

# **DJ/Paradox/WTX**

**Wattenberg**

**New Drills**

**Ray Nelson 2-4-32**

**Wellbore #1**

**Plan: Ray Nelson 2-4-32**

## **Standard Planning Report - Geographic**

**21 July, 2010**

**EnCana Corporation**  
Planning Report - Geographic

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well Ray Nelson 2-4-32
<b>Company:</b>	DJ/Paradox/WTX	<b>TVD Reference:</b>	WELL @ 4961.0ft (Original Well Elev)
<b>Project:</b>	Wattenberg	<b>MD Reference:</b>	WELL @ 4961.0ft (Original Well Elev)
<b>Site:</b>	New Drills	<b>North Reference:</b>	True
<b>Well:</b>	Ray Nelson 2-4-32	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Ray Nelson 2-4-32		

<b>Project</b>	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		

Site		New Drills				
Site Position:		Northing:	1,252,450.66 ft	Latitude:	40° 1' 32.016 N	
From:	Lat/Long	Easting:	3,120,627.66 ft	Longitude:	105° 4' 9.336 W	
Position Uncertainty:		ft	Slot Radius:	in	Grid Convergence:	0.28 °

Well		Ray Nelson 2-4-32				
Well Position	+N/-S	26,087.6 ft	Northing:	1,278,589.01 ft	Latitude:	40° 5' 49.848 N
	+E/-W	9,745.7 ft	Easting:	3,130,236.25 ft	Longitude:	105° 2' 4.056 W
Position Uncertainty		ft	Wellhead Elevation:	ft	Ground Level:	4,948.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	12/31/2009	9.14	66.82	53,114

<b>Design</b>	Ray Nelson 2-4-32			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<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	134.76

<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	
750.0	0.00	0.00	750.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,237.9	9.76	134.76	1,235.6	-29.2	29.4	2.00	2.00	0.00	134.76	
6,699.8	9.76	134.76	6,618.4	-681.1	686.8	0.00	0.00	0.00	0.00	
7,187.7	0.00	0.00	7,104.0	-710.3	716.2	2.00	-2.00	0.00	180.00	
8,287.7	0.00	0.00	8,204.0	-710.3	716.2	0.00	0.00	0.00	0.00	Ray Nelson 2-4-32

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<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Ray Nelson 2-4-32		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude	
0.0	0.00	0.00	0.0	0.0	0.0	1,278,589.01	3,130,236.25	40° 5' 49.848 N	105° 2' 4.056 W	
700.0	0.00	0.00	700.0	0.0	0.0	1,278,589.01	3,130,236.25	40° 5' 49.848 N	105° 2' 4.056 W	
Surface										
750.0	0.00	0.00	750.0	0.0	0.0	1,278,589.01	3,130,236.25	40° 5' 49.848 N	105° 2' 4.056 W	
1,237.9	9.76	134.76	1,235.6	-29.2	29.4	1,278,559.97	3,130,265.84	40° 5' 49.559 N	105° 2' 3.677 W	
4,424.5	9.76	134.76	4,376.0	-409.5	412.9	1,278,181.64	3,130,651.32	40° 5' 45.801 N	105° 1' 58.742 W	
Sussex										
4,936.9	9.76	134.76	4,881.0	-470.7	474.6	1,278,120.80	3,130,713.31	40° 5' 45.196 N	105° 1' 57.949 W	
Shannon										
6,699.8	9.76	134.76	6,618.4	-681.1	686.8	1,277,911.49	3,130,926.58	40° 5' 43.116 N	105° 1' 55.219 W	
7,187.7	0.00	0.00	7,104.0	-710.3	716.2	1,277,882.46	3,130,956.17	40° 5' 42.828 N	105° 1' 54.840 W	
7,369.7	0.00	0.00	7,286.0	-710.3	716.2	1,277,882.46	3,130,956.17	40° 5' 42.828 N	105° 1' 54.840 W	
Niobrara										
7,669.7	0.00	0.00	7,586.0	-710.3	716.2	1,277,882.46	3,130,956.17	40° 5' 42.828 N	105° 1' 54.840 W	
Codell										
8,137.7	0.00	0.00	8,054.0	-710.3	716.2	1,277,882.46	3,130,956.17	40° 5' 42.828 N	105° 1' 54.840 W	
J Sand										
8,184.7	0.00	0.00	8,101.0	-710.3	716.2	1,277,882.46	3,130,956.17	40° 5' 42.828 N	105° 1' 54.840 W	
A Marker										
8,287.7	0.00	0.00	8,204.0	-710.3	716.2	1,277,882.46	3,130,956.17	40° 5' 42.828 N	105° 1' 54.840 W	
Production - Ray Nelson 2-4-32										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
- hit/miss target										
- Shape										
Ray Nelson 2-4-32	0.00	0.00	8,204.0	-710.3	716.2	1,277,882.46	3,130,956.17	40° 5' 42.828 N	105° 1' 54.840 W	
- plan hits target										
- Point										

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)		
700.0	700.0	Surface	8.625	12.250		
8,287.7	8,204.0	Production	4.500	7.785		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,424.5	4,376.0	Sussex		0.00		
4,936.9	4,881.0	Shannon		0.00		
7,369.7	7,286.0	Niobrara		0.00		
7,669.7	7,586.0	Codell		0.00		
8,137.7	8,054.0	J Sand		0.00		
8,184.7	8,101.0	A Marker		0.00		

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