

REFERENCE INFORMATION

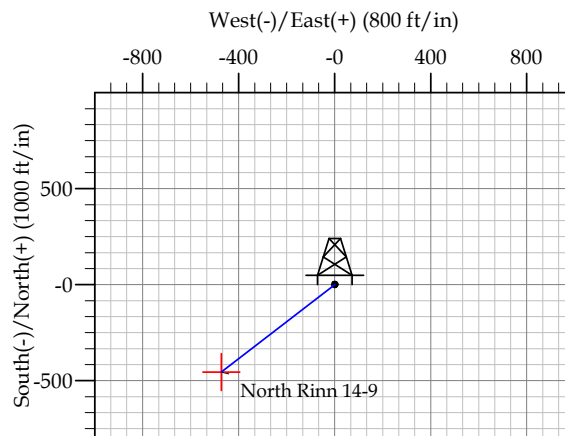
Co-ordinate (N/E) Reference: Well North Rinn 14-9, True North
Vertical (TVD) Reference: WELL @ 4879.0ft (Original Well Elev)
Section (VS) Reference: Slot - (0.0N, 0.0E)
Measured Depth Reference: WELL @ 4879.0ft (Original Well Elev)
Calculation Method:

WELL DETAILS: North Rinn 14-9

+N/-S	+E/-W	Northing	Ground Level:	Easting	Latitude	Longitude	Slot
0.0	0.0	1297508.04	4866.0	3135990.61	40° 8' 56.508 N	105° 0' 48.672 W	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.0	
3	1123.3	6.47	226.06	1122.6	-12.6	-13.1	2.00	226.06	18.2	
4	6626.1	6.47	226.06	6590.4	-442.7	-459.3	0.00	0.00	637.9	
5	6949.4	0.00	0.00	6913.0	-455.3	-472.4	2.00	180.00	656.1	
6	7999.4	0.00	0.00	7963.0	-455.3	-472.4	0.00	0.00	656.1	North Rinn 14-9



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4199.0	4219.4	Sussex
4689.0	4712.5	Shannon
7144.0	7180.4	Niobrara
7419.0	7455.4	Codell
7813.0	7849.4	J Sand
7869.0	7905.4	A Marker

CASING DETAILS

TVD	MD	Name	Size
750.0	750.0	Surface	8.625
7963.0	7999.4	Production	4.500

EnCana Corporation

Planning Report - Geographic

Database:	EDM	Local Co-ordinate Reference:	Well North Rinn 14-9
Company:	DJ/Paradox/WTX	TVD Reference:	WELL @ 4879.0ft (Original Well Elev)
Project:	Wattenberg	MD Reference:	WELL @ 4879.0ft (Original Well Elev)
Site:	New Drills	North Reference:	True
Well:	North Rinn 14-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	North Rinn 14-9		

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

Site		New Drills				
Site Position:		Northing:	1,278,589.08ft	Latitude:	40° 5' 49.848 N	
From:	Lat/Long	Easting:	3,130,247.44ft	Longitude:	105° 2' 3.912 W	
Position Uncertainty:		ft	Slot Radius:	in	Grid Convergence:	0.30 °

Well	North Rinn 14-9					
Well Position	+N-S	18,887.2 ft	Northing:	1,297,508.04 ft	Latitude:	40° 8' 56.508 N
	+E-W	5,846.9 ft	Easting:	3,135,990.61 ft	Longitude:	105° 0' 48.672 W
Position Uncertainty		ft	Wellhead Elevation:	ft	Ground Level:	4,866.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	9.13	66.86	53,145

Design	North Rinn 14-9				
Audit Notes:					
Version:	Phase:	PROTOTYPE		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	226.06	

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	
800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,123.3	6.47	226.06	1,122.6	-12.6	-13.1	2.00	2.00	0.00	226.06	
6,626.1	6.47	226.06	6,590.4	-442.7	-459.3	0.00	0.00	0.00	0.00	
6,949.4	0.00	0.00	6,913.0	-455.3	-472.4	2.00	-2.00	0.00	180.00	
7,999.4	0.00	0.00	7,963.0	-455.3	-472.4	0.00	0.00	0.00	0.00	North Rinn 14-9

EnCana Corporation

Planning Report - Geographic

Database:	EDM	Local Co-ordinate Reference:	Well North Rinn 14-9
Company:	DJ/Paradox/WTX	TVD Reference:	WELL @ 4879.0ft (Original Well Elev)
Project:	Wattenberg	MD Reference:	WELL @ 4879.0ft (Original Well Elev)
Site:	New Drills	North Reference:	True
Well:	North Rinn 14-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	North Rinn 14-9		

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	1,297,508.04	3,135,990.61	40° 8' 56.508 N	105° 0' 48.672 W	
750.0	0.00	0.00	750.0	0.0	0.0	1,297,508.04	3,135,990.61	40° 8' 56.508 N	105° 0' 48.672 W	
Surface										
800.0	0.00	0.00	800.0	0.0	0.0	1,297,508.04	3,135,990.61	40° 8' 56.508 N	105° 0' 48.672 W	
1,123.3	6.47	226.06	1,122.6	-12.6	-13.1	1,297,495.32	3,135,977.55	40° 8' 56.383 N	105° 0' 48.841 W	
4,219.4	6.47	226.06	4,199.0	-254.6	-264.2	1,297,251.99	3,135,727.84	40° 8' 53.992 N	105° 0' 52.074 W	
Sussex										
4,712.5	6.47	226.06	4,689.0	-293.1	-304.2	1,297,213.23	3,135,688.07	40° 8' 53.611 N	105° 0' 52.589 W	
Shannon										
6,626.1	6.47	226.06	6,590.4	-442.7	-459.3	1,297,062.84	3,135,533.73	40° 8' 52.133 N	105° 0' 54.587 W	
6,949.4	0.00	0.00	6,913.0	-455.3	-472.4	1,297,050.12	3,135,520.68	40° 8' 52.008 N	105° 0' 54.756 W	
7,180.4	0.00	0.00	7,144.0	-455.3	-472.4	1,297,050.12	3,135,520.68	40° 8' 52.008 N	105° 0' 54.756 W	
Niobrara										
7,455.4	0.00	0.00	7,419.0	-455.3	-472.4	1,297,050.12	3,135,520.68	40° 8' 52.008 N	105° 0' 54.756 W	
Codell										
7,849.4	0.00	0.00	7,813.0	-455.3	-472.4	1,297,050.12	3,135,520.68	40° 8' 52.008 N	105° 0' 54.756 W	
J Sand										
7,905.4	0.00	0.00	7,869.0	-455.3	-472.4	1,297,050.12	3,135,520.68	40° 8' 52.008 N	105° 0' 54.756 W	
A Marker										
7,999.4	0.00	0.00	7,963.0	-455.3	-472.4	1,297,050.12	3,135,520.68	40° 8' 52.008 N	105° 0' 54.756 W	
Production - North Rinn 14-9										

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										
North Rinn 14-9	0.00	0.00	7,963.0	-455.3	-472.4	1,297,050.12	3,135,520.68	40° 8' 52.008 N	105° 0' 54.756 W	
- plan hits target										
- Point										

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
750.0	750.0	Surface	8.625	12.250	
7,999.4	7,963.0	Production	4.500	7.785	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,219.4	4,199.0	Sussex		0.00		
4,712.5	4,689.0	Shannon		0.00		
7,180.4	7,144.0	Niobrara		0.00		
7,455.4	7,419.0	Codell		0.00		
7,849.4	7,813.0	J Sand		0.00		
7,905.4	7,869.0	A Marker		0.00		

EnCana Corporation
Planning Report - Geographic

Database:	EDM	Local Co-ordinate Reference:	Well North Rinn 14-9
Company:	DJ/Paradox/WTX	TVD Reference:	WELL @ 4879.0ft (Original Well Elev)
Project:	Wattenberg	MD Reference:	WELL @ 4879.0ft (Original Well Elev)
Site:	New Drills	North Reference:	True
Well:	North Rinn 14-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	North Rinn 14-9		