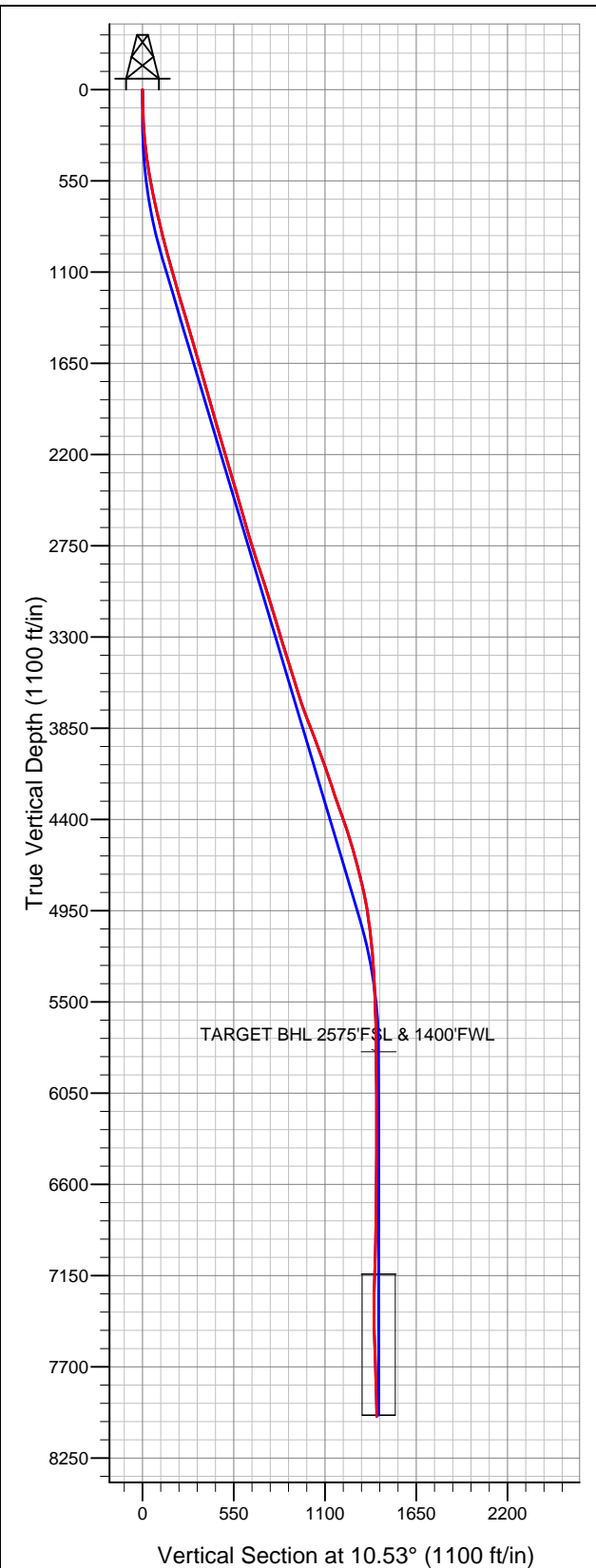
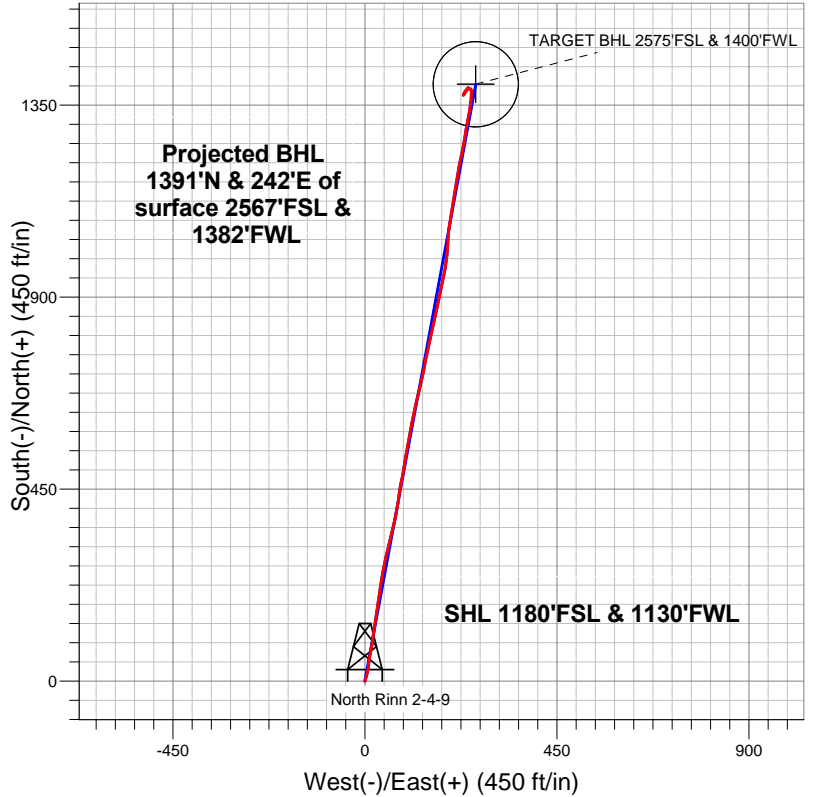


Well Name: North Rinn 2-4-9

Surface Location: North Rinn 2-4-9 Pad Sec.9-T2N-R68W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone
Ground Elevation: 4866.0
+N/-S 0.0 +E/-W 0.0 Northing 1297580.90 Easting 3135990.21 Latitude 40.149230 Longitude -105.013520 Slot
Original Well Elev WELL @ 4879.0ft (Original Well Elev)



EnCana Oil & Gas Weld County CO



LEGEND

- ◆ North Rinn 2-4-9, Wellbore #1, Plan #1 (7-25-13) R V0
- Wellbore #1
- Survey #1

Final Survey Plot

**Projected Final Survey -
8198'MD & 7998'TVD @ 1411'VS
1.1 deg Inc 14.0 deg AZ**

Project: SEC.9-T2N-R68W
Site: North Rinn 2-4-9 Pad Sec.9-T2N-R68W
Well: North Rinn 2-4-9
Plan: Wellbore #1



EnCana Oil & Gas Weld County CO

SEC.9-T2N-R68W

North Rinn 2-4-9 Pad Sec.9-T2N-R68W

North Rinn 2-4-9

Wellbore #1

Survey: Survey #1

Standard Survey Report

31 July, 2013

Survey	Wellbore Data									
	Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Main Wellbore	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	77.0	1.30	23.50	77.0	0.8	0.3	0.9	1.69	1.69	0.00
	137.0	1.90	13.60	137.0	2.4	0.9	2.5	1.10	1.00	-16.50
	197.0	2.90	17.30	196.9	4.8	1.5	5.0	1.69	1.67	6.17
	257.0	4.40	18.00	256.8	8.4	2.7	8.8	2.50	2.50	1.17
	317.0	5.80	15.40	316.6	13.6	4.2	14.1	2.36	2.33	-4.33
	378.0	6.90	15.20	377.2	20.1	6.0	20.8	1.80	1.80	-0.33
	438.0	8.50	8.20	436.6	27.9	7.6	28.8	3.09	2.67	-11.67
	498.0	9.50	4.50	495.9	37.3	8.6	38.2	1.92	1.67	-6.17
	559.0	10.40	6.40	556.0	47.7	9.6	48.7	1.57	1.48	3.11
	620.0	10.90	10.30	615.9	58.9	11.2	60.0	1.44	0.82	6.39
	680.0	12.00	12.40	674.7	70.6	13.6	71.9	1.96	1.83	3.50
	741.0	13.20	10.80	734.3	83.6	16.3	85.2	2.05	1.97	-2.62

Company:	EnCana Oil & Gas Weld County CO	Local Co-ordinate Reference:	Well North Rinn 2-4-9
Project:	SEC.9-T2N-R68W	TVD Reference:	WELL @ 4879.0ft (Original Well Elev)
Site:	North Rinn 2-4-9 Pad Sec.9-T2N-R68W	MD Reference:	WELL @ 4879.0ft (Original Well Elev)
Well:	North Rinn 2-4-9	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
752.0	13.30	10.30	745.0	86.1	16.7	87.7	1.38	0.91	-4.55
875.0	14.40	6.40	864.4	115.2	21.0	117.1	1.17	0.89	-3.17
1,003.0	15.00	9.90	988.2	147.3	25.6	149.5	0.84	0.47	2.73
1,132.0	15.60	7.80	1,112.6	181.0	30.8	183.6	0.63	0.47	-1.63
1,260.0	16.60	8.00	1,235.6	216.1	35.7	219.0	0.78	0.78	0.16
1,389.0	16.20	11.00	1,359.4	252.0	41.7	255.4	0.73	-0.31	2.33
1,518.0	16.40	10.80	1,483.2	287.6	48.5	291.6	0.16	0.16	-0.16
1,646.0	16.50	15.90	1,606.0	322.8	56.9	327.8	1.13	0.08	3.98
1,775.0	15.80	13.30	1,729.9	357.5	66.0	363.6	0.78	-0.54	-2.02
1,903.0	16.40	10.30	1,852.8	392.3	73.2	399.0	0.80	0.47	-2.34
2,032.0	15.70	6.60	1,976.8	427.5	78.5	434.7	0.96	-0.54	-2.87
2,161.0	15.70	13.30	2,101.0	461.9	84.5	469.5	1.40	0.00	5.19
2,289.0	16.30	8.00	2,224.1	496.5	91.0	504.8	1.23	0.47	-4.14
2,418.0	17.10	11.00	2,347.6	533.0	97.1	541.8	0.91	0.62	2.33
2,546.0	15.70	9.90	2,470.4	568.6	103.7	578.0	1.12	-1.09	-0.86
2,675.0	16.00	9.90	2,594.5	603.3	109.7	613.2	0.23	0.23	0.00
2,804.0	17.10	13.60	2,718.2	639.2	117.3	649.9	1.18	0.85	2.87
2,932.0	17.80	13.30	2,840.3	676.6	126.2	688.2	0.55	0.55	-0.23
3,061.0	18.60	12.20	2,962.8	715.9	135.1	728.5	0.67	0.62	-0.85
3,189.0	17.20	10.80	3,084.6	754.4	142.9	767.8	1.14	-1.09	-1.09
3,318.0	16.40	12.20	3,208.1	791.0	150.3	805.1	0.69	-0.62	1.09
3,447.0	17.00	12.90	3,331.7	827.1	158.4	842.2	0.49	0.47	0.54
3,575.0	17.80	12.20	3,453.8	864.5	166.7	880.4	0.65	0.63	-0.55
3,704.0	17.20	11.50	3,576.8	902.5	174.7	919.2	0.49	-0.47	-0.54
3,832.0	18.40	13.30	3,698.7	940.7	183.1	958.3	1.03	0.94	1.41
3,961.0	21.00	6.60	3,820.2	983.5	190.4	1,001.7	2.67	2.02	-5.19
4,090.0	21.60	3.40	3,940.4	1,030.1	194.5	1,048.3	1.01	0.47	-2.48
4,218.0	19.30	8.20	4,060.3	1,074.6	198.9	1,092.8	2.22	-1.80	3.75
4,347.0	18.20	11.70	4,182.5	1,115.4	206.1	1,134.3	1.22	-0.85	2.71
4,475.0	19.60	6.80	4,303.6	1,156.3	212.7	1,175.7	1.65	1.09	-3.83
4,604.0	19.30	11.00	4,425.2	1,198.7	219.3	1,218.6	1.11	-0.23	3.26
4,733.0	16.40	12.20	4,548.0	1,237.5	227.2	1,258.1	2.27	-2.25	0.93
4,861.0	14.90	10.10	4,671.2	1,271.3	233.9	1,292.7	1.25	-1.17	-1.64
4,990.0	12.80	9.40	4,796.5	1,301.8	239.1	1,323.5	1.63	-1.63	-0.54
5,118.0	10.10	10.10	4,921.9	1,326.8	243.4	1,348.9	2.11	-2.11	0.55
5,247.0	7.10	9.40	5,049.4	1,345.8	246.7	1,368.2	2.33	-2.33	-0.54
5,376.0	5.20	6.90	5,177.7	1,359.5	248.7	1,382.0	1.49	-1.47	-1.94
5,504.0	3.60	2.50	5,305.3	1,369.2	249.6	1,391.8	1.28	-1.25	-3.44
5,633.0	2.50	354.80	5,434.1	1,376.1	249.5	1,398.5	0.91	-0.85	-5.97
5,761.0	2.10	3.20	5,562.0	1,381.2	249.4	1,403.5	0.41	-0.31	6.56
5,933.0	0.80	347.60	5,734.0	1,385.5	249.3	1,407.8	0.78	-0.76	-9.07
5,999.1	0.63	340.51	5,800.1	1,386.3	249.1	1,408.5	0.29	-0.26	-10.73
TARGET BHL 2575'FSL & 1400'FWL									
6,105.0	0.40	317.20	5,906.0	1,387.1	248.6	1,409.2	0.29	-0.22	-22.01
6,276.0	0.40	286.80	6,077.0	1,387.8	247.7	1,409.6	0.12	0.00	-17.78
6,447.0	0.40	294.20	6,248.0	1,388.2	246.6	1,409.9	0.03	0.00	4.33
6,619.0	0.70	266.30	6,419.9	1,388.4	245.0	1,409.7	0.23	0.17	-16.22
6,790.0	1.00	260.40	6,590.9	1,388.0	242.4	1,409.0	0.18	0.18	-3.45
6,962.0	1.20	234.20	6,762.9	1,386.7	239.5	1,407.1	0.31	0.12	-15.23
7,133.0	1.50	222.80	6,933.9	1,384.0	236.5	1,404.0	0.23	0.18	-6.67
7,304.0	1.60	215.40	7,104.8	1,380.5	233.6	1,399.9	0.13	0.06	-4.33
7,339.3	1.72	210.16	7,140.0	1,379.6	233.1	1,399.0	0.56	0.35	-14.86
TARGET CIRCLE 2575'FSL & 1400'FWL									
7,476.0	2.30	195.90	7,276.7	1,375.2	231.3	1,394.3	0.56	0.42	-10.43

Company:	EnCana Oil & Gas Weld County CO	Local Co-ordinate Reference:	Well North Rinn 2-4-9
Project:	SEC.9-T2N-R68W	TVD Reference:	WELL @ 4879.0ft (Original Well Elev)
Site:	North Rinn 2-4-9 Pad Sec.9-T2N-R68W	MD Reference:	WELL @ 4879.0ft (Original Well Elev)
Well:	North Rinn 2-4-9	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,647.0	2.40	31.00	7,447.6	1,374.9	232.2	1,394.2	2.72	0.06	-96.43
7,819.0	2.30	30.50	7,619.5	1,381.0	235.8	1,400.8	0.06	-0.06	-0.29
7,990.0	1.70	35.80	7,790.4	1,386.0	239.0	1,406.4	0.37	-0.35	3.10
8,162.0	1.40	24.90	7,962.3	1,390.0	241.4	1,410.7	0.24	-0.17	-6.34
8,198.0	1.10	14.00	7,998.3	1,390.7	241.7	1,411.5	1.06	-0.83	-30.28

Checked By: _____ Approved By: _____ Date: _____