176.4	195.5	191.1	4.39	44.522	
1,300.0	1,297.2	1,265.0	1,258.9	2.6	2.9	114.21	-16.3	-193.0	215.9	211.1	4.80	44.937	
1,400.0	1,396.7	1,359.1	1,351.2	2.8	3.2	114.61	-18.7	-211.0	237.8	232.5	5.22	45.538	
1,500.0	1,496.3	1,452.6	1,442.6	3.0	3.6	114.81	-21.2	-230.4	261.1	255.5	5.64	46.283	
1,600.0	1,595.9	1,545.3	1,533.0	3.3	4.0	114.86	-23.9	-251.0	286.0	279.9	6.07	47.140	
1,700.0	1,695.4	1,637.3	1,622.3	3.5	4.4	114.80	-26.7	-273.0	312.2	305.7	6.49	48.093	
1,800.0	1,795.0	1,732.6	1,714.5	3.8	4.9	114.69	-29.8	-296.7	339.5	332.6	6.93	49.004	
1,900.0	1,894.5	1,828.8	1,807.7	4.0	5.3	114.58	-32.9	-320.7	366.8	359.4	7.37	49.789	
2,000.0	1,994.1	1,925.0	1,900.8	4.2	5.8	114.49	-36.0	-344.6	394.1	386.3	7.81	50.477	
2,100.0	2,093.7	2,021.2	1,993.9	4.5	6.2	114.41	-39.1	-368.6	421.3	413.1	8.25	51.087	
2,200.0	2,193.2	2,117.4	2,087.0	4.7	6.7	114.35	-42.2	-392.6	448.6	439.9	8.69	51.629	
2,300.0	2,292.8	2,213.6	2,180.1	4.9	7.1	114.29	-45.3	-416.6	475.9	466.8	9.13	52.115	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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	-90.00	0.0	-89.5	89.5				
100.0	100.0	99.0	99.0	0.2	0.2	-90.00	0.0	-89.5	89.5	89.2	0.30	296.283	
200.0	200.0	199.0	199.0	0.3	0.3	-90.00	0.0	-89.5	89.5	88.9	0.65	137.522	
300.0	300.0	299.0	299.0	0.5	0.5	-90.00	0.0	-89.5	89.5	88.5	1.00	89.521	CC, ES
400.0	400.0	397.5	397.5	0.7	0.7	101.90	0.1	-90.4	90.5	89.2	1.35	67.212	
500.0	500.0	495.8	495.8	0.9	0.8	103.53	0.3	-92.9	93.7	92.0	1.70	55.192	
600.0	599.9	593.9	593.8	1.0	1.0	106.03	0.7	-97.0	99.1	97.0	2.05	48.249	
700.0	699.7	691.7	691.4	1.2	1.2	109.07	1.2	-102.9	106.9	104.5	2.42	44.224	
800.0	799.4	789.0	788.4	1.4	1.4	112.36	1.9	-110.3	117.3	114.6	2.79	42.050	
900.0	898.9	885.8	884.8	1.7	1.6	115.57	2.8	-119.3	130.4	127.2	3.17	41.141	
1,000.0	998.5	982.2	980.6	1.9	1.9	118.14	3.8	-129.9	145.5	142.0	3.55	40.969	SF
1,100.0	1,098.1	1,078.1	1,075.7	2.1	2.1	120.09	4.9	-142.1	162.5	158.5	3.94	41.272	
1,200.0	1,197.6	1,173.5	1,170.1	2.4	2.4	121.52	6.2	-155.7	181.2	176.8	4.32	41.892	
1,300.0	1,297.2	1,268.3	1,263.7	2.6	2.7	122.56	7.6	-170.8	201.5	196.8	4.72	42.732	
1,400.0	1,396.7	1,362.5	1,356.4	2.8	3.0	123.29	9.1	-187.3	223.4	218.3	5.11	43.725	
1,500.0	1,496.3	1,458.0	1,450.2	3.0	3.4	123.80	10.8	-205.4	246.7	241.2	5.51	44.773	
1,600.0	1,595.9	1,555.2	1,545.6	3.3	3.7	124.21	12.6	-224.0	270.2	264.3	5.92	45.666	
1,700.0	1,695.4	1,652.4	1,640.9	3.5	4.1	124.56	14.3	-242.6	293.7	287.3	6.32	46.432	
1,800.0	1,795.0	1,749.6	1,736.3	3.8	4.4	124.86	16.0	-261.2	317.1	310.4	6.73	47.093	
1,900.0	1,894.5	1,846.8	1,831.7	4.0	4.8	125.12	17.8	-279.8	340.6	333.5	7.15	47.669	
2,000.0	1,994.1	1,944.0	1,927.1	4.2	5.1	125.34	19.5	-298.3	364.1	356.6	7.56	48.175	
2,100.0	2,093.7	2,041.1	2,022.5	4.5	5.5	125.54	21.2	-316.9	387.6	379.7	7.97	48.622	
2,200.0	2,193.2	2,138.3	2,117.8	4.7	5.9	125.71	23.0	-335.5	411.1	402.8	8.39	49.021	
2,300.0	2,292.8	2,235.5	2,213.2	4.9	6.2	125.87	24.7	-354.1	434.7	425.9	8.80	49.377	
2,400.0	2,392.3	2,332.7	2,308.6	5.2	6.6	126.01	26.4	-372.7	458.2	449.0	9.22	49.697	
2,500.0	2,491.9	2,429.9	2,404.0	5.4	7.0	126.13	28.2	-391.3	481.7	472.1	9.64	49.987	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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	-92.49	-3.6	-83.9	84.0				
100.0	100.0	99.0	99.0	0.2	0.2	-92.49	-3.6	-83.9	84.0	83.7	0.30	278.028	
200.0	200.0	199.0	199.0	0.3	0.3	-92.49	-3.6	-83.9	84.0	83.4	0.65	129.048	
300.0	300.0	299.0	299.0	0.5	0.5	-92.49	-3.6	-83.9	84.0	83.0	1.00	84.005	CC
400.0	400.0	399.0	399.0	0.7	0.7	99.42	-3.6	-83.9	84.1	82.8	1.35	62.343	ES
500.0	500.0	497.6	497.6	0.9	0.8	100.99	-3.9	-84.7	85.4	83.7	1.70	50.243	
600.0	599.9	596.0	596.0	1.0	1.0	103.28	-4.5	-87.2	88.8	86.8	2.06	43.169	
700.0	699.7	694.2	694.1	1.2	1.2	106.04	-5.6	-91.2	94.4	92.0	2.42	38.956	
800.0	799.4	792.2	791.9	1.4	1.4	109.02	-7.0	-96.9	102.4	99.6	2.80	36.530	
900.0	898.9	889.9	889.3	1.7	1.6	111.89	-8.9	-104.2	112.7	109.5	3.19	35.304	
1,000.0	998.5	987.2	986.2	1.9	1.8	113.99	-11.3	-113.0	124.8	121.2	3.59	34.781	
1,100.0	1,098.1	1,084.3	1,082.7	2.1	2.0	115.38	-14.0	-123.4	138.4	134.4	3.99	34.704	SF
1,200.0	1,197.6	1,181.0	1,178.5	2.4	2.3	116.22	-17.1	-135.3	153.6	149.2	4.40	34.927	
1,300.0	1,297.2	1,277.2	1,273.8	2.6	2.6	116.62	-20.6	-148.8	170.3	165.5	4.82	35.362	
1,400.0	1,396.7	1,373.0	1,368.3	2.8	2.9	116.69	-24.5	-163.7	188.4	183.1	5.24	35.951	
1,500.0	1,496.3	1,469.8	1,463.6	3.0	3.2	116.55	-28.8	-180.1	207.6	202.0	5.67	36.622	
1,600.0	1,595.9	1,567.9	1,560.2	3.3	3.5	116.42	-33.2	-196.8	227.1	221.0	6.11	37.189	
1,700.0	1,695.4	1,666.0	1,656.7	3.5	3.8	116.30	-37.5	-213.6	246.6	240.0	6.55	37.668	
1,800.0	1,795.0	1,764.0	1,753.2	3.8	4.2	116.20	-41.9	-230.4	266.0	259.0	6.99	38.078	
1,900.0	1,894.5	1,862.1	1,849.8	4.0	4.5	116.11	-46.3	-247.1	285.5	278.0	7.43	38.431	
2,000.0	1,994.1	1,960.2	1,946.3	4.2	4.8	116.04	-50.7	-263.9	304.9	297.0	7.87	38.739	
2,100.0	2,093.7	2,058.3	2,042.9	4.5	5.2	115.97	-55.1	-280.7	324.4	316.1	8.32	39.010	
2,200.0	2,193.2	2,156.4	2,139.4	4.7	5.5	115.91	-59.5	-297.5	343.8	335.1	8.76	39.249	
2,300.0	2,292.8	2,254.5	2,236.0	4.9	5.9	115.86	-63.9	-314.2	363.3	354.1	9.21	39.462	
2,400.0	2,392.3	2,352.6	2,332.5	5.2	6.2	115.82	-68.2	-331.0	382.7	373.1	9.65	39.653	
2,500.0	2,491.9	2,450.7	2,429.1	5.4	6.5	115.77	-72.6	-347.8	402.2	392.1	10.10	39.825	
2,600.0	2,591.5	2,548.8	2,525.6	5.7	6.9	115.74	-77.0	-364.6	421.7	411.1	10.55	39.981	
2,700.0	2,691.0	2,646.8	2,622.1	5.9	7.2	115.70	-81.4	-381.3	441.1	430.1	10.99	40.123	
2,800.0	2,790.6	2,744.9	2,718.7	6.1	7.6	115.67	-85.8	-398.1	460.6	449.1	11.44	40.252	
2,900.0	2,890.1	2,843.0	2,815.2	6.4	7.9	115.64	-90.2	-414.9	480.0	468.1	11.89	40.371	
3,000.0	2,989.7	2,941.1	2,911.8	6.6	8.3	115.61	-94.5	-431.6	499.5	487.2	12.34	40.480	

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 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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	-90.00	0.0	-78.3	78.3				
100.0	100.0	99.0	99.0	0.2	0.2	-90.00	0.0	-78.3	78.3	78.0	0.30	259.248	
200.0	200.0	199.0	199.0	0.3	0.3	-90.00	0.0	-78.3	78.3	77.7	0.65	120.331	
300.0	300.0	299.0	299.0	0.5	0.5	-90.00	0.0	-78.3	78.3	77.3	1.00	78.331	CC
400.0	400.0	399.0	399.0	0.7	0.7	101.94	0.0	-78.3	78.5	77.2	1.35	58.167	ES
500.0	500.0	499.0	499.0	0.9	0.8	103.79	0.0	-78.3	79.1	77.4	1.70	46.453	
600.0	599.9	597.5	597.5	1.0	1.0	106.80	0.1	-79.2	81.1	79.0	2.06	39.376	
700.0	699.7	695.8	695.8	1.2	1.2	110.72	0.5	-81.6	85.6	83.2	2.42	35.326	
800.0	799.4	793.7	793.6	1.4	1.4	115.09	1.2	-85.8	93.0	90.2	2.80	33.247	
900.0	898.9	891.3	891.0	1.7	1.6	119.37	2.2	-91.5	103.2	100.0	3.17	32.527	SF
1,000.0	998.5	988.5	987.9	1.9	1.8	122.76	3.4	-98.9	115.5	112.0	3.55	32.580	
1,100.0	1,098.1	1,085.3	1,084.3	2.1	2.0	125.30	4.8	-107.8	129.9	126.0	3.92	33.112	
1,200.0	1,197.6	1,182.8	1,181.2	2.4	2.2	127.19	6.6	-118.2	145.8	141.5	4.30	33.902	
1,300.0	1,297.2	1,281.4	1,279.2	2.6	2.4	128.69	8.3	-129.0	162.1	157.5	4.69	34.607	
1,400.0	1,396.7	1,379.9	1,377.1	2.8	2.7	129.92	10.1	-139.8	178.5	173.5	5.07	35.212	
1,500.0	1,496.3	1,478.5	1,475.1	3.0	2.9	130.94	11.9	-150.5	195.0	189.5	5.46	35.734	
1,600.0	1,595.9	1,577.1	1,573.1	3.3	3.1	131.81	13.6	-161.3	211.5	205.6	5.84	36.188	
1,700.0	1,695.4	1,675.7	1,671.1	3.5	3.4	132.55	15.4	-172.0	228.0	221.8	6.23	36.585	
1,800.0	1,795.0	1,774.3	1,769.1	3.8	3.6	133.19	17.2	-182.8	244.6	238.0	6.62	36.934	
1,900.0	1,894.5	1,872.9	1,867.0	4.0	3.9	133.74	18.9	-193.6	261.2	254.2	7.01	37.244	
2,000.0	1,994.1	1,971.4	1,965.0	4.2	4.1	134.23	20.7	-204.3	277.8	270.4	7.40	37.520	
2,100.0	2,093.7	2,070.0	2,063.0	4.5	4.4	134.67	22.5	-215.1	294.4	286.6	7.80	37.768	
2,200.0	2,193.2	2,168.6	2,161.0	4.7	4.6	135.06	24.2	-225.8	311.1	302.9	8.19	37.990	
2,300.0	2,292.8	2,267.2	2,259.0	4.9	4.9	135.41	26.0	-236.6	327.8	319.2	8.58	38.192	
2,400.0	2,392.3	2,365.8	2,356.9	5.2	5.1	135.72	27.8	-247.3	344.4	335.4	8.98	38.375	
2,500.0	2,491.9	2,464.4	2,454.9	5.4	5.4	136.01	29.5	-258.1	361.1	351.7	9.37	38.542	
2,600.0	2,591.5	2,562.9	2,552.9	5.7	5.7	136.27	31.3	-268.9	377.8	368.0	9.76	38.695	
2,700.0	2,691.0	2,661.5	2,650.9	5.9	5.9	136.51	33.1	-279.6	394.5	384.3	10.16	38.835	
2,800.0	2,790.6	2,760.1	2,748.8	6.1	6.2	136.73	34.8	-290.4	411.2	400.7	10.55	38.965	
2,900.0	2,890.1	2,858.7	2,846.8	6.4	6.4	136.93	36.6	-301.1	427.9	417.0	10.95	39.084	
3,000.0	2,989.7	2,957.3	2,944.8	6.6	6.7	137.12	38.4	-311.9	444.6	433.3	11.34	39.195	
3,100.0	3,089.2	3,055.9	3,042.8	6.8	6.9	137.29	40.1	-322.7	461.3	449.6	11.74	39.298	
3,200.0	3,188.8	3,154.4	3,140.8	7.1	7.2	137.46	41.9	-333.4	478.1	465.9	12.14	39.395	
3,300.0	3,288.4	3,253.0	3,238.7	7.3	7.4	137.61	43.7	-344.2	494.8	482.3	12.53	39.484	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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	-93.25	-3.7	-64.3	64.5				
100.0	100.0	100.0	100.0	0.2	0.2	-93.25	-3.7	-64.3	64.5	64.1	0.30	212.230	
200.0	200.0	200.0	200.0	0.3	0.3	-93.25	-3.7	-64.3	64.5	63.8	0.65	98.738	
300.0	300.0	300.0	300.0	0.5	0.5	-93.25	-3.7	-64.3	64.5	63.4	1.00	64.334	CC
400.0	400.0	400.0	400.0	0.7	0.7	98.84	-3.7	-64.3	64.6	63.2	1.35	47.782	ES
500.0	500.0	500.0	500.0	0.9	0.8	101.12	-3.7	-64.3	65.0	63.3	1.70	38.152	
600.0	599.9	599.9	599.9	1.0	1.0	104.82	-3.7	-64.3	66.0	64.0	2.06	31.987	
700.0	699.7	698.5	698.5	1.2	1.2	109.90	-3.3	-65.1	68.7	66.2	2.43	28.270	
800.0	799.4	796.9	796.8	1.4	1.4	115.95	-2.3	-67.5	74.3	71.5	2.80	26.518	
900.0	898.9	895.1	895.0	1.7	1.5	122.02	-0.7	-71.3	83.0	79.8	3.17	26.166	
1,000.0	998.5	994.3	994.1	1.9	1.7	127.01	1.1	-75.6	93.1	89.6	3.54	26.282	
1,100.0	1,098.1	1,093.5	1,093.2	2.1	1.9	131.00	3.0	-80.0	103.8	99.9	3.91	26.539	
1,200.0	1,197.6	1,192.7	1,192.2	2.4	2.1	134.24	4.8	-84.3	114.8	110.5	4.27	26.861	
1,300.0	1,297.2	1,291.9	1,291.3	2.6	2.3	136.91	6.7	-88.7	126.2	121.5	4.64	27.207	
1,400.0	1,396.7	1,391.1	1,390.4	2.8	2.5	139.13	8.5	-93.0	137.8	132.8	5.00	27.553	
1,500.0	1,496.3	1,490.3	1,489.5	3.0	2.7	141.01	10.3	-97.4	149.5	144.2	5.36	27.889	
1,600.0	1,595.9	1,589.5	1,588.6	3.3	2.9	142.61	12.2	-101.7	161.4	155.7	5.72	28.208	
1,700.0	1,695.4	1,688.7	1,687.7	3.5	3.0	143.99	14.0	-106.0	173.4	167.4	6.08	28.508	
1,800.0	1,795.0	1,787.9	1,786.7	3.8	3.2	145.19	15.9	-110.4	185.5	179.1	6.44	28.790	
1,900.0	1,894.5	1,887.1	1,885.8	4.0	3.4	146.25	17.7	-114.7	197.7	190.9	6.80	29.052	
2,000.0	1,994.1	1,986.3	1,984.9	4.2	3.6	147.18	19.6	-119.1	209.9	202.7	7.16	29.297	
2,100.0	2,093.7	2,085.5	2,084.0	4.5	3.8	148.01	21.4	-123.4	222.2	214.7	7.53	29.524	
2,200.0	2,193.2	2,184.7	2,183.1	4.7	4.0	148.76	23.2	-127.7	234.5	226.6	7.89	29.737	
2,300.0	2,292.8	2,283.9	2,282.2	4.9	4.2	149.42	25.1	-132.1	246.8	238.6	8.25	29.934	
2,400.0	2,392.3	2,383.1	2,381.2	5.2	4.4	150.03	26.9	-136.4	259.2	250.6	8.61	30.119	
2,500.0	2,491.9	2,482.3	2,480.3	5.4	4.6	150.58	28.8	-140.8	271.6	262.6	8.97	30.292	
2,600.0	2,591.5	2,581.5	2,579.4	5.7	4.8	151.08	30.6	-145.1	284.0	274.7	9.33	30.454	
2,700.0	2,691.0	2,680.6	2,678.5	5.9	4.9	151.54	32.4	-149.5	296.5	286.8	9.69	30.605	
2,800.0	2,790.6	2,779.8	2,777.6	6.1	5.1	151.96	34.3	-153.8	308.9	298.9	10.05	30.748	
2,900.0	2,890.1	2,879.0	2,876.7	6.4	5.3	152.35	36.1	-158.1	321.4	311.0	10.41	30.882	
3,000.0	2,989.7	2,978.2	2,975.7	6.6	5.5	152.72	38.0	-162.5	333.9	323.1	10.77	31.008	
3,100.0	3,089.2	3,077.4	3,074.8	6.8	5.7	153.05	39.8	-166.8	346.4	335.3	11.13	31.127	
3,200.0	3,188.8	3,176.6	3,173.9	7.1	5.9	153.36	41.6	-171.2	358.9	347.4	11.49	31.239	
3,300.0	3,288.4	3,275.8	3,273.0	7.3	6.1	153.65	43.5	-175.5	371.4	359.6	11.85	31.345	
3,400.0	3,387.9	3,375.0	3,372.1	7.6	6.3	153.92	45.3	-179.8	384.0	371.8	12.21	31.446	
3,500.0	3,487.5	3,474.2	3,471.2	7.8	6.5	154.18	47.2	-184.2	396.5	383.9	12.57	31.541	
3,600.0	3,587.0	3,573.4	3,570.3	8.0	6.7	154.42	49.0	-188.5	409.1	396.1	12.93	31.632	
3,700.0	3,686.6	3,672.6	3,669.3	8.3	6.9	154.64	50.9	-192.9	421.6	408.3	13.29	31.718	
3,800.0	3,786.2	3,771.8	3,768.4	8.5	7.0	154.85	52.7	-197.2	434.2	420.5	13.65	31.800	
3,900.0	3,885.7	3,871.0	3,867.5	8.8	7.2	155.05	54.5	-201.6	446.7	432.7	14.01	31.878	
4,000.0	3,985.3	3,970.2	3,966.6	9.0	7.4	155.24	56.4	-205.9	459.3	444.9	14.37	31.952	
4,100.0	4,084.8	4,069.4	4,065.7	9.2	7.6	155.42	58.2	-210.2	471.9	457.1	14.74	32.023	
4,200.0	4,184.4	4,168.6	4,164.8	9.5	7.8	155.59	60.1	-214.6	484.5	469.4	15.10	32.091	
4,300.0	4,284.0	4,267.8	4,263.8	9.7	8.0	155.75	61.9	-218.9	497.0	481.6	15.46	32.156	
7,400.0	7,284.4	7,531.6	7,349.7	14.1	15.1	-95.06	-286.1	-354.2	483.6	455.6	27.95	17.304	SF
7,498.0	7,330.8	7,462.0	7,324.2	13.7	14.6	-89.14	-221.4	-353.0	478.1	450.9	27.23	17.558	
7,500.0	7,331.6	7,460.6	7,323.6	13.7	14.6	-89.01	-220.1	-353.0	478.1	450.9	27.22	17.568	
7,600.0	7,362.8	7,394.6	7,292.2	13.6	14.2	-82.68	-162.1	-351.6	483.4	456.9	26.55	18.207	
7,700.0	7,377.1	7,331.8	7,256.3	13.6	13.9	-76.28	-110.7	-350.1	497.2	471.3	25.95	19.157	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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	-90.01	0.0	-58.8	58.8				
100.0	100.0	100.0	100.0	0.2	0.2	-90.01	0.0	-58.8	58.8	58.4	0.30	193.464	
200.0	200.0	200.0	200.0	0.3	0.3	-90.01	0.0	-58.8	58.8	58.1	0.65	90.007	
300.0	300.0	300.0	300.0	0.5	0.5	-90.01	0.0	-58.8	58.8	57.8	1.00	58.646	CC
400.0	400.0	400.0	400.0	0.7	0.7	102.15	0.0	-58.8	58.9	57.6	1.35	43.602	ES
500.0	500.0	500.0	500.0	0.9	0.8	104.60	0.0	-58.8	59.5	57.8	1.70	34.930	
600.0	599.9	599.9	599.9	1.0	1.0	108.57	0.0	-58.8	60.8	58.7	2.06	29.461	
700.0	699.7	699.7	699.7	1.2	1.2	113.81	0.0	-58.8	63.0	60.6	2.43	25.935	
800.0	799.4	799.4	799.4	1.4	1.4	119.96	0.0	-58.8	66.6	63.8	2.80	23.765	
900.0	898.9	898.9	898.9	1.7	1.5	126.35	0.0	-58.8	71.6	68.5	3.17	22.593	
1,000.0	998.5	998.5	998.5	1.9	1.7	131.92	0.0	-58.8	77.6	74.0	3.54	21.940	
1,100.0	1,098.1	1,098.1	1,098.1	2.1	1.9	136.66	0.0	-58.8	84.1	80.2	3.90	21.598	
1,200.0	1,197.6	1,197.6	1,197.6	2.4	2.1	140.70	0.0	-58.8	91.2	87.0	4.25	21.452	
1,300.0	1,297.2	1,297.2	1,297.2	2.6	2.2	144.15	0.0	-58.8	98.6	94.0	4.60	21.428	
1,400.0	1,396.7	1,396.7	1,396.7	2.8	2.4	147.10	0.0	-58.8	106.4	101.4	4.95	21.479	
1,500.0	1,496.3	1,496.3	1,496.3	3.0	2.6	149.65	0.0	-58.8	114.4	109.1	5.30	21.576	
1,600.0	1,595.9	1,595.9	1,595.9	3.3	2.8	151.86	0.0	-58.8	122.6	116.9	5.65	21.700	
1,700.0	1,695.4	1,695.4	1,695.4	3.5	2.9	153.80	0.0	-58.8	130.9	124.9	5.99	21.840	
1,800.0	1,795.0	1,795.0	1,795.0	3.8	3.1	155.50	0.0	-58.8	139.4	133.1	6.34	21.987	
1,900.0	1,894.5	1,894.5	1,894.5	4.0	3.3	157.00	0.0	-58.8	148.0	141.3	6.69	22.135	
2,000.0	1,994.1	1,994.1	1,994.1	4.2	3.5	158.34	0.0	-58.8	156.7	149.6	7.03	22.283	
2,100.0	2,093.7	2,093.7	2,093.7	4.5	3.6	159.54	0.0	-58.8	165.4	158.1	7.38	22.427	
2,200.0	2,193.2	2,193.2	2,193.2	4.7	3.8	160.61	0.0	-58.8	174.2	166.5	7.72	22.567	
2,300.0	2,292.8	2,292.8	2,292.8	4.9	4.0	161.59	0.0	-58.8	183.1	175.1	8.07	22.702	
2,400.0	2,392.3	2,392.3	2,392.3	5.2	4.2	162.47	0.0	-58.8	192.0	183.6	8.41	22.831	
2,500.0	2,491.9	2,491.9	2,491.9	5.4	4.3	163.27	0.0	-58.8	201.0	192.2	8.76	22.955	
2,600.0	2,591.5	2,591.5	2,591.5	5.7	4.5	164.01	0.0	-58.8	210.0	200.9	9.10	23.073	
2,700.0	2,691.0	2,691.0	2,691.0	5.9	4.7	164.69	0.0	-58.8	219.0	209.6	9.45	23.185	
2,800.0	2,790.6	2,790.6	2,790.6	6.1	4.8	165.31	0.0	-58.8	228.1	218.3	9.79	23.292	
2,900.0	2,890.1	2,890.1	2,890.1	6.4	5.0	165.88	0.0	-58.8	237.2	227.0	10.14	23.394	
3,000.0	2,989.7	2,989.7	2,989.7	6.6	5.2	166.41	0.0	-58.8	246.3	235.8	10.48	23.491	
3,100.0	3,089.2	3,089.2	3,089.2	6.8	5.4	166.91	0.0	-58.8	255.4	244.6	10.83	23.584	
3,200.0	3,188.8	3,188.8	3,188.8	7.1	5.5	167.37	0.0	-58.8	264.5	253.4	11.18	23.672	
3,300.0	3,288.4	3,288.4	3,288.4	7.3	5.7	167.80	0.0	-58.8	273.7	262.2	11.52	23.756	
3,400.0	3,387.9	3,387.9	3,387.9	7.6	5.9	168.20	0.0	-58.8	282.9	271.0	11.87	23.836	
3,500.0	3,487.5	3,487.5	3,487.5	7.8	6.1	168.57	0.0	-58.8	292.0	279.8	12.21	23.913	
3,600.0	3,587.0	3,587.0	3,587.0	8.0	6.2	168.93	0.0	-58.8	301.2	288.7	12.56	23.986	
3,700.0	3,686.6	3,686.6	3,686.6	8.3	6.4	169.26	0.0	-58.8	310.5	297.5	12.91	24.056	
3,800.0	3,786.2	3,786.2	3,786.2	8.5	6.6	169.57	0.0	-58.8	319.7	306.4	13.25	24.122	
3,900.0	3,885.7	3,885.7	3,885.7	8.8	6.8	169.87	0.0	-58.8	328.9	315.3	13.60	24.186	
4,000.0	3,985.3	3,985.3	3,985.3	9.0	6.9	170.15	0.0	-58.8	338.1	324.2	13.94	24.248	
4,100.0	4,084.8	4,081.1	4,081.1	9.2	7.1	170.46	0.5	-58.6	347.8	333.5	14.28	24.351	
4,200.0	4,184.4	4,175.9	4,175.9	9.5	7.3	170.92	2.5	-57.9	358.8	344.2	14.62	24.543	
4,300.0	4,284.0	4,273.8	4,273.7	9.7	7.4	171.48	5.8	-56.8	370.8	355.8	14.96	24.784	
4,400.0	4,383.5	4,373.0	4,372.9	9.9	7.6	172.02	9.1	-55.6	382.8	367.5	15.30	25.017	
4,500.0	4,483.1	4,472.2	4,472.0	10.2	7.8	172.52	12.4	-54.5	394.9	379.2	15.64	25.240	
4,600.0	4,582.6	4,571.4	4,571.2	10.4	8.0	173.00	15.7	-53.4	406.9	391.0	15.99	25.454	
4,700.0	4,682.2	4,670.7	4,670.3	10.7	8.1	173.45	19.0	-52.2	419.1	402.7	16.33	25.661	
4,800.0	4,781.8	4,769.9	4,769.5	10.9	8.3	173.87	22.4	-51.1	431.2	414.5	16.68	25.859	
4,900.0	4,881.3	4,869.1	4,868.6	11.1	8.5	174.27	25.7	-50.0	443.4	426.4	17.02	26.050	
5,000.0	4,980.9	4,968.3	4,967.8	11.4	8.7	174.65	29.0	-48.8	455.6	438.2	17.36	26.235	
5,100.0	5,080.4	5,067.5	5,066.9	11.6	8.8	175.00	32.3	-47.7	467.8	450.1	17.71	26.412	

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 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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
5,200.0	5,180.0	5,166.7	5,166.1	11.9	9.0	175.35	35.6	-46.6	480.0	461.9	18.06	26.584	
5,300.0	5,279.6	5,265.9	5,265.2	12.1	9.2	175.67	39.0	-45.4	492.2	473.8	18.40	26.749	
7,200.0	7,148.2	7,863.3	7,601.5	14.9	15.6	-149.18	-403.7	-14.1	476.5	450.9	25.66	18.568	
7,300.0	7,222.6	7,704.8	7,560.4	14.5	14.3	-136.88	-251.1	-15.9	391.7	366.4	25.32	15.473	
7,400.0	7,284.4	7,612.4	7,517.6	14.1	13.7	-129.21	-169.3	-17.2	308.8	283.9	24.89	12.408	
7,500.0	7,331.6	7,539.7	7,475.1	13.7	13.3	-121.03	-110.5	-18.2	233.4	208.4	24.93	9.360	
7,600.0	7,362.8	7,475.5	7,431.5	13.6	13.1	-109.55	-63.4	-19.1	174.0	148.4	25.63	6.789	
7,700.0	7,377.1	7,415.6	7,386.4	13.6	13.0	-93.46	-24.1	-20.0	146.4	120.0	26.34	5.558	
7,713.0	7,377.8	7,408.1	7,380.5	13.6	12.9	-91.06	-19.5	-20.1	146.0	119.6	26.37	5.535	SF
7,800.0	7,378.0	7,361.2	7,342.1	13.9	12.8	-76.23	7.4	-20.8	162.5	136.5	25.98	6.255	
7,900.0	7,378.0	7,318.8	7,305.5	14.3	12.8	-63.80	28.9	-21.4	214.8	189.7	25.11	8.555	
8,000.0	7,378.0	7,285.5	7,275.8	15.0	12.7	-55.32	43.9	-21.9	286.8	262.4	24.41	11.753	
8,100.0	7,378.0	7,250.0	7,243.2	15.8	12.7	-47.71	57.9	-22.4	368.8	345.1	23.66	15.583	
8,200.0	7,378.0	7,237.1	7,231.1	16.8	12.7	-45.30	62.5	-22.6	455.6	431.8	23.88	19.081	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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	-93.92	-3.6	-53.2	53.3				
100.0	100.0	100.0	100.0	0.2	0.2	-93.92	-3.6	-53.2	53.3	53.0	0.30	175.450	
200.0	200.0	200.0	200.0	0.3	0.3	-93.92	-3.6	-53.2	53.3	52.6	0.65	81.627	
300.0	300.0	300.0	300.0	0.5	0.5	-93.92	-3.6	-53.2	53.3	52.3	1.00	53.185	
400.0	400.0	400.0	400.0	0.7	0.7	98.33	-3.6	-53.2	53.4	52.0	1.35	39.511	
500.0	500.0	500.0	500.0	0.9	0.8	101.08	-3.6	-53.2	53.8	52.1	1.70	31.587	
600.0	599.9	600.8	600.8	1.0	1.0	105.71	-3.6	-52.3	54.0	51.9	2.07	26.135	
700.0	699.7	701.5	701.5	1.2	1.2	112.43	-3.5	-49.6	53.4	50.9	2.43	21.936	
796.6	796.0	798.5	798.4	1.4	1.4	121.16	-3.3	-45.4	52.8	50.0	2.79	18.908	CC
800.0	799.4	801.9	801.7	1.4	1.4	121.50	-3.3	-45.3	52.8	50.0	2.81	18.825	ES
900.0	898.9	901.4	901.1	1.7	1.6	131.86	-3.0	-40.4	54.1	50.9	3.17	17.051	
1,000.0	998.5	1,000.9	1,000.5	1.9	1.8	141.54	-2.8	-35.6	57.1	53.6	3.53	16.184	
1,100.0	1,098.1	1,100.4	1,099.9	2.1	1.9	150.03	-2.6	-30.8	61.6	57.7	3.88	15.874	
1,200.0	1,197.6	1,199.9	1,199.3	2.4	2.1	157.25	-2.3	-26.0	67.2	63.0	4.23	15.897	
1,300.0	1,297.2	1,299.4	1,298.7	2.6	2.3	163.28	-2.1	-21.2	73.8	69.2	4.58	16.106	
1,400.0	1,396.7	1,398.9	1,398.1	2.8	2.5	168.28	-1.9	-16.4	81.0	76.1	4.93	16.414	
1,500.0	1,496.3	1,498.4	1,497.5	3.0	2.7	172.44	-1.6	-11.5	88.7	83.4	5.29	16.766	
1,600.0	1,595.9	1,598.0	1,596.9	3.3	2.9	175.92	-1.4	-6.7	96.9	91.2	5.65	17.133	
1,700.0	1,695.4	1,697.5	1,696.3	3.5	3.1	178.85	-1.2	-1.9	105.3	99.3	6.02	17.497	
1,800.0	1,795.0	1,797.0	1,795.7	3.8	3.3	-178.65	-0.9	2.9	114.0	107.6	6.38	17.849	
1,900.0	1,894.5	1,896.5	1,895.1	4.0	3.5	-176.51	-0.7	7.7	122.8	116.1	6.75	18.184	
2,000.0	1,994.1	1,996.0	1,994.5	4.2	3.7	-174.66	-0.5	12.5	131.8	124.7	7.12	18.501	
2,100.0	2,093.7	2,095.5	2,093.8	4.5	3.9	-173.05	-0.2	17.4	140.9	133.4	7.50	18.798	
2,200.0	2,193.2	2,195.0	2,193.2	4.7	4.0	-171.63	0.0	22.2	150.1	142.3	7.87	19.077	
2,300.0	2,292.8	2,294.5	2,292.6	4.9	4.2	-170.38	0.2	27.0	159.4	151.2	8.24	19.337	
2,400.0	2,392.3	2,394.0	2,392.0	5.2	4.4	-169.27	0.5	31.8	168.8	160.2	8.62	19.581	
2,500.0	2,491.9	2,493.5	2,491.4	5.4	4.6	-168.27	0.7	36.6	178.2	169.2	9.00	19.809	
2,600.0	2,591.5	2,593.1	2,590.8	5.7	4.8	-167.38	0.9	41.5	187.7	178.3	9.37	20.023	
2,700.0	2,691.0	2,692.6	2,690.2	5.9	5.0	-166.57	1.2	46.3	197.2	187.4	9.75	20.223	
2,800.0	2,790.6	2,792.1	2,789.6	6.1	5.2	-165.83	1.4	51.1	206.7	196.6	10.13	20.411	
2,900.0	2,890.1	2,891.6	2,889.0	6.4	5.4	-165.16	1.6	55.9	216.3	205.8	10.51	20.587	
3,000.0	2,989.7	2,991.1	2,988.4	6.6	5.6	-164.55	1.9	60.7	225.9	215.0	10.88	20.753	
3,100.0	3,089.2	3,090.6	3,087.8	6.8	5.8	-163.98	2.1	65.5	235.5	224.3	11.26	20.910	
3,200.0	3,188.8	3,190.1	3,187.2	7.1	6.0	-163.47	2.3	70.4	245.2	233.5	11.64	21.057	
3,300.0	3,288.4	3,289.6	3,286.6	7.3	6.2	-162.99	2.6	75.2	254.8	242.8	12.02	21.197	
3,400.0	3,387.9	3,389.1	3,386.0	7.6	6.4	-162.54	2.8	80.0	264.5	252.1	12.40	21.329	
3,500.0	3,487.5	3,488.6	3,485.4	7.8	6.5	-162.13	3.0	84.8	274.2	261.4	12.78	21.453	
3,600.0	3,587.0	3,588.2	3,584.7	8.0	6.7	-161.74	3.3	89.6	283.9	270.7	13.16	21.572	
3,700.0	3,686.6	3,687.7	3,684.1	8.3	6.9	-161.38	3.5	94.5	293.6	280.1	13.54	21.684	
3,800.0	3,786.2	3,787.2	3,783.5	8.5	7.1	-161.05	3.7	99.3	303.4	289.4	13.92	21.791	
3,900.0	3,885.7	3,886.7	3,882.9	8.8	7.3	-160.73	4.0	104.1	313.1	298.8	14.30	21.892	
4,000.0	3,985.3	3,986.2	3,982.3	9.0	7.5	-160.43	4.2	108.9	322.8	308.2	14.68	21.989	
4,100.0	4,084.8	4,085.7	4,081.7	9.2	7.7	-160.15	4.4	113.7	332.6	317.5	15.06	22.081	
4,200.0	4,184.4	4,185.2	4,181.1	9.5	7.9	-159.89	4.7	118.5	342.4	326.9	15.44	22.170	
4,300.0	4,284.0	4,284.7	4,280.5	9.7	8.1	-159.64	4.9	123.4	352.1	336.3	15.82	22.254	
4,400.0	4,383.5	4,384.2	4,379.9	9.9	8.3	-159.41	5.1	128.2	361.9	345.7	16.20	22.334	
4,500.0	4,483.1	4,483.8	4,479.3	10.2	8.5	-159.18	5.3	133.0	371.7	355.1	16.59	22.411	
4,600.0	4,582.6	4,583.3	4,578.7	10.4	8.7	-158.97	5.6	137.8	381.5	364.5	16.97	22.485	
4,700.0	4,682.2	4,682.8	4,678.1	10.7	8.9	-158.77	5.8	142.6	391.3	373.9	17.35	22.556	
4,800.0	4,781.8	4,782.3	4,777.5	10.9	9.0	-158.58	6.0	147.4	401.1	383.3	17.73	22.624	
4,900.0	4,881.3	4,881.8	4,876.9	11.1	9.2	-158.40	6.3	152.3	410.9	392.8	18.11	22.689	
5,000.0	4,980.9	4,981.3	4,976.3	11.4	9.4	-158.22	6.5	157.1	420.7	402.2	18.49	22.752	

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 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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
5,100.0	5,080.4	5,080.8	5,075.6	11.6	9.6	-158.06	6.7	161.9	430.5	411.6	18.87	22.812	
5,200.0	5,180.0	5,180.3	5,175.0	11.9	9.8	-157.90	7.0	166.7	440.3	421.1	19.25	22.870	
5,300.0	5,279.6	5,279.8	5,274.4	12.1	10.0	-157.75	7.2	171.5	450.1	430.5	19.63	22.926	
5,400.0	5,379.1	5,379.3	5,373.8	12.3	10.2	-157.61	7.4	176.4	459.9	439.9	20.01	22.980	
5,500.0	5,478.7	5,478.9	5,473.2	12.6	10.4	-157.47	7.7	181.2	469.8	449.4	20.40	23.032	
5,600.0	5,578.2	5,578.4	5,572.6	12.8	10.6	-157.33	7.9	186.0	479.6	458.8	20.78	23.082	
5,700.0	5,677.8	5,677.9	5,672.0	13.1	10.8	-157.21	8.1	190.8	489.4	468.2	21.16	23.130	
5,800.0	5,777.4	5,777.4	5,771.4	13.3	11.0	-157.08	8.4	195.6	499.2	477.7	21.54	23.177	
7,000.0	6,970.5	7,665.1	7,376.0	15.6	17.3	116.23	-514.4	273.4	435.5	407.1	28.34	15.366	
7,100.0	7,063.3	7,599.6	7,366.8	15.3	16.6	116.90	-449.6	273.0	345.6	317.9	27.64	12.501	
7,200.0	7,148.2	7,542.6	7,352.9	14.9	16.0	114.44	-394.4	272.3	262.4	235.1	27.24	9.631	
7,300.0	7,222.6	7,488.6	7,334.7	14.5	15.6	107.41	-343.5	271.4	192.4	165.0	27.34	7.036	
7,400.0	7,284.4	7,435.9	7,312.4	14.1	15.2	94.85	-295.8	270.3	150.0	122.3	27.69	5.416	
7,442.9	7,306.5	7,413.5	7,301.6	13.9	15.0	87.79	-276.2	269.8	145.3	117.7	27.67	5.252	SF
7,500.0	7,331.6	7,384.0	7,286.3	13.7	14.8	77.35	-251.0	269.1	153.0	125.9	27.15	5.637	
7,600.0	7,362.8	7,332.5	7,256.4	13.6	14.5	58.88	-209.1	267.6	193.7	168.9	24.82	7.804	
7,700.0	7,377.1	7,281.4	7,223.2	13.6	14.2	43.87	-170.3	266.0	249.6	227.7	21.94	11.377	
7,800.0	7,378.0	7,232.4	7,188.2	13.9	14.0	36.11	-136.0	264.3	310.8	290.2	20.55	15.119	
7,900.0	7,378.0	7,200.0	7,163.6	14.3	13.9	32.62	-115.1	263.1	380.3	360.1	20.17	18.852	
8,000.0	7,378.0	7,150.0	7,123.3	15.0	13.7	27.97	-85.5	261.2	455.8	436.2	19.61	23.251	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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	-90.00	0.0	-47.6	47.6				
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-47.6	47.6	47.3	0.30	156.613	
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-47.6	47.6	46.9	0.65	72.863	
300.0	300.0	300.0	300.0	0.5	0.5	-90.00	0.0	-47.6	47.6	46.6	1.00	47.475	
400.0	400.0	400.4	400.4	0.7	0.7	102.38	0.0	-47.3	47.5	46.2	1.35	35.142	
500.0	500.0	501.2	501.2	0.9	0.9	105.78	0.2	-45.6	46.4	44.7	1.71	27.196	
600.0	599.9	601.8	601.7	1.0	1.0	111.97	0.4	-42.0	44.4	42.3	2.07	21.474	
700.0	699.7	702.3	702.0	1.2	1.2	121.63	0.8	-36.8	42.2	39.7	2.43	17.325	
800.0	799.4	802.4	801.9	1.4	1.4	135.19	1.4	-29.8	41.0	38.2	2.81	14.620	
801.1	800.5	803.5	803.0	1.4	1.4	135.36	1.4	-29.7	41.0	38.2	2.81	14.598	CC, ES
900.0	898.9	902.2	901.3	1.7	1.6	151.49	2.1	-21.1	42.4	39.2	3.19	13.311	
1,000.0	998.5	1,001.5	1,000.1	1.9	1.9	167.52	2.9	-10.8	46.5	42.9	3.58	12.967	SF
1,100.0	1,098.1	1,100.6	1,098.7	2.1	2.1	-179.48	3.7	-0.2	53.5	49.5	4.00	13.377	
1,200.0	1,197.6	1,199.8	1,197.2	2.4	2.3	-169.82	4.5	10.3	62.5	58.1	4.42	14.151	
1,300.0	1,297.2	1,298.9	1,295.8	2.6	2.6	-162.74	5.3	20.9	72.9	68.1	4.85	15.046	
1,400.0	1,396.7	1,398.0	1,394.3	2.8	2.8	-157.47	6.1	31.4	84.1	78.9	5.28	15.946	
1,500.0	1,496.3	1,497.1	1,492.9	3.0	3.1	-153.46	7.0	42.0	95.9	90.2	5.71	16.802	
1,600.0	1,595.9	1,596.2	1,591.4	3.3	3.3	-150.34	7.8	52.5	108.0	101.9	6.14	17.596	
1,700.0	1,695.4	1,695.3	1,689.9	3.5	3.6	-147.85	8.6	63.1	120.4	113.8	6.57	18.323	
1,800.0	1,795.0	1,794.4	1,788.5	3.8	3.8	-145.83	9.4	73.7	132.9	125.9	7.00	18.987	
1,900.0	1,894.5	1,893.5	1,887.0	4.0	4.1	-144.15	10.2	84.2	145.6	138.2	7.43	19.591	
2,000.0	1,994.1	1,992.6	1,985.6	4.2	4.3	-142.75	11.0	94.8	158.4	150.5	7.86	20.142	
2,100.0	2,093.7	2,091.7	2,084.1	4.5	4.6	-141.55	11.9	105.3	171.3	163.0	8.30	20.646	
2,200.0	2,193.2	2,190.9	2,182.7	4.7	4.8	-140.53	12.7	115.9	184.2	175.5	8.73	21.106	
2,300.0	2,292.8	2,290.0	2,281.2	4.9	5.1	-139.63	13.5	126.4	197.2	188.0	9.16	21.529	
2,400.0	2,392.3	2,389.1	2,379.7	5.2	5.3	-138.85	14.3	137.0	210.2	200.6	9.59	21.917	
2,500.0	2,491.9	2,488.2	2,478.3	5.4	5.6	-138.16	15.1	147.5	223.3	213.2	10.02	22.276	
2,600.0	2,591.5	2,587.3	2,576.8	5.7	5.8	-137.55	16.0	158.1	236.4	225.9	10.45	22.607	
2,700.0	2,691.0	2,686.4	2,675.4	5.9	6.1	-137.00	16.8	168.7	249.5	238.6	10.89	22.915	
2,800.0	2,790.6	2,785.5	2,773.9	6.1	6.3	-136.50	17.6	179.2	262.6	251.3	11.32	23.200	
2,900.0	2,890.1	2,884.6	2,872.5	6.4	6.6	-136.05	18.4	189.8	275.7	264.0	11.75	23.466	
3,000.0	2,989.7	2,983.7	2,971.0	6.6	6.8	-135.65	19.2	200.3	288.9	276.7	12.18	23.714	
3,100.0	3,089.2	3,082.8	3,069.5	6.8	7.1	-135.28	20.1	210.9	302.1	289.5	12.61	23.946	
3,200.0	3,188.8	3,182.0	3,168.1	7.1	7.3	-134.94	20.9	221.4	315.3	302.2	13.05	24.164	
3,300.0	3,288.4	3,281.1	3,266.6	7.3	7.6	-134.62	21.7	232.0	328.5	315.0	13.48	24.368	
3,400.0	3,387.9	3,380.2	3,365.2	7.6	7.8	-134.33	22.5	242.6	341.7	327.8	13.91	24.561	
3,500.0	3,487.5	3,479.3	3,463.7	7.8	8.1	-134.07	23.3	253.1	354.9	340.5	14.34	24.742	
3,600.0	3,587.0	3,578.4	3,562.3	8.0	8.3	-133.82	24.2	263.7	368.1	353.3	14.78	24.913	
3,700.0	3,686.6	3,677.5	3,660.8	8.3	8.6	-133.59	25.0	274.2	381.3	366.1	15.21	25.074	
3,800.0	3,786.2	3,776.6	3,759.3	8.5	8.9	-133.37	25.8	284.8	394.6	378.9	15.64	25.227	
3,900.0	3,885.7	3,875.7	3,857.9	8.8	9.1	-133.17	26.6	295.3	407.8	391.7	16.07	25.372	
4,000.0	3,985.3	3,974.8	3,956.4	9.0	9.4	-132.98	27.4	305.9	421.1	404.5	16.51	25.510	
4,100.0	4,084.8	4,073.9	4,055.0	9.2	9.6	-132.80	28.3	316.4	434.3	417.4	16.94	25.641	
4,200.0	4,184.4	4,173.1	4,153.5	9.5	9.9	-132.64	29.1	327.0	447.6	430.2	17.37	25.766	
4,300.0	4,284.0	4,272.2	4,252.1	9.7	10.1	-132.48	29.9	337.6	460.8	443.0	17.80	25.884	
4,400.0	4,383.5	4,371.3	4,350.6	9.9	10.4	-132.33	30.7	348.1	474.1	455.8	18.24	25.998	
4,500.0	4,483.1	4,470.4	4,449.1	10.2	10.6	-132.19	31.5	358.7	487.3	468.7	18.67	26.106	

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 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - File 3I-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	-96.20	-3.6	-33.6	33.8				
100.0	100.0	100.0	100.0	0.2	0.2	-96.20	-3.6	-33.6	33.8	33.5	0.30	111.201	
200.0	200.0	200.0	200.0	0.3	0.3	-96.20	-3.6	-33.6	33.8	33.1	0.65	51.735	CC, ES
300.0	300.0	299.4	299.4	0.5	0.5	-96.58	-4.0	-34.4	34.6	33.6	1.00	34.573	
400.0	400.0	398.8	398.8	0.7	0.7	95.03	-4.9	-36.8	37.2	35.8	1.35	27.554	
500.0	500.0	498.0	497.9	0.9	0.9	96.99	-6.5	-40.8	41.6	39.9	1.70	24.447	
600.0	599.9	597.1	596.7	1.0	1.1	99.93	-8.7	-46.4	48.0	46.0	2.06	23.259	
700.0	699.7	695.8	695.2	1.2	1.3	103.20	-11.5	-53.5	56.5	54.0	2.44	23.150	SF
800.0	799.4	794.2	793.2	1.4	1.5	106.35	-14.9	-62.2	67.1	64.3	2.83	23.686	
900.0	898.9	892.3	890.6	1.7	1.7	109.03	-19.0	-72.4	79.8	76.6	3.24	24.622	
1,000.0	998.5	989.9	987.4	1.9	2.0	110.53	-23.6	-84.2	94.1	90.5	3.66	25.716	
1,100.0	1,098.1	1,087.2	1,083.6	2.1	2.3	111.17	-28.8	-97.3	109.9	105.8	4.09	26.887	
1,200.0	1,197.6	1,184.0	1,179.2	2.4	2.6	111.25	-34.6	-112.0	127.2	122.6	4.52	28.103	
1,300.0	1,297.2	1,280.3	1,273.9	2.6	3.0	110.97	-40.9	-128.0	145.8	140.8	4.97	29.352	
1,400.0	1,396.7	1,376.0	1,367.8	2.8	3.3	110.45	-47.7	-145.5	165.8	160.4	5.42	30.627	
1,500.0	1,496.3	1,471.2	1,460.8	3.0	3.7	109.80	-55.1	-164.2	187.3	181.4	5.87	31.927	
1,600.0	1,595.9	1,565.6	1,552.7	3.3	4.1	109.06	-63.0	-184.3	210.2	203.9	6.32	33.251	
1,700.0	1,695.4	1,660.3	1,644.5	3.5	4.5	108.27	-71.5	-205.7	234.4	227.7	6.78	34.596	
1,800.0	1,795.0	1,757.1	1,738.4	3.8	5.0	107.57	-80.3	-228.1	259.1	251.9	7.24	35.803	
1,900.0	1,894.5	1,854.0	1,832.2	4.0	5.4	106.99	-89.1	-250.4	283.8	276.1	7.70	36.867	
2,000.0	1,994.1	1,950.8	1,926.0	4.2	5.9	106.50	-97.9	-272.7	308.6	300.4	8.16	37.813	
2,100.0	2,093.7	2,047.7	2,019.9	4.5	6.3	106.09	-106.7	-295.1	333.3	324.7	8.62	38.658	
2,200.0	2,193.2	2,144.6	2,113.7	4.7	6.8	105.73	-115.5	-317.4	358.1	349.0	9.08	39.418	
2,300.0	2,292.8	2,241.4	2,207.5	4.9	7.2	105.42	-124.3	-339.8	382.9	373.3	9.55	40.105	
2,400.0	2,392.3	2,338.3	2,301.4	5.2	7.7	105.15	-133.1	-362.1	407.7	397.7	10.01	40.728	
2,500.0	2,491.9	2,435.2	2,395.2	5.4	8.1	104.91	-142.0	-384.5	432.5	422.0	10.47	41.297	
2,600.0	2,591.5	2,532.0	2,489.0	5.7	8.6	104.69	-150.8	-406.8	457.3	446.3	10.93	41.817	
2,700.0	2,691.0	2,628.9	2,582.9	5.9	9.0	104.50	-159.6	-429.2	482.1	470.7	11.40	42.296	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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	-90.00	0.0	-28.0	28.0				
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-28.0	28.0	27.7	0.30	92.126	
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-28.0	28.0	27.3	0.65	42.861	
233.4	233.4	233.4	233.4	0.4	0.4	-90.00	0.0	-28.0	28.0	27.2	0.77	36.367	CC
300.0	300.0	299.8	299.8	0.5	0.5	-90.20	-0.1	-28.2	28.2	27.2	1.00	28.130	ES
400.0	400.0	399.3	399.3	0.7	0.7	101.26	-0.9	-29.7	29.9	28.5	1.35	22.130	
500.0	500.0	498.8	498.7	0.9	0.9	102.93	-2.4	-32.8	33.5	31.8	1.70	19.664	
600.0	599.9	598.0	597.8	1.0	1.0	105.45	-4.8	-37.4	39.1	37.0	2.07	18.917	SF
700.0	699.7	697.1	696.7	1.2	1.2	108.20	-7.9	-43.5	46.7	44.3	2.44	19.121	
800.0	799.4	795.9	795.1	1.4	1.5	110.76	-11.7	-51.2	56.4	53.6	2.84	19.878	
900.0	898.9	894.3	893.0	1.7	1.7	112.80	-16.3	-60.3	68.1	64.9	3.25	20.951	
1,000.0	998.5	992.5	990.4	1.9	2.0	113.57	-21.7	-70.8	81.2	77.5	3.68	22.096	
1,100.0	1,098.1	1,090.3	1,087.3	2.1	2.2	113.48	-27.8	-82.9	95.6	91.5	4.11	23.264	
1,200.0	1,197.6	1,187.6	1,183.5	2.4	2.5	112.86	-34.6	-96.3	111.3	106.8	4.55	24.447	
1,300.0	1,297.2	1,284.6	1,279.0	2.6	2.9	111.94	-42.1	-111.1	128.4	123.4	5.01	25.646	
1,400.0	1,396.7	1,381.0	1,373.7	2.8	3.2	110.84	-50.2	-127.3	146.8	141.3	5.46	26.867	
1,500.0	1,496.3	1,477.3	1,467.9	3.0	3.6	109.66	-59.1	-144.8	166.5	160.6	5.92	28.115	
1,600.0	1,595.9	1,575.2	1,563.7	3.3	3.9	108.62	-68.4	-163.1	186.7	180.4	6.39	29.240	
1,700.0	1,695.4	1,673.1	1,659.4	3.5	4.3	107.78	-77.6	-181.3	207.0	200.2	6.85	30.218	
1,800.0	1,795.0	1,770.9	1,755.1	3.8	4.7	107.09	-86.8	-199.6	227.3	220.0	7.32	31.075	
1,900.0	1,894.5	1,868.8	1,850.8	4.0	5.1	106.52	-96.1	-217.9	247.7	239.9	7.78	31.831	
2,000.0	1,994.1	1,966.7	1,946.5	4.2	5.5	106.03	-105.3	-236.1	268.0	259.8	8.25	32.504	
2,100.0	2,093.7	2,064.6	2,042.2	4.5	5.9	105.61	-114.6	-254.4	288.4	279.7	8.71	33.105	
2,200.0	2,193.2	2,162.5	2,138.0	4.7	6.3	105.25	-123.8	-272.7	308.8	299.6	9.18	33.646	
2,300.0	2,292.8	2,260.4	2,233.7	4.9	6.7	104.93	-133.1	-290.9	329.2	319.6	9.64	34.135	
2,400.0	2,392.3	2,358.2	2,329.4	5.2	7.1	104.65	-142.3	-309.2	349.6	339.5	10.11	34.579	
2,500.0	2,491.9	2,456.1	2,425.1	5.4	7.5	104.40	-151.6	-327.5	370.0	359.5	10.58	34.984	
2,600.0	2,591.5	2,554.0	2,520.8	5.7	7.9	104.17	-160.8	-345.7	390.4	379.4	11.04	35.355	
2,700.0	2,691.0	2,651.9	2,616.5	5.9	8.2	103.97	-170.0	-364.0	410.9	399.4	11.51	35.696	
2,800.0	2,790.6	2,749.8	2,712.3	6.1	8.6	103.79	-179.3	-382.3	431.3	419.3	11.98	36.011	
2,900.0	2,890.1	2,847.6	2,808.0	6.4	9.0	103.62	-188.5	-400.6	451.7	439.3	12.44	36.302	
3,000.0	2,989.7	2,945.5	2,903.7	6.6	9.4	103.47	-197.8	-418.8	472.2	459.3	12.91	36.571	
3,100.0	3,089.2	3,043.4	2,999.4	6.8	9.8	103.33	-207.0	-437.1	492.6	479.2	13.38	36.822	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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	-99.24	-3.6	-22.4	22.7				
100.0	100.0	100.0	100.0	0.2	0.2	-99.24	-3.6	-22.4	22.7	22.4	0.30	74.670	
200.0	200.0	200.0	200.0	0.3	0.3	-99.24	-3.6	-22.4	22.7	22.0	0.65	34.740	
300.0	300.0	300.0	300.0	0.5	0.5	-99.24	-3.6	-22.4	22.7	21.7	1.00	22.635	CC
322.1	322.1	322.1	322.1	0.5	0.5	92.19	-3.6	-22.4	22.7	21.6	1.08	21.016	
400.0	400.0	399.8	399.8	0.7	0.7	94.02	-3.8	-22.6	22.9	21.6	1.35	16.960	ES
500.0	500.0	499.4	499.4	0.9	0.9	98.18	-4.8	-24.0	24.7	23.0	1.70	14.498	
600.0	599.9	599.0	598.9	1.0	1.0	103.15	-6.7	-26.8	28.4	26.3	2.07	13.748	SF
700.0	699.7	698.3	698.1	1.2	1.2	107.84	-9.7	-31.1	34.1	31.6	2.44	13.970	
800.0	799.4	797.5	797.1	1.4	1.4	111.69	-13.6	-36.7	41.8	39.0	2.83	14.761	
900.0	898.9	896.5	895.7	1.7	1.6	114.36	-18.5	-43.7	51.4	48.1	3.24	15.857	
1,000.0	998.5	995.3	993.9	1.9	1.9	115.10	-24.4	-52.2	62.2	58.5	3.66	16.984	
1,100.0	1,098.1	1,093.8	1,091.7	2.1	2.1	114.61	-31.2	-61.9	74.1	70.0	4.10	18.093	
1,200.0	1,197.6	1,192.0	1,188.9	2.4	2.4	113.43	-39.0	-73.0	87.2	82.7	4.54	19.191	
1,300.0	1,297.2	1,290.1	1,285.9	2.6	2.7	111.88	-47.6	-85.5	101.5	96.5	5.00	20.296	
1,400.0	1,396.7	1,389.0	1,383.5	2.8	3.0	110.52	-56.6	-98.4	116.2	110.7	5.46	21.275	
1,500.0	1,496.3	1,487.8	1,481.1	3.0	3.3	109.47	-65.7	-111.3	130.9	125.0	5.92	22.105	
1,600.0	1,595.9	1,586.7	1,578.7	3.3	3.6	108.63	-74.7	-124.3	145.7	139.3	6.39	22.816	
1,700.0	1,695.4	1,685.6	1,676.3	3.5	3.9	107.95	-83.7	-137.2	160.5	153.6	6.85	23.431	
1,800.0	1,795.0	1,784.5	1,774.0	3.8	4.2	107.38	-92.7	-150.2	175.3	168.0	7.31	23.967	
1,900.0	1,894.5	1,883.4	1,871.6	4.0	4.5	106.90	-101.7	-163.1	190.1	182.3	7.78	24.439	
2,000.0	1,994.1	1,982.3	1,969.2	4.2	4.9	106.49	-110.7	-176.0	205.0	196.7	8.25	24.858	
2,100.0	2,093.7	2,081.1	2,066.8	4.5	5.2	106.14	-119.8	-189.0	219.8	211.1	8.71	25.231	
2,200.0	2,193.2	2,180.0	2,164.4	4.7	5.5	105.83	-128.8	-201.9	234.7	225.5	9.18	25.566	
2,300.0	2,292.8	2,278.9	2,262.0	4.9	5.8	105.55	-137.8	-214.9	249.5	239.9	9.65	25.868	
2,400.0	2,392.3	2,377.8	2,359.7	5.2	6.1	105.31	-146.8	-227.8	264.4	254.3	10.11	26.142	
2,500.0	2,491.9	2,476.7	2,457.3	5.4	6.5	105.10	-155.8	-240.7	279.3	268.7	10.58	26.392	
2,600.0	2,591.5	2,575.6	2,554.9	5.7	6.8	104.90	-164.9	-253.7	294.2	283.1	11.05	26.620	
2,700.0	2,691.0	2,674.4	2,652.5	5.9	7.1	104.73	-173.9	-266.6	309.0	297.5	11.52	26.829	
2,800.0	2,790.6	2,773.3	2,750.1	6.1	7.4	104.57	-182.9	-279.5	323.9	311.9	11.99	27.022	
2,900.0	2,890.1	2,872.2	2,847.7	6.4	7.7	104.42	-191.9	-292.5	338.8	326.3	12.46	27.200	
3,000.0	2,989.7	2,971.1	2,945.4	6.6	8.1	104.29	-200.9	-305.4	353.7	340.8	12.92	27.366	
3,100.0	3,089.2	3,070.0	3,043.0	6.8	8.4	104.16	-210.0	-318.4	368.6	355.2	13.39	27.519	
3,200.0	3,188.8	3,168.8	3,140.6	7.1	8.7	104.05	-219.0	-331.3	383.5	369.6	13.86	27.662	
3,300.0	3,288.4	3,267.7	3,238.2	7.3	9.0	103.95	-228.0	-344.2	398.4	384.0	14.33	27.796	
3,400.0	3,387.9	3,366.6	3,335.8	7.6	9.4	103.85	-237.0	-357.2	413.2	398.4	14.80	27.921	
3,500.0	3,487.5	3,465.5	3,433.4	7.8	9.7	103.76	-246.0	-370.1	428.1	412.9	15.27	28.038	
3,600.0	3,587.0	3,564.4	3,531.1	8.0	10.0	103.67	-255.0	-383.0	443.0	427.3	15.74	28.148	
3,700.0	3,686.6	3,663.3	3,628.7	8.3	10.3	103.60	-264.1	-396.0	457.9	441.7	16.21	28.252	
3,800.0	3,786.2	3,762.1	3,726.3	8.5	10.7	103.52	-273.1	-408.9	472.8	456.1	16.68	28.349	
3,900.0	3,885.7	3,861.0	3,823.9	8.8	11.0	103.45	-282.1	-421.9	487.7	470.6	17.15	28.442	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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	-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	-90.00	0.0	-19.6	19.6	18.6	1.00	19.549	CC
400.0	400.0	400.0	400.0	0.7	0.7	103.80	0.0	-19.6	19.8	18.4	1.35	14.631	ES
500.0	500.0	499.9	499.8	0.9	0.8	110.41	-0.1	-19.7	20.7	19.0	1.70	12.141	
600.0	599.9	599.6	599.5	1.0	1.0	117.01	-1.3	-21.0	23.4	21.4	2.06	11.363	SF
700.0	699.7	699.2	699.1	1.2	1.2	121.97	-3.7	-23.5	28.1	25.7	2.43	11.568	
800.0	799.4	798.8	798.6	1.4	1.4	125.18	-7.3	-27.3	34.6	31.8	2.81	12.312	
900.0	898.9	898.2	897.7	1.7	1.6	126.70	-12.0	-32.3	42.6	39.4	3.21	13.295	
1,000.0	998.5	997.5	996.7	1.9	1.8	126.05	-17.9	-38.6	51.4	47.8	3.62	14.186	
1,100.0	1,098.1	1,096.7	1,095.3	2.1	2.0	124.09	-25.0	-46.1	60.8	56.7	4.06	14.986	
1,200.0	1,197.6	1,196.1	1,194.1	2.4	2.3	121.87	-32.8	-54.4	70.7	66.2	4.50	15.712	
1,300.0	1,297.2	1,295.6	1,292.9	2.6	2.5	120.19	-40.7	-62.7	80.7	75.8	4.95	16.309	
1,400.0	1,396.7	1,395.0	1,391.7	2.8	2.8	118.89	-48.5	-71.0	90.8	85.4	5.40	16.807	
1,500.0	1,496.3	1,494.5	1,490.5	3.0	3.0	117.84	-56.3	-79.3	100.9	95.1	5.86	17.228	
1,600.0	1,595.9	1,594.0	1,589.3	3.3	3.3	116.99	-64.1	-87.6	111.1	104.7	6.31	17.588	
1,700.0	1,695.4	1,693.5	1,688.2	3.5	3.5	116.28	-72.0	-95.9	121.2	114.4	6.77	17.898	
1,800.0	1,795.0	1,792.9	1,787.0	3.8	3.8	115.67	-79.8	-104.1	131.4	124.1	7.23	18.170	
1,900.0	1,894.5	1,892.4	1,885.8	4.0	4.0	115.16	-87.6	-112.4	141.6	133.9	7.69	18.408	
2,000.0	1,994.1	1,991.9	1,984.6	4.2	4.3	114.71	-95.5	-120.7	151.7	143.6	8.15	18.619	
2,100.0	2,093.7	2,091.4	2,083.4	4.5	4.5	114.32	-103.3	-129.0	161.9	153.3	8.61	18.807	
2,200.0	2,193.2	2,190.8	2,182.2	4.7	4.8	113.98	-111.1	-137.3	172.2	163.1	9.07	18.976	
2,300.0	2,292.8	2,290.3	2,281.1	4.9	5.1	113.67	-118.9	-145.6	182.4	172.8	9.53	19.128	
2,400.0	2,392.3	2,389.8	2,379.9	5.2	5.3	113.40	-126.8	-153.9	192.6	182.6	10.00	19.266	
2,500.0	2,491.9	2,489.2	2,478.7	5.4	5.6	113.16	-134.6	-162.2	202.8	192.3	10.46	19.392	
2,600.0	2,591.5	2,588.7	2,577.5	5.7	5.8	112.93	-142.4	-170.5	213.0	202.1	10.92	19.506	
2,700.0	2,691.0	2,688.2	2,676.3	5.9	6.1	112.73	-150.2	-178.8	223.2	211.9	11.38	19.612	
2,800.0	2,790.6	2,787.7	2,775.1	6.1	6.4	112.55	-158.1	-187.1	233.5	221.6	11.85	19.709	
2,900.0	2,890.1	2,887.1	2,874.0	6.4	6.6	112.38	-165.9	-195.4	243.7	231.4	12.31	19.798	
3,000.0	2,989.7	2,986.6	2,972.8	6.6	6.9	112.23	-173.7	-203.7	253.9	241.2	12.77	19.881	
3,100.0	3,089.2	3,086.1	3,071.6	6.8	7.2	112.08	-181.5	-212.0	264.2	250.9	13.24	19.958	
3,200.0	3,188.8	3,185.6	3,170.4	7.1	7.4	111.95	-189.4	-220.3	274.4	260.7	13.70	20.030	
3,300.0	3,288.4	3,285.0	3,269.2	7.3	7.7	111.83	-197.2	-228.6	284.6	270.5	14.16	20.097	
3,400.0	3,387.9	3,384.5	3,368.0	7.6	7.9	111.71	-205.0	-236.9	294.9	280.3	14.63	20.160	
3,500.0	3,487.5	3,484.0	3,466.9	7.8	8.2	111.61	-212.9	-245.2	305.1	290.0	15.09	20.219	
3,600.0	3,587.0	3,583.4	3,565.7	8.0	8.5	111.51	-220.7	-253.5	315.4	299.8	15.55	20.274	
3,700.0	3,686.6	3,682.9	3,664.5	8.3	8.7	111.41	-228.5	-261.8	325.6	309.6	16.02	20.326	
3,800.0	3,786.2	3,782.4	3,763.3	8.5	9.0	111.33	-236.3	-270.0	335.8	319.4	16.48	20.375	
3,900.0	3,885.7	3,881.9	3,862.1	8.8	9.3	111.24	-244.2	-278.3	346.1	329.1	16.95	20.421	
4,000.0	3,985.3	3,981.3	3,960.9	9.0	9.5	111.17	-252.0	-286.6	356.3	338.9	17.41	20.465	
4,100.0	4,084.8	4,080.8	4,059.8	9.2	9.8	111.09	-259.8	-294.9	366.6	348.7	17.88	20.507	
4,200.0	4,184.4	4,180.3	4,158.6	9.5	10.0	111.02	-267.6	-303.2	376.8	358.5	18.34	20.546	
4,300.0	4,284.0	4,279.8	4,257.4	9.7	10.3	110.96	-275.5	-311.5	387.1	368.3	18.80	20.583	
4,400.0	4,383.5	4,379.2	4,356.2	9.9	10.6	110.90	-283.3	-319.8	397.3	378.0	19.27	20.619	
4,500.0	4,483.1	4,478.7	4,455.0	10.2	10.8	110.84	-291.1	-328.1	407.5	387.8	19.73	20.653	
4,600.0	4,582.6	4,578.2	4,553.8	10.4	11.1	110.78	-299.0	-336.4	417.8	397.6	20.20	20.685	
4,700.0	4,682.2	4,677.6	4,652.7	10.7	11.4	110.73	-306.8	-344.7	428.0	407.4	20.66	20.716	
4,800.0	4,781.8	4,777.1	4,751.5	10.9	11.6	110.68	-314.6	-353.0	438.3	417.2	21.13	20.746	
4,900.0	4,881.3	4,876.6	4,850.3	11.1	11.9	110.63	-322.4	-361.3	448.5	426.9	21.59	20.774	
5,000.0	4,980.9	4,976.1	4,949.1	11.4	12.2	110.58	-330.3	-369.6	458.8	436.7	22.06	20.801	
5,100.0	5,080.4	5,075.5	5,047.9	11.6	12.4	110.54	-338.1	-377.9	469.0	446.5	22.52	20.827	

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 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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
5,200.0	5,180.0	5,175.0	5,146.7	11.9	12.7	110.49	-345.9	-386.2	479.3	456.3	22.99	20.851	
5,300.0	5,279.6	5,274.5	5,245.6	12.1	12.9	110.45	-353.7	-394.5	489.5	466.1	23.45	20.875	
5,400.0	5,379.1	5,374.0	5,344.4	12.3	13.2	110.41	-361.6	-402.8	499.8	475.9	23.91	20.898	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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	-142.47	-3.6	-2.8	4.6				
100.0	100.0	100.0	100.0	0.2	0.2	-142.47	-3.6	-2.8	4.6	4.3	0.30	15.125	
200.0	200.0	200.0	200.0	0.3	0.3	-142.47	-3.6	-2.8	4.6	3.9	0.65	7.037	CC, ES
300.0	300.0	299.9	299.9	0.5	0.5	-144.93	-4.5	-3.1	5.4	4.4	1.00	5.428	
400.0	400.0	399.8	399.7	0.7	0.7	46.70	-6.9	-4.1	7.4	6.0	1.35	5.465	
500.0	500.0	499.6	499.5	0.9	0.9	51.89	-10.9	-5.7	9.9	8.2	1.70	5.791	
600.0	599.9	599.4	599.0	1.0	1.1	58.42	-16.5	-8.0	13.0	11.0	2.07	6.309	
700.0	699.7	699.0	698.4	1.2	1.3	64.69	-23.8	-10.9	17.0	14.6	2.45	6.956	
800.0	799.4	798.8	797.7	1.4	1.5	70.63	-32.3	-14.4	21.7	18.9	2.86	7.592	
900.0	898.9	898.7	897.2	1.7	1.7	77.21	-41.0	-17.9	26.3	23.0	3.30	7.973	
1,000.0	998.5	998.5	996.6	1.9	2.0	82.04	-49.8	-21.4	31.1	27.4	3.75	8.300	
1,100.0	1,098.1	1,098.4	1,096.0	2.1	2.2	85.55	-58.5	-25.0	36.1	31.9	4.21	8.583	
1,200.0	1,197.6	1,198.2	1,195.4	2.4	2.4	88.21	-67.2	-28.5	41.2	36.5	4.67	8.826	
1,300.0	1,297.2	1,298.1	1,294.8	2.6	2.7	90.28	-75.9	-32.0	46.3	41.2	5.13	9.035	
1,400.0	1,396.7	1,397.9	1,394.2	2.8	2.9	91.93	-84.6	-35.5	51.5	45.9	5.59	9.216	
1,500.0	1,496.3	1,497.8	1,493.6	3.0	3.1	93.28	-93.3	-39.0	56.8	50.7	6.06	9.373	
1,600.0	1,595.9	1,597.6	1,593.0	3.3	3.4	94.40	-102.0	-42.6	62.0	55.5	6.52	9.510	
1,700.0	1,695.4	1,697.5	1,692.5	3.5	3.6	95.35	-110.7	-46.1	67.3	60.3	6.99	9.632	
1,800.0	1,795.0	1,797.4	1,791.9	3.8	3.8	96.16	-119.4	-49.6	72.6	65.1	7.45	9.739	
1,900.0	1,894.5	1,897.2	1,891.3	4.0	4.1	96.85	-128.1	-53.1	77.9	70.0	7.92	9.835	
2,000.0	1,994.1	1,997.1	1,990.7	4.2	4.3	97.46	-136.8	-56.6	83.2	74.8	8.39	9.922	
2,100.0	2,093.7	2,096.9	2,090.1	4.5	4.6	98.00	-145.5	-60.2	88.5	79.7	8.85	10.000	
2,200.0	2,193.2	2,196.8	2,189.5	4.7	4.8	98.47	-154.2	-63.7	93.9	84.6	9.32	10.070	
2,300.0	2,292.8	2,296.6	2,288.9	4.9	5.0	98.90	-162.9	-67.2	99.2	89.4	9.79	10.134	
2,400.0	2,392.3	2,396.5	2,388.3	5.2	5.3	99.28	-171.6	-70.7	104.6	94.3	10.26	10.193	
2,500.0	2,491.9	2,496.3	2,487.8	5.4	5.5	99.62	-180.3	-74.2	109.9	99.2	10.73	10.247	
2,600.0	2,591.5	2,596.2	2,587.2	5.7	5.8	99.93	-189.0	-77.8	115.3	104.1	11.19	10.297	
2,700.0	2,691.0	2,696.0	2,686.6	5.9	6.0	100.22	-197.7	-81.3	120.6	108.9	11.66	10.342	
2,800.0	2,790.6	2,795.9	2,786.0	6.1	6.2	100.48	-206.4	-84.8	126.0	113.8	12.13	10.385	
2,900.0	2,890.1	2,895.8	2,885.4	6.4	6.5	100.72	-215.1	-88.3	131.3	118.7	12.60	10.424	
3,000.0	2,989.7	2,995.6	2,984.8	6.6	6.7	100.94	-223.8	-91.8	136.7	123.6	13.07	10.461	
3,100.0	3,089.2	3,095.5	3,084.2	6.8	6.9	101.14	-232.5	-95.4	142.0	128.5	13.53	10.495	
3,200.0	3,188.8	3,195.3	3,183.6	7.1	7.2	101.33	-241.2	-98.9	147.4	133.4	14.00	10.527	
3,300.0	3,288.4	3,295.2	3,283.1	7.3	7.4	101.51	-249.9	-102.4	152.8	138.3	14.47	10.557	
3,400.0	3,387.9	3,395.0	3,382.5	7.6	7.7	101.67	-258.6	-105.9	158.1	143.2	14.94	10.585	
3,500.0	3,487.5	3,494.9	3,481.9	7.8	7.9	101.82	-267.4	-109.4	163.5	148.1	15.41	10.612	
3,600.0	3,587.0	3,594.7	3,581.3	8.0	8.1	101.96	-276.1	-113.0	168.9	153.0	15.88	10.637	
3,700.0	3,686.6	3,694.6	3,680.7	8.3	8.4	102.10	-284.8	-116.5	174.2	157.9	16.34	10.660	
3,800.0	3,786.2	3,794.5	3,780.1	8.5	8.6	102.22	-293.5	-120.0	179.6	162.8	16.81	10.683	
3,900.0	3,885.7	3,894.3	3,879.5	8.8	8.9	102.34	-302.2	-123.5	185.0	167.7	17.28	10.704	
4,000.0	3,985.3	3,994.2	3,978.9	9.0	9.1	102.46	-310.9	-127.0	190.4	172.6	17.75	10.724	
4,100.0	4,084.8	4,094.0	4,078.4	9.2	9.3	102.56	-319.6	-130.6	195.7	177.5	18.22	10.743	
4,200.0	4,184.4	4,193.9	4,177.8	9.5	9.6	102.66	-328.3	-134.1	201.1	182.4	18.69	10.761	
4,300.0	4,284.0	4,293.7	4,277.2	9.7	9.8	102.76	-337.0	-137.6	206.5	187.3	19.16	10.778	
4,400.0	4,383.5	4,393.6	4,376.6	9.9	10.0	102.85	-345.7	-141.1	211.8	192.2	19.63	10.795	
4,500.0	4,483.1	4,493.4	4,476.0	10.2	10.3	102.93	-354.4	-144.6	217.2	197.1	20.09	10.810	
4,600.0	4,582.6	4,593.3	4,575.4	10.4	10.5	103.02	-363.1	-148.2	222.6	202.0	20.56	10.825	
4,700.0	4,682.2	4,693.1	4,674.8	10.7	10.8	103.09	-371.8	-151.7	228.0	206.9	21.03	10.840	
4,800.0	4,781.8	4,793.0	4,774.2	10.9	11.0	103.17	-380.5	-155.2	233.4	211.9	21.50	10.854	
4,900.0	4,881.3	4,892.9	4,873.7	11.1	11.2	103.24	-389.2	-158.7	238.7	216.8	21.97	10.867	
5,000.0	4,980.9	4,992.7	4,973.1	11.4	11.5	103.31	-397.9	-162.2	244.1	221.7	22.44	10.879	
5,100.0	5,080.4	5,092.6	5,072.5	11.6	11.7	103.37	-406.6	-165.8	249.5	226.6	22.91	10.891	

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 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

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

Survey Program: 0-Geolink MWD

Offset Site Error: 0.0 ft

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	5,180.0	5,192.4	5,171.9	11.9	12.0	103.43	-415.3	-169.3	254.9	231.5	23.38	10.903	
5,300.0	5,279.6	5,292.3	5,271.3	12.1	12.2	103.49	-424.0	-172.8	260.2	236.4	23.84	10.914	
5,400.0	5,379.1	5,392.1	5,370.7	12.3	12.4	103.55	-432.7	-176.3	265.6	241.3	24.31	10.925	
5,500.0	5,478.7	5,492.0	5,470.1	12.6	12.7	103.60	-441.4	-179.8	271.0	246.2	24.78	10.935	
5,600.0	5,578.2	5,591.8	5,569.5	12.8	12.9	103.66	-450.1	-183.4	276.4	251.1	25.25	10.945	
5,700.0	5,677.8	5,691.7	5,669.0	13.1	13.2	103.71	-458.8	-186.9	281.8	256.0	25.72	10.955	
5,800.0	5,777.4	5,791.6	5,768.4	13.3	13.4	103.76	-467.5	-190.4	287.1	260.9	26.19	10.964	
5,900.0	5,876.9	5,891.4	5,867.8	13.5	13.6	103.80	-476.3	-193.9	292.5	265.9	26.66	10.973	
6,000.0	5,976.5	5,991.3	5,967.2	13.8	13.9	103.85	-485.0	-197.4	297.9	270.8	27.13	10.982	
6,100.0	6,076.0	6,091.1	6,066.6	14.0	14.1	103.89	-493.7	-201.0	303.3	275.7	27.59	10.990	
6,200.0	6,175.6	6,191.0	6,166.0	14.2	14.4	103.93	-502.4	-204.5	308.7	280.6	28.06	10.998	
6,300.0	6,275.2	6,290.8	6,265.4	14.5	14.6	103.98	-511.1	-208.0	314.0	285.5	28.53	11.006	
6,400.0	6,374.7	6,390.7	6,364.8	14.7	14.8	104.02	-519.8	-211.5	319.4	290.4	29.00	11.014	
6,500.0	6,474.3	6,490.5	6,464.3	15.0	15.1	104.05	-528.5	-215.0	324.8	295.3	29.47	11.021	
6,600.0	6,573.8	6,590.4	6,563.7	15.2	15.3	104.09	-537.2	-218.6	330.2	300.2	29.94	11.028	
6,700.0	6,673.4	6,690.2	6,663.1	15.4	15.5	104.13	-545.9	-222.1	335.6	305.1	30.41	11.035	
6,800.0	6,773.0	6,790.1	6,762.5	15.7	15.8	111.07	-554.6	-225.6	340.9	310.0	30.87	11.043	
6,900.0	6,872.8	6,889.1	6,861.1	15.7	16.0	-97.54	-563.2	-229.1	345.9	314.7	31.13	11.109	
7,000.0	6,970.5	6,984.6	6,956.1	15.6	16.3	-96.22	-571.5	-232.4	351.8	320.7	31.12	11.306	
7,100.0	7,063.3	7,081.1	7,052.4	15.3	16.4	-100.24	-575.8	-235.9	361.8	331.1	30.71	11.781	
7,200.0	7,148.2	7,187.0	7,157.3	14.9	16.4	-104.89	-562.6	-239.8	376.0	346.2	29.87	12.588	
7,300.0	7,222.6	7,303.6	7,267.7	14.5	16.1	-109.41	-526.1	-244.1	393.2	364.5	28.68	13.707	
7,400.0	7,284.4	7,433.2	7,378.9	14.1	15.7	-113.52	-460.2	-248.7	411.4	384.1	27.29	15.075	
7,500.0	7,331.6	7,577.6	7,481.8	13.7	15.1	-116.95	-359.6	-253.3	428.4	402.4	25.95	16.507	
7,600.0	7,362.8	7,736.4	7,562.2	13.6	14.6	-119.38	-223.2	-257.4	441.4	416.4	25.02	17.644	
7,700.0	7,377.1	7,905.9	7,603.2	13.6	14.5	-120.49	-59.5	-260.3	448.3	423.5	24.87	18.028	
7,800.0	7,378.0	8,029.6	7,606.0	13.9	14.8	-120.48	64.1	-261.5	449.5	424.1	25.44	17.669	
7,900.0	7,378.0	8,129.6	7,606.0	14.3	15.2	-120.42	164.1	-262.4	450.3	424.0	26.31	17.112	
8,000.0	7,378.0	8,229.6	7,606.0	15.0	15.9	-120.37	264.1	-263.2	451.0	423.5	27.49	16.405	
8,100.0	7,378.0	8,329.6	7,606.0	15.8	16.7	-120.31	364.1	-264.1	451.8	422.8	28.95	15.607	
8,200.0	7,378.0	8,429.6	7,606.0	16.8	17.6	-120.26	464.1	-265.0	452.5	421.9	30.64	14.771	
8,300.0	7,378.0	8,529.6	7,606.0	17.9	18.7	-120.20	564.1	-265.9	453.3	420.8	32.52	13.936	
8,400.0	7,378.0	8,629.6	7,606.0	19.1	19.8	-120.14	664.1	-266.7	454.0	419.5	34.58	13.129	
8,500.0	7,378.0	8,729.6	7,606.0	20.4	21.1	-120.09	764.1	-267.6	454.8	418.0	36.78	12.366	
8,600.0	7,378.0	8,829.6	7,606.0	21.7	22.4	-120.03	864.0	-268.5	455.5	416.5	39.09	11.653	
8,700.0	7,378.0	8,929.6	7,606.0	23.1	23.7	-119.98	964.0	-269.4	456.3	414.8	41.50	10.994	
8,800.0	7,378.0	9,029.5	7,606.0	24.5	25.1	-119.92	1,064.0	-270.2	457.1	413.1	44.00	10.387	
8,900.0	7,378.0	9,129.5	7,606.0	26.0	26.6	-119.87	1,164.0	-271.1	457.8	411.2	46.57	9.831	
9,000.0	7,378.0	9,229.5	7,606.0	27.5	28.1	-119.82	1,264.0	-272.0	458.6	409.4	49.19	9.322	
9,100.0	7,378.0	9,329.5	7,606.0	29.1	29.6	-119.76	1,364.0	-272.8	459.3	407.5	51.87	8.855	
9,200.0	7,378.0	9,429.5	7,606.0	30.6	31.1	-119.71	1,464.0	-273.7	460.1	405.5	54.59	8.428	
9,300.0	7,378.0	9,529.5	7,606.0	32.2	32.7	-119.65	1,564.0	-274.6	460.8	403.5	57.35	8.035	
9,400.0	7,378.0	9,629.5	7,606.0	33.8	34.3	-119.60	1,664.0	-275.5	461.6	401.5	60.14	7.675	
9,500.0	7,378.0	9,729.5	7,606.0	35.4	35.9	-119.55	1,764.0	-276.3	462.4	399.4	62.97	7.343	
9,600.0	7,378.0	9,829.5	7,606.0	37.0	37.5	-119.49	1,864.0	-277.2	463.1	397.3	65.82	7.036	
9,700.0	7,378.0	9,929.5	7,606.0	38.7	39.1	-119.44	1,964.0	-278.1	463.9	395.2	68.69	6.753	
9,800.0	7,378.0	10,029.5	7,606.0	40.3	40.7	-119.39	2,064.0	-279.0	464.6	393.1	71.58	6.491	
9,900.0	7,378.0	10,129.5	7,606.0	42.0	42.4	-119.34	2,163.9	-279.8	465.4	390.9	74.49	6.247	
10,000.0	7,378.0	10,229.5	7,606.0	43.7	44.0	-119.28	2,263.9	-280.7	466.2	388.7	77.42	6.021	
10,100.0	7,378.0	10,329.5	7,606.0	45.3	45.7	-119.23	2,363.9	-281.6	466.9	386.6	80.37	5.810	
10,200.0	7,378.0	10,429.5	7,606.0	47.0	47.4	-119.18	2,463.9	-282.4	467.7	384.4	83.33	5.613	
10,300.0	7,378.0	10,539.6	7,606.0	48.7	49.2	-119.17	2,574.0	-282.5	467.8	381.4	86.41	5.414	

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 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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
10,400.0	7,378.0	10,656.4	7,606.0	50.4	51.1	-119.43	2,690.7	-278.3	464.6	375.2	89.40	5.197	
10,500.0	7,378.0	10,772.7	7,606.0	52.1	53.1	-119.99	2,806.7	-269.2	457.8	365.7	92.12	4.970	
10,600.0	7,378.0	10,888.0	7,606.0	53.8	55.0	-120.88	2,921.2	-255.5	447.5	353.0	94.51	4.735	
10,700.0	7,378.0	11,002.0	7,606.0	55.5	56.9	-122.12	3,033.7	-237.3	433.9	337.4	96.45	4.498	
10,800.0	7,378.0	11,073.3	7,606.0	57.2	58.1	-123.11	3,103.7	-223.8	419.0	321.1	97.94	4.278	
10,836.2	7,378.0	11,073.3	7,606.0	57.8	58.1	-123.11	3,103.7	-223.8	417.4	319.0	98.46	4.240	
10,837.1	7,378.0	11,073.3	7,606.0	57.8	58.1	-123.11	3,103.7	-223.8	417.4	319.0	98.47	4.239	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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	123.07	-3.6	5.6	6.7				
100.0	100.0	100.0	100.0	0.2	0.2	123.07	-3.6	5.6	6.7	6.4	0.30	21.986	
200.0	200.0	200.0	200.0	0.3	0.3	123.07	-3.6	5.6	6.7	6.0	0.65	10.229	
233.5	233.5	233.5	233.5	0.4	0.4	123.07	-3.6	5.6	6.7	5.9	0.77	8.676 CC	
300.0	300.0	299.9	299.9	0.5	0.5	123.69	-3.8	5.7	6.9	5.9	1.00	6.870 ES	
400.0	400.0	399.8	399.8	0.7	0.7	-45.25	-5.2	6.8	7.9	6.6	1.35	5.853	
500.0	500.0	499.7	499.6	0.9	0.9	-49.42	-8.0	8.9	9.4	7.7	1.70	5.501	
600.0	599.9	599.5	599.3	1.0	1.1	-55.44	-12.2	12.0	11.4	9.3	2.07	5.509	
700.0	699.7	699.2	698.8	1.2	1.3	-61.76	-17.7	16.2	14.0	11.6	2.45	5.740	
800.0	799.4	799.0	798.1	1.4	1.5	-67.54	-24.7	21.4	17.4	14.6	2.86	6.109	
900.0	898.9	898.7	897.3	1.7	1.7	-71.67	-33.0	27.6	21.7	18.4	3.29	6.600	
1,000.0	998.5	998.5	996.5	1.9	2.0	-73.65	-41.8	34.2	26.4	22.7	3.73	7.086	
1,100.0	1,098.1	1,098.4	1,095.8	2.1	2.2	-75.03	-50.6	40.9	31.2	27.0	4.18	7.461	
1,200.0	1,197.6	1,198.3	1,195.1	2.4	2.4	-76.05	-59.5	47.5	36.0	31.3	4.64	7.757	
1,300.0	1,297.2	1,298.2	1,294.4	2.6	2.7	-76.82	-68.3	54.1	40.8	35.7	5.10	7.995	
1,400.0	1,396.7	1,398.1	1,393.6	2.8	3.0	-77.44	-77.1	60.7	45.6	40.0	5.56	8.192	
1,500.0	1,496.3	1,498.0	1,492.9	3.0	3.2	-77.93	-86.0	67.4	50.3	44.3	6.03	8.355	
1,600.0	1,595.9	1,597.8	1,592.2	3.3	3.5	-78.34	-94.8	74.0	55.1	48.6	6.49	8.494	
1,700.0	1,695.4	1,697.7	1,691.4	3.5	3.7	-78.69	-103.7	80.6	59.9	53.0	6.96	8.612	
1,800.0	1,795.0	1,797.6	1,790.7	3.8	4.0	-78.98	-112.5	87.3	64.7	57.3	7.43	8.715	
1,900.0	1,894.5	1,897.5	1,890.0	4.0	4.2	-79.23	-121.3	93.9	69.5	61.6	7.90	8.804	
2,000.0	1,994.1	1,997.4	1,989.3	4.2	4.5	-79.46	-130.2	100.5	74.3	66.0	8.37	8.883	
2,100.0	2,093.7	2,097.3	2,088.5	4.5	4.7	-79.65	-139.0	107.1	79.1	70.3	8.84	8.953	
2,200.0	2,193.2	2,197.2	2,187.8	4.7	5.0	-79.82	-147.8	113.8	83.9	74.6	9.31	9.015	
2,300.0	2,292.8	2,297.0	2,287.1	4.9	5.3	-79.97	-156.7	120.4	88.7	79.0	9.78	9.071	
2,400.0	2,392.3	2,396.9	2,386.4	5.2	5.5	-80.11	-165.5	127.0	93.6	83.3	10.26	9.122	
2,500.0	2,491.9	2,496.8	2,485.6	5.4	5.8	-80.23	-174.3	133.7	98.4	87.6	10.73	9.168	
2,600.0	2,591.5	2,596.7	2,584.9	5.7	6.0	-80.35	-183.2	140.3	103.2	92.0	11.20	9.209	
2,700.0	2,691.0	2,696.6	2,684.2	5.9	6.3	-80.45	-192.0	146.9	108.0	96.3	11.68	9.248	
2,800.0	2,790.6	2,796.5	2,783.4	6.1	6.6	-80.54	-200.8	153.5	112.8	100.6	12.15	9.283	
2,900.0	2,890.1	2,896.3	2,882.7	6.4	6.8	-80.63	-209.7	160.2	117.6	105.0	12.62	9.315	
3,000.0	2,989.7	2,996.2	2,982.0	6.6	7.1	-80.71	-218.5	166.8	122.4	109.3	13.10	9.345	
3,100.0	3,089.2	3,096.1	3,081.3	6.8	7.3	-80.78	-227.4	173.4	127.2	113.6	13.57	9.373	
3,200.0	3,188.8	3,196.0	3,180.5	7.1	7.6	-80.85	-236.2	180.1	132.0	118.0	14.05	9.398	
3,300.0	3,288.4	3,295.9	3,279.8	7.3	7.9	-80.91	-245.0	186.7	136.8	122.3	14.52	9.422	
3,400.0	3,387.9	3,395.8	3,379.1	7.6	8.1	-80.97	-253.9	193.3	141.6	126.6	14.99	9.445	
3,500.0	3,487.5	3,495.7	3,478.3	7.8	8.4	-81.02	-262.7	199.9	146.4	131.0	15.47	9.466	
3,600.0	3,587.0	3,595.5	3,577.6	8.0	8.6	-81.08	-271.5	206.6	151.2	135.3	15.94	9.485	
3,700.0	3,686.6	3,695.4	3,676.9	8.3	8.9	-81.12	-280.4	213.2	156.0	139.6	16.42	9.504	
3,800.0	3,786.2	3,795.3	3,776.2	8.5	9.1	-81.17	-289.2	219.8	160.9	144.0	16.89	9.521	
3,900.0	3,885.7	3,895.2	3,875.4	8.8	9.4	-81.21	-298.0	226.5	165.7	148.3	17.37	9.537	
4,000.0	3,985.3	3,995.1	3,974.7	9.0	9.7	-81.25	-306.9	233.1	170.5	152.6	17.84	9.553	
4,100.0	4,084.8	4,095.0	4,074.0	9.2	9.9	-81.29	-315.7	239.7	175.3	157.0	18.32	9.568	
4,200.0	4,184.4	4,194.8	4,173.2	9.5	10.2	-81.33	-324.5	246.3	180.1	161.3	18.80	9.581	
4,300.0	4,284.0	4,294.7	4,272.5	9.7	10.4	-81.36	-333.4	253.0	184.9	165.6	19.27	9.595	
4,400.0	4,383.5	4,394.6	4,371.8	9.9	10.7	-81.39	-342.2	259.6	189.7	170.0	19.75	9.607	
4,500.0	4,483.1	4,494.5	4,471.1	10.2	11.0	-81.42	-351.0	266.2	194.5	174.3	20.22	9.619	
4,600.0	4,582.6	4,594.4	4,570.3	10.4	11.2	-81.45	-359.9	272.9	199.3	178.6	20.70	9.630	
4,700.0	4,682.2	4,694.3	4,669.6	10.7	11.5	-81.48	-368.7	279.5	204.1	183.0	21.17	9.641	
4,800.0	4,781.8	4,794.1	4,768.9	10.9	11.7	-81.51	-377.6	286.1	208.9	187.3	21.65	9.652	
4,900.0	4,881.3	4,894.0	4,868.1	11.1	12.0	-81.53	-386.4	292.7	213.7	191.6	22.12	9.661	
5,000.0	4,980.9	4,993.9	4,967.4	11.4	12.3	-81.56	-395.2	299.4	218.6	196.0	22.60	9.671	

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 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

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

Survey Program: 0-Geolink MWD

Offset Site Error: 0.0 ft

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	5,080.4	5,093.8	5,066.7	11.6	12.5	-81.58	-404.1	306.0	223.4	200.3	23.08	9.680	
5,200.0	5,180.0	5,193.7	5,166.0	11.9	12.8	-81.60	-412.9	312.6	228.2	204.6	23.55	9.689	
5,300.0	5,279.6	5,293.6	5,265.2	12.1	13.0	-81.63	-421.7	319.3	233.0	209.0	24.03	9.697	
5,400.0	5,379.1	5,393.5	5,364.5	12.3	13.3	-81.65	-430.6	325.9	237.8	213.3	24.50	9.705	
5,500.0	5,478.7	5,493.3	5,463.8	12.6	13.6	-81.67	-439.4	332.5	242.6	217.6	24.98	9.713	
5,600.0	5,578.2	5,593.2	5,563.0	12.8	13.8	-81.68	-448.2	339.1	247.4	222.0	25.45	9.720	
5,700.0	5,677.8	5,693.1	5,662.3	13.1	14.1	-81.70	-457.1	345.8	252.2	226.3	25.93	9.727	
5,800.0	5,777.4	5,793.0	5,761.6	13.3	14.3	-81.72	-465.9	352.4	257.0	230.6	26.41	9.734	
5,900.0	5,876.9	5,892.9	5,860.9	13.5	14.6	-81.74	-474.7	359.0	261.8	235.0	26.88	9.740	
6,000.0	5,976.5	5,992.8	5,960.1	13.8	14.9	-81.75	-483.6	365.7	266.6	239.3	27.36	9.747	
6,100.0	6,076.0	6,092.6	6,059.4	14.0	15.1	-81.77	-492.4	372.3	271.5	243.6	27.83	9.753	
6,200.0	6,175.6	6,192.5	6,158.7	14.2	15.4	-81.78	-501.3	378.9	276.3	248.0	28.31	9.759	
6,300.0	6,275.2	6,292.4	6,257.9	14.5	15.6	-81.80	-510.1	385.5	281.1	252.3	28.79	9.765	
6,400.0	6,374.7	6,392.3	6,357.2	14.7	15.9	-81.81	-518.9	392.2	285.9	256.6	29.26	9.770	
6,500.0	6,474.3	6,492.2	6,456.5	15.0	16.2	-81.83	-527.8	398.8	290.7	261.0	29.74	9.775	
6,600.0	6,573.8	6,592.1	6,555.8	15.2	16.4	-81.84	-536.6	405.4	295.5	265.3	30.21	9.781	
6,700.0	6,673.4	6,691.9	6,655.0	15.4	16.7	-81.85	-545.4	412.1	300.3	269.6	30.69	9.786	
6,800.0	6,773.0	6,791.8	6,754.3	15.7	16.9	-75.04	-554.3	418.7	305.1	273.9	31.16	9.791	
6,900.0	6,872.8	6,890.9	6,852.7	15.7	17.2	79.64	-563.0	425.3	309.4	278.2	31.27	9.895	
7,000.0	6,970.5	6,986.3	6,947.6	15.6	17.5	89.38	-571.5	431.6	314.9	284.0	30.89	10.195	
7,100.0	7,063.3	7,082.2	7,043.0	15.3	17.6	96.86	-576.9	438.0	325.1	295.1	30.06	10.817	
7,200.0	7,148.2	7,188.4	7,148.2	14.9	17.7	103.57	-565.4	445.0	340.4	311.4	28.91	11.774	
7,300.0	7,222.6	7,305.9	7,259.9	14.5	17.5	109.51	-530.4	452.4	359.0	331.4	27.59	13.014	
7,400.0	7,284.4	7,437.3	7,373.5	14.1	17.1	114.66	-465.2	460.0	378.9	352.7	26.22	14.448	
7,500.0	7,331.6	7,584.8	7,479.5	13.7	16.6	118.83	-363.5	467.1	397.1	372.1	25.03	15.868	
7,600.0	7,362.8	7,748.1	7,562.4	13.6	16.2	121.75	-223.5	472.6	410.8	386.5	24.27	16.924	
7,700.0	7,377.1	7,922.7	7,603.8	13.6	16.1	123.06	-54.6	475.4	417.2	392.9	24.25	17.204	
7,800.0	7,378.0	8,044.9	7,606.0	13.9	16.3	123.11	67.5	475.6	417.4	392.6	24.82	16.816	
7,900.0	7,378.0	8,144.9	7,606.0	14.3	16.8	123.11	167.5	475.6	417.4	391.8	25.69	16.252	
8,000.0	7,378.0	8,244.9	7,606.0	15.0	17.3	123.11	267.5	475.6	417.4	390.6	26.85	15.550	
8,100.0	7,378.0	8,344.9	7,606.0	15.8	18.1	123.11	367.5	475.6	417.4	389.2	28.27	14.769	
8,200.0	7,378.0	8,444.9	7,606.0	16.8	18.9	123.11	467.5	475.6	417.4	387.5	29.91	13.957	
8,300.0	7,378.0	8,544.9	7,606.0	17.9	19.9	123.11	567.5	475.6	417.4	385.7	31.74	13.151	
8,400.0	7,378.0	8,644.9	7,606.0	19.1	21.0	123.11	667.5	475.6	417.4	383.7	33.73	12.375	
8,500.0	7,378.0	8,744.9	7,606.0	20.4	22.2	123.11	767.5	475.6	417.4	381.6	35.85	11.642	
8,600.0	7,378.0	8,844.9	7,606.0	21.7	23.4	123.11	867.5	475.6	417.4	379.4	38.09	10.960	
8,700.0	7,378.0	8,944.9	7,606.0	23.1	24.7	123.11	967.5	475.6	417.4	377.0	40.41	10.330	
8,800.0	7,378.0	9,044.9	7,606.0	24.5	26.1	123.11	1,067.5	475.6	417.4	374.6	42.81	9.750	
8,900.0	7,378.0	9,144.9	7,606.0	26.0	27.5	123.11	1,167.5	475.6	417.4	372.2	45.28	9.219	
9,000.0	7,378.0	9,244.9	7,606.0	27.5	28.9	123.11	1,267.5	475.6	417.4	369.6	47.80	8.733	
9,100.0	7,378.0	9,344.9	7,606.0	29.1	30.4	123.11	1,367.5	475.6	417.4	367.1	50.36	8.288	
9,200.0	7,378.0	9,444.9	7,606.0	30.6	31.9	123.11	1,467.5	475.6	417.4	364.5	52.97	7.881	
9,300.0	7,378.0	9,544.9	7,606.0	32.2	33.4	123.11	1,567.5	475.6	417.4	361.8	55.61	7.506	
9,400.0	7,378.0	9,644.9	7,606.0	33.8	35.0	123.11	1,667.5	475.6	417.4	359.2	58.28	7.163	
9,500.0	7,378.0	9,744.9	7,606.0	35.4	36.6	123.11	1,767.5	475.6	417.4	356.5	60.98	6.846	
9,600.0	7,378.0	9,844.9	7,606.0	37.0	38.1	123.11	1,867.5	475.6	417.4	353.7	63.69	6.554	
9,700.0	7,378.0	9,944.9	7,606.0	38.7	39.7	123.11	1,967.5	475.6	417.4	351.0	66.43	6.284	
9,800.0	7,378.0	10,044.9	7,606.0	40.3	41.3	123.11	2,067.5	475.6	417.4	348.3	69.18	6.034	
9,900.0	7,378.0	10,144.9	7,606.0	42.0	43.0	123.11	2,167.5	475.6	417.4	345.5	71.95	5.802	
10,000.0	7,378.0	10,244.9	7,606.0	43.7	44.6	123.11	2,267.5	475.6	417.4	342.7	74.73	5.586	
10,100.0	7,378.0	10,344.9	7,606.0	45.3	46.2	123.11	2,367.5	475.6	417.4	339.9	77.53	5.384	
10,200.0	7,378.0	10,444.9	7,606.0	47.0	47.9	123.11	2,467.5	475.6	417.4	337.1	80.34	5.196	

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 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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
10,300.0	7,378.0	10,544.9	7,606.0	48.7	49.5	123.11	2,567.5	475.6	417.4	334.3	83.15	5.020	
10,400.0	7,378.0	10,644.9	7,606.0	50.4	51.2	123.11	2,667.5	475.6	417.4	331.5	85.97	4.855	
10,500.0	7,378.0	10,744.9	7,606.0	52.1	52.9	123.11	2,767.5	475.6	417.4	328.6	88.81	4.701	
10,600.0	7,378.0	10,844.9	7,606.0	53.8	54.5	123.11	2,867.5	475.6	417.4	325.8	91.65	4.555	
10,700.0	7,378.0	10,944.9	7,606.0	55.5	56.2	123.11	2,967.5	475.6	417.4	322.9	94.49	4.418	
10,800.0	7,378.0	11,044.9	7,606.0	57.2	57.9	123.11	3,067.5	475.6	417.4	320.1	97.34	4.288	
10,828.0	7,378.0	11,072.9	7,606.0	57.6	58.4	123.11	3,095.5	475.6	417.4	319.3	98.14	4.253	
10,837.1	7,378.0	11,077.4	7,606.0	57.8	58.5	123.11	3,100.0	475.6	417.5	319.1	98.34	4.245	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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	90.00	0.0	11.2	11.2				
100.0	100.0	100.0	100.0	0.2	0.2	90.00	0.0	11.2	11.2	10.9	0.30	36.850	
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	11.2	11.2	10.5	0.65	17.144	CC, ES
300.0	300.0	299.8	299.8	0.5	0.5	92.56	-0.5	11.9	11.9	10.9	1.00	11.872	
400.0	400.0	399.6	399.6	0.7	0.7	-73.38	-2.1	13.9	13.8	12.5	1.35	10.229	
500.0	500.0	499.4	499.2	0.9	0.9	-73.95	-4.8	17.4	16.8	15.1	1.71	9.808	SF
600.0	599.9	599.0	598.7	1.0	1.1	-76.33	-8.5	22.2	20.7	18.6	2.08	9.957	
700.0	699.7	698.6	697.9	1.2	1.3	-79.40	-13.3	28.3	25.7	23.2	2.47	10.411	
800.0	799.4	798.0	796.9	1.4	1.5	-82.51	-19.1	35.9	31.8	28.9	2.88	11.028	
900.0	898.9	897.3	895.5	1.7	1.8	-84.93	-25.9	44.7	39.0	35.7	3.32	11.763	
1,000.0	998.5	996.4	993.8	1.9	2.0	-85.27	-33.8	54.9	47.6	43.8	3.77	12.622	
1,100.0	1,098.1	1,095.4	1,091.8	2.1	2.3	-84.34	-42.7	66.4	57.3	53.1	4.22	13.565	
1,200.0	1,197.6	1,194.9	1,190.2	2.4	2.6	-83.43	-51.8	78.3	67.3	62.7	4.68	14.387	
1,300.0	1,297.2	1,294.4	1,288.5	2.6	2.9	-82.75	-61.0	90.1	77.4	72.3	5.14	15.057	
1,400.0	1,396.7	1,393.9	1,386.9	2.8	3.2	-82.23	-70.2	102.0	87.5	81.9	5.60	15.612	
1,500.0	1,496.3	1,493.4	1,485.2	3.0	3.5	-81.82	-79.3	113.8	97.5	91.5	6.07	16.079	
1,600.0	1,595.9	1,592.9	1,583.6	3.3	3.8	-81.48	-88.5	125.7	107.6	101.1	6.53	16.478	
1,700.0	1,695.4	1,692.4	1,681.9	3.5	4.1	-81.20	-97.7	137.6	117.7	110.7	7.00	16.821	
1,800.0	1,795.0	1,791.9	1,780.3	3.8	4.5	-80.97	-106.8	149.4	127.8	120.3	7.46	17.120	
1,900.0	1,894.5	1,891.3	1,878.6	4.0	4.8	-80.77	-116.0	161.3	137.9	129.9	7.93	17.383	
2,000.0	1,994.1	1,990.8	1,977.0	4.2	5.1	-80.59	-125.2	173.2	147.9	139.5	8.40	17.615	
2,100.0	2,093.7	2,090.3	2,075.3	4.5	5.4	-80.44	-134.3	185.0	158.0	149.2	8.87	17.822	
2,200.0	2,193.2	2,189.8	2,173.7	4.7	5.7	-80.31	-143.5	196.9	168.1	158.8	9.34	18.007	
2,300.0	2,292.8	2,289.3	2,272.0	4.9	6.0	-80.19	-152.7	208.7	178.2	168.4	9.81	18.174	
2,400.0	2,392.3	2,388.8	2,370.4	5.2	6.3	-80.09	-161.8	220.6	188.3	178.0	10.28	18.325	
2,500.0	2,491.9	2,488.3	2,468.7	5.4	6.6	-79.99	-171.0	232.5	198.4	187.6	10.75	18.463	
2,600.0	2,591.5	2,587.8	2,567.1	5.7	7.0	-79.91	-180.2	244.3	208.5	197.3	11.22	18.589	
2,700.0	2,691.0	2,687.3	2,665.5	5.9	7.3	-79.83	-189.3	256.2	218.6	206.9	11.69	18.704	
2,800.0	2,790.6	2,786.7	2,763.8	6.1	7.6	-79.76	-198.5	268.1	228.7	216.5	12.16	18.811	
2,900.0	2,890.1	2,886.2	2,862.2	6.4	7.9	-79.69	-207.7	279.9	238.8	226.1	12.63	18.909	
3,000.0	2,989.7	2,985.7	2,960.5	6.6	8.2	-79.64	-216.8	291.8	248.8	235.7	13.10	19.000	
3,100.0	3,089.2	3,085.2	3,058.9	6.8	8.5	-79.58	-226.0	303.7	258.9	245.4	13.57	19.084	
3,200.0	3,188.8	3,184.7	3,157.2	7.1	8.8	-79.53	-235.2	315.5	269.0	255.0	14.04	19.163	
3,300.0	3,288.4	3,284.2	3,255.6	7.3	9.1	-79.48	-244.3	327.4	279.1	264.6	14.51	19.236	
3,400.0	3,387.9	3,383.7	3,353.9	7.6	9.5	-79.44	-253.5	339.2	289.2	274.2	14.98	19.305	
3,500.0	3,487.5	3,483.2	3,452.3	7.8	9.8	-79.40	-262.7	351.1	299.3	283.9	15.45	19.369	
3,600.0	3,587.0	3,582.7	3,550.6	8.0	10.1	-79.36	-271.8	363.0	309.4	293.5	15.92	19.430	
3,700.0	3,686.6	3,682.2	3,649.0	8.3	10.4	-79.32	-281.0	374.8	319.5	303.1	16.40	19.487	
3,800.0	3,786.2	3,781.6	3,747.3	8.5	10.7	-79.29	-290.2	386.7	329.6	312.7	16.87	19.540	
3,900.0	3,885.7	3,881.1	3,845.7	8.8	11.0	-79.26	-299.3	398.6	339.7	322.3	17.34	19.591	
4,000.0	3,985.3	3,980.6	3,944.0	9.0	11.3	-79.23	-308.5	410.4	349.8	332.0	17.81	19.639	
4,100.0	4,084.8	4,080.1	4,042.4	9.2	11.7	-79.20	-317.7	422.3	359.9	341.6	18.28	19.684	
4,200.0	4,184.4	4,179.6	4,140.7	9.5	12.0	-79.18	-326.8	434.2	370.0	351.2	18.75	19.727	
4,300.0	4,284.0	4,279.1	4,239.1	9.7	12.3	-79.15	-336.0	446.0	380.1	360.8	19.23	19.768	
4,400.0	4,383.5	4,378.6	4,337.5	9.9	12.6	-79.13	-345.2	457.9	390.2	370.5	19.70	19.807	
4,500.0	4,483.1	4,478.1	4,435.8	10.2	12.9	-79.10	-354.3	469.7	400.2	380.1	20.17	19.844	
4,600.0	4,582.6	4,577.6	4,534.2	10.4	13.2	-79.08	-363.5	481.6	410.3	389.7	20.64	19.880	
4,700.0	4,682.2	4,677.0	4,632.5	10.7	13.6	-79.06	-372.7	493.5	420.4	399.3	21.11	19.914	
4,800.0	4,781.8	4,776.5	4,730.9	10.9	13.9	-79.04	-381.8	505.3	430.5	408.9	21.58	19.946	
4,900.0	4,881.3	4,876.0	4,829.2	11.1	14.2	-79.02	-391.0	517.2	440.6	418.6	22.06	19.977	
5,000.0	4,980.9	4,975.5	4,927.6	11.4	14.5	-79.01	-400.2	529.1	450.7	428.2	22.53	20.006	
5,100.0	5,080.4	5,075.0	5,025.9	11.6	14.8	-78.99	-409.3	540.9	460.8	437.8	23.00	20.034	

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 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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
5,200.0	5,180.0	5,174.5	5,124.3	11.9	15.1	-78.97	-418.5	552.8	470.9	447.4	23.47	20.062	
5,300.0	5,279.6	5,274.0	5,222.6	12.1	15.4	-78.96	-427.7	564.6	481.0	457.1	23.94	20.088	
5,400.0	5,379.1	5,373.5	5,321.0	12.3	15.8	-78.94	-436.8	576.5	491.1	466.7	24.42	20.113	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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	57.70	182.1	288.2	340.9				
100.0	100.0	99.0	99.0	0.2	0.2	57.70	182.1	288.2	340.9	340.6	0.32	1,051.465	
200.0	200.0	199.0	199.0	0.3	0.3	57.70	182.1	288.2	340.9	340.2	0.67	506.644	
300.0	300.0	299.0	299.0	0.5	0.5	57.70	182.1	288.2	340.9	339.9	1.02	333.724	CC
400.0	400.0	399.0	399.0	0.7	0.7	-111.11	182.1	288.2	341.2	339.8	1.37	248.930	ES
500.0	500.0	499.0	499.0	0.9	0.9	-111.51	182.1	288.2	342.2	340.4	1.72	198.600	
600.0	599.9	598.9	598.9	1.0	1.0	-112.17	182.1	288.2	343.8	341.7	2.08	165.214	
700.0	699.7	698.7	698.7	1.2	1.2	-113.08	182.1	288.2	346.1	343.7	2.45	141.435	
800.0	799.4	798.4	798.4	1.4	1.4	-114.23	182.1	288.2	349.3	346.5	2.82	123.667	
900.0	898.9	897.9	897.9	1.7	1.6	-115.58	182.1	288.2	353.2	350.0	3.21	110.089	
1,000.0	998.5	997.5	997.5	1.9	1.7	-116.93	182.1	288.2	357.4	353.8	3.59	99.422	
1,100.0	1,098.1	1,097.1	1,097.1	2.1	1.9	-118.25	182.1	288.2	361.7	357.7	3.98	90.856	
1,200.0	1,197.6	1,196.6	1,196.6	2.4	2.1	-119.54	182.1	288.2	366.3	361.9	4.37	83.854	
1,300.0	1,297.2	1,296.2	1,296.2	2.6	2.3	-120.80	182.1	288.2	371.0	366.2	4.75	78.041	
1,400.0	1,396.7	1,395.7	1,395.7	2.8	2.4	-122.02	182.1	288.2	375.9	370.8	5.14	73.150	
1,500.0	1,496.3	1,495.3	1,495.3	3.0	2.6	-123.21	182.1	288.2	381.0	375.4	5.52	68.988	
1,600.0	1,595.9	1,594.9	1,594.9	3.3	2.8	-124.37	182.1	288.2	386.2	380.3	5.90	65.411	
1,700.0	1,695.4	1,694.4	1,694.4	3.5	3.0	-125.50	182.1	288.2	391.6	385.3	6.28	62.309	
1,800.0	1,795.0	1,794.0	1,794.0	3.8	3.1	-126.60	182.1	288.2	397.1	390.5	6.66	59.598	
1,900.0	1,894.5	1,893.5	1,893.5	4.0	3.3	-127.67	182.1	288.2	402.8	395.8	7.04	57.212	
2,000.0	1,994.1	1,993.1	1,993.1	4.2	3.5	-128.70	182.1	288.2	408.6	401.2	7.42	55.100	
2,100.0	2,093.7	2,092.7	2,092.7	4.5	3.6	-129.71	182.1	288.2	414.5	406.8	7.79	53.220	
2,200.0	2,193.2	2,192.2	2,192.2	4.7	3.8	-130.69	182.1	288.2	420.6	412.4	8.16	51.537	
2,300.0	2,292.8	2,291.8	2,291.8	4.9	4.0	-131.64	182.1	288.2	426.8	418.3	8.53	50.025	
2,400.0	2,392.3	2,391.3	2,391.3	5.2	4.2	-132.57	182.1	288.2	433.1	424.2	8.90	48.659	
2,500.0	2,491.9	2,490.9	2,490.9	5.4	4.3	-133.47	182.1	288.2	439.5	430.2	9.27	47.422	
2,600.0	2,591.5	2,590.5	2,590.5	5.7	4.5	-134.34	182.1	288.2	446.0	436.4	9.63	46.297	
2,700.0	2,691.0	2,690.0	2,690.0	5.9	4.7	-135.19	182.1	288.2	452.6	442.6	10.00	45.270	
2,800.0	2,790.6	2,789.6	2,789.6	6.1	4.9	-136.01	182.1	288.2	459.4	449.0	10.36	44.331	
2,900.0	2,890.1	2,889.1	2,889.1	6.4	5.0	-136.81	182.1	288.2	466.2	455.4	10.72	43.469	
3,000.0	2,989.7	2,988.7	2,988.7	6.6	5.2	-137.58	182.1	288.2	473.0	462.0	11.08	42.675	
3,100.0	3,089.2	3,088.2	3,088.2	6.8	5.4	-138.34	182.1	288.2	480.0	468.6	11.44	41.944	
3,200.0	3,188.8	3,187.8	3,187.8	7.1	5.6	-139.07	182.1	288.2	487.1	475.3	11.80	41.267	
3,300.0	3,288.4	3,287.4	3,287.4	7.3	5.7	-139.78	182.1	288.2	494.2	482.1	12.16	40.640	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 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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
0.0	0.0	0.0	0.0	0.0	0.0	70.57	154.1	436.7	473.2				
100.0	100.0	3.0	3.0	0.2	0.0	70.57	154.1	436.7	463.1	463.0	0.16	2,944.486	
200.0	200.0	103.0	103.0	0.3	0.2	70.57	154.1	436.7	463.1	462.6	0.51	914.613	
300.0	300.0	203.0	203.0	0.5	0.4	70.57	154.1	436.7	463.1	462.3	0.86	541.389	
400.0	400.0	303.0	303.0	0.7	0.5	-98.22	154.1	436.7	463.2	462.0	1.21	384.383	
500.0	500.0	403.0	403.0	0.9	0.7	-98.53	154.1	436.7	463.6	462.1	1.56	297.524	
600.0	599.9	502.9	502.9	1.0	0.9	-99.06	154.1	436.7	464.3	462.4	1.92	242.053	
700.0	699.7	602.7	602.7	1.2	1.1	-99.79	154.1	436.7	465.3	463.0	2.29	203.359	
800.0	799.4	702.4	702.4	1.4	1.2	-100.72	154.1	436.7	466.7	464.0	2.67	174.731	
900.0	898.9	801.9	801.9	1.7	1.4	-101.82	154.1	436.7	468.5	465.4	3.06	152.980	
1,000.0	998.5	901.5	901.5	1.9	1.6	-102.93	154.1	436.7	470.5	467.1	3.46	136.076	
1,100.0	1,098.1	1,001.1	1,001.1	2.1	1.7	-104.04	154.1	436.7	472.7	468.9	3.86	122.619	
1,200.0	1,197.6	1,100.6	1,100.6	2.4	1.9	-105.13	154.1	436.7	475.1	470.8	4.25	111.689	
1,300.0	1,297.2	1,200.2	1,200.2	2.6	2.1	-106.21	154.1	436.7	477.6	473.0	4.65	102.660	
1,400.0	1,396.7	1,299.7	1,299.7	2.8	2.3	-107.28	154.1	436.7	480.3	475.3	5.05	95.091	
1,500.0	1,496.3	1,399.3	1,399.3	3.0	2.4	-108.34	154.1	436.7	483.2	477.8	5.45	88.668	
1,600.0	1,595.9	1,498.9	1,498.9	3.3	2.6	-109.38	154.1	436.7	486.3	480.4	5.85	83.157	
1,700.0	1,695.4	1,598.4	1,598.4	3.5	2.8	-110.41	154.1	436.7	489.5	483.2	6.24	78.386	
1,800.0	1,795.0	1,698.0	1,698.0	3.8	3.0	-111.43	154.1	436.7	492.8	486.2	6.64	74.220	
1,900.0	1,894.5	1,797.5	1,797.5	4.0	3.1	-112.43	154.1	436.7	496.3	489.3	7.03	70.556	
7,500.0	7,331.6	7,234.6	7,234.6	13.7	12.6	63.95	154.1	436.7	491.7	466.9	24.83	19.804	
7,600.0	7,362.8	7,265.8	7,265.8	13.6	12.7	78.05	154.1	436.7	422.2	396.5	25.75	16.395	
7,700.0	7,377.1	7,280.1	7,280.1	13.6	12.7	88.07	154.1	436.7	362.6	336.4	26.12	13.881	
7,800.0	7,378.0	7,281.0	7,281.0	13.9	12.7	90.00	154.1	436.7	322.7	296.3	26.39	12.228	
7,886.6	7,378.0	7,281.0	7,281.0	14.3	12.7	90.00	154.1	436.7	310.8	284.0	26.80	11.598	CC, ES
7,900.0	7,378.0	7,281.0	7,281.0	14.3	12.7	90.00	154.1	436.7	311.1	284.3	26.86	11.581	SF
8,000.0	7,378.0	7,281.0	7,281.0	15.0	12.7	90.00	154.1	436.7	330.9	303.3	27.53	12.017	
8,100.0	7,378.0	7,281.0	7,281.0	15.8	12.7	90.00	154.1	436.7	377.0	348.7	28.37	13.289	
8,200.0	7,378.0	7,281.0	7,281.0	16.8	12.7	90.00	154.1	436.7	441.4	412.1	29.36	15.037	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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	66.63	185.4	429.2	467.5				
100.0	100.0	105.0	105.0	0.2	0.2	66.47	186.4	428.2	467.0	466.7	0.31	1,510.348	
123.8	123.8	126.9	126.8	0.2	0.2	66.42	186.8	428.0	466.9	466.5	0.39	1,198.022	CC, ES
200.0	200.0	196.1	196.0	0.3	0.3	66.21	188.6	427.7	467.5	466.9	0.65	721.884	
300.0	300.0	283.6	283.4	0.5	0.5	65.85	192.3	428.8	470.3	469.3	0.99	477.192	
400.0	400.0	367.1	366.8	0.7	0.7	-103.30	197.6	431.6	476.3	475.0	1.32	361.644	
500.0	500.0	456.7	455.9	0.9	0.9	-104.00	204.8	436.9	485.7	484.0	1.67	291.497	
600.0	599.9	544.6	543.2	1.0	1.1	-104.80	212.7	443.6	497.6	495.6	2.02	246.461	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - 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
0.0	0.0	3.1	3.1	0.0	0.0	69.00	167.6	436.4	467.5				
100.0	100.0	104.9	104.9	0.2	0.2	69.06	167.0	436.3	467.2	466.9	0.31	1,519.013	
191.5	191.5	194.6	194.5	0.3	0.3	69.27	165.2	436.6	466.9	466.2	0.63	744.494	CC
200.0	200.0	202.2	202.2	0.3	0.3	69.30	165.0	436.7	466.9	466.2	0.66	711.890	ES
300.0	300.0	298.7	298.5	0.5	0.5	69.90	160.6	438.9	467.4	466.3	1.01	460.607	
400.0	400.0	391.7	391.2	0.7	0.7	-97.91	153.8	442.8	469.0	467.6	1.39	336.740	
500.0	500.0	483.8	482.7	0.9	0.9	-96.96	145.5	449.2	473.0	471.2	1.79	263.582	
600.0	599.9	581.7	579.8	1.0	1.2	-95.98	135.5	457.1	478.1	475.9	2.24	213.705	
700.0	699.7	686.4	683.5	1.2	1.5	-95.04	123.7	465.6	483.2	480.5	2.72	177.664	
800.0	799.4	790.3	786.4	1.4	1.8	-94.43	112.4	473.0	487.7	484.5	3.21	151.924	
900.0	898.9	889.4	884.7	1.7	2.1	-93.99	101.0	479.5	491.7	488.0	3.71	132.462	
1,000.0	998.5	984.4	978.7	1.9	2.4	-93.47	89.1	486.7	496.3	492.1	4.22	117.598	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**Offset TVD Reference:**	Offset Datum

Offset Design S32-T2N-R68W (File) - WANDELL 33-7 (EXISTING) - ENCANA WELL - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-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
7,900.0	7,378.0	7,493.6	7,340.2	14.3	21.2	90.58	525.2	340.9	417.4	387.7	29.64	14.084	
8,000.0	7,378.0	7,506.7	7,352.8	15.0	21.3	94.00	527.0	337.9	335.4	305.1	30.33	11.058	
8,100.0	7,378.0	7,519.2	7,364.9	15.8	21.3	97.34	528.6	335.0	265.4	234.3	31.11	8.530	
8,200.0	7,378.0	7,531.2	7,376.5	16.8	21.4	100.55	530.1	332.4	219.2	187.2	31.95	6.860	
8,263.5	7,378.0	7,538.5	7,383.5	17.5	21.4	102.53	531.0	330.8	209.9	177.4	32.52	6.455	CC, ES, SF
8,300.0	7,378.0	7,542.6	7,387.5	17.9	21.4	103.64	531.5	329.9	213.0	180.2	32.83	6.488	
8,400.0	7,378.0	7,553.5	7,398.1	19.1	21.5	106.58	532.9	327.6	249.9	216.1	33.72	7.409	
8,500.0	7,378.0	7,563.9	7,408.2	20.4	21.5	109.37	534.1	325.5	315.0	280.4	34.61	9.101	
8,600.0	7,378.0	7,573.8	7,417.8	21.7	21.6	112.00	535.3	323.5	394.7	359.2	35.49	11.123	
8,700.0	7,378.0	7,583.4	7,427.1	23.1	21.6	114.48	536.3	321.6	481.8	445.5	36.34	13.259	

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 3N-32H-K268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File)	**MD Reference:**	WELL @ 4971.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	File 3N-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 #1	**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 3N-32H-K268
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.30°