MONTANA WHEAT QUALITY (Averages)

Updated 5-15-06 with Oct-2005 figures.

Hard Red Winter Wheat -- Montana (Area 21)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Test Weight (lbs per bu.)	61.50	61.60	59.60	61.03	61.77	62.23	62.30	59.97	62.15	62.10	61.19	60.62	61.46	61.33	61.41	60.24	57.22	62.11	60.40	61.30
Test Weight (kg. per hl.)	79.21	79.34	76.76	78.61	79.56	80.15	80.24	77.24	80.05	79.98	78.81	78.08	79.16	80.70	80.80	79.25	75.35	81.66	79.40	80.60
Protein (%) (Wheat, as is)	12.61	12.94	15.67	13.83	13.28	12.36	12.83	11.9	12.26	11.40	13.44	12.31	12.74	11.70	13.33	15.00	14.98	13.63	12.50	12.08
Moisture (%)	11.06	11.24	9.45	9.97	10.47	10.45	11.63	12.28	10.51	11.28	10.04	11.08	10.52	10.68	9.61	10.78	11.09	9.09	11.10	9.80
1000 Kernel Weight (g)	26.20	29.01	24.27	25.14	26.31	29.79	31.05	30.22	30.17	33.78	28.52	29.65	33.33	30.27	29.35	28.91	25.53	26.87	28.60	28.10
Sedimentation (Wheat)	52.60	61.93	69.20	64.80	65.90	57.00	65.00	52.50	54.80											
Sedimentation (Flour)										36	50.5	36	42	45	52	68	63	33		
Falling Number (sec)	413	392	433	439	438	433	374	323	387	423	394	373	377	386	412	419	460	475	471	424
Yield (% Flour)	71.70	72.00	70.10	72.16	70.79	69.80	71.60	71.13	70.44	69.23	73.05	70.3	73.3	72.0	70.7	72.5	68.8	72.1	68.9	72
Flour Ash (%)	0.436	0.439	0.442	0.444	0.423	0.445	0.434	0.423	0.436	0.469	0.445	0.432	0.436	0.476	0.414	0.473	0.510	0.447	0.440	0.44
Wheat Ash (as of 1995)										1.515	1.395	1.552	1.504	1.453	1.44	1.44	1.618	1.497	1.54*	1.5
Wet Gluten (%)	27.10	29.25	36.20	31.29	29.56	27.19	31.44	29.47	30.29	29.80	31.14	26.92	31.66	30.13	29.98	32.53	37.01	28.91	31.2	26.7
Farinograph Pk. Time(Min)	5.90	7.52	7.87	7.16	6.59	6.11	6.02	6.24	8	6.1	6	8	6.5	5.5	6.5	7	6.5	5.5	6.7	5
Farinograph Tol. (Min)	10.88	11.63	13.28	12.86	12.00	10.04	9.14	9.23	14.81	11.30	9.00			10.50	12.50	11.50	10.50	8.50	15.90	8.00
Farinograph Absorption(%)	60.90	63.71	64.70	64.32	63.11	63.44	64.77	61.38	62.01	60.30	60.75	61.60	62.70	64.00	59.50	60.40	63.10	61.70	60.20	57.90
Farinograph Valorimeter	63.00	69.40	71.50	69.80	67.30	63.90	63.00	62.4	71.9											
Bake Volume	795	855	967	766		740	790	687	786	867	780	750	838	850	900	975	900	785	826	825
Bake (Crumb) Grain	CLE	SLO	SLO	CLE	CLE	CLE	CLE	CLE	CLE-	5	7	8	6	7	8	7	6	7	6.6	6
Bake (Crumb) Texture	SLG	SLG-	SLG	SLH	SLH+	SLH+	SLH	SLH+	SLH+	6	6.5	8	7	8	8	8	8	7	7.5	7
Bake Mixing Strength	Norm-	Norm	Norm																	
Bake Evaluation	Good+	VG	VG	Good	VG-	Good+	Good	Good	Good+											

SOURCE: CII, Doty Labs and USWA; Compiled By MW&BC

*Lowest figure in range.

As of 2005, sample areas were changed to Eastern, South Central, Central, And North Central. (See next page)

Figures for 2005 not well tested.

Durum -- Northeastern Montana

Updated 5-15-06 with Oct-2005 figures.

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Test Weight (lbs. per bu.)	60.4	60.9	61.7	61.7	59.8	62.3	60.4	63.0	60.7	60.8	61.0	60.7	60.6	60.9	60.1	62.5	60.4
Test Weight (kg. per hl.)	77.8	78.4	79.5	79.5	77.0	80.2	77.8	81.1	78.2	78.3	79.4	79.1	78.9	79.3	78.3	81.4	78.7
Protein (%) as of 94 -12% MB	16.9	16.1	14.6	13.4	12.4	12.2	12.8	13.2	13.9	14.0	13.7	13.6	14.6	13.7	14.5	12.7	14.1
Moisture (%)	10.6	10.4	10.3	13.2	13.1	11.8	12.0	11.6	10.7	10.0	12.0	10.5	10.1	11.9	9.4	12.2	11.6
1000 Kernel Weight (g)	39.2	37.7	38.3	45.8	37.6	42.2	35.7	39.7	34.8	38.5	38.9	36.4	38.8	38.2	31.9	40.2	32.4
Vitreous Kernels (%)	97	83	96	92	91	83	83	95	80	81	87	87	97	91	94.8	91.0	95.0
Falling Numbers (sec)	439	387	430	315	369	363	400	352	363	382	363	363	398	393	486	369	387
Total Extraction (%)	68.2	69.7	67.7	70.7	67.3	70.2	70	70.8	69.8	69.2	72.2	68.1	72.5	70.1	68.1	71.7	71.7
Semolina Extraction (%)	57.9	59.0	58.0	59.5	57.1	61.3	61.6	61.2	59.1	61.3	64.7	62.6	65.7	64.1	62.8	64.8	66.0
Flour Ash (%)	0.68	0.64	0.67	0.62	0.64	0.59	0.67	0.58	0.67	0.60	0.63	0.66	0.70	0.66	0.68	0.61	0.74
Wet Gluten (%)	47.2	44.6	41.6	39.1	37.1	35.3	35.4	39.1	40.1	38.6	36.5	33.8	38.2	35.1	37.5	33.3	37.6
Color Score (Spaghetti Proces	9.5	10.0	10.0	9.5	10.5	10.0	10.0	10.0	9.0	10.0	9.5	9.5	9.5	9.0	9.5	9.0	9.5
Cooked Weight (g)	29.8	31.1	30.9	30.6	30.7	30.3	31.1	31.9	30.7	30.6	31.2	31.2	32.2	32.3	30.9	29.3	30.4
Cooking Loss (%)	6.3	6.6	6.3	6.8	7.2	7.1	5.5	6.5	5.3	5.3	5.8	5.8	5.4	5.3	5.2	6.1	6.2
Cooked Firmness (gcm)	7.7	6.6	7.3	6.9	5.4	4.9	5.7	6.2	5.9	6.1	6.5	6.5	6.6	5.5	6.2	5.0	6.1

SOURCE: CII, Doty Labs and USWA; Compiled By MW&BC

Bake Volume		Crumb Texture	
Poor	Poor	HS	Harsh Stressed
Good	Good	Harsh	Harsh
VG	Very Good	SLH	Slightly Harsh
Exc	Excellent	SLG	Silky Good
		SLExc	Silky Excellent

*** Preliminary**

By courtesy of the Montana Wheat & Barley Committee

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