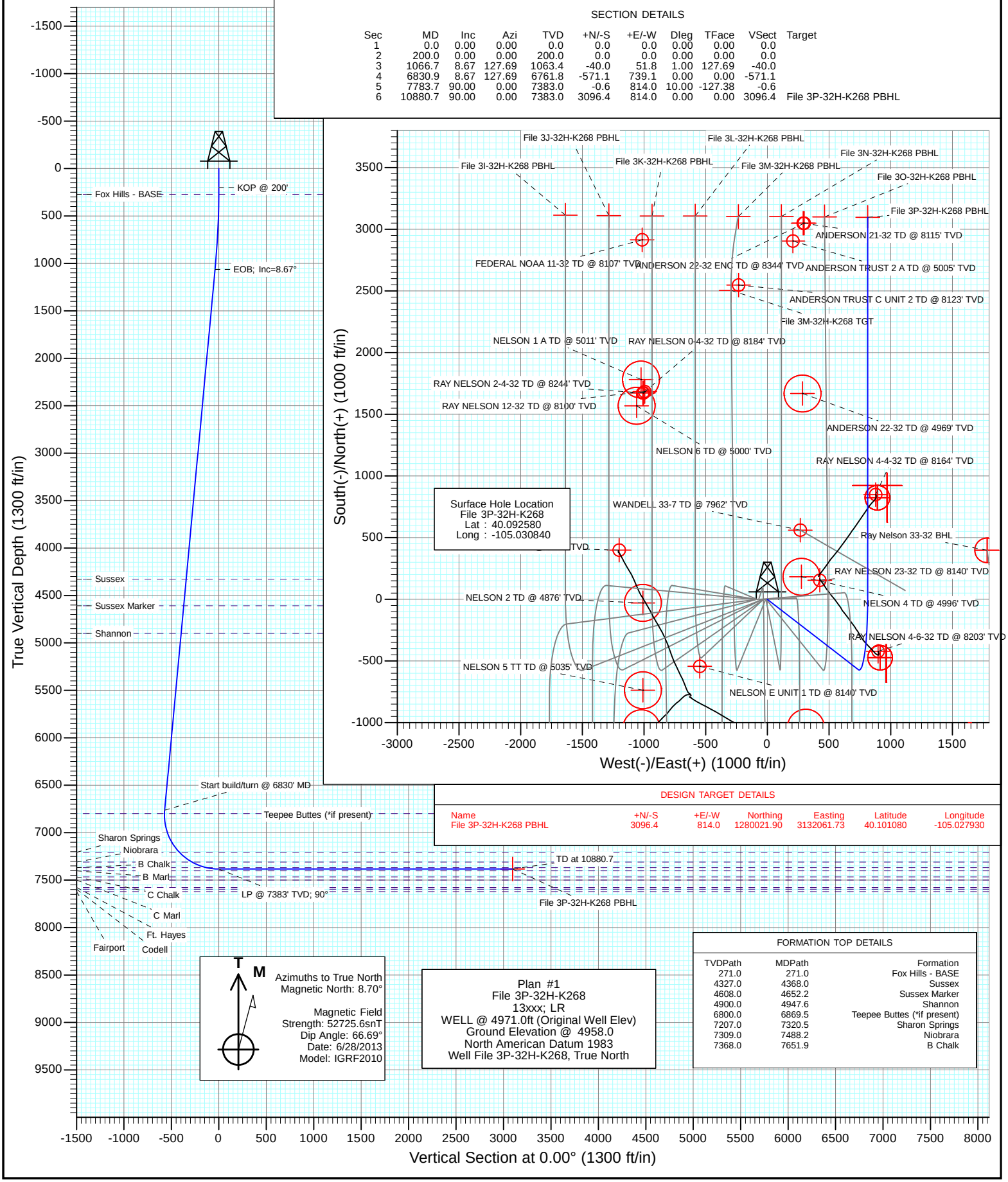
encana natural gas

Project: DJ Wattenberg
Site: S32-T2N-R68W (File)
Well: File 3P-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	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1066.7	8.67	127.69	1063.4	-40.0	51.8	1.00	127.69	-40.0	
4	6830.9	8.67	127.69	6761.8	-571.1	739.1	0.00	0.00	-571.1	
5	7783.7	90.00	0.00	7383.0	-0.6	814.0	10.00	-127.38	-0.6	
6	10880.7	90.00	0.00	7383.0	3096.4	814.0	0.00	0.00	3096.4	File 3P-32H-K268 PBHL



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
File 3P-32H-K268 PBHL	3096.4	814.0	1280021.90	3132061.73	40.101080	-105.027930

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
271.0	271.0	Fox Hills - BASE
4327.0	4368.0	Sussex
4608.0	4652.2	Sussex Marker
4900.0	4947.6	Shannon
6800.0	6869.5	Teepee Buttes (*if present)
7207.0	7320.5	Sharon Springs
7309.0	7488.2	Niobrara
7368.0	7651.9	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 3P-32H-K268
13xxx; LR
WELL @ 4971.0ft (Original Well Elev)
Ground Elevation @ 4958.0
North American Datum 1983
Well File 3P-32H-K268, True North

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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 3P-32H-K268

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,276,921.25 ft	**Latitude:**	40.092580
	+E/-W	0.0 ft	**Easting:**	3,131,264.08 ft	**Longitude:**	-105.030840
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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,066.7	8.67	127.69	1,063.4	-40.0	51.8	1.00	1.00	0.00	127.69	
6,830.9	8.67	127.69	6,761.8	-571.1	739.1	0.00	0.00	0.00	0.00	
7,783.7	90.00	0.00	7,383.0	-0.6	814.0	10.00	8.54	-13.40	-127.38	
10,880.7	90.00	0.00	7,383.0	3,096.4	814.0	0.00	0.00	0.00	0.00	File 3P-32H-K268 PB

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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	KOP @ 200'
271.0	0.71	127.69	271.0	-0.3	0.3	-0.3	1.00	1.00	Fox Hills - BASE
300.0	1.00	127.69	300.0	-0.5	0.7	-0.5	1.00	1.00	
400.0	2.00	127.69	400.0	-2.1	2.8	-2.1	1.00	1.00	
500.0	3.00	127.69	499.9	-4.8	6.2	-4.8	1.00	1.00	
600.0	4.00	127.69	599.7	-8.5	11.0	-8.5	1.00	1.00	
700.0	5.00	127.69	699.4	-13.3	17.3	-13.3	1.00	1.00	
800.0	6.00	127.69	798.9	-19.2	24.8	-19.2	1.00	1.00	
900.0	7.00	127.69	898.3	-26.1	33.8	-26.1	1.00	1.00	
1,000.0	8.00	127.69	997.4	-34.1	44.1	-34.1	1.00	1.00	
1,066.7	8.67	127.69	1,063.4	-40.0	51.8	-40.0	1.00	1.00	EOB; Inc=8.67°
1,100.0	8.67	127.69	1,096.3	-43.1	55.7	-43.1	0.00	0.00	
1,200.0	8.67	127.69	1,195.2	-52.3	67.7	-52.3	0.00	0.00	
1,300.0	8.67	127.69	1,294.0	-61.5	79.6	-61.5	0.00	0.00	
1,400.0	8.67	127.69	1,392.9	-70.7	91.5	-70.7	0.00	0.00	
1,500.0	8.67	127.69	1,491.8	-79.9	103.4	-79.9	0.00	0.00	
1,600.0	8.67	127.69	1,590.6	-89.1	115.4	-89.1	0.00	0.00	
1,700.0	8.67	127.69	1,689.5	-98.4	127.3	-98.4	0.00	0.00	
1,800.0	8.67	127.69	1,788.3	-107.6	139.2	-107.6	0.00	0.00	
1,900.0	8.67	127.69	1,887.2	-116.8	151.1	-116.8	0.00	0.00	
2,000.0	8.67	127.69	1,986.0	-126.0	163.1	-126.0	0.00	0.00	
2,100.0	8.67	127.69	2,084.9	-135.2	175.0	-135.2	0.00	0.00	
2,200.0	8.67	127.69	2,183.8	-144.4	186.9	-144.4	0.00	0.00	
2,300.0	8.67	127.69	2,282.6	-153.6	198.8	-153.6	0.00	0.00	
2,400.0	8.67	127.69	2,381.5	-162.9	210.8	-162.9	0.00	0.00	
2,500.0	8.67	127.69	2,480.3	-172.1	222.7	-172.1	0.00	0.00	
2,600.0	8.67	127.69	2,579.2	-181.3	234.6	-181.3	0.00	0.00	
2,700.0	8.67	127.69	2,678.0	-190.5	246.5	-190.5	0.00	0.00	
2,800.0	8.67	127.69	2,776.9	-199.7	258.5	-199.7	0.00	0.00	
2,900.0	8.67	127.69	2,875.8	-208.9	270.4	-208.9	0.00	0.00	
3,000.0	8.67	127.69	2,974.6	-218.1	282.3	-218.1	0.00	0.00	
3,100.0	8.67	127.69	3,073.5	-227.4	294.2	-227.4	0.00	0.00	
3,200.0	8.67	127.69	3,172.3	-236.6	306.2	-236.6	0.00	0.00	
3,300.0	8.67	127.69	3,271.2	-245.8	318.1	-245.8	0.00	0.00	
3,400.0	8.67	127.69	3,370.1	-255.0	330.0	-255.0	0.00	0.00	
3,500.0	8.67	127.69	3,468.9	-264.2	341.9	-264.2	0.00	0.00	
3,600.0	8.67	127.69	3,567.8	-273.4	353.8	-273.4	0.00	0.00	
3,700.0	8.67	127.69	3,666.6	-282.6	365.8	-282.6	0.00	0.00	
3,800.0	8.67	127.69	3,765.5	-291.9	377.7	-291.9	0.00	0.00	
3,900.0	8.67	127.69	3,864.3	-301.1	389.6	-301.1	0.00	0.00	
4,000.0	8.67	127.69	3,963.2	-310.3	401.5	-310.3	0.00	0.00	
4,100.0	8.67	127.69	4,062.1	-319.5	413.5	-319.5	0.00	0.00	
4,200.0	8.67	127.69	4,160.9	-328.7	425.4	-328.7	0.00	0.00	
4,300.0	8.67	127.69	4,259.8	-337.9	437.3	-337.9	0.00	0.00	
4,368.0	8.67	127.69	4,327.0	-344.2	445.4	-344.2	0.00	0.00	Sussex
4,400.0	8.67	127.69	4,358.6	-347.1	449.2	-347.1	0.00	0.00	
4,500.0	8.67	127.69	4,457.5	-356.4	461.2	-356.4	0.00	0.00	
4,600.0	8.67	127.69	4,556.3	-365.6	473.1	-365.6	0.00	0.00	
4,652.2	8.67	127.69	4,608.0	-370.4	479.3	-370.4	0.00	0.00	Sussex Marker
4,700.0	8.67	127.69	4,655.2	-374.8	485.0	-374.8	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 3P-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	8.67	127.69	4,754.1	-384.0	496.9	-384.0	0.00	0.00	
4,900.0	8.67	127.69	4,852.9	-393.2	508.9	-393.2	0.00	0.00	
4,947.6	8.67	127.69	4,900.0	-397.6	514.5	-397.6	0.00	0.00	Shannon
5,000.0	8.67	127.69	4,951.8	-402.4	520.8	-402.4	0.00	0.00	
5,100.0	8.67	127.69	5,050.6	-411.6	532.7	-411.6	0.00	0.00	
5,200.0	8.67	127.69	5,149.5	-420.9	544.6	-420.9	0.00	0.00	
5,300.0	8.67	127.69	5,248.4	-430.1	556.6	-430.1	0.00	0.00	
5,400.0	8.67	127.69	5,347.2	-439.3	568.5	-439.3	0.00	0.00	
5,500.0	8.67	127.69	5,446.1	-448.5	580.4	-448.5	0.00	0.00	
5,600.0	8.67	127.69	5,544.9	-457.7	592.3	-457.7	0.00	0.00	
5,700.0	8.67	127.69	5,643.8	-466.9	604.3	-466.9	0.00	0.00	
5,800.0	8.67	127.69	5,742.6	-476.1	616.2	-476.1	0.00	0.00	
5,900.0	8.67	127.69	5,841.5	-485.4	628.1	-485.4	0.00	0.00	
6,000.0	8.67	127.69	5,940.4	-494.6	640.0	-494.6	0.00	0.00	
6,100.0	8.67	127.69	6,039.2	-503.8	652.0	-503.8	0.00	0.00	
6,200.0	8.67	127.69	6,138.1	-513.0	663.9	-513.0	0.00	0.00	
6,300.0	8.67	127.69	6,236.9	-522.2	675.8	-522.2	0.00	0.00	
6,400.0	8.67	127.69	6,335.8	-531.4	687.7	-531.4	0.00	0.00	
6,500.0	8.67	127.69	6,434.7	-540.6	699.7	-540.6	0.00	0.00	
6,600.0	8.67	127.69	6,533.5	-549.9	711.6	-549.9	0.00	0.00	
6,700.0	8.67	127.69	6,632.4	-559.1	723.5	-559.1	0.00	0.00	
6,800.0	8.67	127.69	6,731.2	-568.3	735.4	-568.3	0.00	0.00	
6,830.9	8.67	127.69	6,761.8	-571.1	739.1	-571.1	0.00	0.00	Start build/turn @ 6830' MD
6,869.5	7.02	101.75	6,800.0	-573.4	743.7	-573.4	10.00	-4.26	Teepee Buttes (*if present)
6,900.0	7.07	76.67	6,830.3	-573.3	747.4	-573.3	10.00	0.14	
7,000.0	13.48	30.20	6,928.8	-561.8	759.3	-561.8	10.00	6.42	
7,100.0	22.64	16.81	7,023.8	-533.2	770.7	-533.2	10.00	9.16	
7,200.0	32.29	11.00	7,112.4	-488.5	781.4	-488.5	10.00	9.65	
7,300.0	42.09	7.67	7,192.0	-428.9	791.0	-428.9	10.00	9.80	
7,320.5	44.11	7.15	7,207.0	-415.0	792.8	-415.0	10.00	9.85	Sharon Springs
7,400.0	51.95	5.42	7,260.1	-356.3	799.2	-356.3	10.00	9.87	
7,488.2	60.68	3.88	7,309.0	-283.2	805.1	-283.2	10.00	9.90	Niobrara
7,500.0	61.85	3.70	7,314.7	-272.9	805.8	-272.9	10.00	9.91	
7,600.0	71.76	2.28	7,354.0	-181.2	810.5	-181.2	10.00	9.91	
7,651.9	76.91	1.61	7,368.0	-131.3	812.2	-131.3	10.00	9.92	B Chalk
7,700.0	81.69	1.01	7,376.9	-84.1	813.3	-84.1	10.00	9.93	
7,783.7	90.00	0.00	7,383.0	-0.6	814.0	-0.6	10.00	9.93	LP @ 7383' TVD; 90°
7,800.0	90.00	0.00	7,383.0	15.6	814.0	15.6	0.00	0.00	
7,900.0	90.00	0.00	7,383.0	115.6	814.0	115.6	0.00	0.00	
8,000.0	90.00	0.00	7,383.0	215.6	814.0	215.6	0.00	0.00	
8,100.0	90.00	0.00	7,383.0	315.6	814.0	315.6	0.00	0.00	
8,200.0	90.00	0.00	7,383.0	415.6	814.0	415.6	0.00	0.00	
8,300.0	90.00	0.00	7,383.0	515.6	814.0	515.6	0.00	0.00	
8,400.0	90.00	0.00	7,383.0	615.6	814.0	615.6	0.00	0.00	
8,500.0	90.00	0.00	7,383.0	715.6	814.0	715.6	0.00	0.00	
8,600.0	90.00	0.00	7,383.0	815.6	814.0	815.6	0.00	0.00	
8,700.0	90.00	0.00	7,383.0	915.6	814.0	915.6	0.00	0.00	
8,800.0	90.00	0.00	7,383.0	1,015.6	814.0	1,015.6	0.00	0.00	
8,900.0	90.00	0.00	7,383.0	1,115.6	814.0	1,115.6	0.00	0.00	
9,000.0	90.00	0.00	7,383.0	1,215.6	814.0	1,215.6	0.00	0.00	
9,100.0	90.00	0.00	7,383.0	1,315.6	814.0	1,315.6	0.00	0.00	
9,200.0	90.00	0.00	7,383.0	1,415.6	814.0	1,415.6	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 3P-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	7,383.0	1,515.6	814.0	1,515.6	0.00	0.00	
9,400.0	90.00	0.00	7,383.0	1,615.6	814.0	1,615.6	0.00	0.00	
9,500.0	90.00	0.00	7,383.0	1,715.6	814.0	1,715.6	0.00	0.00	
9,600.0	90.00	0.00	7,383.0	1,815.6	814.0	1,815.6	0.00	0.00	
9,700.0	90.00	0.00	7,383.0	1,915.6	814.0	1,915.6	0.00	0.00	
9,800.0	90.00	0.00	7,383.0	2,015.6	814.0	2,015.6	0.00	0.00	
9,900.0	90.00	0.00	7,383.0	2,115.6	814.0	2,115.6	0.00	0.00	
10,000.0	90.00	0.00	7,383.0	2,215.6	814.0	2,215.6	0.00	0.00	
10,100.0	90.00	0.00	7,383.0	2,315.6	814.0	2,315.6	0.00	0.00	
10,200.0	90.00	0.00	7,383.0	2,415.6	814.0	2,415.6	0.00	0.00	
10,300.0	90.00	0.00	7,383.0	2,515.6	814.0	2,515.6	0.00	0.00	
10,400.0	90.00	0.00	7,383.0	2,615.6	814.0	2,615.6	0.00	0.00	
10,500.0	90.00	0.00	7,383.0	2,715.6	814.0	2,715.6	0.00	0.00	
10,600.0	90.00	0.00	7,383.0	2,815.6	814.0	2,815.6	0.00	0.00	
10,700.0	90.00	0.00	7,383.0	2,915.6	814.0	2,915.6	0.00	0.00	
10,800.0	90.00	0.00	7,383.0	3,015.6	814.0	3,015.6	0.00	0.00	
10,880.7	90.00	0.00	7,383.0	3,096.4	814.0	3,096.4	0.00	0.00	TD at 10880.7

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 3P-32H-K268 PBHL - plan hits target center - Point	0.00	0.00	7,383.0	3,096.4	814.0	1,280,021.90	3,132,061.73	40.101080	-105.027930

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
271.0	271.0	Fox Hills - BASE			
4,368.0	4,327.0	Sussex			
4,652.2	4,608.0	Sussex Marker			
4,947.6	4,900.0	Shannon			
6,869.5	6,800.0	Teepee Buttes (*if present)			
7,320.5	7,207.0	Sharon Springs			
7,488.2	7,309.0	Niobrara			
7,651.9	7,368.0	B Chalk			

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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
200.0	200.0	0.0	0.0	KOP @ 200'
1,066.7	1,063.4	-40.0	51.8	EOB; Inc=8.67°
6,830.9	6,761.8	-571.1	739.1	Start build/turn @ 6830' MD
7,783.7	7,383.0	-0.6	814.0	LP @ 7383' TVD; 90°
10,880.7	7,383.0	3,096.4	814.0	TD at 10880.7

EnCana Oil & Gas (USA) Inc

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

Anticollision Report

28 June, 2013

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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	10,880.7	Plan #1 (Hz)	Geolink MWD	Geolink MWD

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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						Out of range
ANDERSON 22-32 (EXISTING) - KPK WELL - NO SURV						Out of range
ANDERSON 22-32 ENC (EXISTING) - ENCANA WELL -						Out of range
ANDERSON TRUST 2 A (EXISTING) - ENCANA WELL -						Out of range
ANDERSON TRUST C UNIT 2 (EXISTING) - ENCANA W						Out of range
BROWN 22-5 (EXISTING) - ENCANA WELL - NO SURV						Out of range
BROWN 31-5 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
BROWN 41-5 (EXISTING) - ENCANA WELL - 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	106.4	105.7	163.403	CC, ES
File 3A-32H-K268 - Hz - Plan #1	900.0	877.9	181.9	178.8	58.237	SF
File 3B-32H-K268 - Hz - Plan #1	200.0	199.0	100.7	100.1	154.712	CC, ES
File 3B-32H-K268 - Hz - Plan #1	800.0	786.0	148.1	145.4	53.815	SF
File 3C-32H-K268 - Hz - Plan #1	200.0	199.0	95.2	94.5	146.224	CC, ES
File 3C-32H-K268 - Hz - Plan #1	900.0	886.0	150.3	147.2	47.974	SF
File 3D-32H-K268 - Hz - Plan #1	200.0	199.0	89.5	88.9	137.522	CC, ES
File 3D-32H-K268 - Hz - Plan #1	800.0	791.7	123.5	120.8	44.758	SF
File 3E-32H-K268 - Hz - Plan #1	200.0	200.0	75.6	75.0	115.859	CC, ES
File 3E-32H-K268 - Hz - Plan #1	800.0	795.5	104.9	102.1	37.886	SF
File 3F-32H-K268 - Hz - Plan #1	200.0	200.0	69.9	69.3	107.151	CC, ES
File 3F-32H-K268 - Hz - Plan #1	900.0	898.3	107.0	103.8	34.260	SF
File 3G-32H-K268 - Hz - Plan #1	200.0	200.0	64.5	63.8	98.738	CC, ES
File 3G-32H-K268 - Hz - Plan #1	1,000.0	1,002.1	96.2	92.7	27.661	SF
File 3H-32H-K268 - Hz - Plan #1	200.0	200.0	58.8	58.1	90.007	CC, ES
File 3H-32H-K268 - Hz - Plan #1	7,709.5	7,462.1	151.4	124.7	5.687	SF
File 3I-32H-K268 - Hz - Plan #1	200.0	200.0	44.9	44.3	68.804	CC, ES
File 3I-32H-K268 - Hz - Plan #1	600.0	595.6	68.6	66.6	33.295	SF
File 3J-32H-K268 - Hz - Plan #1	200.0	200.0	39.2	38.5	60.005	CC, ES
File 3J-32H-K268 - Hz - Plan #1	600.0	596.8	59.8	57.7	28.986	SF
File 3K-32H-K268 - Hz - Plan #1	200.0	200.0	33.8	33.1	51.735	CC, ES
File 3K-32H-K268 - Hz - Plan #1	600.0	598.1	49.1	47.0	23.804	SF
File 3L-32H-K268 - Hz - Plan #1	200.0	200.0	30.8	30.1	47.147	CC, ES
File 3L-32H-K268 - Hz - Plan #1	600.0	599.0	43.8	41.8	21.314	SF
File 3M-32H-K268 - Hz - Plan #1	200.0	200.0	14.5	13.8	22.145	CC, ES
File 3M-32H-K268 - Hz - Plan #1	400.0	399.6	18.7	17.3	13.748	SF
File 3N-32H-K268 - Hz - Plan #1	200.0	200.0	11.2	10.5	17.144	CC, ES
File 3N-32H-K268 - Hz - Plan #1	500.0	500.1	16.8	15.1	9.813	SF
File 3O-32H-K268 - Hz - Plan #1	200.0	200.0	6.7	6.0	10.229	CC
File 3O-32H-K268 - Hz - Plan #1	300.0	300.0	7.0	6.0	6.951	ES
File 3O-32H-K268 - Hz - Plan #1	10,880.7	11,073.0	414.7	315.7	4.187	SF
GENE 11-5 (EXISTING) - KERR-MCGEE WELL - NO SU						Out of range
HIGHLAND 21-5 (EXISTING) - KPK WELL - NO SURVE						Out of range
HOPE 31-5 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
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	1,347.8	1,340.3	313.5	308.1	57.873	CC
NELSON 4 (EXISTING) - TEXAS TEA WELL - NO SURV	1,400.0	1,391.9	313.6	307.9	55.350	ES

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 3P-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 3P-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)						
NELSON 4 (EXISTING) - TEXAS TEA WELL - NO SURV	3,500.0	3,467.9	451.1	436.9	31.871	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	2,241.8	2,128.1	382.1	372.5	39.899	CC
RAY NELSON 23-32 (EXISTING) - ENCANA WELL - NO	7,938.4	7,286.0	388.5	361.6	14.448	ES
RAY NELSON 23-32 (EXISTING) - ENCANA WELL - NO	8,000.0	7,286.0	393.4	366.1	14.440	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	8,622.0	7,436.1	68.4	30.0	1.779	CC, ES, SF
RAY NELSON 4-6-32 (EXISTING) - ENCANA WELL - SU	7,200.0	7,166.1	129.0	95.6	3.861	SF
RAY NELSON 4-6-32 (EXISTING) - ENCANA WELL - SU	7,296.2	7,242.9	114.2	84.7	3.867	CC, ES
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	8,287.2	7,348.1	467.4	436.3	15.031	CC
WANDELL 33-7 (EXISTING) - ENCANA WELL - Plan #1	8,300.0	7,350.9	467.6	436.3	14.951	ES
WANDELL 33-7 (EXISTING) - ENCANA WELL - Plan #1	8,400.0	7,371.9	480.3	447.6	14.676	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 3P-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 3P-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	-91.96	-3.6	-106.3	106.4				
100.0	100.0	99.0	99.0	0.2	0.2	-91.96	-3.6	-106.3	106.4	106.1	0.30	352.043	
200.0	200.0	199.0	199.0	0.3	0.3	-91.96	-3.6	-106.3	106.4	105.7	0.65	163.403	CC, ES
300.0	300.0	297.2	297.2	0.5	0.5	140.58	-3.7	-107.1	107.9	106.9	1.00	108.186	
400.0	400.0	395.2	395.2	0.7	0.7	141.26	-4.1	-109.6	112.5	111.1	1.34	83.631	
500.0	499.9	492.9	492.8	0.9	0.9	142.27	-4.6	-113.7	120.1	118.4	1.69	70.892	
600.0	599.7	590.2	589.9	1.1	1.0	143.48	-5.3	-119.5	130.9	128.8	2.05	63.947	
700.0	699.4	686.9	686.3	1.3	1.3	144.75	-6.3	-126.8	144.7	142.3	2.40	60.266	
800.0	798.9	782.8	781.8	1.5	1.5	146.01	-7.4	-135.7	161.8	159.0	2.76	58.595	
900.0	898.3	877.9	876.3	1.8	1.7	147.17	-8.8	-146.0	181.9	178.8	3.12	58.237	SF
1,000.0	997.4	972.0	969.7	2.0	2.0	148.22	-10.3	-157.8	205.1	201.6	3.49	58.770	
1,100.0	1,096.3	1,065.0	1,061.7	2.3	2.2	149.17	-12.0	-170.9	231.3	227.4	3.86	59.905	
1,200.0	1,195.2	1,157.1	1,152.7	2.6	2.5	149.94	-13.9	-185.4	259.3	255.1	4.24	61.223	
1,300.0	1,294.0	1,248.4	1,242.6	2.9	2.8	150.49	-15.9	-201.2	288.9	284.3	4.61	62.625	
1,400.0	1,392.9	1,338.9	1,331.4	3.2	3.2	150.85	-18.1	-218.2	319.9	314.9	4.99	64.081	
1,500.0	1,491.8	1,428.4	1,419.0	3.5	3.5	151.08	-20.5	-236.4	352.4	347.0	5.37	65.573	
1,600.0	1,590.6	1,517.0	1,505.5	3.9	3.9	151.20	-23.0	-255.8	386.3	380.5	5.76	67.089	
1,700.0	1,689.5	1,604.7	1,590.7	4.2	4.3	151.25	-25.7	-276.2	421.5	415.4	6.14	68.622	
1,800.0	1,788.3	1,694.2	1,677.3	4.5	4.7	151.24	-28.5	-298.3	458.0	451.5	6.53	70.098	
1,900.0	1,887.2	1,787.2	1,767.4	4.8	5.1	151.22	-31.5	-321.5	494.7	487.8	6.93	71.353	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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	-100.7	100.7				
100.0	100.0	99.0	99.0	0.2	0.2	-90.00	0.0	-100.7	100.7	100.4	0.30	333.318	
200.0	200.0	199.0	199.0	0.3	0.3	-90.00	0.0	-100.7	100.7	100.1	0.65	154.712	CC, ES
300.0	300.0	299.0	299.0	0.5	0.5	142.60	0.0	-100.7	101.4	100.4	1.00	101.375	
400.0	400.0	397.2	397.2	0.7	0.7	143.48	0.1	-101.5	104.3	103.0	1.35	77.409	
500.0	499.9	495.1	495.1	0.9	0.8	144.86	0.3	-104.0	110.4	108.7	1.70	65.066	
600.0	599.7	592.7	592.6	1.1	1.0	146.56	0.7	-108.2	119.7	117.7	2.05	58.459	
700.0	699.4	689.7	689.4	1.3	1.2	148.37	1.2	-113.9	132.3	129.9	2.40	55.118	
800.0	798.9	786.0	785.4	1.5	1.4	150.14	1.9	-121.2	148.1	145.4	2.75	53.815	SF
900.0	898.3	881.4	880.4	1.8	1.6	151.78	2.7	-130.1	167.2	164.1	3.10	53.863	
1,000.0	997.4	975.8	974.2	2.0	1.9	153.24	3.7	-140.4	189.6	186.2	3.46	54.844	
1,100.0	1,096.3	1,069.1	1,066.8	2.3	2.1	154.53	4.8	-152.0	215.1	211.3	3.81	56.462	
1,200.0	1,195.2	1,161.5	1,158.2	2.6	2.4	155.58	6.0	-165.1	242.6	238.4	4.16	58.262	
1,300.0	1,294.0	1,253.0	1,248.7	2.9	2.7	156.38	7.3	-179.5	271.7	267.2	4.52	60.135	
1,400.0	1,392.9	1,343.7	1,338.0	3.2	3.0	156.96	8.8	-195.1	302.3	297.4	4.87	62.053	
1,500.0	1,491.8	1,435.0	1,427.6	3.5	3.3	157.40	10.4	-212.2	334.3	329.1	5.23	63.957	
1,600.0	1,590.6	1,529.6	1,520.4	3.9	3.6	157.77	12.1	-230.3	366.8	361.2	5.59	65.610	
1,700.0	1,689.5	1,624.1	1,613.2	4.2	4.0	158.08	13.8	-248.4	399.2	393.3	5.95	67.053	
1,800.0	1,788.3	1,718.7	1,706.0	4.5	4.3	158.34	15.5	-266.5	431.7	425.3	6.32	68.324	
1,900.0	1,887.2	1,813.3	1,798.9	4.8	4.7	158.57	17.2	-284.6	464.1	457.4	6.68	69.451	
2,000.0	1,986.0	1,907.9	1,891.7	5.1	5.0	158.76	18.8	-302.6	496.6	489.5	7.05	70.456	

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 3P-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 3P-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	-92.20	-3.6	-95.1	95.2				
100.0	100.0	99.0	99.0	0.2	0.2	-92.20	-3.6	-95.1	95.2	94.9	0.30	315.032	
200.0	200.0	199.0	199.0	0.3	0.3	-92.20	-3.6	-95.1	95.2	94.5	0.65	146.224	CC, ES
300.0	300.0	299.0	299.0	0.5	0.5	140.44	-3.6	-95.1	95.9	94.9	1.00	95.827	
400.0	400.0	399.0	399.0	0.7	0.7	141.40	-3.6	-95.1	97.9	96.5	1.35	72.451	
500.0	499.9	497.2	497.2	0.9	0.8	142.77	-3.9	-95.9	102.2	100.5	1.70	60.036	
600.0	599.7	595.1	595.1	1.1	1.0	144.28	-4.5	-98.3	109.5	107.5	2.05	53.305	
700.0	699.4	692.7	692.6	1.3	1.2	145.80	-5.5	-102.4	120.0	117.6	2.41	49.783	
800.0	798.9	789.7	789.4	1.5	1.4	147.20	-7.0	-107.9	133.6	130.8	2.77	48.236	
900.0	898.3	886.0	885.4	1.8	1.6	148.44	-8.9	-115.1	150.3	147.2	3.13	47.974	SF
1,000.0	997.4	981.5	980.5	2.0	1.8	149.48	-11.1	-123.6	170.1	166.6	3.50	48.578	
1,100.0	1,096.3	1,076.0	1,074.5	2.3	2.0	150.37	-13.7	-133.7	192.8	188.9	3.87	49.759	
1,200.0	1,195.2	1,169.9	1,167.6	2.6	2.3	151.00	-16.7	-145.1	217.3	213.1	4.25	51.091	
1,300.0	1,294.0	1,263.0	1,259.8	2.9	2.5	151.36	-20.1	-157.9	243.4	238.7	4.64	52.470	
1,400.0	1,392.9	1,355.4	1,351.0	3.2	2.8	151.51	-23.7	-172.0	270.8	265.8	5.03	53.873	
1,500.0	1,491.8	1,448.4	1,442.6	3.5	3.1	151.51	-27.8	-187.6	299.6	294.1	5.42	55.260	
1,600.0	1,590.6	1,544.1	1,536.7	3.9	3.4	151.49	-32.1	-203.9	328.6	322.8	5.82	56.436	
1,700.0	1,689.5	1,639.7	1,630.9	4.2	3.7	151.47	-36.4	-220.3	357.7	351.5	6.23	57.443	
1,800.0	1,788.3	1,735.4	1,725.1	4.5	4.1	151.45	-40.6	-236.7	386.8	380.2	6.63	58.313	
1,900.0	1,887.2	1,831.1	1,819.2	4.8	4.4	151.44	-44.9	-253.0	415.9	408.9	7.04	59.072	
2,000.0	1,986.0	1,926.8	1,913.4	5.1	4.7	151.43	-49.2	-269.4	445.0	437.6	7.45	59.739	
2,100.0	2,084.9	2,022.4	2,007.6	5.4	5.0	151.41	-53.5	-285.7	474.1	466.2	7.86	60.330	

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 3P-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 3P-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	-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	CC, ES
300.0	300.0	299.0	299.0	0.5	0.5	142.64	0.0	-89.5	90.2	89.2	1.00	90.188	
400.0	400.0	399.0	399.0	0.7	0.7	143.61	0.0	-89.5	92.3	91.0	1.35	68.332	
500.0	499.9	498.9	498.9	0.9	0.8	145.14	0.0	-89.5	95.9	94.2	1.70	56.270	
600.0	599.7	597.0	597.0	1.1	1.0	147.09	0.1	-90.3	101.8	99.7	2.06	49.513	
700.0	699.4	694.6	694.6	1.3	1.2	149.30	0.5	-92.8	111.0	108.6	2.41	46.087	
800.0	798.9	791.7	791.6	1.5	1.4	151.54	1.2	-96.9	123.5	120.8	2.76	44.758	SF
900.0	898.3	888.1	887.8	1.8	1.6	153.63	2.1	-102.5	139.5	136.4	3.11	44.831	
1,000.0	997.4	983.6	983.1	2.0	1.7	155.48	3.3	-109.7	158.8	155.4	3.46	45.882	
1,100.0	1,096.3	1,078.1	1,077.1	2.3	2.0	157.09	4.7	-118.3	181.4	177.6	3.81	47.606	
1,200.0	1,195.2	1,173.1	1,171.6	2.6	2.2	158.39	6.4	-128.4	205.9	201.7	4.16	49.474	
1,300.0	1,294.0	1,269.9	1,267.8	2.9	2.4	159.43	8.1	-138.9	230.7	226.2	4.52	51.102	
1,400.0	1,392.9	1,366.7	1,364.0	3.2	2.6	160.26	9.9	-149.5	255.7	250.8	4.87	52.505	
1,500.0	1,491.8	1,463.5	1,460.2	3.5	2.9	160.95	11.6	-160.1	280.6	275.4	5.22	53.725	
1,600.0	1,590.6	1,560.3	1,556.4	3.9	3.1	161.52	13.3	-170.6	305.6	300.0	5.58	54.794	
1,700.0	1,689.5	1,657.0	1,652.5	4.2	3.3	162.01	15.1	-181.2	330.6	324.7	5.93	55.738	
1,800.0	1,788.3	1,753.8	1,748.7	4.5	3.6	162.43	16.8	-191.8	355.7	349.4	6.29	56.577	
1,900.0	1,887.2	1,850.6	1,844.9	4.8	3.8	162.79	18.5	-202.3	380.7	374.1	6.64	57.327	
2,000.0	1,986.0	1,947.4	1,941.1	5.1	4.1	163.11	20.3	-212.9	405.8	398.8	7.00	58.002	
2,100.0	2,084.9	2,044.2	2,037.3	5.4	4.3	163.39	22.0	-223.4	430.8	423.5	7.35	58.612	
2,200.0	2,183.8	2,141.0	2,133.5	5.7	4.6	163.64	23.7	-234.0	455.9	448.2	7.71	59.166	
2,300.0	2,282.6	2,237.8	2,229.7	6.0	4.8	163.87	25.5	-244.6	481.0	473.0	8.06	59.671	

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 3P-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 3P-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	-92.77	-3.7	-75.5	75.6				
100.0	100.0	100.0	100.0	0.2	0.2	-92.77	-3.7	-75.5	75.6	75.3	0.30	249.029	
200.0	200.0	200.0	200.0	0.3	0.3	-92.77	-3.7	-75.5	75.6	75.0	0.65	115.859	CC, ES
300.0	300.0	300.0	300.0	0.5	0.5	139.96	-3.7	-75.5	76.3	75.3	1.00	76.130	
400.0	400.0	400.0	400.0	0.7	0.7	141.18	-3.7	-75.5	78.3	77.0	1.35	57.884	
500.0	499.9	499.9	499.9	0.9	0.8	143.07	-3.7	-75.5	81.8	80.1	1.71	47.924	
600.0	599.7	599.7	599.7	1.1	1.0	145.47	-3.7	-75.5	86.7	84.7	2.06	42.071	
700.0	699.4	697.8	697.8	1.3	1.2	148.27	-3.3	-76.3	94.1	91.7	2.42	38.965	
800.0	798.9	795.5	795.4	1.5	1.4	151.33	-2.3	-78.6	104.9	102.1	2.77	37.886	SF
900.0	898.3	892.8	892.7	1.8	1.5	154.31	-0.7	-82.4	119.1	115.9	3.12	38.175	
1,000.0	997.4	991.3	991.0	2.0	1.7	157.01	1.1	-86.7	135.6	132.2	3.47	39.094	
1,100.0	1,096.3	1,089.4	1,089.0	2.3	1.9	159.34	2.9	-91.0	153.9	150.1	3.82	40.325	
1,200.0	1,195.2	1,187.4	1,187.0	2.6	2.1	161.26	4.7	-95.3	172.8	168.7	4.17	41.482	
1,300.0	1,294.0	1,285.5	1,284.9	2.9	2.3	162.80	6.5	-99.6	191.9	187.4	4.51	42.506	
1,400.0	1,392.9	1,383.5	1,382.9	3.2	2.5	164.05	8.4	-103.9	211.0	206.2	4.86	43.413	
1,500.0	1,491.8	1,481.6	1,480.8	3.5	2.6	165.10	10.2	-108.2	230.3	225.0	5.21	44.221	
1,600.0	1,590.6	1,579.6	1,578.7	3.9	2.8	165.99	12.0	-112.5	249.5	244.0	5.55	44.943	
1,700.0	1,689.5	1,677.7	1,676.7	4.2	3.0	166.75	13.8	-116.7	268.9	263.0	5.90	45.590	
1,800.0	1,788.3	1,775.8	1,774.6	4.5	3.2	167.41	15.6	-121.0	288.3	282.0	6.24	46.174	
1,900.0	1,887.2	1,873.8	1,872.6	4.8	3.4	167.99	17.5	-125.3	307.7	301.1	6.59	46.702	
2,000.0	1,986.0	1,971.9	1,970.5	5.1	3.6	168.50	19.3	-129.6	327.1	320.2	6.93	47.182	
2,100.0	2,084.9	2,069.9	2,068.5	5.4	3.8	168.95	21.1	-133.9	346.6	339.3	7.28	47.620	
2,200.0	2,183.8	2,168.0	2,166.4	5.7	4.0	169.35	22.9	-138.2	366.1	358.5	7.62	48.021	
2,300.0	2,282.6	2,266.0	2,264.3	6.0	4.1	169.71	24.7	-142.5	385.6	377.6	7.97	48.389	
2,400.0	2,381.5	2,364.1	2,362.3	6.4	4.3	170.04	26.6	-146.8	405.1	396.8	8.31	48.729	
2,500.0	2,480.3	2,462.1	2,460.2	6.7	4.5	170.33	28.4	-151.1	424.6	415.9	8.66	49.042	
2,600.0	2,579.2	2,560.2	2,558.2	7.0	4.7	170.61	30.2	-155.4	444.1	435.1	9.00	49.333	
2,700.0	2,678.0	2,658.2	2,656.1	7.3	4.9	170.85	32.0	-159.7	463.7	454.3	9.35	49.603	
2,800.0	2,776.9	2,756.3	2,754.1	7.6	5.1	171.08	33.8	-164.0	483.2	473.5	9.69	49.855	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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	-69.9	69.9				
100.0	100.0	100.0	100.0	0.2	0.2	-90.01	0.0	-69.9	69.9	69.6	0.30	230.314	
200.0	200.0	200.0	200.0	0.3	0.3	-90.01	0.0	-69.9	69.9	69.3	0.65	107.151	CC, ES
300.0	300.0	300.0	300.0	0.5	0.5	142.73	0.0	-69.9	70.6	69.6	1.00	70.488	
400.0	400.0	400.0	400.0	0.7	0.7	143.96	0.0	-69.9	72.7	71.4	1.35	53.773	
500.0	499.9	499.9	499.9	0.9	0.8	145.87	0.0	-69.9	76.3	74.6	1.71	44.753	
600.0	599.7	599.7	599.7	1.1	1.0	148.25	0.0	-69.9	81.4	79.4	2.06	39.547	
700.0	699.4	699.4	699.4	1.3	1.2	150.90	0.0	-69.9	88.2	85.8	2.41	36.537	
800.0	798.9	798.9	798.9	1.5	1.4	153.62	0.0	-69.9	96.7	93.9	2.77	34.923	
900.0	898.3	898.3	898.3	1.8	1.5	156.27	0.0	-69.9	107.0	103.8	3.12	34.260	SF
1,000.0	997.4	997.4	997.4	2.0	1.7	158.75	0.0	-69.9	119.0	115.6	3.47	34.274	
1,100.0	1,096.3	1,096.3	1,096.3	2.3	1.9	161.02	0.0	-69.9	132.9	129.0	3.82	34.755	
1,200.0	1,195.2	1,195.2	1,195.2	2.6	2.1	162.92	0.0	-69.9	147.2	143.0	4.17	35.282	
1,300.0	1,294.0	1,294.0	1,294.0	2.9	2.2	164.49	0.0	-69.9	161.7	157.2	4.52	35.768	
1,400.0	1,392.9	1,392.9	1,392.9	3.2	2.4	165.80	0.0	-69.9	176.3	171.4	4.87	36.212	
1,500.0	1,491.8	1,491.8	1,491.8	3.5	2.6	166.91	0.0	-69.9	190.9	185.7	5.21	36.616	
1,600.0	1,590.6	1,590.6	1,590.6	3.9	2.8	167.86	0.0	-69.9	205.6	200.1	5.56	36.984	
1,700.0	1,689.5	1,689.5	1,689.5	4.2	2.9	168.68	0.0	-69.9	220.4	214.5	5.91	37.319	
1,800.0	1,788.3	1,788.3	1,788.3	4.5	3.1	169.40	0.0	-69.9	235.2	228.9	6.25	37.625	
1,900.0	1,887.2	1,887.2	1,887.2	4.8	3.3	170.04	0.0	-69.9	250.0	243.4	6.60	37.904	
2,000.0	1,986.0	1,986.0	1,986.0	5.1	3.4	170.60	0.0	-69.9	264.9	257.9	6.94	38.159	
2,100.0	2,084.9	2,084.9	2,084.9	5.4	3.6	171.11	0.0	-69.9	279.8	272.5	7.29	38.394	
2,200.0	2,183.8	2,183.8	2,183.8	5.7	3.8	171.56	0.0	-69.9	294.7	287.0	7.63	38.611	
2,300.0	2,282.6	2,282.6	2,282.6	6.0	4.0	171.97	0.0	-69.9	309.6	301.6	7.98	38.810	
2,400.0	2,381.5	2,381.5	2,381.5	6.4	4.1	172.34	0.0	-69.9	324.5	316.2	8.32	38.995	
2,500.0	2,480.3	2,480.3	2,480.3	6.7	4.3	172.68	0.0	-69.9	339.5	330.8	8.67	39.166	
2,600.0	2,579.2	2,579.2	2,579.2	7.0	4.5	172.99	0.0	-69.9	354.4	345.4	9.01	39.325	
2,700.0	2,678.0	2,678.0	2,678.0	7.3	4.7	173.27	0.0	-69.9	369.4	360.0	9.36	39.474	
2,800.0	2,776.9	2,776.9	2,776.9	7.6	4.8	173.54	0.0	-69.9	384.4	374.7	9.70	39.612	
2,900.0	2,875.8	2,875.8	2,875.8	7.9	5.0	173.78	0.0	-69.9	399.3	389.3	10.05	39.742	
3,000.0	2,974.6	2,974.6	2,974.6	8.3	5.2	174.01	0.0	-69.9	414.3	403.9	10.39	39.864	
3,100.0	3,073.5	3,073.5	3,073.5	8.6	5.3	174.22	0.0	-69.9	429.3	418.6	10.74	39.978	
3,200.0	3,172.3	3,172.3	3,172.3	8.9	5.5	174.41	0.0	-69.9	444.3	433.2	11.08	40.085	
3,300.0	3,271.2	3,271.2	3,271.2	9.2	5.7	174.60	0.0	-69.9	459.3	447.9	11.43	40.186	
3,400.0	3,370.1	3,370.1	3,370.1	9.5	5.9	174.77	0.0	-69.9	474.3	462.5	11.77	40.282	
3,500.0	3,468.9	3,468.9	3,468.9	9.8	6.0	174.93	0.0	-69.9	489.3	477.2	12.12	40.372	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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	-93.24	-3.6	-64.3	64.5				
100.0	100.0	100.0	100.0	0.2	0.2	-93.24	-3.6	-64.3	64.5	64.1	0.30	212.229	
200.0	200.0	200.0	200.0	0.3	0.3	-93.24	-3.6	-64.3	64.5	63.8	0.65	98.738	CC, ES
300.0	300.0	300.0	300.0	0.5	0.5	139.56	-3.6	-64.3	65.1	64.1	1.00	64.973	
400.0	400.0	400.0	400.0	0.7	0.7	141.00	-3.6	-64.3	67.1	65.8	1.35	49.613	
500.0	499.9	499.9	499.9	0.9	0.8	143.21	-3.6	-64.3	70.6	68.9	1.71	41.366	
600.0	599.7	601.0	601.0	1.1	1.0	146.07	-3.6	-63.5	74.7	72.6	2.06	36.195	
700.0	699.4	702.1	702.1	1.3	1.2	149.50	-3.5	-60.8	78.7	76.3	2.42	32.506	
800.0	798.9	802.9	802.8	1.5	1.4	153.40	-3.3	-56.4	82.9	80.1	2.78	29.836	
900.0	898.3	902.6	902.3	1.8	1.6	157.41	-3.0	-51.6	88.5	85.4	3.13	28.287	
1,000.0	997.4	1,002.1	1,001.7	2.0	1.8	161.25	-2.8	-46.8	96.2	92.7	3.48	27.661	SF
1,100.0	1,096.3	1,101.4	1,101.0	2.3	1.9	164.76	-2.6	-42.0	105.9	102.0	3.83	27.675	
1,200.0	1,195.2	1,200.7	1,200.1	2.6	2.1	167.73	-2.3	-37.1	116.2	112.0	4.17	27.848	
1,300.0	1,294.0	1,300.0	1,299.3	2.9	2.3	170.21	-2.1	-32.3	126.8	122.3	4.52	28.051	
1,400.0	1,392.9	1,399.3	1,398.5	3.2	2.5	172.31	-1.9	-27.5	137.6	132.8	4.87	28.260	
1,500.0	1,491.8	1,498.6	1,497.7	3.5	2.7	174.10	-1.6	-22.7	148.6	143.4	5.22	28.463	
1,600.0	1,590.6	1,597.9	1,596.9	3.9	2.9	175.64	-1.4	-17.9	159.7	154.1	5.57	28.655	
1,700.0	1,689.5	1,697.2	1,696.0	4.2	3.1	176.98	-1.2	-13.1	170.9	165.0	5.93	28.834	
1,800.0	1,788.3	1,796.5	1,795.2	4.5	3.3	178.16	-0.9	-8.3	182.1	175.9	6.28	28.999	
1,900.0	1,887.2	1,895.8	1,894.4	4.8	3.5	179.20	-0.7	-3.5	193.5	186.8	6.64	29.150	
2,000.0	1,986.0	1,995.1	1,993.6	5.1	3.7	-179.88	-0.5	1.3	204.9	197.9	7.00	29.288	
2,100.0	2,084.9	2,094.4	2,092.8	5.4	3.8	-179.05	-0.2	6.1	216.3	209.0	7.35	29.414	
2,200.0	2,183.8	2,193.7	2,191.9	5.7	4.0	-178.31	0.0	10.9	227.8	220.1	7.71	29.530	
2,300.0	2,282.6	2,293.0	2,291.1	6.0	4.2	-177.64	0.2	15.7	239.3	231.2	8.08	29.635	
2,400.0	2,381.5	2,392.3	2,390.3	6.4	4.4	-177.03	0.5	20.5	250.9	242.4	8.44	29.732	
2,500.0	2,480.3	2,491.6	2,489.5	6.7	4.6	-176.47	0.7	25.4	262.4	253.6	8.80	29.820	
2,600.0	2,579.2	2,590.9	2,588.7	7.0	4.8	-175.96	0.9	30.2	274.0	264.9	9.16	29.902	
2,700.0	2,678.0	2,690.2	2,687.9	7.3	5.0	-175.49	1.2	35.0	285.6	276.1	9.53	29.977	
2,800.0	2,776.9	2,789.5	2,787.0	7.6	5.2	-175.06	1.4	39.8	297.3	287.4	9.89	30.046	
2,900.0	2,875.8	2,888.8	2,886.2	7.9	5.4	-174.66	1.6	44.6	308.9	298.6	10.26	30.111	
3,000.0	2,974.6	2,988.1	2,985.4	8.3	5.6	-174.29	1.8	49.4	320.6	309.9	10.63	30.170	
3,100.0	3,073.5	3,087.4	3,084.6	8.6	5.8	-173.95	2.1	54.2	332.2	321.2	10.99	30.226	
3,200.0	3,172.3	3,186.7	3,183.8	8.9	6.0	-173.63	2.3	59.0	343.9	332.6	11.36	30.277	
3,300.0	3,271.2	3,286.0	3,282.9	9.2	6.2	-173.33	2.5	63.8	355.6	343.9	11.73	30.325	
3,400.0	3,370.1	3,385.3	3,382.1	9.5	6.3	-173.05	2.8	68.6	367.3	355.2	12.09	30.370	
3,500.0	3,468.9	3,484.6	3,481.3	9.8	6.5	-172.78	3.0	73.4	379.0	366.6	12.46	30.412	
3,600.0	3,567.8	3,583.9	3,580.5	10.1	6.7	-172.54	3.2	78.2	390.7	377.9	12.83	30.452	
3,700.0	3,666.6	3,683.2	3,679.7	10.5	6.9	-172.30	3.5	83.0	402.5	389.3	13.20	30.489	
3,800.0	3,765.5	3,782.5	3,778.8	10.8	7.1	-172.08	3.7	87.9	414.2	400.6	13.57	30.523	
3,900.0	3,864.3	3,881.8	3,878.0	11.1	7.3	-171.88	3.9	92.7	425.9	412.0	13.94	30.556	
4,000.0	3,963.2	3,981.1	3,977.2	11.4	7.5	-171.68	4.2	97.5	437.7	423.3	14.31	30.587	
4,100.0	4,062.1	4,080.4	4,076.4	11.7	7.7	-171.49	4.4	102.3	449.4	434.7	14.68	30.617	
4,200.0	4,160.9	4,179.7	4,175.6	12.0	7.9	-171.32	4.6	107.1	461.2	446.1	15.05	30.644	
4,300.0	4,259.8	4,279.0	4,274.7	12.4	8.1	-171.15	4.9	111.9	472.9	457.5	15.42	30.671	
4,400.0	4,358.6	4,378.3	4,373.9	12.7	8.3	-170.99	5.1	116.7	484.7	468.9	15.79	30.695	
4,500.0	4,457.5	4,477.6	4,473.1	13.0	8.5	-170.84	5.3	121.5	496.4	480.3	16.16	30.719	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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	-58.8	58.8				
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-58.8	58.8	58.4	0.30	193.464	
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-58.8	58.8	58.1	0.65	90.007	CC, ES
300.0	300.0	300.0	300.0	0.5	0.5	142.81	0.0	-58.8	59.4	58.4	1.00	59.321	
400.0	400.0	400.5	400.5	0.7	0.7	144.31	0.0	-58.5	61.3	60.0	1.35	45.312	
500.0	499.9	501.5	501.5	0.9	0.9	146.81	0.2	-56.8	63.2	61.5	1.71	36.997	
600.0	599.7	602.6	602.5	1.1	1.0	150.27	0.4	-53.2	64.9	62.9	2.06	31.466	
700.0	699.4	703.5	703.3	1.3	1.2	154.62	0.8	-47.9	66.8	64.4	2.42	27.598	
800.0	798.9	804.5	804.0	1.5	1.4	159.77	1.4	-40.8	69.0	66.2	2.78	24.849	
900.0	898.3	905.3	904.4	1.8	1.7	165.56	2.1	-31.9	71.8	68.7	3.13	22.909	
1,000.0	997.4	1,005.5	1,004.1	2.0	1.9	171.71	2.9	-21.6	75.7	72.2	3.50	21.623	
1,100.0	1,096.3	1,105.1	1,103.1	2.3	2.1	177.35	3.7	-11.0	81.8	77.9	3.88	21.076	
1,200.0	1,195.2	1,204.5	1,202.0	2.6	2.4	-177.83	4.5	-0.4	88.9	84.6	4.28	20.780	
1,300.0	1,294.0	1,304.0	1,300.9	2.9	2.6	-173.74	5.4	10.2	96.6	91.9	4.69	20.574	
1,400.0	1,392.9	1,403.5	1,399.8	3.2	2.8	-170.27	6.2	20.8	104.7	99.5	5.13	20.421	
1,500.0	1,491.8	1,503.0	1,498.7	3.5	3.1	-167.31	7.0	31.4	113.1	107.5	5.57	20.302	
1,600.0	1,590.6	1,602.5	1,597.7	3.9	3.3	-164.76	7.8	42.0	121.8	115.8	6.03	20.207	
1,700.0	1,689.5	1,702.0	1,696.6	4.2	3.6	-162.56	8.6	52.6	130.7	124.2	6.49	20.129	
1,800.0	1,788.3	1,801.5	1,795.5	4.5	3.8	-160.63	9.5	63.2	139.7	132.8	6.96	20.064	
1,900.0	1,887.2	1,900.9	1,894.4	4.8	4.1	-158.95	10.3	73.8	148.9	141.5	7.44	20.010	
2,000.0	1,986.0	2,000.4	1,993.3	5.1	4.3	-157.46	11.1	84.4	158.2	150.3	7.93	19.964	
2,100.0	2,084.9	2,099.9	2,092.2	5.4	4.6	-156.13	11.9	95.0	167.6	159.2	8.41	19.926	
2,200.0	2,183.8	2,199.4	2,191.2	5.7	4.8	-154.95	12.8	105.6	177.1	168.2	8.90	19.893	
2,300.0	2,282.6	2,298.9	2,290.1	6.0	5.1	-153.88	13.6	116.2	186.7	177.3	9.40	19.866	
2,400.0	2,381.5	2,398.4	2,389.0	6.4	5.3	-152.93	14.4	126.8	196.3	186.4	9.89	19.842	
2,500.0	2,480.3	2,497.9	2,487.9	6.7	5.6	-152.06	15.2	137.4	205.9	195.6	10.39	19.822	
2,600.0	2,579.2	2,597.3	2,586.8	7.0	5.8	-151.26	16.1	148.0	215.6	204.8	10.89	19.805	
2,700.0	2,678.0	2,696.8	2,685.7	7.3	6.1	-150.54	16.9	158.6	225.4	214.0	11.39	19.791	
2,800.0	2,776.9	2,796.3	2,784.7	7.6	6.4	-149.88	17.7	169.2	235.2	223.3	11.89	19.778	
2,900.0	2,875.8	2,895.8	2,883.6	7.9	6.6	-149.27	18.5	179.8	245.0	232.6	12.39	19.768	
3,000.0	2,974.6	2,995.3	2,982.5	8.3	6.9	-148.70	19.3	190.4	254.8	241.9	12.89	19.759	
3,100.0	3,073.5	3,094.8	3,081.4	8.6	7.1	-148.18	20.2	201.0	264.6	251.2	13.40	19.751	
3,200.0	3,172.3	3,194.3	3,180.3	8.9	7.4	-147.70	21.0	211.6	274.5	260.6	13.90	19.744	
3,300.0	3,271.2	3,293.8	3,279.2	9.2	7.6	-147.25	21.8	222.2	284.4	270.0	14.41	19.739	
3,400.0	3,370.1	3,393.2	3,378.2	9.5	7.9	-146.83	22.6	232.8	294.3	279.4	14.91	19.734	
3,500.0	3,468.9	3,492.7	3,477.1	9.8	8.1	-146.44	23.5	243.3	304.2	288.8	15.42	19.730	
3,600.0	3,567.8	3,592.2	3,576.0	10.1	8.4	-146.07	24.3	253.9	314.1	298.2	15.92	19.726	
3,700.0	3,666.6	3,691.7	3,674.9	10.5	8.6	-145.72	25.1	264.5	324.1	307.6	16.43	19.724	
3,800.0	3,765.5	3,791.2	3,773.8	10.8	8.9	-145.40	25.9	275.1	334.0	317.1	16.94	19.721	
3,900.0	3,864.3	3,890.7	3,872.7	11.1	9.1	-145.09	26.7	285.7	344.0	326.5	17.44	19.719	
4,000.0	3,963.2	3,990.2	3,971.7	11.4	9.4	-144.80	27.6	296.3	354.0	336.0	17.95	19.718	
4,100.0	4,062.1	4,089.6	4,070.6	11.7	9.7	-144.53	28.4	306.9	363.9	345.5	18.46	19.717	
4,200.0	4,160.9	4,189.1	4,169.5	12.0	9.9	-144.27	29.2	317.5	373.9	355.0	18.97	19.716	
4,300.0	4,259.8	4,288.6	4,268.4	12.4	10.2	-144.03	30.0	328.1	383.9	364.5	19.47	19.715	
4,400.0	4,358.6	4,388.1	4,367.3	12.7	10.4	-143.79	30.9	338.7	393.9	373.9	19.98	19.715	
4,500.0	4,457.5	4,487.6	4,466.2	13.0	10.7	-143.57	31.7	349.3	403.9	383.4	20.49	19.714	
4,600.0	4,556.3	4,587.1	4,565.2	13.3	10.9	-143.36	32.5	359.9	414.0	393.0	21.00	19.714	
4,700.0	4,655.2	4,686.6	4,664.1	13.6	11.2	-143.16	33.3	370.5	424.0	402.5	21.51	19.714	
4,800.0	4,754.1	4,786.0	4,763.0	13.9	11.4	-142.97	34.2	381.1	434.0	412.0	22.01	19.714	
4,900.0	4,852.9	4,885.5	4,861.9	14.3	11.7	-142.79	35.0	391.7	444.0	421.5	22.52	19.715	
5,000.0	4,951.8	4,985.0	4,960.8	14.6	11.9	-142.61	35.8	402.3	454.1	431.0	23.03	19.715	
5,100.0	5,050.6	5,084.5	5,059.7	14.9	12.2	-142.45	36.6	412.9	464.1	440.6	23.54	19.716	

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 3P-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 3P-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
5,200.0	5,149.5	5,184.0	5,158.7	15.2	12.4	-142.29	37.4	423.5	474.1	450.1	24.05	19.716	
5,300.0	5,248.4	5,283.5	5,257.6	15.5	12.7	-142.13	38.3	434.1	484.2	459.6	24.56	19.717	
5,400.0	5,347.2	5,383.0	5,356.5	15.8	13.0	-141.99	39.1	444.7	494.2	469.2	25.07	19.717	
7,200.0	7,112.4	7,784.6	7,575.7	20.5	19.8	-137.18	-335.4	682.4	497.8	462.7	35.10	14.181	
7,300.0	7,192.0	7,694.3	7,540.2	20.3	19.3	-130.40	-252.6	678.6	406.1	374.0	32.10	12.654	
7,400.0	7,260.1	7,630.9	7,507.7	20.0	18.9	-127.23	-198.2	675.1	318.9	289.3	29.65	10.755	
7,500.0	7,314.7	7,574.1	7,473.7	19.8	18.7	-121.78	-152.9	671.5	240.3	212.7	27.68	8.684	
7,600.0	7,354.0	7,519.9	7,437.3	19.7	18.5	-112.27	-113.0	667.6	179.0	152.3	26.72	6.700	
7,700.0	7,376.9	7,467.0	7,398.4	19.7	18.3	-97.84	-77.6	663.4	151.6	125.0	26.62	5.694	
7,709.5	7,378.2	7,462.1	7,394.6	19.7	18.3	-96.24	-74.4	663.0	151.4	124.7	26.61	5.687	SF
7,800.0	7,383.0	7,415.1	7,357.1	19.8	18.1	-80.51	-46.4	659.0	169.0	143.0	26.01	6.499	
7,900.0	7,383.0	7,371.1	7,320.0	20.0	18.0	-68.38	-23.0	655.0	220.2	195.2	24.99	8.813	
8,000.0	7,383.0	7,336.3	7,289.5	20.4	17.9	-60.05	-6.6	651.7	290.7	266.5	24.23	11.999	
8,100.0	7,383.0	7,300.0	7,256.7	21.0	17.8	-52.70	8.4	648.2	371.2	347.7	23.52	15.781	
8,200.0	7,383.0	7,285.5	7,243.3	21.6	17.8	-50.13	13.9	646.8	457.1	433.3	23.74	19.254	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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	-94.66	-3.6	-44.8	44.9				
100.0	100.0	100.0	100.0	0.2	0.2	-94.66	-3.6	-44.8	44.9	44.6	0.30	147.889	
200.0	200.0	200.0	200.0	0.3	0.3	-94.66	-3.6	-44.8	44.9	44.3	0.65	68.804	CC, ES
300.0	300.0	299.2	299.2	0.5	0.5	138.05	-4.0	-45.6	46.4	45.4	1.00	46.344	
400.0	400.0	398.3	398.3	0.7	0.7	139.12	-4.9	-48.0	50.8	49.5	1.35	37.621	
500.0	499.9	497.2	497.0	0.9	0.9	140.53	-6.5	-51.9	58.2	56.5	1.70	34.175	
600.0	599.7	595.6	595.3	1.1	1.1	141.98	-8.7	-57.5	68.6	66.6	2.06	33.295	SF
700.0	699.4	693.5	692.9	1.3	1.3	143.29	-11.4	-64.5	82.1	79.6	2.43	33.831	
800.0	798.9	790.7	789.6	1.5	1.5	144.39	-14.8	-73.1	98.4	95.6	2.80	35.208	
900.0	898.3	887.1	885.5	1.8	1.7	145.28	-18.7	-83.1	117.8	114.6	3.17	37.099	
1,000.0	997.4	982.7	980.2	2.0	2.0	145.98	-23.2	-94.4	140.0	136.5	3.56	39.308	
1,100.0	1,096.3	1,077.2	1,073.8	2.3	2.3	146.56	-28.2	-107.1	165.1	161.1	3.96	41.691	
1,200.0	1,195.2	1,170.9	1,166.3	2.6	2.6	146.90	-33.7	-121.1	191.9	187.5	4.37	43.948	
1,300.0	1,294.0	1,263.9	1,257.8	2.9	2.9	146.96	-39.8	-136.4	220.1	215.3	4.78	46.053	
1,400.0	1,392.9	1,356.0	1,348.2	3.2	3.2	146.86	-46.3	-152.9	249.7	244.5	5.20	48.035	
1,500.0	1,491.8	1,447.4	1,437.5	3.5	3.6	146.63	-53.2	-170.6	280.6	275.0	5.62	49.917	
1,600.0	1,590.6	1,537.8	1,525.7	3.9	4.0	146.32	-60.7	-189.4	312.9	306.9	6.05	51.718	
1,700.0	1,689.5	1,627.3	1,612.6	4.2	4.4	145.97	-68.5	-209.3	346.6	340.1	6.48	53.463	
1,800.0	1,788.3	1,720.7	1,703.1	4.5	4.8	145.60	-77.0	-230.8	381.0	374.1	6.93	55.009	
1,900.0	1,887.2	1,814.6	1,794.0	4.8	5.2	145.29	-85.5	-252.5	415.4	408.1	7.37	56.355	
2,000.0	1,986.0	1,908.4	1,884.9	5.1	5.7	145.03	-94.1	-274.2	449.9	442.1	7.82	57.540	
2,100.0	2,084.9	2,002.3	1,975.9	5.4	6.1	144.81	-102.6	-295.8	484.4	476.1	8.27	58.591	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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	-39.2	39.2				
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-39.2	39.2	38.9	0.30	128.976	
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-39.2	39.2	38.5	0.65	60.005	CC, ES
300.0	300.0	299.7	299.7	0.5	0.5	142.92	-0.1	-39.4	40.1	39.1	1.00	39.992	
400.0	400.0	399.0	399.0	0.7	0.7	143.91	-0.9	-40.9	43.7	42.3	1.35	32.328	
500.0	499.9	498.0	498.0	0.9	0.9	144.92	-2.4	-44.0	50.3	48.6	1.70	29.491	
600.0	599.7	596.8	596.6	1.1	1.0	145.77	-4.7	-48.5	59.8	57.7	2.06	28.986	SF
700.0	699.4	695.0	694.6	1.3	1.2	146.42	-7.8	-54.6	72.2	69.8	2.43	29.758	
800.0	798.9	792.7	791.9	1.5	1.5	146.89	-11.6	-62.1	87.5	84.7	2.80	31.276	
900.0	898.3	889.6	888.3	1.8	1.7	147.21	-16.1	-71.0	105.7	102.6	3.18	33.245	
1,000.0	997.4	985.7	983.7	2.0	1.9	147.41	-21.3	-81.3	126.8	123.2	3.57	35.482	
1,100.0	1,096.3	1,080.9	1,078.0	2.3	2.2	147.55	-27.2	-92.8	150.5	146.6	3.98	37.855	
1,200.0	1,195.2	1,175.4	1,171.3	2.6	2.5	147.50	-33.7	-105.7	176.0	171.6	4.39	40.067	
1,300.0	1,294.0	1,269.1	1,263.7	2.9	2.8	147.22	-40.8	-119.8	202.8	197.9	4.82	42.102	
1,400.0	1,392.9	1,362.1	1,355.1	3.2	3.1	146.80	-48.6	-135.2	230.9	225.6	5.25	43.996	
1,500.0	1,491.8	1,454.3	1,445.4	3.5	3.5	146.28	-56.9	-151.7	260.3	254.6	5.68	45.793	
1,600.0	1,590.6	1,549.4	1,538.5	3.9	3.8	145.77	-65.9	-169.4	290.5	284.3	6.13	47.363	
1,700.0	1,689.5	1,644.8	1,631.7	4.2	4.2	145.36	-74.9	-187.2	320.6	314.1	6.58	48.706	
1,800.0	1,788.3	1,740.1	1,724.9	4.5	4.6	145.01	-83.9	-205.0	350.8	343.8	7.04	49.868	
1,900.0	1,887.2	1,835.4	1,818.1	4.8	5.0	144.72	-92.9	-222.8	381.0	373.5	7.49	50.881	
2,000.0	1,986.0	1,930.7	1,911.3	5.1	5.3	144.48	-101.9	-240.6	411.2	403.3	7.94	51.773	
2,100.0	2,084.9	2,026.0	2,004.5	5.4	5.7	144.26	-110.9	-258.4	441.4	433.0	8.40	52.564	
2,200.0	2,183.8	2,121.3	2,097.7	5.7	6.1	144.08	-119.9	-276.2	471.6	462.8	8.85	53.269	

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 3P-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 3P-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	-96.19	-3.6	-33.6	33.8				
100.0	100.0	100.0	100.0	0.2	0.2	-96.19	-3.6	-33.6	33.8	33.5	0.30	111.199	
200.0	200.0	200.0	200.0	0.3	0.3	-96.19	-3.6	-33.6	33.8	33.1	0.65	51.735	CC, ES
300.0	300.0	300.0	300.0	0.5	0.5	137.12	-3.6	-33.6	34.4	33.4	1.00	34.329	
400.0	400.0	399.7	399.7	0.7	0.7	139.72	-3.8	-33.7	36.5	35.2	1.35	27.020	
500.0	499.9	499.0	499.0	0.9	0.8	142.30	-4.8	-35.2	41.4	39.7	1.71	24.269	
600.0	599.7	598.1	598.0	1.1	1.0	144.29	-6.7	-38.0	49.1	47.0	2.06	23.804	SF
700.0	699.4	696.8	696.5	1.3	1.2	145.62	-9.6	-42.2	59.6	57.2	2.43	24.582	
800.0	798.9	795.0	794.5	1.5	1.4	146.43	-13.5	-47.7	72.9	70.1	2.80	26.079	
900.0	898.3	892.6	891.8	1.8	1.6	146.87	-18.3	-54.6	89.0	85.8	3.18	28.001	
1,000.0	997.4	989.5	988.2	2.0	1.8	147.05	-24.0	-62.8	107.8	104.2	3.57	30.170	
1,100.0	1,096.3	1,085.7	1,083.7	2.3	2.1	147.10	-30.6	-72.3	129.2	125.3	3.98	32.455	
1,200.0	1,195.2	1,181.2	1,178.3	2.6	2.4	146.87	-38.1	-83.0	152.2	147.8	4.40	34.560	
1,300.0	1,294.0	1,276.3	1,272.3	2.9	2.6	146.37	-46.4	-94.9	176.5	171.6	4.84	36.477	
1,400.0	1,392.9	1,373.2	1,367.9	3.2	2.9	145.85	-55.2	-107.5	201.2	195.9	5.28	38.105	
1,500.0	1,491.8	1,470.1	1,463.6	3.5	3.2	145.45	-64.0	-120.2	226.0	220.3	5.73	39.462	
1,600.0	1,590.6	1,567.0	1,559.2	3.9	3.5	145.12	-72.9	-132.9	250.8	244.6	6.18	40.605	
1,700.0	1,689.5	1,663.8	1,654.8	4.2	3.8	144.86	-81.7	-145.6	275.5	268.9	6.63	41.582	
1,800.0	1,788.3	1,760.7	1,750.5	4.5	4.1	144.64	-90.5	-158.2	300.3	293.3	7.08	42.424	
1,900.0	1,887.2	1,857.6	1,846.1	4.8	4.5	144.45	-99.4	-170.9	325.1	317.6	7.53	43.158	
2,000.0	1,986.0	1,954.4	1,941.7	5.1	4.8	144.29	-108.2	-183.6	349.9	341.9	7.99	43.802	
2,100.0	2,084.9	2,051.3	2,037.4	5.4	5.1	144.15	-117.0	-196.3	374.7	366.3	8.44	44.372	
2,200.0	2,183.8	2,148.2	2,133.0	5.7	5.4	144.02	-125.9	-208.9	399.5	390.6	8.90	44.880	
2,300.0	2,282.6	2,245.1	2,228.6	6.0	5.7	143.92	-134.7	-221.6	424.3	415.0	9.36	45.335	
2,400.0	2,381.5	2,341.9	2,324.3	6.4	6.0	143.82	-143.6	-234.3	449.1	439.3	9.82	45.744	
2,500.0	2,480.3	2,438.8	2,419.9	6.7	6.3	143.73	-152.4	-247.0	473.9	463.7	10.28	46.115	
2,600.0	2,579.2	2,535.7	2,515.5	7.0	6.6	143.66	-161.2	-259.6	498.7	488.0	10.74	46.453	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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	-30.8	30.8				
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-30.8	30.8	30.5	0.30	101.338	
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-30.8	30.8	30.1	0.65	47.147	CC, ES
300.0	300.0	300.0	300.0	0.5	0.5	143.27	0.0	-30.8	31.5	30.5	1.00	31.405	
400.0	400.0	400.0	400.0	0.7	0.7	145.93	0.0	-30.8	33.6	32.3	1.35	24.847	
500.0	499.9	499.7	499.7	0.9	0.8	149.40	-0.1	-30.9	37.4	35.7	1.70	21.975	
600.0	599.7	599.0	599.0	1.1	1.0	151.68	-1.3	-32.2	43.8	41.8	2.06	21.314	SF
700.0	699.4	698.1	698.0	1.3	1.2	152.68	-3.7	-34.7	52.8	50.4	2.41	21.890	
800.0	798.9	796.8	796.6	1.5	1.4	152.82	-7.2	-38.4	64.4	61.6	2.78	23.176	
900.0	898.3	895.1	894.7	1.8	1.6	152.45	-11.9	-43.3	78.5	75.4	3.16	24.883	
1,000.0	997.4	992.8	992.0	2.0	1.8	151.83	-17.6	-49.5	95.2	91.6	3.55	26.838	
1,100.0	1,096.3	1,089.9	1,088.6	2.3	2.0	151.12	-24.5	-56.7	114.3	110.3	3.95	28.900	
1,200.0	1,195.2	1,187.6	1,185.6	2.6	2.2	150.35	-32.2	-64.9	134.4	130.0	4.37	30.723	
1,300.0	1,294.0	1,285.6	1,282.9	2.9	2.5	149.77	-39.9	-73.0	154.5	149.7	4.80	32.194	
1,400.0	1,392.9	1,383.5	1,380.2	3.2	2.7	149.33	-47.6	-81.2	174.7	169.5	5.23	33.402	
1,500.0	1,491.8	1,481.4	1,477.5	3.5	3.0	148.97	-55.3	-89.4	194.9	189.2	5.66	34.409	
1,600.0	1,590.6	1,579.4	1,574.8	3.9	3.2	148.69	-63.0	-97.5	215.1	209.0	6.10	35.260	
1,700.0	1,689.5	1,677.3	1,672.1	4.2	3.5	148.45	-70.7	-105.7	235.3	228.7	6.54	35.987	
1,800.0	1,788.3	1,775.2	1,769.4	4.5	3.7	148.25	-78.4	-113.9	255.5	248.5	6.98	36.616	
1,900.0	1,887.2	1,873.2	1,866.7	4.8	4.0	148.08	-86.1	-122.0	275.6	268.2	7.42	37.164	
2,000.0	1,986.0	1,971.1	1,964.0	5.1	4.2	147.93	-93.8	-130.2	295.8	288.0	7.86	37.646	
2,100.0	2,084.9	2,069.0	2,061.3	5.4	4.5	147.80	-101.5	-138.4	316.0	307.7	8.30	38.072	
2,200.0	2,183.8	2,167.0	2,158.6	5.7	4.7	147.69	-109.2	-146.5	336.2	327.5	8.74	38.453	
2,300.0	2,282.6	2,264.9	2,255.8	6.0	5.0	147.59	-116.9	-154.7	356.4	347.3	9.19	38.794	
2,400.0	2,381.5	2,362.9	2,353.1	6.4	5.2	147.50	-124.6	-162.9	376.6	367.0	9.63	39.101	
2,500.0	2,480.3	2,460.8	2,450.4	6.7	5.5	147.42	-132.3	-171.0	396.8	386.8	10.08	39.380	
2,600.0	2,579.2	2,558.7	2,547.7	7.0	5.8	147.34	-140.1	-179.2	417.0	406.5	10.52	39.633	
2,700.0	2,678.0	2,656.7	2,645.0	7.3	6.0	147.28	-147.8	-187.4	437.2	426.3	10.97	39.865	
2,800.0	2,776.9	2,754.6	2,742.3	7.6	6.3	147.22	-155.5	-195.5	457.4	446.0	11.41	40.077	
2,900.0	2,875.8	2,852.5	2,839.6	7.9	6.5	147.16	-163.2	-203.7	477.7	465.8	11.86	40.272	
3,000.0	2,974.6	2,950.5	2,936.9	8.3	6.8	147.11	-170.9	-211.9	497.9	485.5	12.31	40.453	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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	-104.60	-3.6	-14.0	14.5				
100.0	100.0	100.0	100.0	0.2	0.2	-104.60	-3.6	-14.0	14.5	14.2	0.30	47.599	
200.0	200.0	200.0	200.0	0.3	0.3	-104.60	-3.6	-14.0	14.5	13.8	0.65	22.145	CC, ES
300.0	300.0	299.8	299.8	0.5	0.5	127.67	-4.4	-14.3	15.5	14.5	1.00	15.467	
400.0	400.0	399.6	399.6	0.7	0.7	127.57	-6.9	-15.3	18.7	17.3	1.36	13.748	SF
500.0	499.9	499.3	499.1	0.9	0.9	127.45	-10.9	-16.9	23.9	22.2	1.72	13.890	
600.0	599.7	598.7	598.4	1.1	1.1	127.35	-16.5	-19.2	31.3	29.2	2.10	14.886	
700.0	699.4	697.9	697.2	1.3	1.3	127.25	-23.7	-22.1	40.7	38.2	2.50	16.299	
800.0	798.9	797.0	796.0	1.5	1.5	127.42	-32.2	-25.5	52.1	49.2	2.91	17.875	
900.0	898.3	896.2	894.7	1.8	1.7	128.61	-40.8	-29.0	64.6	61.3	3.35	19.318	
1,000.0	997.4	995.3	993.3	2.0	2.0	130.37	-49.5	-32.5	78.3	74.5	3.79	20.662	
1,100.0	1,096.3	1,094.1	1,091.8	2.3	2.2	132.37	-58.1	-36.0	93.1	88.8	4.24	21.953	
1,200.0	1,195.2	1,192.9	1,190.1	2.6	2.4	134.03	-66.7	-39.5	108.2	103.5	4.69	23.056	
1,300.0	1,294.0	1,291.7	1,288.5	2.9	2.6	135.27	-75.3	-43.0	123.5	118.3	5.15	23.971	
1,400.0	1,392.9	1,390.5	1,386.9	3.2	2.9	136.25	-83.9	-46.5	138.7	133.1	5.61	24.741	
1,500.0	1,491.8	1,489.3	1,485.2	3.5	3.1	137.03	-92.5	-49.9	154.0	148.0	6.06	25.397	
1,600.0	1,590.6	1,588.1	1,583.6	3.9	3.4	137.67	-101.1	-53.4	169.4	162.8	6.52	25.962	
1,700.0	1,689.5	1,686.9	1,681.9	4.2	3.6	138.20	-109.8	-56.9	184.7	177.7	6.98	26.453	
1,800.0	1,788.3	1,785.7	1,780.3	4.5	3.8	138.65	-118.4	-60.4	200.0	192.6	7.44	26.884	
1,900.0	1,887.2	1,884.5	1,878.7	4.8	4.1	139.04	-127.0	-63.9	215.4	207.5	7.90	27.266	
2,000.0	1,986.0	1,983.3	1,977.0	5.1	4.3	139.38	-135.6	-67.3	230.8	222.4	8.36	27.605	
2,100.0	2,084.9	2,082.2	2,075.4	5.4	4.5	139.67	-144.2	-70.8	246.2	237.3	8.82	27.909	
2,200.0	2,183.8	2,181.0	2,173.8	5.7	4.8	139.93	-152.8	-74.3	261.5	252.3	9.28	28.183	
2,300.0	2,282.6	2,279.8	2,272.1	6.0	5.0	140.16	-161.4	-77.8	276.9	267.2	9.74	28.431	
2,400.0	2,381.5	2,378.6	2,370.5	6.4	5.2	140.37	-170.0	-81.3	292.3	282.1	10.20	28.657	
2,500.0	2,480.3	2,477.4	2,468.9	6.7	5.5	140.55	-178.7	-84.8	307.7	297.1	10.66	28.863	
2,600.0	2,579.2	2,576.2	2,567.2	7.0	5.7	140.72	-187.3	-88.2	323.1	312.0	11.12	29.052	
2,700.0	2,678.0	2,675.0	2,665.6	7.3	5.9	140.87	-195.9	-91.7	338.5	326.9	11.58	29.226	
2,800.0	2,776.9	2,773.8	2,764.0	7.6	6.2	141.01	-204.5	-95.2	353.9	341.9	12.04	29.386	
2,900.0	2,875.8	2,872.6	2,862.3	7.9	6.4	141.14	-213.1	-98.7	369.3	356.8	12.51	29.535	
3,000.0	2,974.6	2,971.4	2,960.7	8.3	6.6	141.26	-221.7	-102.2	384.7	371.8	12.97	29.673	
3,100.0	3,073.5	3,070.2	3,059.1	8.6	6.9	141.36	-230.3	-105.7	400.2	386.7	13.43	29.802	
3,200.0	3,172.3	3,169.0	3,157.4	8.9	7.1	141.46	-238.9	-109.1	415.6	401.7	13.89	29.922	
3,300.0	3,271.2	3,267.8	3,255.8	9.2	7.4	141.56	-247.6	-112.6	431.0	416.6	14.35	30.034	
3,400.0	3,370.1	3,366.6	3,354.2	9.5	7.6	141.64	-256.2	-116.1	446.4	431.6	14.81	30.139	
3,500.0	3,468.9	3,465.4	3,452.5	9.8	7.8	141.72	-264.8	-119.6	461.8	446.5	15.27	30.238	
3,600.0	3,567.8	3,564.2	3,550.9	10.1	8.1	141.80	-273.4	-123.1	477.2	461.5	15.73	30.331	
3,700.0	3,666.6	3,663.0	3,649.3	10.5	8.3	141.87	-282.0	-126.6	492.6	476.4	16.20	30.419	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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 3N-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-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	300.0	300.0	0.5	0.5	144.87	0.0	-11.2	11.9	10.9	1.00	11.869	
400.0	400.0	400.0	400.0	0.7	0.7	147.59	-0.9	-11.0	13.8	12.5	1.35	10.229	
500.0	499.9	500.1	500.0	0.9	0.9	146.99	-3.4	-10.5	16.8	15.1	1.71	9.813	SF
600.0	599.7	600.1	599.9	1.1	1.0	144.57	-7.7	-9.6	20.7	18.6	2.08	9.966	
700.0	699.4	700.0	699.7	1.3	1.2	141.45	-13.7	-8.5	25.7	23.2	2.47	10.425	
800.0	798.9	799.9	799.3	1.5	1.4	138.27	-21.4	-6.9	31.8	28.9	2.88	11.048	
900.0	898.3	899.6	898.6	1.8	1.7	135.82	-30.4	-5.1	39.1	35.8	3.32	11.790	
1,000.0	997.4	999.3	997.8	2.0	1.9	135.47	-39.6	-3.3	47.7	43.9	3.77	12.658	
1,100.0	1,096.3	1,098.8	1,096.9	2.3	2.1	136.39	-48.7	-1.4	57.5	53.2	4.22	13.606	
1,200.0	1,195.2	1,198.3	1,195.9	2.6	2.3	137.30	-57.9	0.4	67.5	62.8	4.68	14.424	
1,300.0	1,294.0	1,297.8	1,295.0	2.9	2.6	137.98	-67.0	2.2	77.6	72.4	5.14	15.091	
1,400.0	1,392.9	1,397.3	1,394.0	3.2	2.8	138.49	-76.2	4.1	87.6	82.0	5.60	15.643	
1,500.0	1,491.8	1,496.7	1,493.1	3.5	3.0	138.91	-85.3	5.9	97.7	91.6	6.07	16.108	
1,600.0	1,590.6	1,596.2	1,592.1	3.9	3.3	139.24	-94.4	7.7	107.8	101.3	6.53	16.504	
1,700.0	1,689.5	1,695.7	1,691.2	4.2	3.5	139.52	-103.6	9.6	117.9	110.9	7.00	16.846	
1,800.0	1,788.3	1,795.2	1,790.2	4.5	3.7	139.75	-112.7	11.4	127.9	120.5	7.46	17.143	
1,900.0	1,887.2	1,894.7	1,889.3	4.8	4.0	139.95	-121.9	13.2	138.0	130.1	7.93	17.404	
2,000.0	1,986.0	1,994.2	1,988.3	5.1	4.2	140.12	-131.0	15.0	148.1	139.7	8.40	17.635	
2,100.0	2,084.9	2,093.7	2,087.4	5.4	4.5	140.27	-140.2	16.9	158.2	149.3	8.87	17.841	
2,200.0	2,183.8	2,193.2	2,186.4	5.7	4.7	140.41	-149.3	18.7	168.3	159.0	9.34	18.025	
2,300.0	2,282.6	2,292.7	2,285.5	6.0	4.9	140.52	-158.5	20.5	178.4	168.6	9.81	18.191	
2,400.0	2,381.5	2,392.2	2,384.5	6.4	5.2	140.63	-167.6	22.4	188.5	178.2	10.28	18.342	
2,500.0	2,480.3	2,491.6	2,483.6	6.7	5.4	140.72	-176.7	24.2	198.6	187.8	10.75	18.479	
2,600.0	2,579.2	2,591.1	2,582.6	7.0	5.6	140.81	-185.9	26.0	208.7	197.4	11.22	18.604	
2,700.0	2,678.0	2,690.6	2,681.7	7.3	5.9	140.89	-195.0	27.9	218.7	207.1	11.69	18.719	
2,800.0	2,776.9	2,790.1	2,780.7	7.6	6.1	140.96	-204.2	29.7	228.8	216.7	12.16	18.824	
2,900.0	2,875.8	2,889.6	2,879.8	7.9	6.3	141.02	-213.3	31.5	238.9	226.3	12.63	18.922	
3,000.0	2,974.6	2,989.1	2,978.8	8.3	6.6	141.08	-222.5	33.4	249.0	235.9	13.10	19.012	
3,100.0	3,073.5	3,088.6	3,077.9	8.6	6.8	141.14	-231.6	35.2	259.1	245.5	13.57	19.096	
3,200.0	3,172.3	3,188.1	3,176.9	8.9	7.1	141.19	-240.8	37.0	269.2	255.2	14.04	19.175	
3,300.0	3,271.2	3,287.6	3,276.0	9.2	7.3	141.23	-249.9	38.9	279.3	264.8	14.51	19.248	
3,400.0	3,370.1	3,387.0	3,375.0	9.5	7.5	141.28	-259.1	40.7	289.4	274.4	14.98	19.316	
3,500.0	3,468.9	3,486.5	3,474.1	9.8	7.8	141.32	-268.2	42.5	299.5	284.0	15.45	19.380	
3,600.0	3,567.8	3,586.0	3,573.1	10.1	8.0	141.36	-277.3	44.3	309.6	293.6	15.92	19.440	
3,700.0	3,666.6	3,685.5	3,672.2	10.5	8.2	141.39	-286.5	46.2	319.7	303.3	16.40	19.497	
3,800.0	3,765.5	3,785.0	3,771.2	10.8	8.5	141.42	-295.6	48.0	329.8	312.9	16.87	19.550	
3,900.0	3,864.3	3,884.5	3,870.3	11.1	8.7	141.46	-304.8	49.8	339.9	322.5	17.34	19.600	
4,000.0	3,963.2	3,984.0	3,969.3	11.4	9.0	141.49	-313.9	51.7	349.9	332.1	17.81	19.648	
4,100.0	4,062.1	4,083.5	4,068.4	11.7	9.2	141.51	-323.1	53.5	360.0	341.8	18.28	19.693	
4,200.0	4,160.9	4,183.0	4,167.4	12.0	9.4	141.54	-332.2	55.3	370.1	351.4	18.75	19.736	
4,300.0	4,259.8	4,282.4	4,266.5	12.4	9.7	141.56	-341.4	57.2	380.2	361.0	19.23	19.777	
4,400.0	4,358.6	4,381.9	4,365.5	12.7	9.9	141.59	-350.5	59.0	390.3	370.6	19.70	19.816	
4,500.0	4,457.5	4,481.4	4,464.6	13.0	10.1	141.61	-359.6	60.8	400.4	380.2	20.17	19.852	
4,600.0	4,556.3	4,580.9	4,563.6	13.3	10.4	141.63	-368.8	62.7	410.5	389.9	20.64	19.888	
4,700.0	4,655.2	4,680.4	4,662.7	13.6	10.6	141.65	-377.9	64.5	420.6	399.5	21.11	19.921	
4,800.0	4,754.1	4,779.9	4,761.7	13.9	10.9	141.67	-387.1	66.3	430.7	409.1	21.59	19.953	
4,900.0	4,852.9	4,879.4	4,860.8	14.3	11.1	141.69	-396.2	68.2	440.8	418.7	22.06	19.984	
5,000.0	4,951.8	4,978.9	4,959.8	14.6	11.3	141.71	-405.4	70.0	450.9	428.4	22.53	20.013	
5,100.0	5,050.6	5,078.4	5,058.9	14.9	11.6	141.73	-414.5	71.8	461.0	438.0	23.00	20.041	

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 3P-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 3P-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 3N-32H-K268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,149.5	5,177.8	5,157.9	15.2	11.8	141.74	-423.7	73.6	471.1	447.6	23.47	20.068	
5,300.0	5,248.4	5,277.3	5,257.0	15.5	12.0	141.76	-432.8	75.5	481.2	457.2	23.95	20.094	
5,400.0	5,347.2	5,376.8	5,356.0	15.8	12.3	141.77	-441.9	77.3	491.3	466.8	24.42	20.119	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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	CC
300.0	300.0	300.0	300.0	0.5	0.5	114.23	-3.8	-5.5	7.0	6.0	1.00	6.951	ES
400.0	400.0	400.0	400.0	0.7	0.7	119.20	-5.2	-4.4	7.8	6.4	1.36	5.709	
500.0	499.9	500.1	500.0	0.9	0.9	122.05	-7.9	-2.2	9.0	7.2	1.72	5.196	
600.0	599.7	600.1	599.9	1.1	1.1	123.18	-12.0	1.1	10.5	8.4	2.10	5.007	
700.0	699.4	700.2	699.7	1.3	1.3	123.14	-17.4	5.5	12.5	10.0	2.51	4.980	
800.0	798.9	800.2	799.4	1.5	1.5	122.39	-24.2	10.9	14.8	11.9	2.94	5.037	
900.0	898.3	900.3	898.9	1.8	1.7	121.27	-32.4	17.5	17.5	14.1	3.41	5.134	
1,000.0	997.4	1,000.2	998.2	2.0	2.0	122.20	-41.3	24.6	20.8	17.0	3.89	5.354	
1,100.0	1,096.3	1,100.1	1,097.4	2.3	2.2	126.03	-50.1	31.7	25.1	20.8	4.36	5.763	
1,200.0	1,195.2	1,200.0	1,196.6	2.6	2.5	129.34	-59.0	38.7	29.7	24.9	4.81	6.171	
1,300.0	1,294.0	1,299.9	1,295.9	2.9	2.7	131.76	-67.8	45.8	34.4	29.1	5.27	6.525	
1,400.0	1,392.9	1,399.7	1,395.1	3.2	3.0	133.60	-76.6	52.9	39.1	33.4	5.72	6.831	
1,500.0	1,491.8	1,499.6	1,494.4	3.5	3.2	135.04	-85.5	60.0	43.8	37.7	6.18	7.098	
1,600.0	1,590.6	1,599.5	1,593.6	3.9	3.5	136.20	-94.3	67.1	48.6	42.0	6.63	7.332	
1,700.0	1,689.5	1,699.4	1,692.8	4.2	3.8	137.15	-103.2	74.2	53.4	46.3	7.08	7.539	
1,800.0	1,788.3	1,799.3	1,792.1	4.5	4.0	137.94	-112.0	81.3	58.2	50.7	7.54	7.722	
1,900.0	1,887.2	1,899.2	1,891.3	4.8	4.3	138.62	-120.9	88.4	63.0	55.0	7.99	7.886	
2,000.0	1,986.0	1,999.0	1,990.5	5.1	4.5	139.20	-129.7	95.5	67.8	59.4	8.44	8.033	
2,100.0	2,084.9	2,098.9	2,089.8	5.4	4.8	139.70	-138.6	102.6	72.6	63.7	8.89	8.166	
2,200.0	2,183.8	2,198.8	2,189.0	5.7	5.1	140.14	-147.4	109.7	77.5	68.1	9.35	8.286	
2,300.0	2,282.6	2,298.7	2,288.2	6.0	5.3	140.52	-156.3	116.8	82.3	72.5	9.80	8.396	
2,400.0	2,381.5	2,398.6	2,387.5	6.4	5.6	140.87	-165.1	123.9	87.1	76.9	10.25	8.496	
2,500.0	2,480.3	2,498.4	2,486.7	6.7	5.8	141.18	-174.0	131.0	92.0	81.2	10.71	8.588	
2,600.0	2,579.2	2,598.3	2,586.0	7.0	6.1	141.46	-182.8	138.1	96.8	85.6	11.16	8.673	
2,700.0	2,678.0	2,698.2	2,685.2	7.3	6.4	141.71	-191.7	145.2	101.6	90.0	11.61	8.751	
2,800.0	2,776.9	2,798.1	2,784.4	7.6	6.6	141.93	-200.5	152.3	106.5	94.4	12.07	8.824	
2,900.0	2,875.8	2,898.0	2,883.7	7.9	6.9	142.14	-209.4	159.3	111.3	98.8	12.52	8.891	
3,000.0	2,974.6	2,997.9	2,982.9	8.3	7.2	142.33	-218.2	166.4	116.2	103.2	12.97	8.954	
3,100.0	3,073.5	3,097.7	3,082.1	8.6	7.4	142.51	-227.1	173.5	121.0	107.6	13.43	9.012	
3,200.0	3,172.3	3,197.6	3,181.4	8.9	7.7	142.67	-235.9	180.6	125.9	112.0	13.88	9.067	
3,300.0	3,271.2	3,297.5	3,280.6	9.2	7.9	142.82	-244.8	187.7	130.7	116.4	14.33	9.119	
3,400.0	3,370.1	3,397.4	3,379.8	9.5	8.2	142.96	-253.6	194.8	135.5	120.8	14.79	9.167	
3,500.0	3,468.9	3,497.3	3,479.1	9.8	8.5	143.09	-262.4	201.9	140.4	125.2	15.24	9.212	
3,600.0	3,567.8	3,597.1	3,578.3	10.1	8.7	143.21	-271.3	209.0	145.2	129.6	15.69	9.255	
3,700.0	3,666.6	3,697.0	3,677.5	10.5	9.0	143.33	-280.1	216.1	150.1	133.9	16.15	9.296	
3,800.0	3,765.5	3,796.9	3,776.8	10.8	9.3	143.43	-289.0	223.2	154.9	138.3	16.60	9.334	
3,900.0	3,864.3	3,896.8	3,876.0	11.1	9.5	143.53	-297.8	230.3	159.8	142.7	17.05	9.370	
4,000.0	3,963.2	3,996.7	3,975.3	11.4	9.8	143.63	-306.7	237.4	164.6	147.1	17.51	9.405	
4,100.0	4,062.1	4,096.6	4,074.5	11.7	10.1	143.71	-315.5	244.5	169.5	151.5	17.96	9.437	
4,200.0	4,160.9	4,196.4	4,173.7	12.0	10.3	143.80	-324.4	251.6	174.4	155.9	18.41	9.468	
4,300.0	4,259.8	4,296.3	4,273.0	12.4	10.6	143.88	-333.2	258.7	179.2	160.3	18.87	9.498	
4,400.0	4,358.6	4,396.2	4,372.2	12.7	10.8	143.95	-342.1	265.8	184.1	164.7	19.32	9.526	
4,500.0	4,457.5	4,496.1	4,471.4	13.0	11.1	144.02	-350.9	272.8	188.9	169.1	19.77	9.553	
4,600.0	4,556.3	4,596.0	4,570.7	13.3	11.4	144.09	-359.8	279.9	193.8	173.5	20.23	9.579	
4,700.0	4,655.2	4,695.8	4,669.9	13.6	11.6	144.15	-368.6	287.0	198.6	177.9	20.68	9.604	
4,800.0	4,754.1	4,795.7	4,769.1	13.9	11.9	144.22	-377.5	294.1	203.5	182.3	21.14	9.627	
4,900.0	4,852.9	4,895.6	4,868.4	14.3	12.2	144.27	-386.3	301.2	208.3	186.7	21.59	9.650	
5,000.0	4,951.8	4,995.5	4,967.6	14.6	12.4	144.33	-395.2	308.3	213.2	191.1	22.04	9.671	
5,100.0	5,050.6	5,095.4	5,066.9	14.9	12.7	144.38	-404.0	315.4	218.0	195.5	22.50	9.692	

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 3P-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 3P-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
5,200.0	5,149.5	5,195.3	5,166.1	15.2	13.0	144.43	-412.9	322.5	222.9	199.9	22.95	9.712	
5,300.0	5,248.4	5,295.1	5,265.3	15.5	13.2	144.48	-421.7	329.6	227.7	204.3	23.40	9.731	
5,400.0	5,347.2	5,395.0	5,364.6	15.8	13.5	144.53	-430.6	336.7	232.6	208.7	23.86	9.750	
5,500.0	5,446.1	5,494.9	5,463.8	16.2	13.7	144.57	-439.4	343.8	237.5	213.1	24.31	9.768	
5,600.0	5,544.9	5,594.8	5,563.0	16.5	14.0	144.62	-448.2	350.9	242.3	217.6	24.76	9.785	
5,700.0	5,643.8	5,694.7	5,662.3	16.8	14.3	144.66	-457.1	358.0	247.2	222.0	25.22	9.801	
5,800.0	5,742.6	5,794.5	5,761.5	17.1	14.5	144.70	-465.9	365.1	252.0	226.4	25.67	9.817	
5,900.0	5,841.5	5,894.4	5,860.7	17.4	14.8	144.74	-474.8	372.2	256.9	230.8	26.13	9.833	
6,000.0	5,940.4	5,994.3	5,960.0	17.7	15.1	144.77	-483.6	379.3	261.7	235.2	26.58	9.848	
6,100.0	6,039.2	6,094.2	6,059.2	18.1	15.3	144.81	-492.5	386.3	266.6	239.6	27.03	9.862	
6,200.0	6,138.1	6,194.1	6,158.4	18.4	15.6	144.84	-501.3	393.4	271.5	244.0	27.49	9.876	
6,300.0	6,236.9	6,294.0	6,257.7	18.7	15.9	144.87	-510.2	400.5	276.3	248.4	27.94	9.889	
6,400.0	6,335.8	6,393.8	6,356.9	19.0	16.1	144.91	-519.0	407.6	281.2	252.8	28.39	9.903	
6,500.0	6,434.7	6,493.7	6,456.2	19.3	16.4	144.94	-527.9	414.7	286.0	257.2	28.85	9.915	
6,600.0	6,533.5	6,593.6	6,555.4	19.6	16.6	144.97	-536.7	421.8	290.9	261.6	29.30	9.927	
6,700.0	6,632.4	6,693.5	6,654.6	20.0	16.9	145.00	-545.6	428.9	295.7	266.0	29.75	9.939	
6,800.0	6,731.2	6,793.4	6,753.9	20.3	17.2	145.02	-554.4	436.0	300.6	270.4	30.21	9.951	
6,900.0	6,830.3	6,893.1	6,852.9	20.5	17.4	-164.80	-563.3	443.1	305.3	274.6	30.70	9.943	
7,000.0	6,928.8	6,990.8	6,950.0	20.6	17.7	-122.14	-571.9	450.0	310.1	278.5	31.63	9.806	
7,100.0	7,023.8	7,088.1	7,046.9	20.6	17.9	-114.53	-577.0	456.9	317.7	285.1	32.55	9.759	
7,200.0	7,112.4	7,192.5	7,150.3	20.5	17.9	-114.47	-565.2	464.1	328.6	295.9	32.72	10.044	
7,300.0	7,192.0	7,304.9	7,257.1	20.3	17.8	-116.48	-531.8	471.4	342.0	310.0	31.99	10.690	
7,400.0	7,260.1	7,426.5	7,363.0	20.0	17.4	-119.03	-472.9	478.4	356.5	326.0	30.48	11.698	
7,500.0	7,314.7	7,558.0	7,460.8	19.8	17.0	-121.45	-385.6	484.5	370.5	342.0	28.48	13.008	
7,600.0	7,354.0	7,699.2	7,540.8	19.7	16.6	-123.35	-269.7	489.2	382.1	355.6	26.54	14.396	
7,700.0	7,376.9	7,848.3	7,591.9	19.7	16.3	-124.46	-130.2	491.6	389.7	364.4	25.36	15.370	
7,800.0	7,383.0	7,992.3	7,606.0	19.8	16.4	-124.64	12.8	491.3	392.3	366.8	25.45	15.411	
7,900.0	7,383.0	8,092.3	7,606.0	20.0	16.7	-124.57	112.8	490.4	393.0	366.9	26.13	15.040	
8,000.0	7,383.0	8,192.3	7,606.0	20.4	17.2	-124.50	212.8	489.6	393.7	366.6	27.10	14.530	
8,100.0	7,383.0	8,292.3	7,606.0	21.0	17.9	-124.43	312.8	488.7	394.4	366.1	28.33	13.922	
8,200.0	7,383.0	8,392.3	7,606.0	21.6	18.6	-124.36	412.8	487.8	395.2	365.4	29.80	13.259	
8,300.0	7,383.0	8,492.3	7,606.0	22.4	19.5	-124.28	512.8	486.9	395.9	364.4	31.48	12.577	
8,400.0	7,383.0	8,592.3	7,606.0	23.3	20.6	-124.21	612.8	486.1	396.6	363.3	33.33	11.901	
8,500.0	7,383.0	8,692.3	7,606.0	24.3	21.7	-124.14	712.8	485.2	397.3	362.0	35.32	11.249	
8,600.0	7,383.0	8,792.3	7,606.0	25.3	22.9	-124.07	812.8	484.3	398.1	360.6	37.44	10.631	
8,700.0	7,383.0	8,892.3	7,606.0	26.5	24.1	-124.00	912.8	483.5	398.8	359.1	39.67	10.052	
8,800.0	7,383.0	8,992.3	7,606.0	27.7	25.4	-123.93	1,012.7	482.6	399.5	357.5	41.99	9.514	
8,900.0	7,383.0	9,092.3	7,606.0	29.0	26.8	-123.86	1,112.7	481.7	400.2	355.8	44.39	9.017	
9,000.0	7,383.0	9,192.3	7,606.0	30.3	28.2	-123.79	1,212.7	480.8	401.0	354.1	46.85	8.558	
9,100.0	7,383.0	9,292.3	7,606.0	31.6	29.7	-123.72	1,312.7	480.0	401.7	352.3	49.37	8.136	
9,200.0	7,383.0	9,392.3	7,606.0	33.0	31.2	-123.65	1,412.7	479.1	402.4	350.5	51.94	7.748	
9,300.0	7,383.0	9,492.3	7,606.0	34.4	32.7	-123.59	1,512.7	478.2	403.1	348.6	54.55	7.390	
9,400.0	7,383.0	9,592.3	7,606.0	35.9	34.2	-123.52	1,612.7	477.3	403.9	346.7	57.20	7.060	
9,500.0	7,383.0	9,692.3	7,606.0	37.4	35.7	-123.45	1,712.7	476.5	404.6	344.7	59.88	6.756	
9,600.0	7,383.0	9,792.3	7,606.0	38.9	37.3	-123.38	1,812.7	475.6	405.3	342.7	62.60	6.475	
9,700.0	7,383.0	9,892.3	7,606.0	40.4	38.9	-123.31	1,912.7	474.7	406.0	340.7	65.34	6.215	
9,800.0	7,383.0	9,992.3	7,606.0	42.0	40.5	-123.25	2,012.7	473.9	406.8	338.7	68.10	5.973	
9,900.0	7,383.0	10,092.3	7,606.0	43.5	42.1	-123.18	2,112.7	473.0	407.5	336.6	70.89	5.749	
10,000.0	7,383.0	10,192.3	7,606.0	45.1	43.7	-123.11	2,212.7	472.1	408.2	334.5	73.69	5.540	
10,100.0	7,383.0	10,292.3	7,606.0	46.7	45.4	-123.04	2,312.7	471.2	409.0	332.4	76.51	5.345	
10,200.0	7,383.0	10,392.3	7,606.0	48.3	47.0	-122.98	2,412.6	470.4	409.7	330.3	79.35	5.163	
10,300.0	7,383.0	10,492.3	7,606.0	49.9	48.6	-122.91	2,512.6	469.5	410.4	328.2	82.21	4.993	

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 3P-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 3P-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
10,400.0	7,383.0	10,592.2	7,606.0	51.5	50.3	-122.85	2,612.6	468.6	411.2	326.1	85.08	4.833	
10,500.0	7,383.0	10,692.2	7,606.0	53.1	52.0	-122.78	2,712.6	467.7	411.9	323.9	87.96	4.683	
10,600.0	7,383.0	10,792.2	7,606.0	54.8	53.6	-122.71	2,812.6	466.9	412.6	321.8	90.85	4.542	
10,700.0	7,383.0	10,892.2	7,606.0	56.4	55.3	-122.65	2,912.6	466.0	413.4	319.6	93.76	4.409	
10,800.0	7,383.0	10,992.2	7,606.0	58.0	57.0	-122.58	3,012.6	465.1	414.1	317.4	96.68	4.283	
10,880.7	7,383.0	11,073.0	7,606.0	59.4	58.3	-122.53	3,093.3	464.4	414.7	315.7	99.04	4.187	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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	56.67	182.1	277.0	331.5				
100.0	100.0	99.0	99.0	0.2	0.2	56.67	182.1	277.0	331.5	331.2	0.32	1,022.454	
200.0	200.0	199.0	199.0	0.3	0.3	56.67	182.1	277.0	331.5	330.8	0.67	492.666	
300.0	300.0	299.0	299.0	0.5	0.5	-71.17	182.1	277.0	331.2	330.2	1.02	323.982	
400.0	400.0	399.0	399.0	0.7	0.7	-71.61	182.1	277.0	330.4	329.0	1.38	240.172	
500.0	499.9	498.9	498.9	0.9	0.9	-72.34	182.1	277.0	329.0	327.3	1.74	189.518	
600.0	599.7	598.7	598.7	1.1	1.0	-73.37	182.1	277.0	327.2	325.1	2.11	155.268	
700.0	699.4	698.4	698.4	1.3	1.2	-74.72	182.1	277.0	325.1	322.6	2.49	130.378	
800.0	798.9	797.9	797.9	1.5	1.4	-76.37	182.1	277.0	322.7	319.8	2.90	111.385	
900.0	898.3	897.3	897.3	1.8	1.6	-78.36	182.1	277.0	320.2	316.8	3.32	96.397	
1,000.0	997.4	996.4	996.4	2.0	1.7	-80.67	182.1	277.0	317.8	314.0	3.77	84.300	
1,100.0	1,096.3	1,095.3	1,095.3	2.3	1.9	-83.28	182.1	277.0	315.7	311.5	4.24	74.506	
1,200.0	1,195.2	1,194.2	1,194.2	2.6	2.1	-85.98	182.1	277.0	314.3	309.6	4.71	66.708	
1,300.0	1,294.0	1,293.0	1,293.0	2.9	2.3	-88.70	182.1	277.0	313.6	308.4	5.19	60.440	
1,347.8	1,341.3	1,340.3	1,340.3	3.1	2.3	-90.00	182.1	277.0	313.5	308.1	5.42	57.873	CC
1,400.0	1,392.9	1,391.9	1,391.9	3.2	2.4	-91.42	182.1	277.0	313.6	307.9	5.67	55.350	ES
1,500.0	1,491.8	1,490.8	1,490.8	3.5	2.6	-94.14	182.1	277.0	314.3	308.2	6.14	51.184	
1,600.0	1,590.6	1,589.6	1,589.6	3.9	2.8	-96.83	182.1	277.0	315.8	309.2	6.61	47.751	
1,700.0	1,689.5	1,688.5	1,688.5	4.2	2.9	-99.50	182.1	277.0	317.9	310.9	7.08	44.909	
1,800.0	1,788.3	1,787.3	1,787.3	4.5	3.1	-102.13	182.1	277.0	320.8	313.3	7.54	42.547	
1,900.0	1,887.2	1,886.2	1,886.2	4.8	3.3	-104.70	182.1	277.0	324.3	316.3	7.99	40.579	
2,000.0	1,986.0	1,985.0	1,985.0	5.1	3.5	-107.22	182.1	277.0	328.5	320.1	8.44	38.938	
2,100.0	2,084.9	2,083.9	2,083.9	5.4	3.6	-109.67	182.1	277.0	333.3	324.5	8.87	37.570	
2,200.0	2,183.8	2,182.8	2,182.8	5.7	3.8	-112.05	182.1	277.0	338.8	329.5	9.30	36.430	
2,300.0	2,282.6	2,281.6	2,281.6	6.0	4.0	-114.35	182.1	277.0	344.8	335.0	9.72	35.482	
2,400.0	2,381.5	2,380.5	2,380.5	6.4	4.1	-116.57	182.1	277.0	351.3	341.2	10.12	34.696	
2,500.0	2,480.3	2,479.3	2,479.3	6.7	4.3	-118.70	182.1	277.0	358.4	347.8	10.52	34.049	
2,600.0	2,579.2	2,578.2	2,578.2	7.0	4.5	-120.75	182.1	277.0	365.9	355.0	10.92	33.519	
2,700.0	2,678.0	2,677.0	2,677.0	7.3	4.7	-122.72	182.1	277.0	373.9	362.6	11.30	33.089	
2,800.0	2,776.9	2,775.9	2,775.9	7.6	4.8	-124.61	182.1	277.0	382.3	370.6	11.68	32.744	
2,900.0	2,875.8	2,874.8	2,874.8	7.9	5.0	-126.41	182.1	277.0	391.1	379.1	12.05	32.471	
3,000.0	2,974.6	2,973.6	2,973.6	8.3	5.2	-128.14	182.1	277.0	400.3	387.9	12.41	32.262	
3,100.0	3,073.5	3,072.5	3,072.5	8.6	5.3	-129.78	182.1	277.0	409.9	397.1	12.77	32.105	
3,200.0	3,172.3	3,171.3	3,171.3	8.9	5.5	-131.35	182.1	277.0	419.7	406.6	13.12	31.994	
3,300.0	3,271.2	3,270.2	3,270.2	9.2	5.7	-132.85	182.1	277.0	429.9	416.4	13.47	31.921	
3,400.0	3,370.1	3,369.1	3,369.1	9.5	5.9	-134.28	182.1	277.0	440.3	426.5	13.81	31.882	
3,500.0	3,468.9	3,467.9	3,467.9	9.8	6.0	-135.64	182.1	277.0	451.1	436.9	14.15	31.871	SF
3,600.0	3,567.8	3,566.8	3,566.8	10.1	6.2	-136.94	182.1	277.0	462.0	447.5	14.49	31.884	
3,700.0	3,666.6	3,665.6	3,665.6	10.5	6.4	-138.18	182.1	277.0	473.2	458.4	14.83	31.918	
3,800.0	3,765.5	3,764.5	3,764.5	10.8	6.6	-139.37	182.1	277.0	484.6	469.4	15.16	31.969	
3,900.0	3,864.3	3,863.3	3,863.3	11.1	6.7	-140.49	182.1	277.0	496.2	480.7	15.49	32.034	

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 3P-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 3P-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	70.10	154.1	425.5	462.8				
100.0	100.0	3.0	3.0	0.2	0.0	70.10	154.1	425.5	452.6	452.4	0.16	2,877.484	
200.0	200.0	103.0	103.0	0.3	0.2	70.10	154.1	425.5	452.6	452.1	0.51	893.801	
300.0	300.0	203.0	203.0	0.5	0.4	-57.70	154.1	425.5	452.1	451.2	0.86	528.134	
400.0	400.0	303.0	303.0	0.7	0.5	-57.99	154.1	425.5	450.7	449.5	1.21	372.880	
500.0	499.9	402.9	402.9	0.9	0.7	-58.48	154.1	425.5	448.4	446.8	1.57	286.126	
600.0	599.7	502.7	502.7	1.1	0.9	-59.18	154.1	425.5	445.2	443.3	1.93	230.177	
700.0	699.4	602.4	602.4	1.3	1.1	-60.08	154.1	425.5	441.3	439.0	2.31	190.746	
800.0	798.9	701.9	701.9	1.5	1.2	-61.21	154.1	425.5	436.6	433.8	2.71	161.237	
900.0	898.3	801.3	801.3	1.8	1.4	-62.57	154.1	425.5	431.2	428.1	3.12	138.191	
1,000.0	997.4	900.4	900.4	2.0	1.6	-64.17	154.1	425.5	425.3	421.8	3.56	119.630	
1,100.0	1,096.3	999.3	999.3	2.3	1.7	-66.00	154.1	425.5	419.1	415.1	4.01	104.486	
1,200.0	1,195.2	1,098.2	1,098.2	2.6	1.9	-67.90	154.1	425.5	413.1	408.6	4.48	92.279	
1,300.0	1,294.0	1,197.0	1,197.0	2.9	2.1	-69.84	154.1	425.5	407.6	402.7	4.95	82.331	
1,400.0	1,392.9	1,295.9	1,295.9	3.2	2.3	-71.83	154.1	425.5	402.6	397.2	5.43	74.121	
1,500.0	1,491.8	1,394.8	1,394.8	3.5	2.4	-73.87	154.1	425.5	398.1	392.2	5.92	67.270	
1,600.0	1,590.6	1,493.6	1,493.6	3.9	2.6	-75.95	154.1	425.5	394.2	387.8	6.41	61.501	
1,700.0	1,689.5	1,592.5	1,592.5	4.2	2.8	-78.07	154.1	425.5	390.7	383.8	6.90	56.606	
1,800.0	1,788.3	1,691.3	1,691.3	4.5	3.0	-80.23	154.1	425.5	387.9	380.5	7.40	52.427	
1,900.0	1,887.2	1,790.2	1,790.2	4.8	3.1	-82.41	154.1	425.5	385.6	377.7	7.89	48.841	
2,000.0	1,986.0	1,889.0	1,889.0	5.1	3.3	-84.62	154.1	425.5	383.8	375.5	8.39	45.752	
2,100.0	2,084.9	1,987.9	1,987.9	5.4	3.5	-86.84	154.1	425.5	382.7	373.8	8.88	43.083	
2,200.0	2,183.8	2,086.8	2,086.8	5.7	3.6	-89.07	154.1	425.5	382.2	372.8	9.37	40.771	
2,241.8	2,225.1	2,128.1	2,128.1	5.9	3.7	-90.00	154.1	425.5	382.1	372.5	9.58	39.899	CC
2,300.0	2,282.6	2,185.6	2,185.6	6.0	3.8	-91.30	154.1	425.5	382.2	372.4	9.86	38.766	
2,400.0	2,381.5	2,284.5	2,284.5	6.4	4.0	-93.53	154.1	425.5	382.9	372.5	10.34	37.026	
2,500.0	2,480.3	2,383.3	2,383.3	6.7	4.2	-95.75	154.1	425.5	384.1	373.3	10.81	35.515	
2,600.0	2,579.2	2,482.2	2,482.2	7.0	4.3	-97.95	154.1	425.5	385.9	374.6	11.28	34.205	
2,700.0	2,678.0	2,581.0	2,581.0	7.3	4.5	-100.13	154.1	425.5	388.3	376.6	11.74	33.070	
2,800.0	2,776.9	2,679.9	2,679.9	7.6	4.7	-102.28	154.1	425.5	391.3	379.1	12.19	32.090	
2,900.0	2,875.8	2,778.8	2,778.8	7.9	4.8	-104.39	154.1	425.5	394.8	382.1	12.64	31.244	
3,000.0	2,974.6	2,877.6	2,877.6	8.3	5.0	-106.47	154.1	425.5	398.8	385.8	13.07	30.518	
3,100.0	3,073.5	2,976.5	2,976.5	8.6	5.2	-108.50	154.1	425.5	403.4	389.9	13.49	29.897	
3,200.0	3,172.3	3,075.3	3,075.3	8.9	5.4	-110.48	154.1	425.5	408.5	394.6	13.91	29.370	
3,300.0	3,271.2	3,174.2	3,174.2	9.2	5.5	-112.42	154.1	425.5	414.1	399.7	14.31	28.926	
3,400.0	3,370.1	3,273.1	3,273.1	9.5	5.7	-114.30	154.1	425.5	420.1	405.4	14.71	28.554	
3,500.0	3,468.9	3,371.9	3,371.9	9.8	5.9	-116.13	154.1	425.5	426.6	411.5	15.10	28.248	
3,600.0	3,567.8	3,470.8	3,470.8	10.1	6.1	-117.90	154.1	425.5	433.5	418.0	15.48	27.999	
3,700.0	3,666.6	3,569.6	3,569.6	10.5	6.2	-119.62	154.1	425.5	440.8	424.9	15.86	27.801	
3,800.0	3,765.5	3,668.5	3,668.5	10.8	6.4	-121.28	154.1	425.5	448.5	432.3	16.22	27.648	
3,900.0	3,864.3	3,767.3	3,767.3	11.1	6.6	-122.88	154.1	425.5	456.6	440.0	16.58	27.535	
4,000.0	3,963.2	3,866.2	3,866.2	11.4	6.7	-124.43	154.1	425.5	465.0	448.1	16.94	27.457	
4,100.0	4,062.1	3,965.1	3,965.1	11.7	6.9	-125.92	154.1	425.5	473.7	456.5	17.28	27.410	
4,200.0	4,160.9	4,063.9	4,063.9	12.0	7.1	-127.36	154.1	425.5	482.8	465.2	17.63	27.390	
4,300.0	4,259.8	4,162.8	4,162.8	12.4	7.3	-128.74	154.1	425.5	492.2	474.2	17.97	27.395	
7,700.0	7,376.9	7,279.9	7,279.9	19.7	12.7	-85.12	154.1	425.5	455.1	429.1	25.98	17.517	
7,800.0	7,383.0	7,286.0	7,286.0	19.8	12.7	-90.00	154.1	425.5	412.4	386.1	26.30	15.680	
7,900.0	7,383.0	7,286.0	7,286.0	20.0	12.7	-90.00	154.1	425.5	390.4	363.7	26.67	14.638	
7,938.4	7,383.0	7,286.0	7,286.0	20.2	12.7	-90.00	154.1	425.5	388.5	361.6	26.89	14.448	ES
8,000.0	7,383.0	7,286.0	7,286.0	20.4	12.7	-90.00	154.1	425.5	393.4	366.1	27.24	14.440	SF
8,100.0	7,383.0	7,286.0	7,286.0	21.0	12.7	-90.00	154.1	425.5	420.8	392.8	27.99	15.031	
8,200.0	7,383.0	7,286.0	7,286.0	21.6	12.7	-90.00	154.1	425.5	468.4	439.4	28.90	16.205	

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 3P-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 3P-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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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	66.08	185.4	418.0	457.3				
100.0	100.0	104.9	104.9	0.2	0.2	65.91	186.4	417.0	456.8	456.4	0.31	1,486.464	
123.0	123.0	126.0	126.0	0.2	0.2	65.86	186.8	416.8	456.7	456.3	0.38	1,188.011	
200.0	200.0	196.1	196.0	0.3	0.3	65.64	188.6	416.5	457.3	456.6	0.64	710.293	
300.0	300.0	283.8	283.6	0.5	0.5	-62.48	192.3	417.6	459.7	458.7	0.98	467.028	
400.0	400.0	367.6	367.2	0.7	0.7	-63.13	197.6	420.5	464.4	463.1	1.32	351.385	
500.0	499.9	457.6	456.8	0.9	0.9	-64.01	204.9	425.8	471.3	469.6	1.68	280.952	
600.0	599.7	546.0	544.6	1.1	1.1	-65.01	212.8	432.6	479.6	477.6	2.04	235.060	
700.0	699.4	643.6	641.3	1.3	1.4	-66.34	222.8	440.7	488.6	486.2	2.44	200.633	
800.0	798.9	740.5	737.3	1.5	1.6	-67.85	233.3	448.8	497.7	494.9	2.84	174.951	
8,200.0	7,383.0	7,430.2	7,380.0	21.6	19.0	84.98	837.5	882.4	427.5	394.0	33.42	12.792	
8,300.0	7,383.0	7,431.6	7,381.4	22.4	19.0	86.15	837.6	882.5	329.1	294.7	34.47	9.550	
8,400.0	7,383.0	7,433.0	7,382.8	23.3	19.0	87.33	837.6	882.5	232.3	196.6	35.62	6.521	
8,500.0	7,383.0	7,434.4	7,384.2	24.3	19.0	88.50	837.6	882.5	139.8	103.0	36.85	3.795	
8,600.0	7,383.0	7,435.8	7,385.6	25.3	19.0	89.67	837.6	882.5	71.9	33.7	38.16	1.883	
8,622.0	7,383.0	7,436.1	7,385.9	25.6	19.0	89.92	837.6	882.5	68.4	30.0	38.45	1.779	CC, ES, SF
8,700.0	7,383.0	7,437.2	7,387.0	26.5	19.0	90.83	837.6	882.5	103.8	64.3	39.51	2.626	
8,800.0	7,383.0	7,438.6	7,388.4	27.7	19.0	91.99	837.7	882.5	190.7	149.8	40.90	4.663	
8,900.0	7,383.0	7,440.0	7,389.7	29.0	19.0	93.12	837.7	882.5	286.3	244.0	42.32	6.765	
9,000.0	7,383.0	7,441.3	7,391.1	30.3	19.0	94.24	837.7	882.5	384.1	340.4	43.75	8.779	
9,100.0	7,383.0	7,442.6	7,392.4	31.6	19.0	95.34	837.7	882.5	482.8	437.6	45.21	10.681	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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	68.49	167.6	425.3	457.1				
100.0	100.0	104.9	104.9	0.2	0.2	68.55	167.0	425.1	456.7	456.4	0.31	1,485.150	
192.8	192.8	195.8	195.8	0.3	0.3	68.78	165.2	425.5	456.4	455.8	0.63	724.292	
200.0	200.0	202.4	202.4	0.3	0.3	68.81	165.0	425.5	456.4	455.8	0.65	697.627	
300.0	300.0	299.1	298.9	0.5	0.5	-58.37	160.6	427.7	456.4	455.4	1.02	448.808	
367.7	367.7	364.3	364.0	0.6	0.7	-57.87	156.0	430.2	456.4	455.1	1.28	357.398	
400.0	400.0	392.4	391.9	0.7	0.7	-57.64	153.7	431.6	456.4	455.0	1.40	326.467	
500.0	499.9	485.0	483.9	0.9	0.9	-56.81	145.4	438.1	457.6	455.8	1.81	253.244	
600.0	599.7	583.4	581.5	1.1	1.2	-55.91	135.3	446.1	458.7	456.4	2.26	203.156	
700.0	699.4	688.0	685.1	1.3	1.5	-55.03	123.6	454.5	458.5	455.7	2.75	167.002	
800.0	798.9	791.7	787.9	1.5	1.8	-54.43	112.2	461.9	456.6	453.4	3.24	140.995	
900.0	898.3	890.9	886.2	1.8	2.1	-53.99	100.8	468.5	453.1	449.3	3.75	120.939	
1,000.0	997.4	986.4	980.6	2.0	2.4	-53.58	88.9	475.7	449.2	444.9	4.27	105.118	
1,100.0	1,096.3	1,078.1	1,071.3	2.3	2.7	-53.29	77.5	483.9	445.7	440.9	4.79	92.967	
1,200.0	1,195.2	1,182.7	1,174.7	2.6	3.0	-53.11	65.6	493.7	442.6	437.3	5.35	82.769	
1,300.0	1,294.0	1,282.2	1,273.3	2.9	3.3	-52.96	54.3	502.2	438.9	433.0	5.90	74.448	
1,400.0	1,392.9	1,384.0	1,373.9	3.2	3.6	-52.78	42.6	510.9	434.9	428.5	6.45	67.439	
1,500.0	1,491.8	1,480.6	1,469.6	3.5	3.9	-52.64	31.7	519.2	431.2	424.3	6.98	61.739	
1,600.0	1,590.6	1,580.6	1,568.6	3.9	4.2	-52.51	20.7	528.1	427.8	420.3	7.53	56.785	
1,700.0	1,689.5	1,679.2	1,666.1	4.2	4.5	-52.32	9.5	537.3	424.7	416.6	8.08	52.565	
1,800.0	1,788.3	1,781.4	1,767.3	4.5	4.8	-52.25	-1.3	546.3	421.4	412.8	8.63	48.853	
1,900.0	1,887.2	1,883.0	1,867.9	4.8	5.1	-52.17	-12.2	554.9	417.7	408.5	9.17	45.543	
2,000.0	1,986.0	1,985.4	1,969.6	5.1	5.4	-52.22	-22.4	562.8	413.4	403.7	9.71	42.556	
2,100.0	2,084.9	2,086.2	2,069.5	5.4	5.7	-52.23	-32.9	570.2	408.6	398.4	10.26	39.825	
2,200.0	2,183.8	2,185.2	2,167.7	5.7	6.0	-52.15	-43.7	577.6	403.9	393.1	10.80	37.395	
2,300.0	2,282.6	2,284.9	2,266.5	6.0	6.2	-52.10	-54.4	585.3	399.4	388.1	11.34	35.221	
2,400.0	2,381.5	2,387.0	2,367.8	6.4	6.5	-52.08	-65.1	592.8	394.7	382.8	11.89	33.192	
2,500.0	2,480.3	2,487.0	2,466.8	6.7	6.8	-51.93	-76.6	599.9	389.5	377.0	12.45	31.294	
2,600.0	2,579.2	2,583.5	2,562.3	7.0	7.1	-51.61	-88.7	607.5	384.8	371.8	12.99	29.629	
2,700.0	2,678.0	2,678.6	2,656.3	7.3	7.4	-51.29	-100.3	616.0	381.1	367.6	13.52	28.197	
2,800.0	2,776.9	2,779.3	2,755.8	7.6	7.8	-50.99	-112.2	625.7	378.3	364.3	14.06	26.914	
2,900.0	2,875.8	2,880.9	2,856.3	7.9	8.1	-50.78	-123.7	634.8	374.9	360.3	14.60	25.680	
3,000.0	2,974.6	2,981.2	2,955.5	8.3	8.4	-50.53	-135.4	643.5	371.3	356.1	15.14	24.517	
3,100.0	3,073.5	3,081.1	3,054.5	8.6	8.7	-50.29	-146.9	652.2	367.6	351.9	15.67	23.463	
3,200.0	3,172.3	3,183.0	3,155.5	8.9	9.0	-50.24	-157.5	660.3	363.5	347.2	16.20	22.429	
3,300.0	3,271.2	3,279.9	3,251.4	9.2	9.3	-50.04	-168.5	668.4	359.5	342.7	16.74	21.472	
3,400.0	3,370.1	3,383.4	3,353.8	9.5	9.6	-49.76	-180.6	677.1	355.5	338.2	17.27	20.582	
3,500.0	3,468.9	3,481.4	3,450.8	9.8	9.9	-49.60	-191.4	685.1	351.5	333.7	17.79	19.753	
3,600.0	3,567.8	3,581.8	3,550.3	10.1	10.2	-49.53	-201.9	693.4	347.6	329.3	18.32	18.973	
3,700.0	3,666.6	3,683.8	3,651.5	10.5	10.5	-49.44	-212.7	701.5	343.4	324.5	18.86	18.210	
3,800.0	3,765.5	3,785.4	3,752.3	10.8	10.7	-49.39	-223.3	708.8	338.5	319.2	19.39	17.458	
3,900.0	3,864.3	3,886.2	3,852.2	11.1	11.0	-49.24	-234.6	715.9	333.3	313.4	19.92	16.733	
4,000.0	3,963.2	3,985.6	3,950.8	11.4	11.3	-49.13	-245.4	722.7	328.0	307.5	20.44	16.044	
4,100.0	4,062.1	4,084.2	4,048.5	11.7	11.6	-48.98	-256.3	729.8	323.0	302.0	20.96	15.408	
4,200.0	4,160.9	4,185.5	4,148.9	12.0	11.9	-48.85	-267.3	737.2	318.2	296.7	21.48	14.813	
4,300.0	4,259.8	4,288.7	4,251.4	12.4	12.2	-48.94	-277.5	743.5	312.3	290.3	22.01	14.187	
4,400.0	4,358.6	4,388.4	4,350.5	12.7	12.4	-49.16	-286.8	748.9	305.9	283.3	22.56	13.560	
4,500.0	4,457.5	4,488.2	4,449.7	13.0	12.7	-49.27	-296.7	754.6	299.6	276.5	23.10	12.970	
4,600.0	4,556.3	4,585.7	4,546.6	13.3	12.9	-49.41	-306.2	760.5	293.7	270.1	23.63	12.431	
4,700.0	4,655.2	4,686.7	4,646.8	13.6	13.2	-49.49	-316.3	766.7	287.9	263.7	24.17	11.908	
4,800.0	4,754.1	4,781.0	4,740.4	13.9	13.5	-49.47	-326.0	773.5	283.1	258.4	24.69	11.466	
4,900.0	4,852.9	4,881.0	4,839.6	14.3	13.8	-49.55	-335.7	781.5	279.1	253.9	25.23	11.064	

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 3P-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 3P-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
5,000.0	4,951.8	4,980.4	4,938.2	14.6	14.0	-49.47	-346.0	789.6	275.2	249.4	25.76	10.685	
5,100.0	5,050.6	5,081.2	5,038.1	14.9	14.3	-49.48	-356.0	797.9	271.4	245.1	26.29	10.326	
5,200.0	5,149.5	5,181.1	5,137.3	15.2	14.6	-49.82	-364.6	805.4	267.2	240.3	26.85	9.951	
5,300.0	5,248.4	5,278.1	5,233.7	15.5	14.9	-50.11	-373.0	813.3	263.6	236.2	27.41	9.616	
5,400.0	5,347.2	5,375.5	5,330.2	15.8	15.2	-50.21	-382.0	822.6	261.2	233.3	27.95	9.345	
5,500.0	5,446.1	5,475.9	5,429.6	16.2	15.4	-50.14	-392.0	832.6	259.2	230.7	28.48	9.101	
5,600.0	5,544.9	5,578.1	5,530.8	16.5	15.7	-50.25	-401.5	842.2	256.7	227.7	29.03	8.843	
5,700.0	5,643.8	5,678.7	5,630.6	16.8	16.0	-50.29	-411.4	850.9	253.3	223.8	29.58	8.565	
5,800.0	5,742.6	5,779.3	5,730.3	17.1	16.3	-50.30	-421.3	859.7	250.1	220.0	30.11	8.308	
5,900.0	5,841.5	5,882.2	5,832.7	17.4	16.6	-50.84	-429.5	867.4	246.0	215.3	30.71	8.012	
6,000.0	5,940.4	5,983.3	5,933.3	17.7	16.8	-51.78	-436.1	873.5	240.9	209.6	31.35	7.684	
6,100.0	6,039.2	6,083.6	6,033.4	18.1	17.0	-53.23	-440.9	878.9	235.7	203.6	32.07	7.349	
6,200.0	6,138.1	6,184.9	6,134.5	18.4	17.2	-55.07	-444.7	883.6	230.1	197.3	32.84	7.008	
6,300.0	6,236.9	6,284.1	6,233.5	18.7	17.3	-57.26	-447.4	887.4	224.5	190.8	33.64	6.673	
6,400.0	6,335.8	6,384.9	6,334.3	19.0	17.5	-59.89	-449.1	890.7	219.1	184.6	34.48	6.353	
6,500.0	6,434.7	6,482.7	6,432.1	19.3	17.6	-62.68	-450.5	893.7	214.1	178.8	35.31	6.063	
6,600.0	6,533.5	6,583.0	6,532.3	19.6	17.8	-65.72	-451.6	896.9	209.8	173.6	36.14	5.805	
6,700.0	6,632.4	6,681.4	6,630.6	20.0	17.9	-69.00	-452.1	899.6	206.1	169.2	36.93	5.581	
6,800.0	6,731.2	6,781.6	6,730.8	20.3	18.0	-72.71	-451.9	901.8	203.1	165.4	37.68	5.390	
6,900.0	6,830.3	6,882.1	6,831.3	20.5	18.1	-24.90	-451.3	903.1	197.8	159.7	38.07	5.196	
7,000.0	6,928.8	6,980.8	6,930.0	20.6	18.2	22.65	-450.4	903.6	182.3	144.7	37.55	4.854	
7,100.0	7,023.8	7,075.9	7,025.1	20.6	18.3	43.06	-449.2	904.0	157.6	121.4	36.13	4.361	
7,200.0	7,112.4	7,166.1	7,115.2	20.5	18.4	64.51	-447.8	903.9	129.0	95.6	33.42	3.861	SF
7,296.2	7,189.2	7,242.9	7,192.1	20.3	18.5	89.97	-446.9	903.8	114.2	84.7	29.53	3.867	CC, ES
7,300.0	7,192.0	7,245.8	7,195.0	20.3	18.5	90.99	-446.8	903.8	114.2	84.9	29.37	3.889	
7,400.0	7,260.1	7,315.4	7,264.6	20.0	18.6	113.91	-445.9	903.9	137.8	111.9	25.87	5.327	
7,500.0	7,314.7	7,371.9	7,321.1	19.8	18.6	126.56	-444.7	904.1	197.9	174.0	23.89	8.285	
7,600.0	7,354.0	7,413.4	7,362.6	19.7	18.7	129.65	-443.8	904.2	278.8	255.3	23.54	11.846	
7,700.0	7,376.9	7,438.8	7,387.9	19.7	18.7	121.46	-443.2	904.4	370.6	344.7	25.90	14.309	
7,800.0	7,383.0	7,447.5	7,396.6	19.8	18.7	96.71	-443.0	904.4	467.6	437.5	30.03	15.570	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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
8,200.0	7,383.0	7,333.1	7,187.7	21.6	20.4	-70.60	500.3	373.0	475.2	445.3	29.96	15.861	
8,287.2	7,383.0	7,348.1	7,201.8	22.3	20.5	-72.41	502.9	368.5	467.4	436.3	31.10	15.031	CC
8,300.0	7,383.0	7,350.9	7,204.4	22.4	20.5	-72.75	503.3	367.7	467.6	436.3	31.27	14.951	ES
8,400.0	7,383.0	7,371.9	7,224.2	23.3	20.6	-75.29	506.9	361.5	480.3	447.6	32.73	14.676	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well File 3P-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 3P-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 3P-32H-K268
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.30°