Canada Western Red Spring (CWRS) wheat
Harvest quality data for No. 2 CWRS, prairie aggregates[1]

Quality parameter [2]	2024	2023
Wheat		
Test weight, kg/hL	79	81
Weight per 1000 kernels, g	32.8	36.1
Protein content, %	13.8	13.0
Protein content, % (dry matter basis)	16.0	15.1
Ash content, %	1.55	1.42
Falling Number, seconds	373	360
Milling flour yield - Bühler laboratory mill		
Clean wheat basis, %	76.5	76.4
Flour, extraction (%) for analysis	**74**	**74**
Protein content, %	12.8	12.3
Protein loss, %	1.0	0.7
Wet gluten content, %	34.4	32.8
Gluten index, %	97.5	97.4
Ash content, %	0.43	0.42
Dough sheet brightness (L*) at 2h [3]	76.1	77.4
Dough sheet redness (a*) at 2h [3]	1.9	1.6
Dough sheet yellowness (b*) at 2h [3]	26.2	25.4
Starch damage, %	7.8	7.8
Amylograph peak viscosity, BU	522	470
Farinogram, 50 g bowl		
Absorption, %	64.1	63.7
Dough development time, minutes	6.4	6.5
Stability, minutes	10.7	9.9
Mixing tolerance index, BU	26	31
Farinogram, 300 g bowl [4]		
Absorption, %	65.1	64.6
Dough development time, minutes	5.4	5.6
Stability, minutes	13.5	13.1
Mixing tolerance index, BU	16	17
Extensogram (135 minutes), standard method [5]		
Maximum resistance, BU	563	621
Extensibility (length), cm	20.7	18.8
Area, cm^2	149	147
Extensogram (90 minutes), pin mixer method [6]		
Maximum resistance, BU	526	561
Extensibility (length), cm	18.3	16.1
Area, cm^2	118	113
Alveogram		
P (maximum over pressure), mm H_2O	117	115
L (length), mm	118	116
P/L	0.99	0.99
W (deformation energy), 10^{-4} joules	464	445
Ie (elasticity index), %	63.3	61.8

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Quality parameter [2]	2024	2023
Baking (Canadian short process)		
Absorption, %	67	67
Mixing time, minutes	5.5	5.5
Mixing energy, Wh/kg	13.9	14.0
Loaf volume, cm^3/100 g flour	967	979

[1] No. 2 CWRS samples were obtained from the Canadian Grain Commission's Harvest Sample Program. Prairie aggregate region includes British Columbia, Alberta, Saskatchewan and Manitoba (regions 1-10 on crop region map). In 2024 and 2023, No. 2 CWRS was downgraded due to HVK. The minimum HVK content for No. 1 CWRS is 65%.

[2] Data are reported on a 13.5% moisture basis for wheat and a 14.0% moisture basis for flour, except Alveogram results which are reported on a 15% moisture basis. For more information refer to Methods and tests used by the Canadian Grain Commission to measure the quality of wheat.

[3] Colour measured with Minolta CR-410 with D65 illuminant. For more information refer to our colour – water dough sheet method.

[4] An additional test reported on starting in 2022. Farinograph results were historically generated with only a 50 g bowl.

[5] The Farinograph used to mix dough for the Extensograph was replaced with a new model in 2024. For comparison purposes, the 2023 aggregate samples, which had been stored in freezer, were retested with the 2024 aggregate samples after mixing with the new Farinograph model.

[6] An additional test reported on in 2024. The fully developed dough was prepared using a Swanson-type pin mixer to 10% past peak time with 1% salt (flour weight basis) and Farinograph absorption of plus 4%. For more information refer to our Extensogram - pin mixer method.

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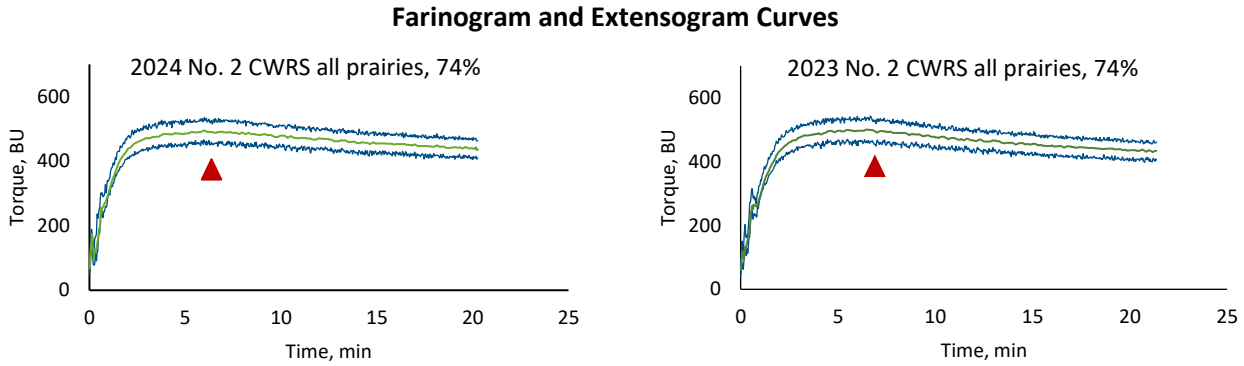

Figure 1. Examples of Farinograms (50 g bowl) generated from flour with extraction rates of 74% for all prairies aggregate samples of No. 2 CWRS from the 2023 and 2024 crop years. Minimum and maximum torque values (blue), mean torque values (green) and dough development time (red arrow) are shown.

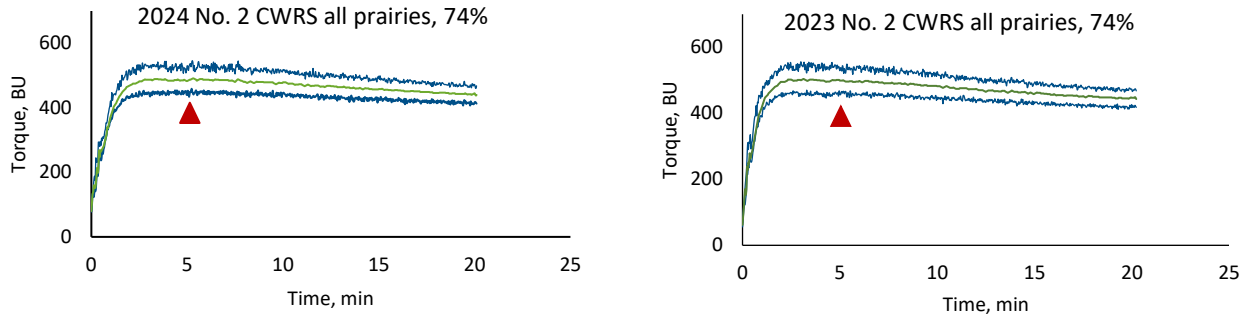

Figure 2. Examples of Farinograms (300 g bowl) generated from flour with extraction rates of 74% for all prairies aggregate samples of No. 2 CWRS from the 2023 and 2024 crop years. Minimum and maximum torque values (blue), mean torque values (green) and dough development time (red arrow) are shown.

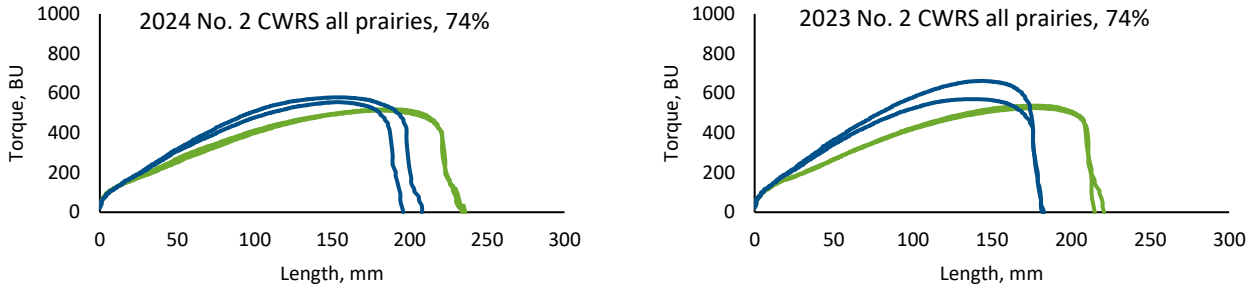

Figure 3. Examples of Extensograms at 45 minutes (green) and 135 minutes (blue) generated from flour with extraction rates of 74% for all prairies aggregate samples of No. 2 CWRS from the 2023 and 2024 crop years.