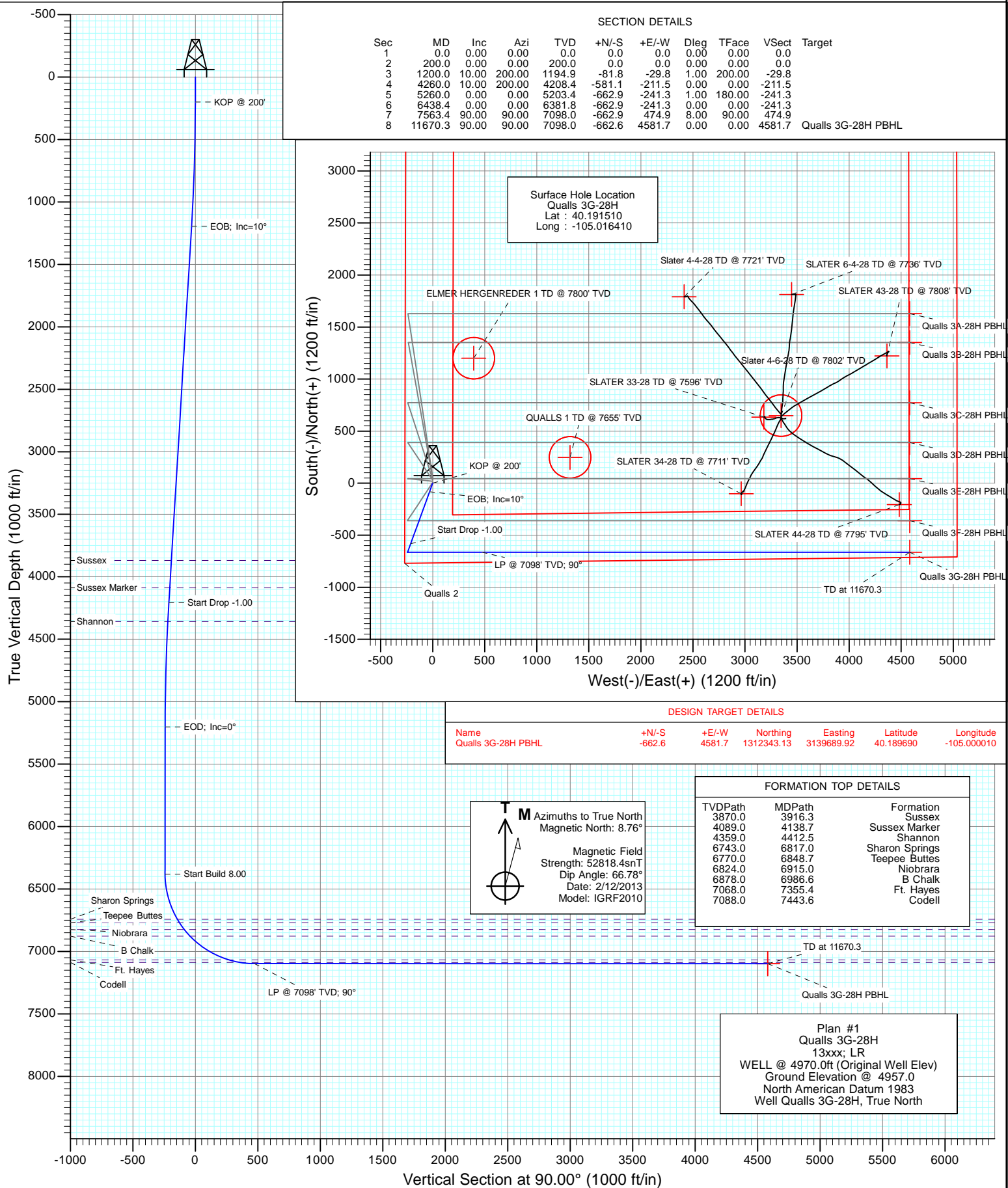




Project: DJ Wattenberg  
Site: S28-T3N-R68W (Qualls)  
Well: Qualls 3G-28H  
Wellbore: Hz  
Design: Plan #1



## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Qualls 3G-28H
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Site:</b>	S28-T3N-R68W (Qualls)	<b>North Reference:</b>	True
<b>Well:</b>	Qualls 3G-28H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #1		

<b>Project</b>	DJ Wattenberg		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

<b>Site</b>	S28-T3N-R68W (Qualls)			
<b>Site Position:</b>		<b>Northing:</b>	1,313,038.99 ft	<b>Latitude:</b> 40.191670
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,135,104.30 ft	<b>Longitude:</b> -105.016410
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b> 0.31 °

<b>Well</b>	Qualls 3G-28H			
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>	1,312,980.70 ft
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	3,135,104.62 ft
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	ft
			<b>Ground Level:</b>	4,957.0 ft

<b>Wellbore</b>	Hz				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	2/12/2013	8.76	66.78	52,818

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	90.00

<b>Plan Sections</b>										
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	
1,200.0	10.00	200.00	1,194.9	-81.8	-29.8	1.00	1.00	0.00	200.00	
4,260.0	10.00	200.00	4,208.4	-581.1	-211.5	0.00	0.00	0.00	0.00	
5,260.0	0.00	0.00	5,203.4	-662.9	-241.3	1.00	-1.00	0.00	180.00	
6,438.4	0.00	0.00	6,381.8	-662.9	-241.3	0.00	0.00	0.00	0.00	
7,563.4	90.00	90.00	7,098.0	-662.9	474.9	8.00	8.00	0.00	90.00	
11,670.3	90.00	90.00	7,098.0	-662.6	4,581.7	0.00	0.00	0.00	0.00	Qualls 3G-28H PBHL

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Qualls 3G-28H
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Site:</b>	S28-T3N-R68W (Qualls)	<b>North Reference:</b>	True
<b>Well:</b>	Qualls 3G-28H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	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'
300.0	1.00	200.00	300.0	-0.8	-0.3	-0.3	1.00	1.00	
400.0	2.00	200.00	400.0	-3.3	-1.2	-1.2	1.00	1.00	
500.0	3.00	200.00	499.9	-7.4	-2.7	-2.7	1.00	1.00	
600.0	4.00	200.00	599.7	-13.1	-4.8	-4.8	1.00	1.00	
700.0	5.00	200.00	699.4	-20.5	-7.5	-7.5	1.00	1.00	
800.0	6.00	200.00	798.9	-29.5	-10.7	-10.7	1.00	1.00	
900.0	7.00	200.00	898.3	-40.1	-14.6	-14.6	1.00	1.00	
1,000.0	8.00	200.00	997.4	-52.4	-19.1	-19.1	1.00	1.00	
1,100.0	9.00	200.00	1,096.3	-66.3	-24.1	-24.1	1.00	1.00	
1,200.0	10.00	200.00	1,194.9	-81.8	-29.8	-29.8	1.00	1.00	EOB; Inc=10°
1,300.0	10.00	200.00	1,293.4	-98.1	-35.7	-35.7	0.00	0.00	
1,400.0	10.00	200.00	1,391.9	-114.4	-41.6	-41.6	0.00	0.00	
1,500.0	10.00	200.00	1,490.4	-130.7	-47.6	-47.6	0.00	0.00	
1,600.0	10.00	200.00	1,588.9	-147.1	-53.5	-53.5	0.00	0.00	
1,700.0	10.00	200.00	1,687.3	-163.4	-59.5	-59.5	0.00	0.00	
1,800.0	10.00	200.00	1,785.8	-179.7	-65.4	-65.4	0.00	0.00	
1,900.0	10.00	200.00	1,884.3	-196.0	-71.3	-71.3	0.00	0.00	
2,000.0	10.00	200.00	1,982.8	-212.3	-77.3	-77.3	0.00	0.00	
2,100.0	10.00	200.00	2,081.3	-228.7	-83.2	-83.2	0.00	0.00	
2,200.0	10.00	200.00	2,179.7	-245.0	-89.2	-89.2	0.00	0.00	
2,300.0	10.00	200.00	2,278.2	-261.3	-95.1	-95.1	0.00	0.00	
2,400.0	10.00	200.00	2,376.7	-277.6	-101.0	-101.0	0.00	0.00	
2,500.0	10.00	200.00	2,475.2	-293.9	-107.0	-107.0	0.00	0.00	
2,600.0	10.00	200.00	2,573.7	-310.2	-112.9	-112.9	0.00	0.00	
2,700.0	10.00	200.00	2,672.1	-326.6	-118.9	-118.9	0.00	0.00	
2,800.0	10.00	200.00	2,770.6	-342.9	-124.8	-124.8	0.00	0.00	
2,900.0	10.00	200.00	2,869.1	-359.2	-130.7	-130.7	0.00	0.00	
3,000.0	10.00	200.00	2,967.6	-375.5	-136.7	-136.7	0.00	0.00	
3,100.0	10.00	200.00	3,066.1	-391.8	-142.6	-142.6	0.00	0.00	
3,200.0	10.00	200.00	3,164.5	-408.1	-148.6	-148.6	0.00	0.00	
3,300.0	10.00	200.00	3,263.0	-424.5	-154.5	-154.5	0.00	0.00	
3,400.0	10.00	200.00	3,361.5	-440.8	-160.4	-160.4	0.00	0.00	
3,500.0	10.00	200.00	3,460.0	-457.1	-166.4	-166.4	0.00	0.00	
3,600.0	10.00	200.00	3,558.5	-473.4	-172.3	-172.3	0.00	0.00	
3,700.0	10.00	200.00	3,657.0	-489.7	-178.2	-178.2	0.00	0.00	
3,800.0	10.00	200.00	3,755.4	-506.1	-184.2	-184.2	0.00	0.00	
3,900.0	10.00	200.00	3,853.9	-522.4	-190.1	-190.1	0.00	0.00	
3,916.3	10.00	200.00	3,870.0	-525.0	-191.1	-191.1	0.00	0.00	Sussex
4,000.0	10.00	200.00	3,952.4	-538.7	-196.1	-196.1	0.00	0.00	
4,100.0	10.00	200.00	4,050.9	-555.0	-202.0	-202.0	0.00	0.00	
4,138.7	10.00	200.00	4,089.0	-561.3	-204.3	-204.3	0.00	0.00	Sussex Marker
4,200.0	10.00	200.00	4,149.4	-571.3	-207.9	-207.9	0.00	0.00	
4,260.0	10.00	200.00	4,208.4	-581.1	-211.5	-211.5	0.00	0.00	Start Drop -1.00
4,300.0	9.60	200.00	4,247.9	-587.5	-213.8	-213.8	1.00	-1.00	
4,400.0	8.60	200.00	4,346.6	-602.4	-219.2	-219.2	1.00	-1.00	
4,412.5	8.47	200.00	4,359.0	-604.1	-219.9	-219.9	1.00	-1.00	Shannon
4,500.0	7.60	200.00	4,445.6	-615.6	-224.1	-224.1	1.00	-1.00	
4,600.0	6.60	200.00	4,544.8	-627.2	-228.3	-228.3	1.00	-1.00	
4,700.0	5.60	200.00	4,644.3	-637.2	-231.9	-231.9	1.00	-1.00	

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Qualls 3G-28H
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Site:</b>	S28-T3N-R68W (Qualls)	<b>North Reference:</b>	True
<b>Well:</b>	Qualls 3G-28H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	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	4.60	200.00	4,743.9	-645.6	-235.0	-235.0	1.00	-1.00	
4,900.0	3.60	200.00	4,843.6	-652.3	-237.4	-237.4	1.00	-1.00	
5,000.0	2.60	200.00	4,943.5	-657.4	-239.3	-239.3	1.00	-1.00	
5,100.0	1.60	200.00	5,043.4	-660.8	-240.5	-240.5	1.00	-1.00	
5,200.0	0.60	200.00	5,143.4	-662.6	-241.2	-241.2	1.00	-1.00	
5,260.0	0.00	0.00	5,203.4	-662.9	-241.3	-241.3	1.00	-1.00	EOD; Inc=0°
5,300.0	0.00	0.00	5,243.4	-662.9	-241.3	-241.3	0.00	0.00	
5,400.0	0.00	0.00	5,343.4	-662.9	-241.3	-241.3	0.00	0.00	
5,500.0	0.00	0.00	5,443.4	-662.9	-241.3	-241.3	0.00	0.00	
5,600.0	0.00	0.00	5,543.4	-662.9	-241.3	-241.3	0.00	0.00	
5,700.0	0.00	0.00	5,643.4	-662.9	-241.3	-241.3	0.00	0.00	
5,800.0	0.00	0.00	5,743.4	-662.9	-241.3	-241.3	0.00	0.00	
5,900.0	0.00	0.00	5,843.4	-662.9	-241.3	-241.3	0.00	0.00	
6,000.0	0.00	0.00	5,943.4	-662.9	-241.3	-241.3	0.00	0.00	
6,100.0	0.00	0.00	6,043.4	-662.9	-241.3	-241.3	0.00	0.00	
6,200.0	0.00	0.00	6,143.4	-662.9	-241.3	-241.3	0.00	0.00	
6,300.0	0.00	0.00	6,243.4	-662.9	-241.3	-241.3	0.00	0.00	
6,400.0	0.00	0.00	6,343.4	-662.9	-241.3	-241.3	0.00	0.00	
6,438.4	0.00	0.00	6,381.8	-662.9	-241.3	-241.3	0.00	0.00	Start Build 8.00
6,500.0	4.93	90.00	6,443.3	-662.9	-238.6	-238.6	8.00	8.00	
6,600.0	12.93	90.00	6,542.0	-662.9	-223.1	-223.1	8.00	8.00	
6,700.0	20.93	90.00	6,637.6	-662.9	-194.0	-194.0	8.00	8.00	
6,800.0	28.93	90.00	6,728.2	-662.9	-151.9	-151.9	8.00	8.00	
6,817.0	30.29	90.00	6,743.0	-662.9	-143.5	-143.5	8.00	8.00	Sharon Springs
6,848.7	32.82	90.00	6,770.0	-662.9	-126.9	-126.9	8.00	8.00	Teepee Buttes
6,900.0	36.93	90.00	6,812.1	-662.9	-97.6	-97.6	8.00	8.00	
6,915.0	38.13	90.00	6,824.0	-662.9	-88.5	-88.5	8.00	8.00	Niobrara
6,986.6	43.85	90.00	6,878.0	-662.9	-41.5	-41.5	8.00	8.00	B Chalk
7,000.0	44.93	90.00	6,887.6	-662.9	-32.2	-32.2	8.00	8.00	
7,100.0	52.93	90.00	6,953.2	-662.9	43.2	43.2	8.00	8.00	
7,200.0	60.93	90.00	7,007.8	-662.9	126.9	126.9	8.00	8.00	
7,300.0	68.93	90.00	7,050.1	-662.9	217.4	217.4	8.00	8.00	
7,355.4	73.36	90.00	7,068.0	-662.9	269.8	269.8	8.00	8.00	Ft. Hayes
7,400.0	76.93	90.00	7,079.4	-662.9	312.9	312.9	8.00	8.00	
7,443.6	80.41	90.00	7,088.0	-662.9	355.7	355.7	8.00	8.00	Codell
7,500.0	84.93	90.00	7,095.2	-662.9	411.6	411.6	8.00	8.00	
7,563.4	90.00	90.00	7,098.0	-662.9	474.9	474.9	8.00	8.00	LP @ 7098' TVD; 90°
7,600.0	90.00	90.00	7,098.0	-662.9	511.5	511.5	0.00	0.00	
7,700.0	90.00	90.00	7,098.0	-662.8	611.5	611.5	0.00	0.00	
7,800.0	90.00	90.00	7,098.0	-662.8	711.5	711.5	0.00	0.00	
7,900.0	90.00	90.00	7,098.0	-662.8	811.5	811.5	0.00	0.00	
8,000.0	90.00	90.00	7,098.0	-662.8	911.5	911.5	0.00	0.00	
8,100.0	90.00	90.00	7,098.0	-662.8	1,011.5	1,011.5	0.00	0.00	
8,200.0	90.00	90.00	7,098.0	-662.8	1,111.5	1,111.5	0.00	0.00	
8,300.0	90.00	90.00	7,098.0	-662.8	1,211.5	1,211.5	0.00	0.00	
8,400.0	90.00	90.00	7,098.0	-662.8	1,311.5	1,311.5	0.00	0.00	
8,500.0	90.00	90.00	7,098.0	-662.8	1,411.5	1,411.5	0.00	0.00	
8,600.0	90.00	90.00	7,098.0	-662.8	1,511.5	1,511.5	0.00	0.00	
8,700.0	90.00	90.00	7,098.0	-662.8	1,611.5	1,611.5	0.00	0.00	
8,800.0	90.00	90.00	7,098.0	-662.8	1,711.5	1,711.5	0.00	0.00	
8,900.0	90.00	90.00	7,098.0	-662.8	1,811.5	1,811.5	0.00	0.00	
9,000.0	90.00	90.00	7,098.0	-662.8	1,911.5	1,911.5	0.00	0.00	

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Qualls 3G-28H
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Site:</b>	S28-T3N-R68W (Qualls)	<b>North Reference:</b>	True
<b>Well:</b>	Qualls 3G-28H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	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
9,100.0	90.00	90.00	7,098.0	-662.7	2,011.5	2,011.5	0.00	0.00	
9,200.0	90.00	90.00	7,098.0	-662.7	2,111.5	2,111.5	0.00	0.00	
9,300.0	90.00	90.00	7,098.0	-662.7	2,211.5	2,211.5	0.00	0.00	
9,400.0	90.00	90.00	7,098.0	-662.7	2,311.5	2,311.5	0.00	0.00	
9,500.0	90.00	90.00	7,098.0	-662.7	2,411.5	2,411.5	0.00	0.00	
9,600.0	90.00	90.00	7,098.0	-662.7	2,511.5	2,511.5	0.00	0.00	
9,700.0	90.00	90.00	7,098.0	-662.7	2,611.5	2,611.5	0.00	0.00	
9,800.0	90.00	90.00	7,098.0	-662.7	2,711.5	2,711.5	0.00	0.00	
9,900.0	90.00	90.00	7,098.0	-662.7	2,811.5	2,811.5	0.00	0.00	
10,000.0	90.00	90.00	7,098.0	-662.7	2,911.5	2,911.5	0.00	0.00	
10,100.0	90.00	90.00	7,098.0	-662.7	3,011.5	3,011.5	0.00	0.00	
10,200.0	90.00	90.00	7,098.0	-662.7	3,111.5	3,111.5	0.00	0.00	
10,300.0	90.00	90.00	7,098.0	-662.7	3,211.5	3,211.5	0.00	0.00	
10,400.0	90.00	90.00	7,098.0	-662.7	3,311.5	3,311.5	0.00	0.00	
10,500.0	90.00	90.00	7,098.0	-662.6	3,411.5	3,411.5	0.00	0.00	
10,600.0	90.00	90.00	7,098.0	-662.6	3,511.5	3,511.5	0.00	0.00	
10,700.0	90.00	90.00	7,098.0	-662.6	3,611.5	3,611.5	0.00	0.00	
10,800.0	90.00	90.00	7,098.0	-662.6	3,711.5	3,711.5	0.00	0.00	
10,900.0	90.00	90.00	7,098.0	-662.6	3,811.5	3,811.5	0.00	0.00	
11,000.0	90.00	90.00	7,098.0	-662.6	3,911.5	3,911.5	0.00	0.00	
11,100.0	90.00	90.00	7,098.0	-662.6	4,011.5	4,011.5	0.00	0.00	
11,200.0	90.00	90.00	7,098.0	-662.6	4,111.5	4,111.5	0.00	0.00	
11,300.0	90.00	90.00	7,098.0	-662.6	4,211.5	4,211.5	0.00	0.00	
11,400.0	90.00	90.00	7,098.0	-662.6	4,311.5	4,311.5	0.00	0.00	
11,500.0	90.00	90.00	7,098.0	-662.6	4,411.5	4,411.5	0.00	0.00	
11,600.0	90.00	90.00	7,098.0	-662.6	4,511.5	4,511.5	0.00	0.00	
11,670.3	90.00	90.00	7,098.0	-662.6	4,581.7	4,581.7	0.00	0.00	TD at 11670.3 - Qualls 3G-28H PBHL

### Targets

#### Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Qualls 3G-28H PBHL - plan hits target center - Point	0.00	0.00	7,098.0	-662.6	4,581.7	1,312,343.13	3,139,689.92	40.189690	-105.000010

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Qualls 3G-28H
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Site:</b>	S28-T3N-R68W (Qualls)	<b>North Reference:</b>	True
<b>Well:</b>	Qualls 3G-28H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,916.3	3,870.0	Sussex				
4,138.7	4,089.0	Sussex Marker				
4,412.5	4,359.0	Shannon				
6,817.0	6,743.0	Sharon Springs				
6,848.7	6,770.0	Teepee Buttes				
6,915.0	6,824.0	Niobrara				
6,986.6	6,878.0	B Chalk				
7,355.4	7,068.0	Ft. Hayes				
7,443.6	7,088.0	Codell				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.0	200.0	0.0	0.0	KOP @ 200'	
1,200.0	1,194.9	-81.8	-29.8	EOB; Inc=10°	
4,260.0	4,208.4	-581.1	-211.5	Start Drop -1.00	
5,260.0	5,203.4	-662.9	-241.3	EOD; Inc=0°	
6,438.4	6,381.8	-662.9	-241.3	Start Build 8.00	
7,563.4	7,098.0	-662.9	474.9	LP @ 7098' TVD; 90°	
11,670.3	7,098.0	-662.6	4,581.7	TD at 11670.3	

# **EnCana Oil & Gas (USA) Inc**

**DJ Wattenberg**

**S28-T3N-R68W (Qualls)**

**Qualls 3G-28H**

**Hz**

**Plan #1**

## **Anticollision Report**

**12 February, 2013**

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Qualls 3G-28H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Reference Site:</b>	S28-T3N-R68W (Qualls)	<b>MD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Qualls 3G-28H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	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	2/12/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	11,670.3	Plan #1 (Hz)	MWD	Geolink MWD	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S28-T3N-R68W (Qualls)						
ANDERSON FAMILY TRUST 1 (EXISTING) - EXISTING						Out of range
ELMER HERGENREDER 1 (EXISTING) - EXISTING - N						Out of range
QUALLS 1 (EXISTING) - EXISTING - NO SURVEYS						Out of range
Qualls 3A-28H - Hz - Plan #1	200.0	200.0	58.3	57.6	89.298	CC, ES
Qualls 3A-28H - Hz - Plan #1	500.0	490.1	84.5	82.8	50.107	SF
Qualls 3B-28H - Hz - Plan #1	200.0	200.0	47.4	46.7	72.549	CC, ES
Qualls 3B-28H - Hz - Plan #1	500.0	495.9	61.5	59.8	36.288	SF
Qualls 3C-28H - Hz - Plan #1	200.0	200.0	36.4	35.8	55.807	CC, ES
Qualls 3C-28H - Hz - Plan #1	600.0	598.0	53.0	50.9	25.867	SF
Qualls 3D-28H - Hz - Plan #1	200.0	200.0	29.1	28.5	44.646	CC, ES
Qualls 3D-28H - Hz - Plan #1	600.0	599.1	43.2	41.1	21.088	SF
Qualls 3E-28H - Hz - Plan #1	200.0	200.0	18.2	17.6	27.904	CC, ES
Qualls 3E-28H - Hz - Plan #1	500.0	499.9	25.8	24.1	15.142	SF
Qualls 3F-28H - Hz - Plan #1	200.0	200.0	7.3	6.6	11.161	CC, ES
Qualls 3F-28H - Hz - Plan #1	11,670.3	11,439.0	368.1	176.0	1.916	SF
SLATER 33-28 (EXISTING) - EXISTING - GYRO						Out of range
SLATER 34-28 (EXISTING) - EXISTING - SURVEYS						Out of range
SLATER 43-28 (EXISTING) - EXISTING - SURVEYS						Out of range
SLATER 44-28 (EXISTING) - EXISTING - SURVEYS	11,580.8	7,294.1	464.3	326.0	3.356	CC
SLATER 44-28 (EXISTING) - EXISTING - SURVEYS	11,600.0	7,293.8	464.7	325.9	3.348	ES, SF
SLATER 4-4-28 (EXISTING) - Existing - SURVEYS						Out of range
SLATER 4-6-28 (EXISTING) - Existing - NO SURVEYS						Out of range
SLATER 6-4-28 (EXISTING) - EXISTING - SURVEYS						Out of range
WATERFRONT 11-27 (EXISTING) - EXISTING - NO SU						Out of range
WATERFRONT 12-27 (EXISTING) - EXISTING - NO SU						Out of range
WATERFRONT 13-27 (EXISTING) - EXISTING - NO SU						Out of range
WATERFRONT 14-27 (EXISTING) - EXISTING - NO SU						Out of range
WATERFRONT 33-27 (EXISTING) - EXISTING - NO SU						Out of range

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

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Qualls 3G-28H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Reference Site:</b>	S28-T3N-R68W (Qualls)	<b>MD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Qualls 3G-28H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> S28-T3N-R68W (Qualls) - Qualls 3A-28H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	0.00	58.3	0.0	58.3					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	58.3	0.0	58.3	58.0	0.30	191.939		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	58.3	0.0	58.3	57.6	0.65	89.298 CC, ES		
300.0	300.0	297.5	297.4	0.5	0.5	159.97	60.3	-0.3	61.2	60.2	1.00	61.364		
400.0	400.0	394.3	394.1	0.7	0.7	159.90	66.4	-1.2	70.0	68.6	1.34	52.130		
500.0	499.9	490.1	489.3	0.9	0.9	159.81	76.4	-2.7	84.5	82.8	1.69	50.107 SF		
600.0	599.7	584.2	582.4	1.1	1.2	159.71	90.1	-4.8	104.6	102.6	2.03	51.586		
700.0	699.4	676.2	672.8	1.3	1.6	159.60	107.0	-7.4	130.3	127.9	2.37	55.003		
800.0	798.9	765.7	759.9	1.5	1.9	159.50	127.0	-10.4	161.2	158.5	2.71	59.577		
900.0	898.3	854.0	845.2	1.8	2.4	159.40	149.9	-13.9	197.3	194.3	3.04	64.823		
1,000.0	997.4	944.0	931.5	2.0	2.8	159.36	175.0	-17.6	236.7	233.3	3.39	69.892		
1,100.0	1,096.3	1,035.2	1,019.1	2.3	3.3	159.42	200.4	-21.5	277.6	273.9	3.73	74.343		
1,200.0	1,194.9	1,125.8	1,106.0	2.7	3.7	159.54	225.6	-25.3	320.0	315.9	4.08	78.376		
1,300.0	1,293.4	1,216.0	1,192.5	3.0	4.2	159.81	250.7	-29.1	363.2	358.7	4.44	81.758		
1,400.0	1,391.9	1,306.2	1,279.1	3.3	4.7	160.02	275.8	-32.9	406.3	401.5	4.80	84.615		
1,500.0	1,490.4	1,396.4	1,365.6	3.7	5.1	160.19	300.9	-36.7	449.4	444.3	5.16	87.058		
1,600.0	1,588.9	1,486.6	1,452.2	4.0	5.6	160.33	326.0	-40.5	492.6	487.1	5.52	89.170		

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Qualls 3G-28H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Reference Site:</b>	S28-T3N-R68W (Qualls)	<b>MD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Qualls 3G-28H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> S28-T3N-R68W (Qualls) - Qualls 3B-28H - Hz - Plan #1												<b>Offset Site Error:</b>	0.0 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	0.00	47.4	0.0	47.4				
100.0	100.0	100.0	100.0	0.2	0.2	0.00	47.4	0.0	47.4	47.1	0.30	155.939	
200.0	200.0	200.0	200.0	0.3	0.3	0.00	47.4	0.0	47.4	46.7	0.65	72.549 CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	160.35	47.4	0.0	48.2	47.2	1.00	48.090	
400.0	400.0	398.2	398.2	0.7	0.7	160.95	49.0	-0.3	52.3	51.0	1.35	38.818	
500.0	499.9	495.9	495.7	0.9	0.9	161.31	53.9	-1.2	61.5	59.8	1.69	36.288 SF	
600.0	599.7	592.6	592.1	1.1	1.1	161.45	62.1	-2.6	75.6	73.5	2.04	37.045	
700.0	699.4	688.1	686.9	1.3	1.3	161.44	73.2	-4.6	94.5	92.2	2.39	39.628	
800.0	798.9	781.8	779.5	1.5	1.6	161.34	87.1	-7.2	118.3	115.6	2.73	43.314	
900.0	898.3	873.5	869.7	1.8	1.9	161.20	103.7	-10.1	146.7	143.6	3.08	47.697	
1,000.0	997.4	963.0	957.1	2.0	2.3	161.05	122.5	-13.5	179.6	176.2	3.42	52.534	
1,100.0	1,096.3	1,050.6	1,042.1	2.3	2.6	160.88	143.6	-17.3	216.9	213.1	3.76	57.656	
1,200.0	1,194.9	1,142.3	1,130.7	2.7	3.1	160.80	166.6	-21.5	256.7	252.6	4.11	62.404	
1,300.0	1,293.4	1,233.7	1,219.1	3.0	3.5	160.90	189.6	-25.6	297.3	292.9	4.48	66.441	
1,400.0	1,391.9	1,325.1	1,307.4	3.3	3.9	160.98	212.6	-29.7	337.9	333.1	4.84	69.854	
1,500.0	1,490.4	1,416.5	1,395.8	3.7	4.3	161.04	235.5	-33.9	378.6	373.4	5.20	72.775	
1,600.0	1,588.9	1,507.8	1,484.1	4.0	4.7	161.09	258.5	-38.0	419.2	413.6	5.57	75.300	
1,700.0	1,687.3	1,599.2	1,572.5	4.3	5.2	161.13	281.5	-42.1	459.8	453.9	5.93	77.505	

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Qualls 3G-28H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Reference Site:</b>	S28-T3N-R68W (Qualls)	<b>MD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Qualls 3G-28H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S28-T3N-R68W (Qualls) - Qualls 3C-28H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	0.00	36.4	0.0	36.4					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	36.4	0.0	36.4	36.1	0.30	119.953		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	36.4	0.0	36.4	35.8	0.65	55.807	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	160.46	36.4	0.0	37.2	36.2	1.00	37.181		
400.0	400.0	400.0	400.0	0.7	0.7	161.71	36.4	0.0	39.7	38.4	1.35	29.404		
500.0	499.9	499.1	499.1	0.9	0.8	163.07	37.2	-0.3	44.7	43.0	1.70	26.304		
600.0	599.7	598.0	598.0	1.1	1.0	163.95	39.7	-1.1	53.0	50.9	2.05	25.867	SF	
700.0	699.4	696.4	696.3	1.3	1.2	164.41	43.7	-2.4	64.5	62.1	2.40	26.917		
800.0	798.9	794.2	793.9	1.5	1.4	164.57	49.3	-4.2	79.2	76.5	2.74	28.872		
900.0	898.3	891.2	890.6	1.8	1.6	164.54	56.4	-6.5	97.2	94.1	3.09	31.412		
1,000.0	997.4	987.3	986.2	2.0	1.8	164.41	65.0	-9.3	118.4	114.9	3.45	34.344		
1,100.0	1,096.3	1,082.3	1,080.7	2.3	2.0	164.23	75.0	-12.5	142.6	138.8	3.80	37.543		
1,200.0	1,194.9	1,176.1	1,173.7	2.7	2.3	164.03	86.3	-16.2	170.0	165.9	4.15	40.925		
1,300.0	1,293.4	1,268.8	1,265.5	3.0	2.5	163.84	99.0	-20.3	199.6	195.1	4.52	44.192		
1,400.0	1,391.9	1,360.7	1,356.2	3.3	2.8	163.55	112.8	-24.8	230.7	225.8	4.88	47.238		
1,500.0	1,490.4	1,451.6	1,445.7	3.7	3.1	163.21	128.0	-29.7	263.1	257.9	5.25	50.104		
1,600.0	1,588.9	1,541.6	1,534.1	4.0	3.4	162.84	144.2	-35.0	297.0	291.4	5.62	52.821		
1,700.0	1,687.3	1,632.3	1,622.8	4.3	3.8	162.45	161.9	-40.8	332.1	326.1	6.00	55.378		
1,800.0	1,785.8	1,725.8	1,714.2	4.7	4.1	162.10	180.4	-46.8	367.6	361.2	6.38	57.621		
1,900.0	1,884.3	1,819.2	1,805.7	5.0	4.5	161.82	198.9	-52.8	403.1	396.3	6.76	59.604		
2,000.0	1,982.8	1,912.7	1,897.1	5.4	4.8	161.58	217.3	-58.8	438.5	431.4	7.15	61.368		
2,100.0	2,081.3	2,006.2	1,988.6	5.7	5.2	161.37	235.8	-64.8	474.0	466.5	7.53	62.947		

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Qualls 3G-28H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Reference Site:</b>	S28-T3N-R68W (Qualls)	<b>MD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Qualls 3G-28H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S28-T3N-R68W (Qualls) - Qualls 3D-28H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	0.00	29.1	0.0	29.1					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	29.1	0.0	29.1	28.8	0.30	95.963		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	29.1	0.0	29.1	28.5	0.65	44.646 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	160.57	29.1	0.0	30.0	29.0	1.00	29.909		
400.0	400.0	400.0	400.0	0.7	0.7	162.10	29.1	0.0	32.4	31.1	1.35	24.015		
500.0	499.9	499.9	499.9	0.9	0.8	164.19	29.1	0.0	36.6	34.9	1.70	21.540		
600.0	599.7	599.1	599.1	1.1	1.0	165.67	29.9	-0.5	43.2	41.1	2.05	21.088 SF		
700.0	699.4	698.0	698.0	1.3	1.2	165.97	32.0	-1.9	52.8	50.4	2.40	22.027		
800.0	798.9	796.4	796.3	1.5	1.4	165.58	35.5	-4.2	65.4	62.7	2.75	23.803		
900.0	898.3	894.2	893.9	1.8	1.6	164.85	40.4	-7.5	81.0	77.9	3.10	26.114		
1,000.0	997.4	991.3	990.7	2.0	1.8	164.00	46.7	-11.6	99.6	96.1	3.46	28.774		
1,100.0	1,096.3	1,087.4	1,086.4	2.3	2.0	163.16	54.2	-16.6	121.2	117.3	3.83	31.664		
1,200.0	1,194.9	1,182.6	1,181.0	2.7	2.2	162.37	63.0	-22.4	145.7	141.5	4.20	34.699		
1,300.0	1,293.4	1,276.8	1,274.5	3.0	2.4	161.63	73.0	-29.0	172.3	167.7	4.58	37.598		
1,400.0	1,391.9	1,370.3	1,367.0	3.3	2.7	160.83	84.2	-36.4	200.2	195.2	4.97	40.251		
1,500.0	1,490.4	1,463.0	1,458.5	3.7	3.0	160.00	96.5	-44.6	229.5	224.1	5.37	42.702		
1,600.0	1,588.9	1,557.0	1,551.1	4.0	3.3	159.19	110.0	-53.5	259.8	254.0	5.78	44.939		
1,700.0	1,687.3	1,652.2	1,644.8	4.3	3.6	158.53	123.8	-62.6	290.3	284.1	6.19	46.866		
1,800.0	1,785.8	1,747.4	1,738.6	4.7	3.9	157.99	137.5	-71.8	320.8	314.2	6.61	48.541		
1,900.0	1,884.3	1,842.6	1,832.3	5.0	4.2	157.55	151.3	-80.9	351.4	344.3	7.03	50.010		
2,000.0	1,982.8	1,937.8	1,926.0	5.4	4.5	157.18	165.1	-90.0	381.9	374.5	7.44	51.308		
2,100.0	2,081.3	2,033.0	2,019.8	5.7	4.8	156.86	178.9	-99.1	412.5	404.6	7.86	52.463		
2,200.0	2,179.7	2,128.1	2,113.5	6.1	5.1	156.59	192.7	-108.2	443.0	434.8	8.28	53.496		
2,300.0	2,278.2	2,223.3	2,207.3	6.4	5.5	156.35	206.5	-117.4	473.6	464.9	8.70	54.425		

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Qualls 3G-28H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Reference Site:</b>	S28-T3N-R68W (Qualls)	<b>MD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Qualls 3G-28H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S28-T3N-R68W (Qualls) - Qualls 3E-28H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	0.00	18.2	0.0	18.2					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	18.2	0.0	18.2	17.9	0.30	59.977		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	18.2	0.0	18.2	17.6	0.65	27.904 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	160.90	18.2	0.0	19.0	18.0	1.00	19.002		
400.0	400.0	400.0	400.0	0.7	0.7	163.17	18.2	0.0	21.5	20.2	1.35	15.935		
500.0	499.9	499.9	499.8	0.9	0.9	164.03	18.3	-0.9	25.8	24.1	1.70	15.142 SF		
600.0	599.7	599.6	599.6	1.1	1.0	162.33	18.6	-3.5	31.7	29.7	2.05	15.446		
700.0	699.4	699.3	699.1	1.3	1.2	159.47	19.1	-7.8	39.5	37.1	2.42	16.361		
800.0	798.9	798.6	798.3	1.5	1.4	156.31	19.7	-13.8	49.3	46.5	2.79	17.642		
900.0	898.3	897.7	897.1	1.8	1.6	153.31	20.5	-21.5	61.1	57.9	3.19	19.135		
1,000.0	997.4	996.4	995.3	2.0	1.8	150.62	21.6	-30.8	74.9	71.3	3.61	20.734		
1,100.0	1,096.3	1,094.7	1,093.0	2.3	2.1	148.27	22.8	-41.8	90.8	86.8	4.06	22.363		
1,200.0	1,194.9	1,192.5	1,189.9	2.7	2.3	146.25	24.1	-54.4	108.9	104.3	4.54	23.971		
1,300.0	1,293.4	1,290.5	1,287.0	3.0	2.6	144.69	25.6	-68.0	128.0	123.0	5.04	25.402		
1,400.0	1,391.9	1,388.6	1,384.2	3.3	2.9	143.53	27.1	-81.5	147.2	141.7	5.55	26.549		
1,500.0	1,490.4	1,486.7	1,481.3	3.7	3.1	142.64	28.5	-95.1	166.5	160.4	6.06	27.484		
1,600.0	1,588.9	1,584.8	1,578.5	4.0	3.4	141.93	30.0	-108.7	185.8	179.2	6.57	28.259		
1,700.0	1,687.3	1,682.9	1,675.6	4.3	3.7	141.36	31.5	-122.2	205.1	198.0	7.09	28.909		
1,800.0	1,785.8	1,781.0	1,772.7	4.7	4.0	140.88	33.0	-135.8	224.4	216.8	7.62	29.462		
1,900.0	1,884.3	1,879.1	1,869.9	5.0	4.3	140.48	34.4	-149.4	243.7	235.6	8.14	29.936		
2,000.0	1,982.8	1,977.2	1,967.0	5.4	4.6	140.14	35.9	-163.0	263.1	254.4	8.67	30.348		
2,100.0	2,081.3	2,075.3	2,064.2	5.7	4.8	139.85	37.4	-176.5	282.5	273.3	9.20	30.709		
2,200.0	2,179.7	2,174.4	2,162.4	6.1	5.1	139.62	38.9	-190.1	301.7	292.0	9.72	31.029		
2,300.0	2,278.2	2,275.1	2,262.2	6.4	5.4	139.66	40.2	-202.4	320.4	310.2	10.23	31.318		
2,400.0	2,376.7	2,375.9	2,362.6	6.8	5.6	139.97	41.3	-212.9	338.3	327.6	10.71	31.580		
2,500.0	2,475.2	2,477.0	2,463.3	7.1	5.9	140.51	42.3	-221.8	355.5	344.3	11.17	31.825		
2,600.0	2,573.7	2,578.3	2,564.2	7.4	6.1	141.25	43.1	-228.8	372.0	360.4	11.60	32.064		
2,700.0	2,672.1	2,679.5	2,665.4	7.8	6.3	142.18	43.6	-234.1	387.8	375.8	12.00	32.308		
2,800.0	2,770.6	2,780.8	2,766.6	8.1	6.4	143.27	44.0	-237.6	403.0	390.7	12.38	32.566		
2,900.0	2,869.1	2,882.1	2,867.8	8.5	6.6	144.50	44.2	-239.3	417.8	405.1	12.72	32.847		
3,000.0	2,967.6	2,981.8	2,967.6	8.8	6.7	145.82	44.2	-239.5	432.2	419.1	13.04	33.140		
3,100.0	3,066.1	3,080.3	3,066.1	9.2	6.8	147.07	44.2	-239.5	446.7	433.4	13.36	33.446		
3,200.0	3,164.5	3,178.8	3,164.5	9.5	7.0	148.24	44.2	-239.5	461.4	447.8	13.67	33.759		
3,300.0	3,263.0	3,277.3	3,263.0	9.9	7.1	149.33	44.2	-239.5	476.4	462.4	13.98	34.075		
3,400.0	3,361.5	3,375.8	3,361.5	10.2	7.2	150.36	44.2	-239.5	491.4	477.1	14.29	34.393		

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Qualls 3G-28H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Reference Site:</b>	S28-T3N-R68W (Qualls)	<b>MD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Qualls 3G-28H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S28-T3N-R68W (Qualls) - Qualls 3F-28H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	0.00	7.3	0.0	7.3					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	7.3	0.0	7.3	7.0	0.30	23.991		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	7.3	0.0	7.3	6.6	0.65	11.161	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	162.11	7.3	0.0	8.1	7.1	1.00	8.096		
400.0	400.0	400.1	400.1	0.7	0.7	164.13	6.6	-0.5	9.9	8.5	1.35	7.299		
500.0	499.9	500.3	500.2	0.9	0.9	163.68	4.4	-1.9	11.8	10.1	1.70	6.918		
600.0	599.7	600.4	600.3	1.1	1.0	161.78	0.7	-4.3	13.9	11.8	2.06	6.735		
700.0	699.4	700.6	700.3	1.3	1.2	159.07	-4.4	-7.7	16.1	13.7	2.42	6.665		
800.0	798.9	800.8	800.2	1.5	1.4	155.92	-11.0	-12.1	18.6	15.8	2.80	6.661		
900.0	898.3	901.1	900.0	1.8	1.7	152.60	-19.0	-17.4	21.4	18.2	3.20	6.693		
1,000.0	997.4	1,001.3	999.5	2.0	1.9	149.26	-28.5	-23.7	24.5	20.8	3.63	6.741		
1,100.0	1,096.3	1,101.5	1,098.9	2.3	2.2	146.02	-39.4	-30.9	27.9	23.8	4.10	6.791		
1,200.0	1,194.9	1,201.8	1,198.1	2.7	2.5	142.94	-51.8	-39.1	31.6	27.0	4.62	6.833		
1,300.0	1,293.4	1,302.1	1,297.0	3.0	2.8	139.16	-65.6	-48.2	35.0	29.8	5.21	6.719		
1,400.0	1,391.9	1,402.0	1,395.4	3.3	3.1	135.01	-80.1	-57.8	38.1	32.3	5.86	6.513		
1,500.0	1,490.4	1,501.9	1,493.8	3.7	3.5	131.51	-94.5	-67.4	41.4	34.9	6.52	6.351		
1,600.0	1,588.9	1,601.8	1,592.2	4.0	3.8	128.52	-109.0	-77.0	44.8	37.6	7.20	6.225		
1,700.0	1,687.3	1,701.7	1,690.6	4.3	4.1	125.97	-123.5	-86.5	48.3	40.4	7.89	6.126		
1,800.0	1,785.8	1,801.7	1,789.0	4.7	4.5	123.76	-137.9	-96.1	51.9	43.3	8.59	6.049		
1,900.0	1,884.3	1,901.6	1,887.4	5.0	4.8	121.85	-152.4	-105.7	55.6	46.3	9.29	5.987		
2,000.0	1,982.8	2,001.5	1,985.8	5.4	5.2	120.17	-166.9	-115.3	59.3	49.3	9.99	5.939		
2,100.0	2,081.3	2,101.4	2,084.2	5.7	5.5	118.69	-181.3	-124.9	63.1	52.4	10.69	5.900		
2,200.0	2,179.7	2,201.3	2,182.6	6.1	5.8	117.38	-195.8	-134.4	66.9	55.5	11.40	5.868		
2,300.0	2,278.2	2,301.2	2,281.0	6.4	6.2	116.21	-210.3	-144.0	70.7	58.6	12.10	5.843		
2,400.0	2,376.7	2,401.2	2,379.4	6.8	6.5	115.16	-224.8	-153.6	74.6	61.8	12.81	5.823		
2,500.0	2,475.2	2,501.1	2,477.8	7.1	6.9	114.21	-239.2	-163.2	78.5	64.9	13.51	5.806		
2,600.0	2,573.7	2,601.0	2,576.2	7.4	7.2	113.35	-253.7	-172.7	82.4	68.1	14.22	5.793		
2,700.0	2,672.1	2,700.9	2,674.6	7.8	7.6	112.58	-268.2	-182.3	86.3	71.4	14.92	5.782		
2,800.0	2,770.6	2,800.8	2,773.0	8.1	7.9	111.86	-282.6	-191.9	90.2	74.6	15.63	5.773		
2,900.0	2,869.1	2,900.6	2,871.3	8.5	8.3	111.44	-296.8	-201.2	94.2	77.9	16.31	5.776		
3,000.0	2,967.6	3,000.3	2,969.7	8.8	8.6	111.99	-309.5	-209.7	98.4	81.5	16.92	5.819		
3,100.0	3,066.1	3,099.8	3,068.4	9.2	8.8	113.45	-320.9	-217.2	103.0	85.5	17.44	5.903		
3,200.0	3,164.5	3,199.3	3,167.1	9.5	9.1	115.68	-330.8	-223.8	107.9	90.0	17.89	6.034		
3,300.0	3,263.0	3,298.5	3,265.8	9.9	9.3	118.56	-339.2	-229.4	113.5	95.2	18.23	6.225		
3,400.0	3,361.5	3,397.5	3,364.4	10.2	9.5	121.93	-346.2	-234.0	119.8	101.4	18.46	6.490		
3,500.0	3,460.0	3,496.1	3,462.9	10.6	9.7	125.66	-351.8	-237.7	127.2	108.6	18.59	6.844		
3,600.0	3,558.5	3,594.4	3,561.0	10.9	9.9	129.61	-355.9	-240.4	135.8	117.2	18.61	7.299		
3,700.0	3,657.0	3,692.2	3,658.8	11.3	10.0	133.64	-358.7	-242.2	145.9	127.3	18.54	7.868		
3,800.0	3,755.4	3,789.6	3,756.1	11.6	10.2	137.62	-360.0	-243.1	157.5	139.1	18.40	8.557		
3,900.0	3,853.9	3,887.4	3,853.9	12.0	10.3	141.45	-360.2	-243.2	170.7	152.4	18.25	9.354		
4,000.0	3,952.4	3,985.9	3,952.4	12.3	10.4	144.80	-360.2	-243.2	184.6	166.5	18.13	10.184		
4,100.0	4,050.9	4,084.3	4,050.9	12.7	10.5	147.67	-360.2	-243.2	199.2	181.1	18.07	11.021		
4,200.0	4,149.4	4,182.8	4,149.4	13.0	10.6	150.14	-360.2	-243.2	214.1	196.0	18.06	11.853		
4,300.0	4,247.9	4,281.3	4,247.9	13.4	10.7	152.31	-360.2	-243.2	229.2	211.1	18.10	12.667		
4,400.0	4,346.6	4,380.1	4,346.6	13.7	10.9	154.10	-360.2	-243.2	243.4	225.2	18.18	13.385		
4,500.0	4,445.6	4,479.1	4,445.6	14.0	11.0	155.52	-360.2	-243.2	256.2	237.9	18.32	13.983		
4,600.0	4,544.8	4,578.3	4,544.8	14.2	11.1	156.67	-360.2	-243.2	267.5	249.0	18.49	14.465		
4,700.0	4,644.3	4,677.7	4,644.3	14.5	11.2	157.57	-360.2	-243.2	277.3	258.6	18.69	14.833		
4,800.0	4,743.9	4,777.3	4,743.9	14.7	11.3	158.28	-360.2	-243.2	285.5	266.6	18.92	15.092		
4,900.0	4,843.6	4,877.1	4,843.6	14.9	11.5	158.83	-360.2	-243.2	292.2	273.0	19.16	15.246		
5,000.0	4,943.5	4,976.9	4,943.5	15.0	11.6	159.22	-360.2	-243.2	297.2	277.8	19.42	15.302		
5,100.0	5,043.4	5,076.9	5,043.4	15.2	11.7	159.48	-360.2	-243.2	300.7	281.0	19.70	15.264		

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

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Qualls 3G-28H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Reference Site:</b>	S28-T3N-R68W (Qualls)	<b>MD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Qualls 3G-28H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S28-T3N-R68W (Qualls) - Qualls 3F-28H - Hz - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,143.4	5,176.8	5,143.4	15.3	11.9	159.61	-360.2	-243.2	302.5	282.5	19.98	15.136		
5,300.0	5,243.4	5,276.8	5,243.4	15.4	12.0	-0.36	-360.2	-243.2	302.8	276.8	26.00	11.647		
5,400.0	5,343.4	5,376.8	5,343.4	15.5	12.1	-0.36	-360.2	-243.2	302.8	276.5	26.25	11.534		
5,500.0	5,443.4	5,476.8	5,443.4	15.6	12.3	-0.36	-360.2	-243.2	302.8	276.3	26.50	11.423		
5,600.0	5,543.4	5,576.8	5,543.4	15.7	12.4	-0.36	-360.2	-243.2	302.8	276.0	26.76	11.313		
5,700.0	5,643.4	5,676.8	5,643.4	15.8	12.5	-0.36	-360.2	-243.2	302.8	275.7	27.02	11.205		
5,800.0	5,743.4	5,776.8	5,743.4	15.9	12.7	-0.36	-360.2	-243.2	302.8	275.5	27.28	11.098		
5,900.0	5,843.4	5,876.8	5,843.4	16.1	12.8	-0.36	-360.2	-243.2	302.8	275.2	27.54	10.992		
6,000.0	5,943.4	5,976.8	5,943.4	16.2	13.0	-0.36	-360.2	-243.2	302.8	274.9	27.81	10.887		
6,100.0	6,043.4	6,076.8	6,043.4	16.3	13.1	-0.36	-360.2	-243.2	302.8	274.7	28.08	10.784		
6,200.0	6,143.4	6,176.8	6,143.4	16.4	13.2	-0.36	-360.2	-243.2	302.8	274.4	28.34	10.682		
6,273.6	6,217.0	6,250.5	6,217.0	16.5	13.3	-0.09	-360.2	-241.8	302.8	274.2	28.57	10.598		
6,300.0	6,243.4	6,276.8	6,243.2	16.5	13.4	0.31	-360.2	-239.6	302.8	274.1	28.67	10.558		
6,400.0	6,343.4	6,374.1	6,339.1	16.6	13.4	3.38	-360.2	-223.4	303.3	274.1	29.19	10.391		
6,500.0	6,443.3	6,466.3	6,427.1	16.7	13.4	-81.78	-360.2	-196.2	306.1	283.1	23.03	13.291		
6,600.0	6,542.0	6,555.3	6,508.1	16.8	13.4	-77.02	-360.2	-159.3	311.2	288.3	22.92	13.583		
6,700.0	6,637.6	6,641.8	6,581.8	16.8	13.3	-72.66	-360.2	-114.2	318.0	295.0	23.02	13.817		
6,800.0	6,728.2	6,726.3	6,648.1	16.8	13.4	-68.77	-360.2	-61.9	325.9	302.5	23.34	13.963		
6,900.0	6,812.1	6,808.9	6,706.5	16.8	13.5	-65.39	-360.2	-3.5	334.2	310.3	23.81	14.036		
7,000.0	6,887.6	6,890.1	6,756.9	16.8	13.7	-62.51	-360.2	60.0	342.4	317.9	24.43	14.013		
7,100.0	6,953.2	6,970.1	6,799.3	17.0	14.2	-60.13	-360.2	127.8	350.0	324.8	25.19	13.894		
7,200.0	7,007.8	7,050.0	6,833.9	17.3	14.8	-58.23	-360.2	199.8	356.6	330.5	26.11	13.662		
7,300.0	7,050.1	7,127.4	6,859.5	17.9	15.7	-56.83	-360.2	272.9	362.0	334.8	27.22	13.300		
7,400.0	7,079.4	7,200.0	6,876.2	18.8	16.8	-55.91	-360.2	343.4	365.9	337.4	28.51	12.833		
7,500.0	7,095.2	7,282.7	6,886.4	20.0	18.1	-55.35	-360.2	425.5	368.0	337.7	30.23	12.172		
7,600.0	7,098.0	7,368.8	6,888.0	21.5	19.7	-55.25	-360.2	511.5	368.4	335.8	32.59	11.306		
7,700.0	7,098.0	7,468.8	6,888.0	23.2	21.6	-55.25	-360.2	611.5	368.4	332.6	35.85	10.277		
7,800.0	7,098.0	7,568.8	6,888.0	25.1	23.7	-55.25	-360.2	711.5	368.4	329.1	39.26	9.384		
7,900.0	7,098.0	7,668.8	6,888.0	27.1	25.8	-55.25	-360.2	811.5	368.4	325.6	42.78	8.611		
8,000.0	7,098.0	7,768.8	6,888.0	29.1	28.0	-55.24	-360.2	911.5	368.4	322.0	46.40	7.940		
8,100.0	7,098.0	7,868.8	6,888.0	31.3	30.2	-55.24	-360.2	1,011.5	368.4	318.3	50.08	7.355		
8,200.0	7,098.0	7,968.8	6,888.0	33.5	32.4	-55.24	-360.2	1,111.5	368.4	314.5	53.82	6.844		
8,300.0	7,098.0	8,068.8	6,888.0	35.7	34.7	-55.24	-360.2	1,211.5	368.4	310.7	57.61	6.394		
8,400.0	7,098.0	8,168.8	6,888.0	37.9	37.0	-55.24	-360.2	1,311.5	368.3	306.9	61.43	5.996		
8,500.0	7,098.0	8,268.8	6,888.0	40.2	39.4	-55.24	-360.2	1,411.5	368.3	303.1	65.28	5.642		
8,600.0	7,098.0	8,368.8	6,888.0	42.5	41.7	-55.24	-360.2	1,511.5	368.3	299.2	69.16	5.326		
8,700.0	7,098.0	8,468.8	6,888.0	44.8	44.1	-55.24	-360.2	1,611.5	368.3	295.3	73.06	5.042		
8,800.0	7,098.0	8,568.8	6,888.0	47.2	46.5	-55.24	-360.2	1,711.5	368.3	291.3	76.98	4.785		
8,900.0	7,098.0	8,668.8	6,888.0	49.5	48.8	-55.24	-360.2	1,811.5	368.3	287.4	80.91	4.552		
9,000.0	7,098.0	8,768.8	6,888.0	51.9	51.2	-55.24	-360.2	1,911.5	368.3	283.5	84.85	4.341		
9,100.0	7,098.0	8,868.8	6,888.0	54.3	53.6	-55.24	-360.2	2,011.5	368.3	279.5	88.81	4.147		
9,200.0	7,098.0	8,968.8	6,888.0	56.7	56.0	-55.24	-360.2	2,111.5	368.3	275.5	92.77	3.970		
9,300.0	7,098.0	9,068.8	6,888.0	59.0	58.4	-55.24	-360.2	2,211.5	368.3	271.5	96.75	3.807		
9,400.0	7,098.0	9,168.8	6,888.0	61.4	60.9	-55.23	-360.2	2,311.5	368.3	267.6	100.73	3.656		
9,500.0	7,098.0	9,268.8	6,888.0	63.8	63.3	-55.23	-360.2	2,411.5	368.3	263.6	104.72	3.517		
9,600.0	7,098.0	9,368.8	6,888.0	66.2	65.7	-55.23	-360.2	2,511.5	368.3	259.6	108.71	3.387		
9,700.0	7,098.0	9,468.8	6,888.0	68.7	68.1	-55.23	-360.2	2,611.5	368.3	255.5	112.71	3.267		
9,800.0	7,098.0	9,568.8	6,888.0	71.1	70.6	-55.23	-360.2	2,711.5	368.3	251.5	116.72	3.155		
9,900.0	7,098.0	9,668.8	6,888.0	73.5	73.0	-55.23	-360.2	2,811.5	368.2	247.5	120.73	3.050		
10,000.0	7,098.0	9,768.8	6,888.0	75.9	75.4	-55.23	-360.2	2,911.5	368.2	243.5	124.74	2.952		
10,100.0	7,098.0	9,868.8	6,888.0	78.4	77.9	-55.23	-360.2	3,011.5	368.2	239.5	128.76	2.860		
10,200.0	7,098.0	9,968.8	6,888.0	80.8	80.3	-55.23	-360.2	3,111.5	368.2	235.4	132.78	2.773		

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

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Qualls 3G-28H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Reference Site:</b>	S28-T3N-R68W (Qualls)	<b>MD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Qualls 3G-28H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S28-T3N-R68W (Qualls) - Qualls 3F-28H - Hz - Plan #1												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)			
10,300.0	7,098.0	10,068.8	6,888.0	83.2	82.8	-55.23	-360.2	3,211.5	368.2	231.4	136.80	2.692	
10,400.0	7,098.0	10,168.8	6,888.0	85.6	85.2	-55.23	-360.2	3,311.5	368.2	227.4	140.83	2.615	
10,500.0	7,098.0	10,268.8	6,888.0	88.1	87.7	-55.23	-360.2	3,411.5	368.2	223.4	144.86	2.542	
10,600.0	7,098.0	10,368.8	6,888.0	90.5	90.1	-55.23	-360.2	3,511.5	368.2	219.3	148.89	2.473	
10,700.0	7,098.0	10,468.8	6,888.0	93.0	92.6	-55.23	-360.2	3,611.5	368.2	215.3	152.92	2.408	
10,800.0	7,098.0	10,568.8	6,888.0	95.4	95.0	-55.22	-360.2	3,711.5	368.2	211.2	156.95	2.346	
10,900.0	7,098.0	10,668.8	6,888.0	97.9	97.5	-55.22	-360.2	3,811.5	368.2	207.2	160.99	2.287	
11,000.0	7,098.0	10,768.8	6,888.0	100.3	99.9	-55.22	-360.2	3,911.5	368.2	203.1	165.03	2.231	
11,100.0	7,098.0	10,868.8	6,888.0	102.7	102.4	-55.22	-360.2	4,011.5	368.2	199.1	169.06	2.178	
11,200.0	7,098.0	10,968.8	6,888.0	105.2	104.8	-55.22	-360.2	4,111.5	368.2	195.1	173.10	2.127	
11,300.0	7,098.0	11,068.8	6,888.0	107.6	107.3	-55.22	-360.2	4,211.5	368.2	191.0	177.15	2.078	
11,400.0	7,098.0	11,168.8	6,888.0	110.1	109.7	-55.22	-360.2	4,311.5	368.1	187.0	181.19	2.032	
11,500.0	7,098.0	11,268.8	6,888.0	112.6	112.2	-55.22	-360.2	4,411.5	368.1	182.9	185.23	1.987	
11,600.0	7,098.0	11,368.8	6,888.0	115.0	114.7	-55.22	-360.2	4,511.5	368.1	178.9	189.28	1.945	
11,670.3	7,098.0	11,439.0	6,888.0	116.7	116.4	-55.22	-360.2	4,581.8	368.1	176.0	192.12	1.916 SF	

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Qualls 3G-28H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Reference Site:</b>	S28-T3N-R68W (Qualls)	<b>MD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Qualls 3G-28H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> S28-T3N-R68W (Qualls) - SLATER 44-28 (EXISTING) - EXISTING - SURVEYS													<b>Offset Site Error:</b> 0.0 ft
Survey Program: 146-MWD													<b>Offset Well Error:</b> 0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
11,400.0	7,098.0	7,296.1	7,090.7	110.1	28.3	-90.21	-198.3	4,492.2	498.2	364.4	133.89	3.721	
11,500.0	7,098.0	7,295.0	7,089.6	112.6	28.3	-90.07	-198.3	4,492.2	471.3	334.9	136.35	3.456	
11,580.8	7,098.0	7,294.1	7,088.7	114.5	28.3	-89.96	-198.3	4,492.3	464.3	326.0	138.33	3.356 CC	
11,600.0	7,098.0	7,293.8	7,088.5	115.0	28.3	-89.93	-198.3	4,492.3	464.7	325.9	138.80	3.348 ES, SF	
11,670.3	7,098.0	7,293.0	7,087.7	116.7	28.3	-89.84	-198.3	4,492.3	472.8	332.3	140.53	3.365	

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Qualls 3G-28H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Reference Site:</b>	S28-T3N-R68W (Qualls)	<b>MD Reference:</b>	WELL @ 4970.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Qualls 3G-28H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4970.0ft (Original Well Elev)

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Qualls 3G-28H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.31°

