

2010 Preliminary Spring Wheat Yield Trial Mill & Bake

Location: Means - Havre & Sidney, MT

Sample No.	Whole Grain Analysis				Flour Analysis				Mixograph Analysis				Bake Analysis				
	Identity	Pedigree	Class	Wheat Protein, % (12%/m.b.)	Single Kernel Hardness	Flour Protein, % (14%/m.b.)	Flour Yield, %	Flour Ash, %	Wheat Ash, %	Mixograph Type	Mixing Tolerance	Mixing Time, min	Mix Water Absorption, %	Bake Mixing Time, min	Bake Water Absorption, %	Loaf Volume	Comments
1	MT 1001	CHOTEAU/MT0421	HRS	13.1	64	67.9	11.6	0.41	1.40			5.0	5.0	66.7	7.6	76.4	1123
2	MT 1002	CHOTEAU/MT0515	HRS	12.7	46	68.3	11.1	0.39	1.31			4.5	4.0	64.2	5.3	73.9	1123
3	MT 1003	CHOTEAU/MT0515	HRS	13.9	55	68.0	12.3	0.41	1.30			4.5	4.7	66.2	6.3	75.9	1140
4	MT 1004	CHOTEAU/MT0515	HRS	13.2	53	67.7	11.7	0.41	1.39			4.0	4.5	65.3	6.3	75.0	1075
5	MT 1005	CHOTEAU/MT0515	HRS	12.4	55	67.5	10.9	0.39	1.30			4.0	6.5	64.4	9.9	75.1	1025
6	MT 1006	CHOTEAU/MT0515	HRS	12.3	55	69.1	10.6	0.38	1.30			4.0	4.3	63.3	7.9	73.0	1008
7	MT 1007	CHOTEAU/MT0515	HRS	13.0	52	68.3	11.7	0.40	1.34			5.0	5.9	66.4	8.7	76.1	1055
8	MT 1008	CHOTEAU/MT0515	HRS	11.8	57	69.0	10.2	0.39	1.28			4.5	5.7	62.7	7.3	72.4	1063
9	MT 1009	CHOTEAU/MT0515	HRS	12.2	50	68.8	10.7	0.39	1.36			3.5	5.0	64.3	7.3	74.5	990
10	MT 1010	CHOTEAU/MT0515	HRS	13.0	59	66.5	11.1	0.40	1.33			4.5	6.1	65.3	7.8	75.0	1080
11	MT 1011	CHOTEAU/MT0515	HRS	13.7	55	65.1	11.9	0.39	1.31			4.5	5.5	66.1	7.1	75.8	1120
12	MT 1012	CHOTEAU/MT0515	HRS	12.3	63	67.6	11.0	0.39	1.34			4.5	4.7	64.2	6.9	73.9	1090
13	MT 1013	CHOTEAU/MT0515	HRS	13.0	59	69.1	11.8	0.39	1.31			4.0	5.0	65.1	6.5	75.0	1120
14	MT 1014	CHOTEAU/MT0515	HRS	12.2	57	68.4	10.7	0.39	1.34			4.5	4.9	64.1	5.9	74.3	1020
15	MT 1015	CHOTEAU/MT0542	HRS	12.7	61	69.3	11.4	0.39	1.46			5.0	6.6	65.9	10.4	75.6	1123
16	MT 1016	CHOTEAU/MT0564	HRS	13.1	67	69.1	11.8	0.42	1.39			3.5	4.6	66.3	5.4	75.0	1090
17	MT 1017	CHOTEAU/MT0564	HRS	12.7	64	68.4	11.2	0.42	1.46			4.5	4.7	65.0	6.4	75.0	1108
18	MT 1018	CHOTEAU/MT0564	HRS	13.5	73	68.9	12.0	0.42	1.51			4.0	3.9	65.4	5.0	75.1	1120
19	MT 1019	CHOTEAU/MT0564	HRS	13.2	59	68.8	11.7	0.41	1.44			3.5	4.2	65.2	6.1	75.4	1083
20	MT 1020	CHOTEAU/NDSW034	HRS	13.0	59	68.1	11.5	0.39	1.37			4.0	3.8	64.7	5.4	73.9	1070
21	MT 1021	CHOTEAU/00H04*J3	HRS	12.7	61	67.7	11.1	0.40	1.41			3.0	4.6	64.5	6.9	74.0	1053
22	MT 1022	CHOTEAU/SD3851	HRS	13.8	55	65.9	12.0	0.40	1.42			5.0	4.6	67.2	6.2	76.9	1158
23	MT 1023	CHOTEAU/SD3851	HRS	12.2	61	67.6	10.6	0.40	1.31			4.0	4.7	63.9	7.4	73.6	1053
24	MT 1024	CHOTEAU/SD3851 C	HRS	12.7	69	66.3	10.8	0.41	1.35			4.5	5.4	63.5	6.6	73.2	1048
25	MT 1025	CHOTEAU/BZ9M1044	HRS	13.0	54	67.9	11.4	0.41	1.31			4.5	4.5	64.1	6.1	73.8	1088
26	MT 1026	CHOTEAU/BZ9M1044	HRS	13.0	56	66.8	11.5	0.40	1.36			4.0	5.5	64.9	7.6	74.9	1055
27	MT 1027	CHOTEAU/BZ9M1044	HRS	13.2	53	67.6	11.5	0.40	1.36			4.5	5.0	64.9	6.9	74.4	1078
28	MT 1028	CHOTEAU/BZ9M1044	HRS	12.7	54	67.7	11.3	0.39	1.34			3.5	5.0	65.0	6.9	74.9	1075
29	MT 1029	CHOTEAU/BZ9M1044	HRS	12.5	53	68.1	11.1	0.40	1.31			4.0	4.5	63.7	6.0	73.4	1078
30	MT 1030	CHOTEAU/BZ9M1044	HRS	12.7	55	68.3	11.1	0.40	1.29			5.0	4.8	64.3	6.3	74.3	1063
31	MT 1031	CHOTEAU/BZ9M1044	HRS	13.3	56	68.1	11.7	0.40	1.37			4.5	5.3	66.1	6.8	75.8	1103
32	MT 1032	CHOTEAU/BZ9M1044	HRS	12.7	54	67.6	11.3	0.39	1.35			4.0	4.6	64.8	6.1	74.5	1068
33	MT 1033	CHOTEAU/BZ9M1044	HRS	13.8	55	67.4	12.2	0.39	1.36			3.5	5.4	66.3	7.1	76.0	1090
34	MT 1034	CHOTEAU/BZ9M1044	HRS	12.7	54	68.2	11.4	0.40	1.34			4.5	4.3	65.2	6.4	74.9	1080
35	MT 1035	CHOTEAU/BZ9M1044	HRS	13.0	55	67.7	11.5	0.39	1.31			3.0	5.1	65.4	6.9	74.9	1053
36	MT 1036	CHOTEAU/BZ9M1044	HRS	12.6	55	67.9	11.3	0.41	1.33			4.0	4.3	65.6	6.6	75.5	1048
37	MT 1037	CHOTEAU/BZ9M1044	HRS	13.1	55	67.6	11.6	0.39	1.36			5.0	5.2	65.6	6.9	75.5	1085
38	MT 1038	CHOTEAU/BZ9M1044	HRS	13.3	53	67.8	11.7	0.40	1.38			4.0	4.8	65.5	6.8	74.9	1098
39	MT 1039	CHOTEAU/BZ9M1044	HRS	13.2	55	68.4	11.9	0.41	1.29			4.5	4.0	64.5	5.7	73.2	1138
40	MT 1040	CHOTEAU/BZ9M1044	HRS	12.4	58	67.7	11.3	0.39	1.44			4.0	5.3	64.3	6.0	74.3	1098
41	MT 1041	CHOTEAU/MTHW020	HRS	13.8	78	67.4	12.0	0.39	1.51			4.0	4.9	66.1	5.9	75.8	1173
42	MT 1042	CHOTEAU/MTHW020	HRS	13.8	63	67.6	11.8	0.41	1.38			4.0	3.9	66.9	4.7	76.1	1093

43	MT 1043	CHOTEAU/MTHW020	HRS	12.9	71	67.6	11.4	0.40	1.42	3.5	3.9	65.6	4.4	75.0	1100
44	MT 1044	CHOTEAU/MTHW020	HRS	13.4	74	65.9	11.7	0.40	1.50	4.0	3.9	65.6	4.7	75.6	1163
45	MT 1045	CHOTEAU/MTHW020	HRS	12.6	69	68.5	11.4	0.41	1.36	3.5	4.5	65.7	5.6	74.4	1123
46	MT 1046	CHOTEAU/MTHW020	HRS	12.7	71	69.7	11.4	0.38	1.36	4.5	6.0	66.2	7.9	76.4	1180
47	MT 1047	CHOTEAU/MTHW047	HRS	12.4	70	66.4	10.9	0.42	1.34	5.0	7.1	63.8	10.3	74.0	1108
48	MT 1048	CHOTEAU/MTHW047	HRS	12.6	63	67.8	11.0	0.41	1.44	4.5	5.5	66.2	9.3	75.9	1103
49	MT 1049	CHOTEAU/MTHW047	HRS	12.9	65	68.2	11.2	0.41	1.41	4.5	6.7	66.6	12.4	77.0	1108
50	MT 1050	VIDA/SD3851	HRS	12.5	69	66.3	10.8	0.41	1.43	5.0	8.5	68.7	13.6	78.6	1090
51	MT 1051	VIDA/MTHW0202	HRS	12.1	55	68.6	10.5	0.38	1.34	3.0	5.0	63.9	11.3	73.9	1095
52	MT 1052	VIDA/MTHW0202	HRS	12.4	63	69.8	10.8	0.39	1.39	2.5	4.7	63.7	7.6	73.4	1030
53	MT 1053	VIDA/MTHW0202	HRS	12.2	68	71.3	10.6	0.39	1.36	4.0	5.3	64.4	7.3	74.1	1073
54	MT 1054	MT0515/MT0562	HRS	13.2	69	67.9	11.6	0.40	1.49	4.0	4.1	65.8	4.7	75.0	1085
55	MT 1055	MT0515/MT0562	HRS	13.1	56	68.0	11.6	0.38	1.45	3.5	5.1	65.8	6.8	75.5	1073
56	MT 1056	MT0548/MT0562	HRS	11.4	72	65.8	10.0	0.42	1.50	3.5	5.0	63.2	7.2	73.2	1058
57	MTHW105	MTHW0202/MTHW04	HWS	11.7	70	67.9	10.3	0.40	1.43	3.5	6.6	63.7	9.3	73.6	1093
58	MTHW105	MTHW0202/MTHW04	HWS	11.9	72	66.6	10.2	0.41	1.47	4.0	7.2	63.5	11.8	73.5	1138
59	MTHW105	MTHW0202/NDSW03	HWS	12.6	64	68.8	10.8	0.40	1.45	3.0	4.5	64.2	6.4	74.2	1103
60	MTHW106	MTHW0202/BW315A	HWS	11.5	61	69.9	10.0	0.37	1.38	2.5	5.1	62.2	6.8	72.1	1085
61	MTHW106	MTHW0202/BW315A	HWS	11.7	65	69.3	10.5	0.37	1.36	2.5	4.4	62.7	5.4	72.1	1068
62	MTHW106	MTHW0202/BW315A	HWS	12.1	66	69.7	10.8	0.37	1.34	2.5	4.0	61.4	5.2	70.8	1135
63	MTHW106	MTHW0202/BW315A	HWS	12.0	63	69.6	10.6	0.37	1.33	2.5	4.4	61.4	5.1	71.1	1073
64	MTHW106	AGAWAM/IFAFS275	HWS	12.2	66	66.9	10.6	0.40	1.45	3.5	5.8	61.7	8.3	71.9	1048
65	MTHW106	AGAWAM/IFAFS275	HWS	12.4	64	66.2	10.7	0.42	1.50	4.5	5.0	63.2	6.9	72.9	988
66	MTHW106	CHOTEAU/MTHW020	HWS	12.4	58	65.7	10.7	0.41	1.46	4.0	5.1	61.5	8.7	71.7	1025
67	MTHW106	CHOTEAU/MTHW020	HWS	12.9	61	66.0	11.2	0.41	1.44	3.5	4.9	63.7	10.4	73.4	1113
68	MTHW106	MTHW0202/CHOTEA	HWS	12.2	59	66.0	10.6	0.42	1.42	3.0	6.2	62.4	6.5	72.1	1118
69	MTHW106	ID594/CHOTEAU	HWS	12.8	63	66.0	11.5	0.41	1.41	4.5	6.5	63.9	11.0	73.6	1120
70	MTHW107	ID594/CHOTEAU	HWS	12.7	56	66.7	11.2	0.41	1.44	5.0	7.9	64.1	14.3	73.8	1013
71	MTHW107	ID597/CHOTEAU	HWS	13.0	61	70.2	11.6	0.40	1.49	4.5	5.2	64.8	8.0	74.7	1135
72	MT 1072	CHOTEAU/REEDER F	HRS	11.9	56	64.2	10.3	0.39	1.39	3.5	3.8	63.3	5.1	73.3	1000
73	MT 1073	CHOTEAU/REEDER F	HRS	12.6	59	64.0	10.8	0.39	1.32	3.0	4.4	64.7	6.2	74.4	998
74	MTHW107	MTHW9420*3/GLUPRO	HWS	12.1	62	64.7	10.6	0.39	1.46	4.0	6.0	62.5	7.9	72.2	1078
75	MTHW107	MTHW9420*3/GLUPRO	HWS	12.8	63	65.4	11.0	0.40	1.51	4.0	5.0	62.9	7.2	72.8	1133
76	MTHW107	MTHW9420*3/GLUPRO	HWS	13.3	68	64.9	11.6	0.40	1.51	3.5	5.2	65.8	7.7	75.5	1140
77	CI 13596	FORTUNA	HRS	13.0	58	70.8	11.5	0.40	1.41	3.5	4.0	64.8	5.6	74.7	1088
78	PI574642	MCNEAL	HRS	12.4	77	66.7	10.7	0.39	1.50	4.5	7.8	65.9	11.4	75.9	1128
79	ND 695	REEDER	HRS	12.4	69	67.4	10.9	0.38	1.42	3.0	5.3	64.8	6.7	74.5	1058
80	PI633974	CHOTEAU	HRS	13.9	56	68.3	12.2	0.41	1.42	3.5	4.2	66.9	6.4	76.1	1170
81	PI642366	VIDA	HRS	12.4	69	70.9	11.0	0.40	1.30	3.0	4.3	65.0	6.0	73.9	1108

<i>NURSERY MIN</i>	<i>11.4</i>	<i>45.6</i>	<i>64.0</i>	<i>10.0</i>	<i>0.37</i>	<i>1.28</i>	<i>2.5</i>	<i>3.8</i>	<i>61.4</i>	<i>4.4</i>	<i>70.8</i>	<i>988</i>
<i>NURSERY MAX</i>	<i>13.9</i>	<i>77.6</i>	<i>71.3</i>	<i>12.3</i>	<i>0.42</i>	<i>1.51</i>	<i>5.0</i>	<i>8.5</i>	<i>68.7</i>	<i>14.3</i>	<i>78.6</i>	<i>1180</i>
<i>NURSERY AVE</i>	<i>12.7</i>	<i>61.0</i>	<i>67.7</i>	<i>11.2</i>	<i>0.40</i>	<i>1.39</i>	<i>4.0</i>	<i>5.1</i>	<i>64.7</i>	<i>7.3</i>	<i>74.4</i>	<i>1087</i>

2010 Preliminary Spring Wheat Yield Trial Mill & Bake
Location: Havre, MT 3302

Sample No.	Whole Grain Analysis				Flour Analysis				Mixograph Analysis				Bake Analysis				Comments
	Identity	Pedigree	Class	Wheat Protein, % (12%mb.)	Single Kernel Hardness	Flour Protein, % (14%mb.)	Flour Yield, %	Flour Ash, %	Wheat Ash, %	Mixograph Type	Mixing Tolerance	Mixograph Mixing Time, min	Mixograph Water Absorption, %	Bake Mixing Time, min	Bake Water Absorption, %	Loaf Volume	
1	MT 1001	CHOTEAU/MT0421	HRS	13.0	59	67.9	11.3	0.42	1.35	MH	4	4.9	65.5	8.1	75.2	1160	Bucky1PLate
2	MT 1002	CHOTEAU/MT0515	HRS	12.8	47	69.3	11.1	0.39	1.18	M	4	4.1	64.3	4.8	74.0	1155	
3	MT 1003	CHOTEAU/MT0515	HRS	14.1	47	68.0	12.4	0.41	1.21	M	5	3.8	66.3	5.2	76.0	1195	
4	MT 1004	CHOTEAU/MT0515	HRS	13.2	47	67.1	11.6	0.42	1.31	M	4	3.9	64.3	5.5	74.0	1090	1PLateSIBuckySt
5	MT 1005	CHOTEAU/MT0515	HRS	12.3	48	67.3	10.8	0.40	1.21	M	3	6.0	63.6	8.4	73.3	1045	SIBuckyST
6	MT 1006	CHOTEAU/MT0515	HRS	12.3	51	69.3	10.6	0.39	1.21	M	4	4.2	63.5	7.1	73.2	1035	ST
7	MT 1007	CHOTEAU/MT0515	HRS	12.7	47	68.8	11.6	0.40	1.26	M	4	5.9	65.5	7.8	75.2	1045	
8	MT 1008	CHOTEAU/MT0515	HRS	11.9	51	69.4	10.1	0.39	1.19	M	4	5.8	63.5	6.9	73.2	1055	
9	MT 1009	CHOTEAU/MT0515	HRS	12.0	46	68.6	10.4	0.40	1.30	M	3	5.2	64.0	6.9	74.2	950	SIBuckyST
10	MT 1010	CHOTEAU/MT0515	HRS	12.5	58	66.4	10.7	0.41	1.22	M	4	6.6	63.6	6.8	73.3	1050	ST
11	MT 1011	CHOTEAU/MT0515	HRS	13.2	51	64.9	11.5	0.40	1.24	M	4	5.6	64.3	6.0	74.0	1095	ST
12	MT 1012	CHOTEAU/MT0515	HRS	12.9	58	68.0	11.4	0.40	1.24	M	4	4.7	64.5	5.7	74.2	1120	
13	MT 1013	CHOTEAU/MT0515	HRS	13.1	56	69.0	11.9	0.40	1.22	M	4	5.0	65.1	6.2	74.8	1155	ST
14	MT 1014	CHOTEAU/MT0515	HRS	13.2	55	69.6	11.5	0.40	1.30	M	4	4.8	65.7	6.1	75.9	1055	ST
15	MT 1015	CHOTEAU/MT0542	HRS	12.4	57	69.9	11.2	0.39	1.34	M	5	6.6	65.5	9.2	75.2	1120	
16	MT 1016	CHOTEAU/MT0564	HRS	13.5	61	69.3	12.1	0.42	1.27	M	4	4.5	67.2	5.6	75.9	1140	
17	MT 1017	CHOTEAU/MT0564	HRS	12.6	58	68.4	11.1	0.42	1.34	M	4	4.8	64.8	6.0	75.0	1135	HasStrength
18	MT 1018	CHOTEAU/MT0564	HRS	13.2	72	69.1	11.7	0.42	1.32	M	5	3.8	64.1	4.8	74.3	1155	HasStrength
19	MT 1019	CHOTEAU/MT0564	HRS	13.3	55	68.5	11.8	0.42	1.33	M	3	4.2	64.7	5.4	74.9	1150	HasStrength
20	MT 1020	CHOTEAU/NDSW034	HRS	12.8	57	68.6	11.3	0.39	1.25	LM	4	3.4	64.3	4.4	73.0	1120	
21	MT 1021	CHOTEAU/00H04*J3	HRS	12.7	55	68.5	11.1	0.40	1.32	M	3	4.9	64.5	7.3	74.2	1085	
22	MT 1022	CHOTEAU/SD3851	HRS	13.8	50	65.9	12.0	0.41	1.30	MH	5	4.3	67.5	5.3	77.2	1180	HasStrength
23	MT 1023	CHOTEAU/SD3851	HRS	12.5	58	68.5	10.8	0.39	1.21	M	4	4.2	64.3	7.5	74.0	1095	
24	MT 1024	CHOTEAU/SD3851 C1	HRS	13.3	62	66.5	11.3	0.41	1.27	M	4	5.3	64.5	6.2	74.2	1105	HasStrengthSIST
25	MT 1025	CHOTEAU/BZ9M1044	HRS	13.2	48	67.9	11.6	0.42	1.20	M	4	3.8	64.2	5.3	73.9	1145	LgST
26	MT 1026	CHOTEAU/BZ9M1044	HRS	13.0	51	66.6	11.4	0.41	1.27	M	4	4.8	64.8	6.4	75.0	1090	ST
27	MT 1027	CHOTEAU/BZ9M1044	HRS	13.1	44	67.9	11.3	0.41	1.31	M	4	4.9	64.5	6.1	74.7	1145	ST
28	MT 1028	CHOTEAU/BZ9M1044	HRS	12.8	50	68.0	11.3	0.39	1.26	M	3	4.4	63.8	6.0	74.0	1105	HasStrength
29	MT 1029	CHOTEAU/BZ9M1044	HRS	13.5	52	67.8	11.9	0.39	1.20	M	4	3.8	65.3	5.2	75.0	1170	HasStrengthSIST
30	MT 1030	CHOTEAU/BZ9M1044	HRS	12.5	49	68.6	11.2	0.41	1.20	M	5	4.2	64.5	5.2	74.7	1135	had to shake extra
31	MT 1031	CHOTEAU/BZ9M1044	HRS	13.4	50	67.6	11.7	0.41	1.24	M	5	4.3	65.3	5.2	75.0	1180	SIST
32	MT 1032	CHOTEAU/BZ9M1044	HRS	13.3	48	67.4	11.8	0.40	1.22	M	4	4.1	65.5	5.1	75.2	1150	ST
33	MT 1033	CHOTEAU/BZ9M1044	HRS	13.6	52	67.3	12.0	0.39	1.20	M	3	4.4	65.3	5.3	75.0	1160	ST
34	MT 1034	CHOTEAU/BZ9M1044	HRS	12.9	50	68.6	11.5	0.40	1.23	M	4	3.8	64.8	5.8	75.0	1140	SIBucky
35	MT 1035	CHOTEAU/BZ9M1044	HRS	13.4	50	67.8	11.8	0.40	1.24	M	3	4.7	65.2	6.0	74.9	1160	HasStrength
36	MT 1036	CHOTEAU/BZ9M1044	HRS	12.9	51	68.3	11.7	0.41	1.25	M	4	4.2	66.0	5.9	76.2	1135	HasStrengthSIST
37	MT 1037	CHOTEAU/BZ9M1044	HRS	12.6	50	67.7	11.4	0.39	1.23	M	4	4.5	65.0	5.5	75.2	1090	SIST
38	MT 1038	CHOTEAU/BZ9M1044	HRS	13.0	50	67.3	11.4	0.41	1.29	M	4	4.2	65.1	5.8	74.3	1135	ST
39	MT 1039	CHOTEAU/BZ9M1044	HRS	13.9	55	67.3	12.4	0.40	1.17	M	4	3.9	66.0	5.1	74.7	1215	ST
40	MT 1040	CHOTEAU/BZ9M1044	HRS	11.9	51	68.0	10.8	0.39	1.34	LM	3	5.1	63.2	5.6	72.9	1115	
41	MT 1041	CHOTEAU/MTHW020	HRS	13.9	72	67.3	11.9	0.39	1.46	M	4	5.0	65.2	5.4	74.9	1195	SIBucky
42	MT 1042	CHOTEAU/MTHW020	HRS	13.7	55	67.7	11.7	0.42	1.32	LM	3	4.2	66.5	4.6	76.2	1135	
43	MT 1043	CHOTEAU/MTHW020	HRS	12.6	63	67.5	11.1	0.40	1.29	M	3	3.9	65.0	4.5	75.2	1115	SideSeam
44	MT 1044	CHOTEAU/MTHW020	HRS	12.9	67	65.8	11.2	0.40	1.40	M	3	4.2	65.5	5.0	75.2	1190	ST

45	MT 1045	CHOTEAU/MTHW020	HRS	12.5	64	69.2	11.3	0.41	1.27	M	3	4.3	64.2	5.2	72.9	1175		
46	MT 1046	CHOTEAU/MTHW020	HRS	12.8	68	69.9	11.4	0.38	1.24	M	4	6.1	64.8	7.0	75.0	1260	HasStrength	
47	MT 1047	CHOTEAU/MTHW047	HRS	12.9	65	66.6	11.3	0.43	1.21	M	5	6.6	63.5	9.1	73.2	1195	SlBucky	
48	MT 1048	CHOTEAU/MTHW047	HRS	13.3	62	68.3	11.8	0.41	1.34	M	4	5.3	67.3	9.0	77.0	1230	HasStrengthSIST	
49	MT 1049	CHOTEAU/MTHW047	HRS	13.0	60	68.3	11.4	0.42	1.34	M	4	5.6	65.6	9.4	75.3	1165	StrongST	
50	MT 1050	VIDA/SD3851	HRS	13.3	62	67.8	11.5	0.41	1.30	M	5	8.0	69.6	12.1	79.3	1110	StrongST	
51	MT 1051	VIDA/MTHW0202	HRS	11.4	51	68.4	9.9	0.39	1.27	M	2	4.2	62.3	9.9	72.0	1090		
52	MT 1052	VIDA/MTHW0202	HRS	12.5	59	70.2	10.7	0.38	1.25	M	2	4.9	63.3	7.9	73.0	1050	ST	
53	MT 1053	VIDA/MTHW0202	HRS	12.2	61	72.8	10.5	0.39	1.21	M	4	5.5	63.5	7.2	73.2	1065	HasStrengthST	
54	MT 1054	MT0515/MT0562	HRS	13.0	69	67.9	11.1	0.41	1.33	M	3	4.3	64.3	4.5	74.0	1065		
55	MT 1055	MT0515/MT0562	HRS	12.1	50	68.1	10.7	0.38	1.35	M	3	5.2	63.6	6.1	73.3	1060		
56	MT 1056	MT0548/MT0562	HRS	11.5	66	66.1	10.1	0.42	1.40	M	3	4.9	62.2	6.7	72.4	1080		
57	MTHW105	MTHW0202/MTHW04	HWS	11.4	58	68.5	10.1	0.39	1.33	LM	3	6.7	63.0	9.4	73.2	1085	HasStrengthST	
58	MTHW105	MTHW0202/MTHW04	HWS	12.4	67	66.5	10.6	0.41	1.39	M	4	7.5	63.3	12.3	73.0	1235	Strong	
59	MTHW105	MTHW0202/NDW03	HWS	12.8	58	69.1	10.9	0.40	1.33	M	3	4.4	63.8	6.8	74.0	1155	HasStrength	
60	MTHW106	MTHW0202/BW315A	HWS	11.6	54	69.7	10.1	0.37	1.24	LM	2	4.7	61.5	7.4	71.2	1165	HasStrength	
61	MTHW106	MTHW0202/BW315A	HWS	11.9	57	68.9	10.5	0.37	1.26	LM	2	4.3	62.0	5.6	72.2	1130		
62	MTHW106	MTHW0202/BW315A	HWS	12.3	57	69.1	11.0	0.37	1.28	M	2	3.8	59.5	4.7	68.2	1240		
63	MTHW106	MTHW0202/BW315A	HWS	12.4	56	69.1	10.9	0.37	1.23	LM	2	4.1	60.0	4.5	70.2	1170		
64	MTHW106	AGAWAM/IFAFS275	HWS	12.4	59	67.5	10.7	0.40	1.37	M	3	5.4	59.6	7.6	69.3	1135	HasStrength	
65	MTHW106	AGAWAM/IFAFS275	HWS	12.5	59	67.6	10.9	0.43	1.43	M	3	5.2	61.9	6.5	71.6	1060	HasStrength	
66	MTHW106	CHOTEAU/MTHW020	HWS	11.9	51	65.1	10.2	0.42	1.31	M	3	4.4	58.3	6.4	69.0	1045	HasStrength	
67	MTHW106	CHOTEAU/MTHW020	HWS	13.1	52	65.8	11.3	0.42	1.32	M	3	4.7	61.2	6.1	70.9	1170	HasStrengthST	
68	MTHW106	MTHW0202/CHOTEAU	HWS	12.2	50	65.6	10.6	0.42	1.27	M	2	4.1	60.5	5.3	70.2	1190	LgST	
69	MTHW106	ID594/CHOTEAU	HWS	12.5	55	66.1	11.1	0.42	1.28	M	3	5.9	61.5	8.5	71.2	1175	LgST	
70	MTHW107	ID594/CHOTEAU	HWS	12.6	49	67.4	11.1	0.41	1.36	M	4	7.3	62.5	11.2	72.2	1045	HasStrength	
71	MTHW107	ID597/CHOTEAU	HWS	12.9	54	70.5	11.5	0.41	1.38	M	4	5.2	63.5	7.8	73.2	1175	HasStrengthSIST	
72	MT 1072	CHOTEAU/REEDER F	HRS	12.7	51	65.1	10.9	0.40	1.23	M	4	3.6	64.1	4.8	74.3	1055		
73	MT 1073	CHOTEAU/REEDER F	HRS	13.0	53	65.3	11.3	0.41	1.23	M	3	4.2	65.8	5.5	75.5	1065		
74	MTHW107	MTHW9420*3/GLUPRO	HWS	11.8	54	64.7	10.2	0.40	1.35	M	3	6.3	60.3	7.2	70.0	1065	LgST	
75	MTHW107	MTHW9420*3/GLUPRO	HWS	12.4	56	65.8	10.5	0.40	1.39	M	4	5.0	61.0	6.3	71.2	1160	LgST	
76	MTHW107	MTHW9420*3/GLUPRO	HWS	13.4	61	64.5	11.4	0.40	1.36	M	3	5.2	64.3	6.7	74.0	1200	ST	
77	CI 13596	FORTUNA	HRS	13.0	53	70.7	11.4	0.41	1.30	M	3	4.3	65.0	6.1	75.2	1135	ST	
78	PI574642	MCNEAL	HRS	12.7	71	67.4	10.8	0.37	1.36	M	5	7.8	65.3	11.2	75.0	1165	SlBucky	
79	ND 695	REEDER	HRS	12.4	66	67.7	11.0	0.38	1.37	M	3	5.4	64.3	5.9	74.0	1100	ST	
80	PI633974	CHOTEAU	HRS	13.7	50	68.6	11.9	0.41	1.33	M	3	3.7	65.2	4.9	74.9	1225	HasStrength	
81	PI642366	VIDA	HRS	12.6	63	71.7	11.1	0.40	1.23	M	2	3.7	64.3	5.2	74.0	1175	ST	
NURSERY MIN				11.4	44	64.5	9.9	0.37	1.17			2.0	3.4	58.3	4.4	68.2	950	
NURSERY MAX				14.1	72	72.8	12.4	0.43	1.46			5.0	8.0	69.6	12.3	79.3	1260	
NURSERY AVE				12.8	56	67.9	11.2	0.40	1.29			3.6	4.9	64.1	6.5	73.9	1129	

2010 Preliminary Spring Wheat Yield Trial Mill & Bake

Location: Sidney, MT 3303

Sample No.	Whole Grain Analysis				Flour Analysis			Mixograph Analysis				Bake Analysis				Loaf Volume	Comments
	Identity	Pedigree	Class	Wheat Protein, % (12%/m.b.)	Single Kernel Hardness	Flour Protein, % (14%/m.b.)	Flour Yield, %	Flour Ash, %	Wheat Ash, %	Mixograph Type	Mixing Tolerance	Mixing Time, min	Mix Water Absorption, %	Bake Mixing Time, min	Bake Water Absorption, %		
1	MT 1001	CHOTEAU/MT0421	HRS	13.2	70	67.8	11.9	0.39	1.44	M	6	5.1	67.9	7.1	77.6	1085	HasStrength
2	MT 1002	CHOTEAU/MT0515	HRS	12.6	44	67.3	11.0	0.38	1.43	M	5	3.8	64.0	5.7	73.7	1090	extra5mins
3	MT 1003	CHOTEAU/MT0515	HRS	13.7	63	67.9	12.2	0.40	1.38	M	4	5.5	66.0	7.3	75.7	1085	ST
4	MT 1004	CHOTEAU/MT0515	HRS	13.2	59	68.2	11.8	0.40	1.47	M	4	5.0	66.2	7.1	75.9	1060	ST
5	MT 1005	CHOTEAU/MT0515	HRS	12.5	61	67.6	10.9	0.37	1.38	M	5	6.9	65.2	11.3	76.9	1005	StStrong
6	MT 1006	CHOTEAU/MT0515	HRS	12.2	59	68.8	10.6	0.36	1.39	M	4	4.4	63.1	8.6	72.8	980	HasStrengthST
7	MT 1007	CHOTEAU/MT0515	HRS	13.3	56	67.8	11.8	0.39	1.42	M	6	5.8	67.2	9.6	76.9	1065	HasStrength
8	MT 1008	CHOTEAU/MT0515	HRS	11.7	63	68.6	10.3	0.38	1.36	M	5	5.5	61.9	7.7	71.6	1070	extra5mins
9	MT 1009	CHOTEAU/MT0515	HRS	12.4	55	68.9	10.9	0.37	1.41	M	4	4.8	64.5	7.7	74.7	1030	
10	MT 1010	CHOTEAU/MT0515	HRS	13.4	60	66.5	11.5	0.38	1.44	M	5	5.5	66.9	8.7	76.6	1110	HasStrength
11	MT 1011	CHOTEAU/MT0515	HRS	14.1	59	65.3	12.3	0.37	1.38	MH	5	5.3	67.9	8.2	77.6	1145	HasStrength
12	MT 1012	CHOTEAU/MT0515	HRS	11.7	68	67.2	10.5	0.37	1.44	M	5	4.7	63.9	8.0	73.6	1060	
13	MT 1013	CHOTEAU/MT0515	HRS	12.9	62	69.1	11.6	0.38	1.39	M	4	4.9	65.0	6.7	75.2	1085	
14	MT 1014	CHOTEAU/MT0515	HRS	11.2	58	67.1	9.9	0.37	1.38	M	5	5.0	62.5	5.6	72.7	985	
15	MT 1015	CHOTEAU/MT0542	HRS	12.9	64	68.7	11.6	0.39	1.58	M	5	6.5	66.2	11.6	75.9	1125	HasStrengthLgST
16	MT 1016	CHOTEAU/MT0564	HRS	12.7	73	68.9	11.5	0.42	1.51	LM	3	4.7	65.3	5.1	74.0	1040	SIST
17	MT 1017	CHOTEAU/MT0564	HRS	12.8	70	68.3	11.3	0.41	1.58	M	5	4.6	65.2	6.7	74.9	1080	
18	MT 1018	CHOTEAU/MT0564	HRS	13.7	74	68.6	12.3	0.42	1.70	M	3	3.9	66.7	5.2	75.9	1085	ST
19	MT 1019	CHOTEAU/MT0564	HRS	13.1	62	69.0	11.6	0.40	1.55	LM	4	4.1	65.7	6.8	75.9	1015	
20	MT 1020	CHOTEAU/NDSW034	HRS	13.1	61	67.6	11.7	0.39	1.49	M	4	4.2	65.1	6.3	74.8	1020	ST
21	MT 1021	CHOTEAU/00H04*J3	HRS	12.7	67	66.8	11.0	0.39	1.50	M	3	4.3	64.5	6.4	73.7	1020	SIST
22	MT 1022	CHOTEAU/SD3851	HRS	13.7	59	65.8	12.0	0.39	1.53	M	5	4.8	66.9	7.1	76.6	1135	STStrong
23	MT 1023	CHOTEAU/SD3851	HRS	11.9	65	66.6	10.3	0.40	1.40	LM	4	5.2	63.5	7.3	73.2	1010	
24	MT 1024	CHOTEAU/SD3851 C	HRS	12.1	77	66.1	10.3	0.40	1.43	M	5	5.5	62.5	6.9	72.2	990	HasStrength
25	MT 1025	CHOTEAU/BZ9M1044	HRS	12.7	60	67.9	11.1	0.39	1.42	M	5	5.2	64.0	6.8	73.7	1030	
26	MT 1026	CHOTEAU/BZ9M1044	HRS	13.0	61	66.9	11.6	0.38	1.44	M	4	6.2	65.0	8.7	74.7	1020	ST
27	MT 1027	CHOTEAU/BZ9M1044	HRS	13.2	62	67.2	11.6	0.39	1.40	M	5	5.1	65.3	7.7	74.0	1010	ST
28	MT 1028	CHOTEAU/BZ9M1044	HRS	12.5	59	67.3	11.3	0.38	1.42	LM	4	5.6	66.1	7.8	75.8	1045	extra5minutes
29	MT 1029	CHOTEAU/BZ9M1044	HRS	11.5	53	68.4	10.2	0.40	1.41	LM	4	5.1	62.1	6.7	71.8	985	extra5minutes
30	MT 1030	CHOTEAU/BZ9M1044	HRS	12.8	61	67.9	11.0	0.38	1.38	LM	5	5.3	64.1	7.3	73.8	990	ST
31	MT 1031	CHOTEAU/BZ9M1044	HRS	13.1	62	68.5	11.7	0.38	1.50	LM	4	6.2	66.9	8.4	76.6	1025	ST
32	MT 1032	CHOTEAU/BZ9M1044	HRS	12.1	59	67.8	10.8	0.38	1.48	M	4	5.0	64.1	7.1	73.8	985	
33	MT 1033	CHOTEAU/BZ9M1044	HRS	13.9	58	67.5	12.3	0.38	1.52	M	4	6.4	67.2	8.9	76.9	1020	HasStrengthST
34	MT 1034	CHOTEAU/BZ9M1044	HRS	12.5	59	67.8	11.2	0.39	1.44	M	5	4.8	65.6	6.9	74.8	1020	
35	MT 1035	CHOTEAU/BZ9M1044	HRS	12.6	61	67.6	11.2	0.38	1.38	M	3	5.5	65.6	7.8	74.8	945	ST
36	MT 1036	CHOTEAU/BZ9M1044	HRS	12.2	59	67.4	10.9	0.40	1.41	M	4	4.3	65.1	7.2	74.8	960	SLST
37	MT 1037	CHOTEAU/BZ9M1044	HRS	13.5	61	67.5	11.7	0.38	1.49	M	6	5.9	66.1	8.2	75.8	1080	
38	MT 1038	CHOTEAU/BZ9M1044	HRS	13.5	56	68.2	12.0	0.38	1.47	M	4	5.3	65.8	7.8	75.5	1060	SLST
39	MT 1039	CHOTEAU/BZ9M1044	HRS	12.5	56	69.4	11.4	0.41	1.40	M	5	4.1	63.0	6.2	71.7	1060	ex10minmachplug
40	MT 1040	CHOTEAU/BZ9M1044	HRS	12.9	64	67.4	11.8	0.38	1.53	M	5	5.4	65.4	6.4	75.6	1080	
41	MT 1041	CHOTEAU/MTHW020	HRS	13.6	84	67.4	12.1	0.39	1.55	M	4	4.8	66.9	6.3	76.6	1150	SLST
42	MT 1042	CHOTEAU/MTHW020	HRS	13.9	70	67.4	11.8	0.40	1.43	M	5	3.6	67.2	4.8	75.9	1050	ST
43	MT 1043	CHOTEAU/MTHW020	HRS	13.2	79	67.7	11.6	0.39	1.55	M	4	3.9	66.1	4.2	74.8	1085	
44	MT 1044	CHOTEAU/MTHW020	HRS	13.9	81	66.0	12.1	0.40	1.60	MH	5	3.5	65.7	4.3	75.9	1135	HasStrengthST
45	MT 1045	CHOTEAU/MTHW020	HRS	12.7	74	67.7	11.5	0.40	1.44	M	4	4.7	67.1	5.9	75.8	1070	
46	MT 1046	CHOTEAU/MTHW020	HRS	12.6	73	69.4	11.3	0.38	1.48	M	5	5.8	67.5	8.8	77.7	1100	
47	MT 1047	CHOTEAU/MTHW047	HRS	11.8	75	66.2	10.4	0.40	1.47	M	5	7.5	64.1	11.4	74.8	1020	SlBucky

48	MT 1048	CHOTEAU/MTHW047	HRS	11.8	65	67.3	10.2	0.40	1.54	M	5	5.6	65.1	9.5	74.8	975	Strong
49	MT 1049	CHOTEAU/MTHW047	HRS	12.7	69	68.1	10.9	0.40	1.47	M	5	7.7	67.5	15.4	78.7	1050	VeryStrong
50	MT 1050	VIDA/SD3851	HRS	11.6	76	64.8	10.0	0.41	1.56	M	5	8.9	67.7	15.1	77.9	1070	HasStrength
51	MT 1051	VIDA/MTHW0202	HRS	12.8	60	68.7	11.1	0.37	1.40	M	4	5.7	65.5	12.7	75.7	1100	HasStrength
52	MT 1052	VIDA/MTHW0202	HRS	12.3	67	69.4	10.8	0.39	1.53	M	3	4.5	64.1	7.3	73.8	1010	
53	MT 1053	VIDA/MTHW0202	HRS	12.2	75	69.7	10.7	0.39	1.51	M	4	5.1	65.3	7.4	75.0	1080	
54	MT 1054	MT0515/MT0562	HRS	13.4	69	67.9	12.0	0.38	1.64	M	5	3.9	67.2	4.8	75.9	1105	
55	MT 1055	MT0515/MT0562	HRS	14.1	61	67.9	12.4	0.38	1.55	M	4	4.9	67.9	7.4	77.6	1085	
56	MT 1056	MT0548/MT0562	HRS	11.3	77	65.5	9.9	0.42	1.60	M	4	5.1	64.2	7.6	73.9	1035	
57	MTHW105	MTHW0202/MTHW04	HWS	12.0	82	67.2	10.4	0.40	1.53	LM	4	6.4	64.3	9.1	74.0	1100	HasStrength
58	MTHW105	MTHW0202/MTHW04	HWS	11.3	78	66.6	9.8	0.40	1.54	M	4	6.8	63.7	11.2	73.9	1040	HasStrengthSt
59	MTHW105	MTHW0202/NDSW03	HWS	12.3	71	68.4	10.6	0.39	1.56	LM	3	4.5	64.6	5.9	74.3	1050	
60	MTHW106	MTHW0202/BW315A	HWS	11.3	68	70.0	9.9	0.36	1.52	LM	3	5.4	62.8	6.2	73.0	1005	YellowColor
61	MTHW106	MTHW0202/BW315A	HWS	11.5	73	69.7	10.4	0.36	1.46	LM	3	4.5	63.3	5.2	72.0	1005	YellowColorST
62	MTHW106	MTHW0202/BW315A	HWS	11.9	75	70.3	10.6	0.37	1.39	M	3	4.1	63.2	5.6	73.4	1030	YellowColorST
63	MTHW106	MTHW0202/BW315A	HWS	11.5	70	70.1	10.2	0.37	1.42	M	3	4.7	62.8	5.6	72.0	975	
64	MTHW106	AGAWAM/IFAFS275	HWS	12.0	72	66.3	10.5	0.40	1.53	M	4	6.1	63.7	8.9	74.4	960	Wrap@PanST
65	MTHW106	AGAWAM/IFAFS275	HWS	12.3	69	64.7	10.5	0.40	1.57	M	6	4.8	64.5	7.2	74.2	915	
66	MTHW106	CHOTEAU/MTHW020	HWS	12.9	64	66.2	11.1	0.39	1.61	M	5	5.7	64.6	10.9	74.3	1005	
67	MTHW106	CHOTEAU/MTHW020	HWS	12.7	70	66.1	11.0	0.39	1.56	M	4	5.0	66.1	14.6	75.8	1055	
68	MTHW106	MTHW0202/CHOTEAU	HWS	12.2	67	66.4	10.6	0.41	1.56	LM	4	8.3	64.3	7.7	74.0	1045	1minLate1Punch
69	MTHW106	ID594/CHOTEAU	HWS	13.0	72	65.9	11.8	0.39	1.53	M	6	7.0	66.3	13.5	76.0	1065	HasStrength
70	MTHW107	ID594/CHOTEAU	HWS	12.8	64	66.0	11.2	0.40	1.52	LM	6	8.4	65.6	17.3	75.3	980	SLBucky
71	MTHW107	ID597/CHOTEAU	HWS	13.0	69	69.8	11.6	0.39	1.60	M	5	5.2	66.0	8.1	76.2	1095	HasStrength
72	MT 1072	CHOTEAU/REEDER F	HRS	11.0	60	63.3	9.7	0.38	1.55	M	3	4.0	62.5	5.3	72.2	945	
73	MT 1073	CHOTEAU/REEDER F	HRS	12.1	65	62.7	10.2	0.37	1.41	M	3	4.6	63.5	6.9	73.2	930	ST
74	MTHW107	MTHW9420*3/GLUPRO	HWS	12.3	70	64.7	10.9	0.37	1.57	M	5	5.7	64.6	8.6	74.3	1090	HasStrengthST
75	MTHW107	MTHW9420*3/GLUPRO	HWS	13.1	71	65.0	11.5	0.39	1.62	M	4	4.9	64.7	8.1	74.4	1105	ST
76	MTHW107	MTHW9420*3/GLUPRO	HWS	13.2	75	65.2	11.7	0.39	1.66	M	4	5.1	67.3	8.6	77.0	1080	ST
77	CI 13596	FORTUNA	HRS	13.0	63	70.9	11.6	0.39	1.52	M	4	3.7	64.5	5.1	74.2	1040	HasStrength
78	PI574642	MCNEAL	HRS	12.0	82	65.9	10.6	0.41	1.64	M	4	7.8	66.5	11.5	76.7	1090	Strong
79	ND 695	REEDER	HRS	12.3	72	67.0	10.7	0.37	1.47	M	3	5.2	65.2	7.5	74.9	1015	
80	PI633974	CHOTEAU	HRS	14.1	61	68.0	12.5	0.40	1.50	M	4	4.7	68.5	7.9	77.2	1115	
81	PI642366	VIDA	HRS	12.2	75	70.1	10.9	0.39	1.36	M	4	4.9	65.6	6.8	73.8	1040	

<i>NURSERY MIN</i>	<i>11.0</i>	<i>44</i>	<i>62.7</i>	<i>9.7</i>	<i>0.36</i>	<i>1.36</i>	<i>3.0</i>	<i>3.5</i>	<i>61.9</i>	<i>4.2</i>	<i>71.6</i>	<i>915</i>
<i>NURSERY MAX</i>	<i>14.1</i>	<i>84</i>	<i>70.9</i>	<i>12.5</i>	<i>0.42</i>	<i>1.70</i>	<i>6.0</i>	<i>8.9</i>	<i>68.5</i>	<i>17.3</i>	<i>78.7</i>	<i>1150</i>
<i>NURSERY AVE</i>	<i>12.6</i>	<i>66</i>	<i>67.5</i>	<i>11.1</i>	<i>0.39</i>	<i>1.49</i>	<i>4.3</i>	<i>5.3</i>	<i>65.2</i>	<i>8.0</i>	<i>74.9</i>	<i>1044</i>