

2008 Hard Winter Wheat Regional Performance Nursery Quality Report



Hard Winter Wheat Quality Laboratory

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USDA/ARS

Hard Winter Wheat Quality Laboratory

Locations from the **NRPN**, and **SRPN** were subdivided into **intra-regional production zones**. The intra-regional production zones represent broad production regions in which several locations have been composited by similar historical yield trends. Full quality testing is performed on these samples, and the data are listed beginning with the name of the nursery followed by a zone identifier (eg. "NRPN-NCP breadmaking properties," the NCP indicating North Central Plains Zone).

The **NRPN**, and **SRPN** regional nursery locations were subdivided and variety-composited according to the following zones:

Northern Regional Performance Nursery (NRPN)

North Central Plains (NCP)

Ames, IA
North Platte, NE
St Paul, MN
Brookings, Dakota Lakes, Winner, SD

Northern Plains (NP)

Williston, ND
Mocassin, MT

Northern High Plains (NHP)

Alliance, Sidney, NE
Goodland, Palmer, KS
Archer, WY

Southern Regional Performance Nursery (SRPN)

North Central Plains (NCP)

Crawfordsville, IA
Salina, KS
Lincoln, NE
Brookings, Dakota Lakes, Winner, SD

Northern High Plains (NHP)

Akron, Burlington, Ft. Collins, Julesburg, CO
Colby, KS
Alliance, Sidney, NE
Farmington, NM
Archer, WY

South Central Plains (SCP)

Hays, Windfield, Wichita, KS
Goodwell-irr, Hobart, Lahoma, Stillwater, OK
Bushland-irr, Chillicothe, TX

Southern High Plains (SHP)

Clovis-dry, Clovis-irr, NM
Bushland-dry, TX

HWWQL Laboratory Analyses

About the HWWQL Quality Data ...

Milling, flour chemical, physical dough, breadmaking, noodlemaking properties and flour protein analysis of 2008 Hard Winter Wheat regional performance nurseries have been evaluated and analyzed in the Hard Winter Wheat Quality Laboratory. The nurseries are: **Northern Regional Performance Nursery (NRPN)**, and **Southern Regional Performance Nursery (SRPN)**. Tested samples were composites from multi-location trials. Data are reported in five tables: Physical data, Hardness data, Chemical and Mixograph data, Computerized Mixograph data, Breadmaking, and Noodlemaking properties. Results of flour protein analysis are located in last page of this report.

The following parameters are currently reported:

Physical and Hardness Data

- Test weight (TW) = lbs/bushel. (AACC Method 55-10)
- SKCS kernel moisture, size, and weight = Single Kernel Characterization System: the average of 300 kernels for kernel moisture (%), size (mm), and weight (mg) and their standard deviations.
- SKCS hardness (AACC Method 55-31) = hardness score: the average of 300 kernels for kernel hardness and its standard deviation.

Chemical Data

NIR Protein Content

NIR calibrations for protein were developed according to standard AACC methods: wheat meal (AACC Method 39-10), wheat flour (AACC Method 39-11) and whole kernel wheat (AACC Method 39-25). Laboratory values for protein content and subsequent equation development and calibration checks were determined by nitrogen combustion method (AACC Method 46-30) in all three sample types.

Wheat

- Protein (FP) = grain protein content (%) on 14% mb. (AACC Method 46-30 or 39-10)
- Flour % (FY) = flour yield (extraction) from milling (AACC Methods 26-10A, -50)

Flour

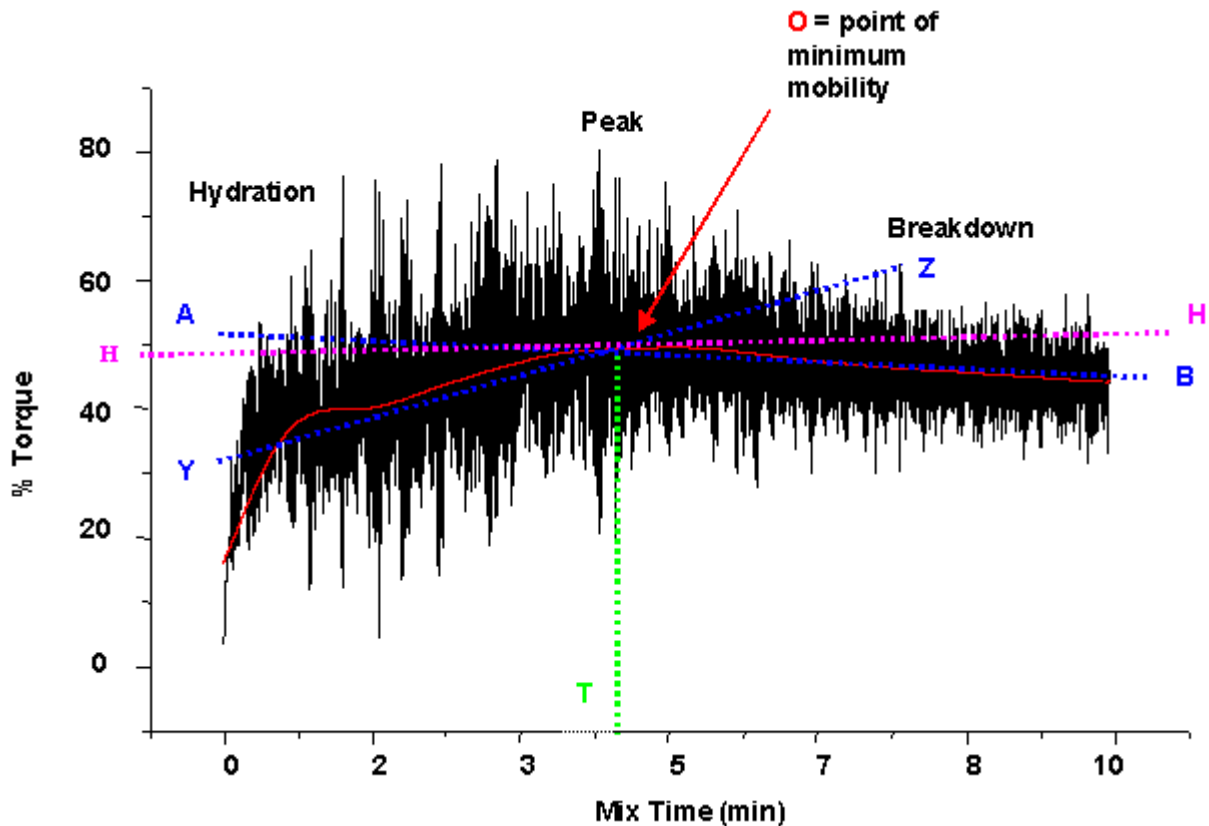
- Ash (FA) = flour ash content (%) on 14% mb. (AACC Method 08-01)
- Protein (FP) = flour protein content (%) on 14% mb. (AACC Method 46-30 or 39-11)
- Color (dry flour) = Minolta method
- PPO = polyphenol oxidase activity defined as a change of 0.001 absorbance unit (AU)/min/mL

Mixograph Data

Mixograph (AACC Method 54-40)

- Absorption = optimal water added (% of flour wt. on 14% mb).
- Mix Time = time (as-is), in minutes, to peak dough development.
- Tolerance = resistance of dough to over-mixing (0 = unsatisfactory, 4 = satisfactory, 6 = outstanding).

Mixogram Curve

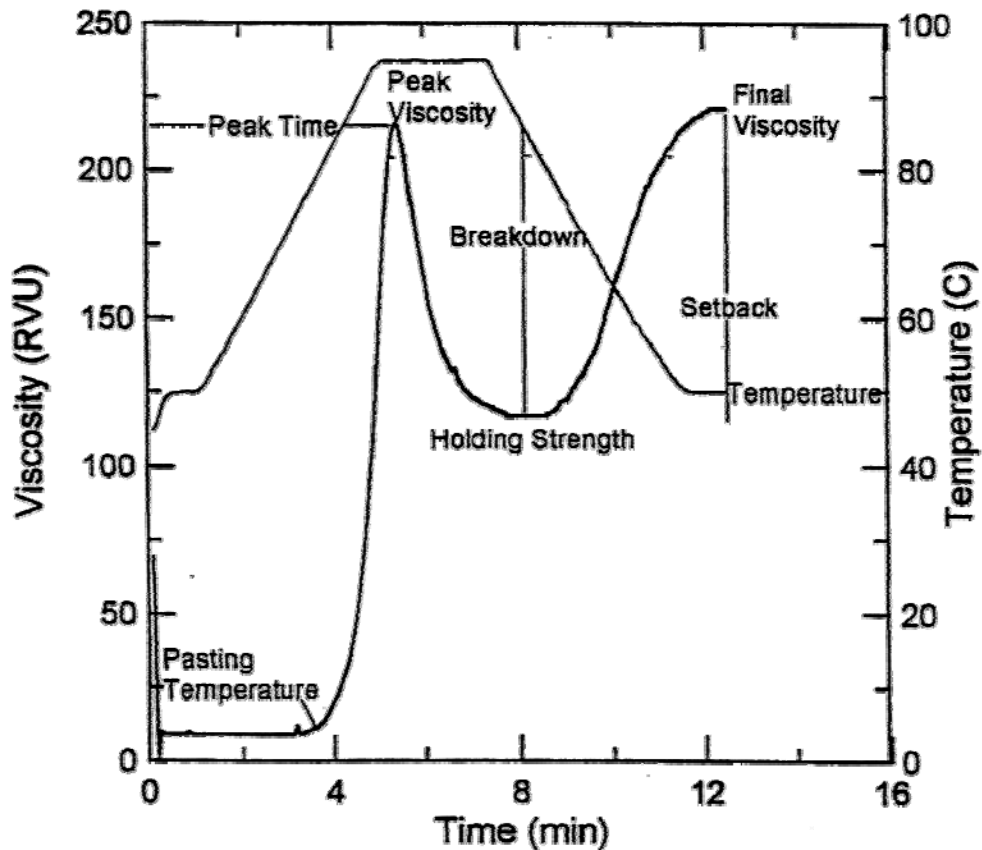


Rapid Visco Analyser (RVA) (AACC Method 61-02)

13 min pasting profile:

- Peak viscosity = maximum viscosity developed during or soon after the heating portion of the test, in RVU.
- Peak time = time at which the peak viscosity occurred, in minutes.
- Pasting temperature = temperature where viscosity first increases by at least 2 RVU over a 20 sec. period, in °C.
- Peak temperature = temperature at which the peak viscosity occurred, in °C.
- Holding strength = minimum viscosity after the peak, normally occurring around the commencement of sample cooling, in RVU.
- Breakdown = peak viscosity minus trough viscosity, in RVU.
- Final viscosity = viscosity at the end of the test, in RVU.
- Setback from Peak = final viscosity minus peak viscosity, in RVU.
- Setback from Trough = final viscosity minus trough viscosity, in RVU.

Pasting profile:



Breadmaking Properties (*Pup Loaf based on 100 g flour, AACC Method 10-10B*)

- Flour protein (FP) = flour protein content (14% mb) (AACC Method 46-30 or 39-11).
- Flour absorption = optimal water added (%) for breadmaking.
- Mix time = bake mix time, in min, as-is and corrected.
- Dough weight = dough weight (g) after mixing.
- Proof height = height of fermented dough (cm) after proofing.
- Crumb grain = internal loaf appearance; 0 = unsatisfactory, 4 = satisfactory 6 = outstanding).
- Loaf volume (LV) = cc (by rape seed displacement).

Noodlemaking Properties

- Alkaline noodle color by Minolta colorimeter

Flour Protein Analysis

- Determination of High Molecular Weight Glutenin Subunit composition by bioanalyser and SDS-PAGE.
- Determination of HMW-GS to LMW-GS ratio by SE-HPLC – area of chromatograms.
- Determination of Glutenin to Gliadin ratio by RP-HPLC – area of chromatograms.
- Determination of the Percentage of Insoluble Polymeric Protein (%IPP) by LECO.

The data were provided by the Hard Winter Wheat Quality Laboratory (HWWQL), located at the USDA/ARS, Grain Marketing & Production Research Center, Manhattan, Kansas. Some data may not appear in all years.

HWWQL personnel who contributed to the collection and analysis of the RPN samples are listed below:

Milling Lab: Laura McLaughlin, B.S.

Bake/Mixograph Lab: Margo Caley, B.S.; Zina Haden, B.S.; Susan Xiao, M.D.; Guixiang (Lucy) Lu, M.D.; Rachel Herrell, B.S.

NIR/SKCS Lab: Alicsa Mayer, M.S.

Analytical Lab: Kevin Fay, B.S.

Flour Protein Analysis: Sarah Harmer, Ph.D.

Data evaluation & Written report: Richard Chen, Ph.D.

HWWQL: Brad Seabourn, Ph.D (HWWQL Director)

**AACC methods cited are from the American Association of Cereal Chemists Approved Methods. 2000.
The Association: St. Paul, MN.

Regional Performance Nursery data may be viewed and downloaded at:
<http://www.ars.usda.gov/Main/docs.htm?docid=14298&page=3>

Northern Regional Performance Nursery

2008 NRPN Intraregional Production Zone

Entry	Selection No.	Pedigree	Source
1	Kharkof	Kharkof	check
2	Antelope	Antelope	check
3	Wesley	Wesley	check
4	Jerry	Jerry	check
5	SD06W117	Alice/SD00W024	SDSU
6	SD06069	Harry/Wesley//Jerry	SDSU
7	SD06163	Wesley/SD97049	SDSU
8	SD06165	Wesley/SD97049	SDSU
9	SD06173	BULK02R2B	SDSU
10	SD03164-1	89118RC1-X-9-3-3/TX96D2845//Expedition	SDSU
11	SD03164-2	89118RC1-X-9-3-3/TX96D2845//Expedition	SDSU
12	SD05118	Wesley/NE93613	SDSU
13	SD05210	SD98444/SD97060	SDSU
14	SD05W030	SD98W302/NW97S186	SDSU
15	N98L20040-44	CS/PI467024//CS/3/SXLD/4/TAM202/5/SXLD	ARS-LNK
16	NX03Y2489	BaiHuo/Kanto107//Ike/3/KS91H184/3*RBL//N87V106	ARS-LNK
17	NX04Y2107	NW98S081/99Y1442	ARS-LNK
18	NW04Y2188	MO8/REDLAND//KS91H184/3*RIO BLANCO	ARS-LNK
19	HV9W03-1379R	B1127/3/B1551W//ROWDY/RWA 671 MONT	WestBred
20	NE02533	NE94458 (=GK-SAGVARI/COLT//NE86582)/JAGGER	UNL
21	NE02558	JAGGER/ALLIANCE	UNL
22	NW03666	N94S097KS/NE93459	UNL
23	NE04490	NE95589/NE94632(=ABILENE/NORKAN//RAWHIDE)//NE95510 (=ABILEN	UNL
24	NI04420	NE96644(=ODESSKAYA P./CODY)//PAVON/*3SCOUT66/3/WAHOO SIB	UNL
25	NI04427	KS98HW22/W95-615W/N94L189	UNL
26	NE05548	NE97426 (=BRIGANTINA.2*ARAPAHOE)/NE98574 (=CO850267/RAWHID	UNL
27	NE05549	NI98414 (=NE90614/NE87612//NE87612)/WESLEY	UNL
28	NE05569	Wesley//Pronghorn/Arlin	UNL
29	MT0495	MT9640/NB1133	MT
30	MTS0531	L'Govskaya 167/Rampart//MT9409 (solid stem)	MT
31	MT0552	N95L159/CDC Clair	MT



Hard Winter Wheat Quality Report 2008 NRPN-NCP

1 - Test weight	10	11 - Flour protein	8
2 - SKCS kernel weight	8	12 - Bake absorption	15
3 - Kernel weight SD	8	13 - Mixograph absorption	5
4 - SKCS kernel diameter	8	14 - Bake mix time	10
5 - Kernel diameter SD	8	15 - Mixograph mix time	5
6 - SKCS hardness	10	16 - Mixograph tolerance	5
7 - Hardness SD	8	17 - Dough weight	
8 - Flour yield	30	18 - Proof height	2
9 - Flour ash	10	19 - Loaf volume	20
10 - Milling score		20 - Volume regression	5
		21 - Crumb grain	25

ID	Milling Score	Rating	%	Baking Score	Rating	%	1RS	Trait Deficiencies
Kharkof	47.7	Very Poor	75.5	58.9	Very Good	100.0		8,
Antelope	56.2	Poor	89.0	49.2	Good	83.6		
Wesley	59.0	Average	93.4	48.4	Good	82.2		14,15,
Jerry	60.4	Good	95.6	40.2	Average	68.2		
SD06W117	61.6	Very Good	97.6	36.7	Poor	62.4		
SD06069	59.8	Good	94.6	35.3	Very Poor	59.9		3,
SD06163	62.2	Very Good	98.5	37.1	Poor	63.1		16,
SD06165	59.6	Average	94.4	48.9	Good	83.0		14,15,
SD06173	55.1	Poor	87.3	35.3	Very Poor	60.0		5,16,
SD03164-1	61.9	Very Good	98.0	52.3	Good	88.9		15,20,
SD03164-2	60.6	Very Good	96.0	52.9	Very Good	89.8		15,
SD05118	60.6	Good	96.0	22.7	Very Poor	38.6		14,15,17,19,
SD05210	63.1	Very Good	100.0	38.6	Poor	65.5	1AL	15,
SD05W030	60.7	Very Good	96.2	43.7	Average	74.2	1BL	16,
N98L20040-44	49.3	Very Poor	78.0	57.9	Very Good	98.4		1,
NX03Y2489	49.5	Very Poor	78.4	36.6	Poor	62.1		1,8,10,16,18,21,
NX04Y2107	47.6	Very Poor	75.4	44.6	Average	75.8		8,10,21,
NW04Y2188	54.5	Very Poor	86.4	40.2	Average	68.3		12,16,17,
HV9W03-1379R	60.0	Good	95.1	51.9	Very Good	88.1	1AL	2,4,9,10,
NE02533	54.8	Poor	86.8	36.7	Very Poor	62.2		
NE02558	55.3	Poor	87.6	52.3	Very Good	88.8		11,13,
NW03666	58.3	Average	92.3	45.3	Average	76.8		15,
NE04490	57.4	Average	90.9	35.0	Very Poor	59.5		
NI04420	57.6	Average	91.2	36.1	Very Poor	61.2		5,11,13,
NI04427	59.8	Good	94.7	37.8	Poor	64.1	1BL	
NE05548	60.2	Good	95.3	50.2	Good	85.3		
NE05549	53.9	Very Poor	85.3	51.3	Good	87.0		
NE05569	55.0	Poor	87.1	53.7	Very Good	91.2		15,
MT0495	53.7	Very Poor	85.0	39.1	Poor	66.3		1,2,
MTS0531	58.3	Average	92.3	47.6	Average	80.8		4,15,

Quality scores and ratings are calculated directly from the relative trait weightings (printed at the top of the page) and are applicable only to the nursery selected.



Hard Winter Wheat Quality Report 2008 NRPN-NCP

1 - Test weight	10	11 - Flour protein	8
2 - SKCS kernel weight	8	12 - Bake absorption	15
3 - Kernel weight SD	8	13 - Mixograph absorption	5
4 - SKCS kernel diameter	8	14 - Bake mix time	10
5 - Kernel diameter SD	8	15 - Mixograph mix time	5
6 - SKCS hardness	10	16 - Mixograph tolerance	5
7 - Hardness SD	8	17 - Dough weight	
8 - Flour yield	30	18 - Proof height	2
9 - Flour ash	10	19 - Loaf volume	20
10 - Milling score		20 - Volume regression	5
		21 - Crumb grain	25

ID	Milling Score	Rating	%	Baking Score	Rating	%	1RS	Trait Deficiencies
MT0552	55.4	Poor	87.7	27.1	Very Poor	46.0		14,15,

2008 NRPN Intraregional Production Zone

North Central Plains

LINE	Wt/Bu (lb)	SKCS Average Kernel						Hardness			
		Moisture		Weight		Diameter		SKCS	Class	Distribution	
		(%)	(sd)	(mg)	(sd)	(mm)	(sd)				
								(sd)			
Kharkof	60.4	11.0	0.4	27.2	7.7	2.57	0.29	45 21	MIXED	28--27--22--23--03	
Antelope	60.1	10.6	0.4	29.8	9.1	2.63	0.34	53 17	MIXED	12--23--26--39--03	
Wesley	57.2	10.4	0.4	29.1	8.4	2.67	0.32	59 16	HARD	03--20--30--47--01	
Jerry	59.1	10.9	0.4	30.9	9.0	2.63	0.32	58 16	HARD	07--15--29--49--02	
SD06W117	60.2	10.4	0.4	27.9	8.2	2.60	0.32	66 16	HARD	02--08--22--68--01	
SD06069	58.9	10.7	0.4	32.5	9.8	2.66	0.32	54 18	MIXED	13--22--25--40--03	
SD06163	60.0	10.6	0.4	31.9	8.7	2.75	0.35	55 16	HARD	09--21--29--41--02	
SD06165	58.4	10.7	0.4	30.5	8.5	2.73	0.32	56 17	HARD	08--21--30--41--02	
SD06173	58.2	10.7	0.4	30.4	8.9	2.66	0.35	55 17	HARD	09--22--31--38--02	
SD03164-1	60.3	10.9	0.3	31.8	8.5	2.78	0.32	59 16	HARD	03--22--27--48--01	
SD03164-2	59.7	10.8	0.4	29.0	8.4	2.66	0.32	59 17	HARD	06--16--30--48--02	
SD05118	59.8	10.7	0.4	28.9	8.7	2.65	0.31	63 16	HARD	04--11--23--62--01	
SD05210	59.5	9.9	0.4	28.1	7.7	2.58	0.28	70 16	HARD	01--06--19--74--01	
SD05W030	60.6	10.3	0.3	29.6	8.3	2.63	0.31	67 16	HARD	02--05--23--70--01	
N98L20040-44	54.2	9.8	0.3	25.8	8.0	2.53	0.32	61 19	HARD	05--17--25--53--01	
NX03Y2489	56.4	10.0	0.4	27.8	7.3	2.60	0.28	64 16	HARD	03--09--28--60--01	
NX04Y2107	58.5	10.4	0.4	29.4	9.2	2.70	0.32	67 16	HARD	01--08--21--70--01	
NW04Y2188	58.4	10.6	0.4	28.4	7.5	2.61	0.29	52 19	MIXED	12--26--28--34--03	
HV9W03-1379R	60.9	10.8	0.4	22.6	6.3	2.46	0.27	85 19	HARD	00--03--05--92--01	
NE02533	58.7	10.6	0.4	28.7	9.3	2.62	0.34	67 18	HARD	02--09--24--65--01	
NE02558	58.9	10.3	0.4	26.9	8.5	2.59	0.33	67 18	HARD	03--11--20--66--01	
NW03666	59.8	10.3	0.4	26.7	7.8	2.61	0.31	65 18	HARD	03--10--25--62--01	
NE04490	59.2	10.5	0.4	28.7	8.0	2.65	0.32	63 17	HARD	04--13--26--57--01	
NI04420	60.1	10.5	0.3	30.2	8.8	2.76	0.38	66 18	HARD	03--09--23--65--01	
NI04427	61.0	10.3	0.4	27.0	8.1	2.61	0.34	66 17	HARD	02--10--27--61--01	
NE05548	58.5	10.4	0.4	28.0	7.8	2.58	0.32	62 16	HARD	05--09--28--58--01	
NE05549	57.5	10.5	0.4	29.5	8.3	2.67	0.34	60 17	HARD	06--15--25--54--02	
NE05569	58.6	10.4	0.3	29.1	8.4	2.68	0.32	52 18	MIXED	13--28--27--32--03	
MT0495	55.2	10.3	0.4	24.6	6.8	2.55	0.29	77 15	HARD	00--02--08--90--01	
MTS0531	58.6	10.5	0.4	27.2	8.0	2.52	0.28	66 16	HARD	02--08--23--67--01	
MT0552	58.2	10.3	0.4	25.5	7.2	2.55	0.30	62 17	HARD	04--13--28--55--01	

2008 NRPN Intraregional Production Zone

North Central Plains

LINE	Wheat		Flour			Noodle Color					
	Protein	Milling Yield	Ash	Protein	PPO	L @ 0	a @ 0	b @ 0	Delta L 24 hrs	Delta a 24 hrs	Delta b 24 hrs
	(%)	(%)	(%)	(%)							
Kharkof	13.2	66.9	0.43	11.9	0.540	81.20	-2.39	23.65	-10.48	1.08	2.38
Antelope	12.8	70.3	0.39	11.2	0.560	82.28	-2.14	21.56	-10.77	0.97	3.84
Wesley	13.2	72.5	0.43	11.9	0.631	80.52	-1.94	22.43	-10.23	0.95	2.05
Jerry	13.1	72.3	0.43	11.6	0.588	80.17	-2.28	25.85	-11.68	1.37	2.98
SD06W117	12.7	71.8	0.42	11.2	0.547	81.61	-1.86	20.72	-11.24	1.26	2.74
SD06069	12.5	73.1	0.40	11.2	0.615	81.62	-2.39	23.27	-12.54	1.15	4.13
SD06163	13.1	72.3	0.40	12.0	0.667	80.71	-2.03	21.54	-12.32	1.31	2.83
SD06165	12.9	71.5	0.37	11.5	0.587	80.81	-1.95	22.10	-11.74	1.28	3.77
SD06173	12.4	70.4	0.40	10.8	0.551	80.81	-2.20	24.39	-11.51	1.34	2.50
SD03164-1	14.0	71.0	0.40	12.2	0.519	81.58	-1.86	21.89	-13.46	0.99	4.99
SD03164-2	13.1	71.5	0.38	11.6	0.510	81.36	-1.98	22.37	-11.39	0.75	5.38
SD05118	12.5	71.3	0.39	11.0	0.576	81.44	-2.15	22.25	-11.33	0.99	3.35
SD05210	13.1	71.9	0.41	11.7	0.592	80.44	-1.98	22.47	-12.65	1.27	3.55
SD05W030	12.1	70.3	0.42	10.7	0.367	82.08	-2.44	23.63	-10.83	0.99	4.50
N98L20040-44	12.1	69.9	0.44	10.7	0.574	80.50	-1.79	22.35	-14.24	1.67	3.22
NX03Y2489	12.9	65.8	0.44	11.1	0.359	84.26	-1.87	17.99	-13.98	1.57	5.78
NX04Y2107	12.9	64.4	0.45	11.1	0.596	84.50	-2.02	19.78	-13.61	1.31	4.25
NW04Y2188	12.6	69.4	0.38	10.9	0.539	81.38	-2.03	22.04	-11.68	1.38	1.21
HV9W03-1379R	13.0	70.5	0.49	11.3	0.599	80.59	-2.71	26.69	-12.63	1.59	1.06
NE02533	12.3	70.1	0.43	10.9	0.658	80.24	-1.66	22.48	-12.24	1.22	2.47
NE02558	11.9	69.3	0.39	10.1	0.516	80.36	-1.68	22.06	-11.70	1.26	3.80
NW03666	12.3	70.5	0.41	11.2	0.575	83.03	-1.37	17.47	-13.03	0.54	8.36
NE04490	12.4	69.9	0.42	10.6	0.648	80.88	-2.07	22.33	-13.04	1.69	2.98
NI04420	11.8	70.4	0.44	10.1	0.510	82.79	-2.29	21.65	-11.41	1.20	4.65
NI04427	12.7	70.7	0.41	11.3	0.599	81.28	-2.14	23.28	-11.62	0.92	3.81
NE05548	13.4	71.5	0.41	11.6	0.554	79.90	-2.05	24.33	-10.92	1.28	1.73
NE05549	12.3	69.1	0.42	10.8	0.584	80.79	-1.55	21.88	-10.42	0.51	2.20
NE05569	11.7	70.3	0.41	10.5	0.565	82.52	-2.45	21.48	-9.77	1.13	2.71
MT0495	13.2	67.4	0.41	11.3	0.297	80.90	-2.19	25.16	-9.55	0.80	4.80
MTS0531	12.4	70.7	0.45	11.1	0.778	81.14	-2.39	24.64	-12.51	1.35	3.01
MT0552	13.0	69.1	0.40	11.3	0.755	81.11	-1.45	21.49	-11.78	0.77	3.36

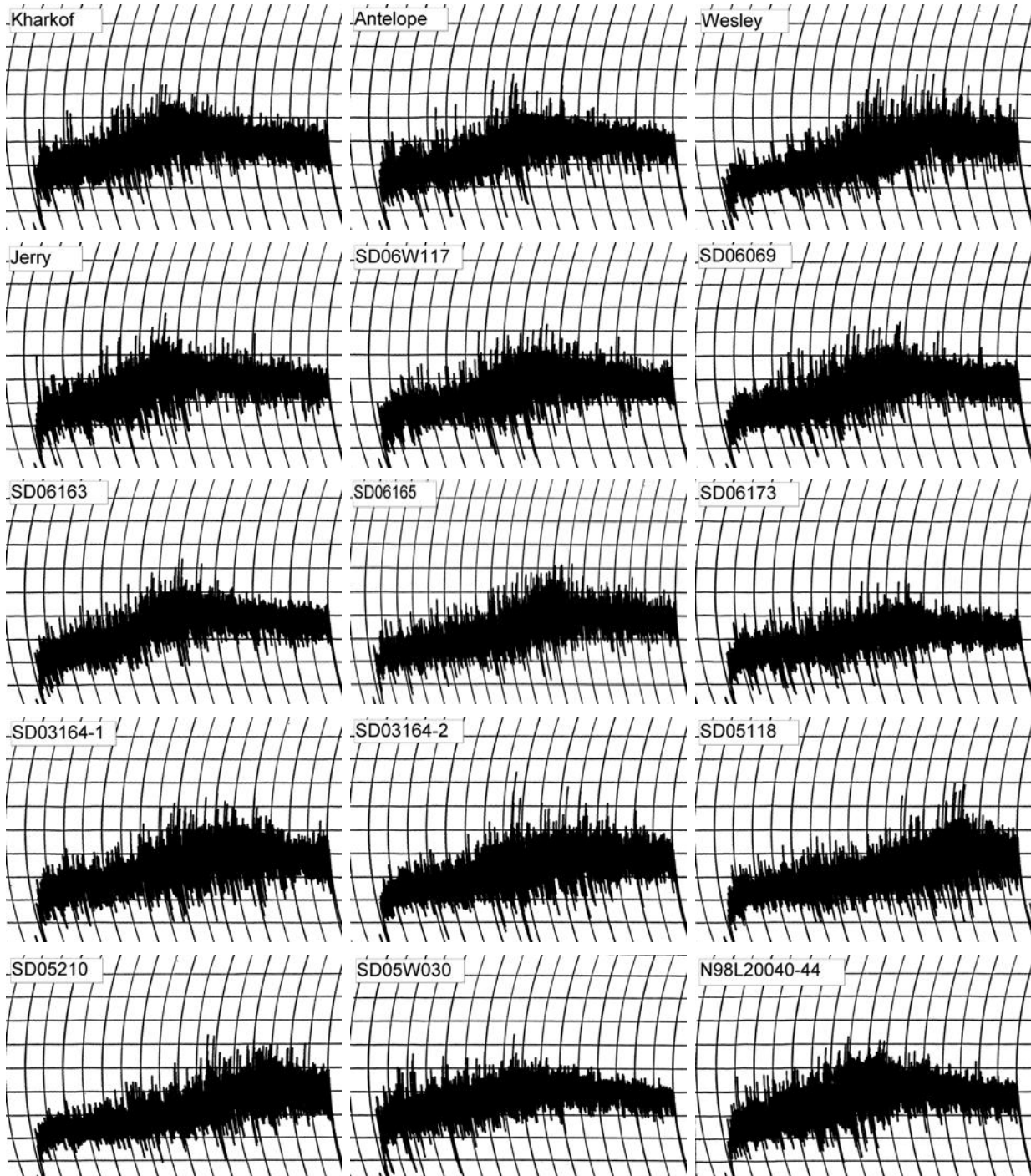
2008 NRPN Intraregional Production Zone

North Central Plains

	Flour Protein	Mixograph			
		Absorption	As-Is	Corrected	Tolerance
Line	(%)	(%)	(min)	(min)	
Kharkof	11.9	62.9	3.88	3.85	3
Antelope	11.2	61.7	4.38	3.98	3
Wesley	11.9	61.8	5.50	5.43	4
Jerry	11.6	62.3	3.63	3.46	3
SD06W117	11.2	61.6	4.50	4.07	3
SD06069	11.2	61.5	4.63	4.17	3
SD06163	12.0	61.9	4.13	4.13	2
SD06165	11.5	63.6	6.00	5.65	4
SD06173	10.8	60.9	4.63	3.94	2
SD03164-1	12.2	63.2	5.38	5.38	4
SD03164-2	11.6	62.3	5.38	5.12	4
SD05118	11.0	62.8	6.50	5.71	4
SD05210	11.7	61.4	6.50	6.24	4
SD05W030	10.7	60.8	4.00	3.39	2
N98L20040-44	10.7	60.8	4.38	3.69	3
NX03Y2489	11.1	63.0	3.25	2.92	1
NX04Y2107	11.1	63.5	3.13	2.79	3
NW04Y2188	10.9	60.1	2.75	2.40	2
HV9W03-1379R	11.3	61.9	3.38	3.11	3
NE02533	10.9	61.0	4.63	4.01	5
NE02558	10.1	59.8	4.75	3.67	5
NW03666	11.2	61.6	5.75	5.20	6
NE04490	10.6	60.6	3.75	3.11	3
NI04420	10.1	59.7	3.88	2.97	4
NI04427	11.3	61.7	5.00	4.58	5
NE05548	11.6	62.2	4.00	3.80	3
NE05549	10.8	60.8	4.63	3.94	4
NE05569	10.5	60.4	5.50	4.52	5
MT0495	11.3	61.7	4.50	4.12	3
MTS0531	11.1	61.4	5.50	4.88	4
MT0552	11.3	63.3	7.50	6.83	5

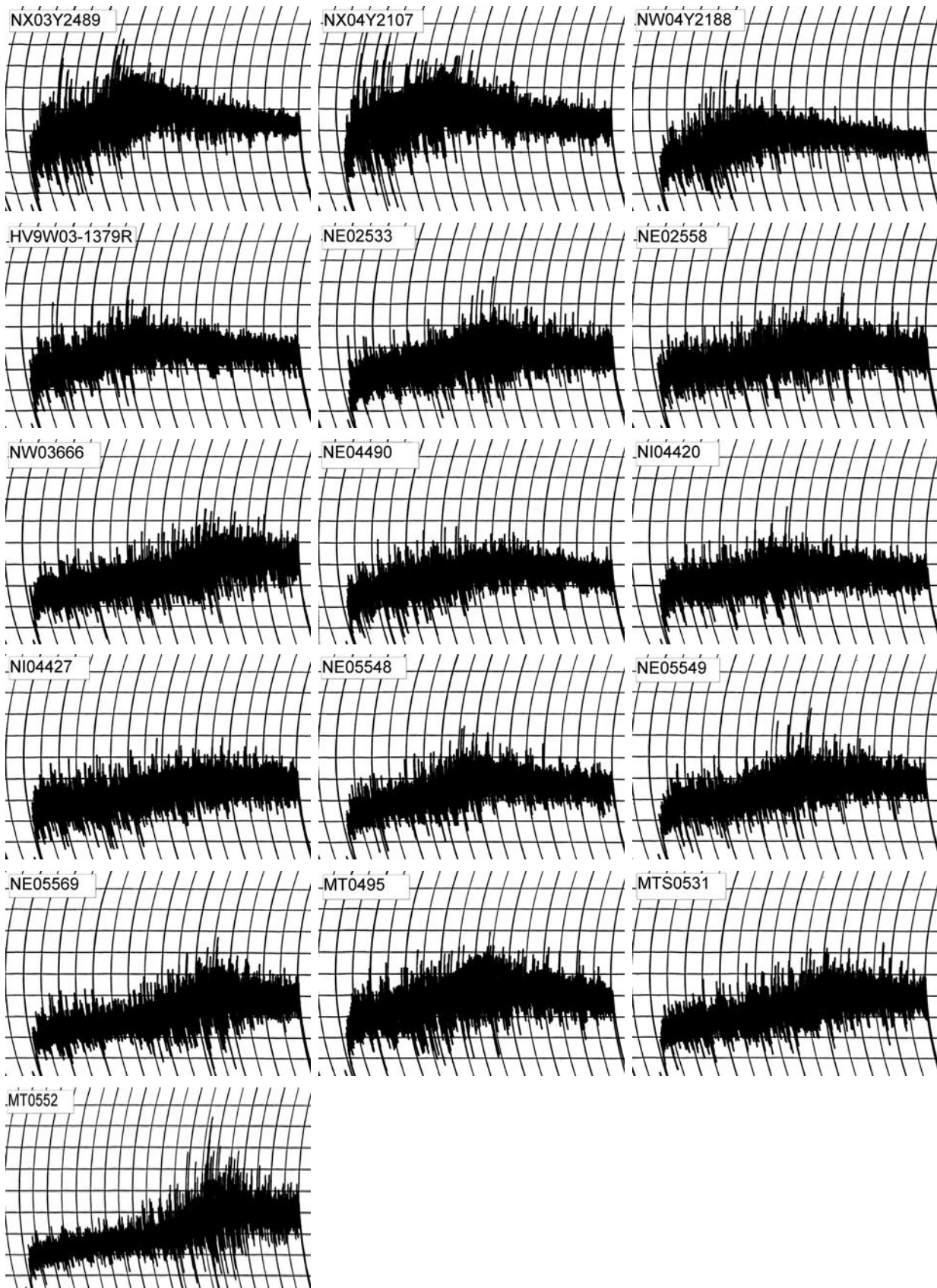
2008 NRPN Intraregional Production Zone

Northern Central Plains



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2008 NRPN Intraregional Production Zone

North Central Plains

	RVA							
	Stirring Number	Peak Viscosity	Trough Viscosity	Breakdown	Final Viscosity	Set back	Peak Time	Pasting Temp
Line	(RVU)	(RVU)	(RVU)	(RVU)	(RVU)	(RVU)	(min)	(Deg. C)
Kharkof	154.08	251.92	176.42	75.50	299.83	123.42	6.47	
Antelope	131.25	223.33	142.00	81.33	261.42	119.42	6.20	
Wesley	123.00	223.42	147.75	75.67	275.75	128.00	6.27	
Jerry	133.17	216.08	151.33	64.75	279.08	127.75	6.27	
SD06W117	127.75	229.08	154.67	74.42	279.25	124.58	6.27	
SD06069	113.92	214.58	150.25	64.33	283.42	133.17	6.20	
SD06163	126.83	229.33	155.58	73.75	286.67	131.08	6.27	
SD06165	135.00	251.75	170.08	81.67	304.58	134.50	6.27	
SD06173	119.25	255.50	177.25	78.25	320.08	142.83	6.27	
SD03164-1	129.17	247.42	168.83	78.58	295.92	127.08	6.40	
SD03164-2	128.58	245.17	165.75	79.42	290.67	124.92	6.40	
SD05118	126.33	231.92	157.50	74.42	290.17	132.67	6.27	
SD05210	133.42	217.17	149.58	67.58	271.58	122.00	6.27	
SD05W030	144.58	226.50	165.08	61.42	297.50	132.42	6.33	
N98L20040-44	113.50	224.92	144.67	80.25	266.50	121.83	6.20	
NX03Y2489	57.42	78.58	10.17	68.42	16.25	6.08	3.20	
NX04Y2107	86.42	157.08	39.67	117.42	55.92	16.25	3.60	
NW04Y2188	126.50	213.58	149.25	64.33	265.17	115.92	6.40	
HV9W03-1379R	136.00	217.25	159.67	57.58	289.25	129.58	6.33	
NE02533	128.75	231.83	160.42	71.42	295.50	135.08	6.27	
NE02558	112.67	260.58	167.25	93.33	294.58	127.33	6.33	
NW03666	126.50	243.75	158.92	84.83	282.33	123.42	6.33	
NE04490	108.83	231.42	160.83	70.58	299.25	138.42	6.27	
NI04420	124.58	208.83	145.08	63.75	265.17	120.08	6.33	
NI04427	135.25	239.00	178.42	60.58	321.17	142.75	6.33	
NE05548	142.58	240.83	176.58	64.25	307.50	130.92	6.40	
NE05549	128.00	240.67	160.92	79.75	286.92	126.00	6.33	
NE05569	126.67	232.25	158.83	73.42	295.00	136.17	6.27	
MT0495	121.17	202.08	129.58	72.50	249.83	120.25	6.13	
MTS0531	125.25	222.17	139.17	83.00	265.25	126.08	6.07	
MT0552	123.92	240.58	155.83	84.75	286.08	130.25	6.20	

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North Central Plains

Line	Flour		Mix Time		Dough					
	Protein	Water Abs.	As-is	Corrected	Weight	Proof Height	Crumb Grain	As-Rec'd.	Specific Volume	Loaf Volume Potential
	(%)	(%)	(min)	(min)	(g)	(cm)		(cc)	(cc/g)	(cc/%)
Kharkof	11.9	61.2	4.88	4.84	169.6	7.5	4.0	940	6.4	72
Antelope	11.2	59.6	4.75	4.31	169.0	7.3	4.0	845	5.8	66
Wesley	11.9	62.6	7.38	7.29	171.9	7.4	4.0	950	6.4	73
Jerry	11.6	60.3	4.88	4.66	169.5	7.3	4.5	895	6.1	69
SD06W117	11.2	60.7	4.50	4.07	169.5	7.2	3.5	895	6.1	72
SD06069	11.2	61.7	4.63	4.17	172.2	7.5	3.5	840	5.7	66
SD06163	12.0	60.5	4.13	4.13	170.5	7.5	4.5	915	6.3	68
SD06165	11.5	62.5	7.25	6.83	171.8	7.3	4.0	945	6.3	76
SD06173	10.8	59.9	4.63	3.94	168.9	7.4	3.5	900	6.1	77
SD03164-1	12.2	63.5	5.38	5.38	173.3	7.1	4.0	875	5.8	63
SD03164-2	11.6	62.6	5.50	5.23	172.2	7.2	4.0	915	6.1	71
SD05118	11.0	58.6	7.25	6.36	167.0	7.1	3.5	825	5.6	65
SD05210	11.7	61.6	6.00	5.76	171.7	7.5	3.5	985	6.7	79
SD05W030	10.7	59.5	4.25	3.60	169.2	7.4	3.0	870	6.0	73
N98L20040-44	10.7	61.4	4.50	3.79	171.2	8.0	4.0	975	6.6	87
NX03Y2489	11.1	60.4	3.20	2.87	169.5	6.8	0.0	975	6.6	82
NX04Y2107	11.1	60.8	3.63	3.24	170.5	7.3	0.0	1055	7.1	93
NW04Y2188	10.9	57.0	3.25	2.84	166.7	7.4	4.0	855	5.8	69
HV9W03-1379R	11.3	60.7	3.38	3.11	170.0	7.5	4.0	935	6.3	76
NE02533	10.9	59.5	5.00	4.33	167.9	7.3	4.5	870	6.0	72
NE02558	10.1	59.6	5.00	3.86	169.0	7.3	4.0	895	6.2	82
NW03666	11.2	58.6	7.00	6.33	168.0	7.4	4.0	910	6.3	74
NE04490	10.6	60.2	3.50	2.90	169.7	7.5	4.5	900	6.2	78
NI04420	10.1	60.1	4.25	3.26	169.8	7.2	4.5	875	6.0	80
NI04427	11.3	61.1	5.50	5.04	170.4	7.3	3.8	905	6.2	73
NE05548	11.6	58.7	4.25	4.03	167.8	7.6	4.0	880	6.1	67
NE05549	10.8	61.0	4.63	3.94	169.7	7.3	4.0	865	5.9	72
NE05569	10.5	59.7	5.63	4.62	167.5	7.2	5.0	900	6.2	79
MT0495	11.3	60.4	4.50	4.12	169.6	7.5	4.5	930	6.4	76
MTS0531	11.1	60.3	5.50	4.88	169.4	7.2	4.0	875	5.9	71
MT0552	11.3	60.7	9.00	8.20	169.2	7.3	3.5	880	6.0	70



Hard Winter Wheat Quality Report 2008 NRPN-NHP

1 - Test weight	10	11 - Flour protein	8
2 - SKCS kernel weight	8	12 - Bake absorption	15
3 - Kernel weight SD	8	13 - Mixograph absorption	5
4 - SKCS kernel diameter	8	14 - Bake mix time	10
5 - Kernel diameter SD	8	15 - Mixograph mix time	5
6 - SKCS hardness	10	16 - Mixograph tolerance	5
7 - Hardness SD	8	17 - Dough weight	
8 - Flour yield	30	18 - Proof height	2
9 - Flour ash	10	19 - Loaf volume	20
10 - Milling score		20 - Volume regression	5
		21 - Crumb grain	25

ID	Milling Score	Rating	%	Baking Score	Rating	%	1RS	Trait Deficiencies
Kharkof	48.5	Very Poor	73.5	47.7	Average	77.8		8,
Antelope	59.1	Poor	89.5	56.3	Very Good	91.9		
Wesley	62.7	Very Good	95.0	52.3	Good	85.3		
Jerry	59.7	Poor	90.4	61.3	Very Good	100.0		
SD06W117	61.9	Good	93.7	42.4	Poor	69.2		
SD06069	59.8	Average	90.6	52.7	Good	86.0		3,18,
SD06163	65.3	Very Good	98.9	42.4	Poor	69.1		16,
SD06165	62.1	Good	94.0	55.0	Very Good	89.7		14,15,
SD06173	55.8	Very Poor	84.5	55.7	Very Good	90.8		
SD03164-1	66.0	Very Good	100.0	55.7	Very Good	90.8		
SD03164-2	65.0	Very Good	98.5	55.1	Very Good	89.8		
SD05118	58.0	Very Poor	87.9	49.4	Average	80.5		15,
SD05210	61.4	Good	93.1	48.4	Average	79.0	1AL	
SD05W030	60.9	Average	92.2	34.9	Very Poor	57.0	1BL	12,16,17,19,21,
N98L20040-44	59.4	Poor	90.0	39.4	Poor	64.2		1,11,16,
NX03Y2489	54.4	Very Poor	82.4	39.3	Very Poor	64.1		1,8,16,21,
NX04Y2107	56.3	Very Poor	85.3	38.7	Very Poor	63.1		8,16,21,
NW04Y2188	57.5	Very Poor	87.1	40.5	Poor	66.1		16,
HV9W03-1379R	61.0	Good	92.4	47.9	Good	78.0	1AL	2,4,16,
NE02533	59.6	Poor	90.3	44.2	Poor	72.1		16,
NE02558	59.8	Average	90.6	45.1	Average	73.5		11,
NW03666	59.5	Poor	90.1	40.1	Very Poor	65.4		
NE04490	61.2	Good	92.7	32.6	Very Poor	53.2		16,
NI04420	63.3	Very Good	95.9	32.3	Very Poor	52.7		12,13,17,18,19,
NI04427	57.8	Very Poor	87.6	44.7	Average	72.9	1BL	9,10,16,17,18,19,20,
NE05548	60.1	Average	91.0	50.1	Good	81.8		3,5,
NE05549	58.1	Poor	88.0	38.8	Very Poor	63.3		
NE05569	61.2	Good	92.8	51.4	Good	83.8		16,
MT0495	62.3	Very Good	94.4	40.2	Poor	65.6		
MTS0531	59.9	Average	90.8	53.6	Good	87.4		4,

Quality scores and ratings are calculated directly from the relative trait weightings (printed at the top of the page) and are applicable only to the nursery selected.



Hard Winter Wheat Quality Report 2008 NRPN-NHP

1 - Test weight	10	11 - Flour protein	8
2 - SKCS kernel weight	8	12 - Bake absorption	15
3 - Kernel weight SD	8	13 - Mixograph absorption	5
4 - SKCS kernel diameter	8	14 - Bake mix time	10
5 - Kernel diameter SD	8	15 - Mixograph mix time	5
6 - SKCS hardness	10	16 - Mixograph tolerance	5
7 - Hardness SD	8	17 - Dough weight	
8 - Flour yield	30	18 - Proof height	2
9 - Flour ash	10	19 - Loaf volume	20
10 - Milling score		20 - Volume regression	5
		21 - Crumb grain	25

ID	Milling Score	Rating	%	Baking Score	Rating	%	1RS	Trait Deficiencies
MT0552	60.9	Average	92.2	48.0	Average	78.2		2,15,

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LINE	Wt/Bu (lb)	SKCS Average Kernel						Hardness			
		Moisture		Weight		Diameter		SKCS	Class	Distribution	
		(%)	(sd)	(mg)	(sd)	(mm)	(sd)				
								(sd)			
Kharkof	59.5	12.2	0.3	25.4	5.7	2.53	0.23	46 20	MIXED	26--30--21--23--03	
Antelope	60.2	10.7	0.5	27.6	7.0	2.56	0.28	60 17	HARD	07--12--25--56--02	
Wesley	58.7	10.7	0.4	28.5	7.0	2.62	0.26	61 16	HARD	04--13--27--56--01	
Jerry	58.3	10.9	0.4	27.9	7.2	2.53	0.26	64 16	HARD	03--12--22--63--01	
SD06W117	59.6	10.4	0.5	25.9	7.4	2.52	0.28	69 14	HARD	00--06--17--77--01	
SD06069	59.0	10.8	0.4	30.2	8.2	2.59	0.29	56 18	MIXED	12--17--27--44--03	
SD06163	60.5	10.6	0.5	30.2	7.0	2.69	0.28	58 15	HARD	05--17--31--47--01	
SD06165	58.8	10.8	0.5	29.4	7.2	2.70	0.27	56 16	HARD	09--20--27--44--02	
SD06173	58.4	10.5	0.5	27.6	7.7	2.57	0.28	60 18	HARD	07--13--27--53--02	
SD03164-1	60.6	11.0	0.3	31.0	6.6	2.75	0.25	56 16	HARD	08--20--27--45--02	
SD03164-2	60.5	10.8	0.4	28.0	6.9	2.65	0.27	61 15	HARD	04--12--27--57--01	
SD05118	59.2	10.3	0.6	26.5	7.3	2.51	0.28	64 16	HARD	03--10--22--65--01	
SD05210	59.1	10.6	0.4	25.5	5.9	2.49	0.23	69 17	HARD	03--08--17--72--01	
SD05W030	60.3	10.9	0.4	27.3	7.1	2.59	0.29	69 17	HARD	01--07--22--70--01	
N98L20040-44	56.2	10.8	0.4	26.9	6.2	2.58	0.27	67 15	HARD	01--07--18--74--01	
NX03Y2489	57.8	10.8	0.4	27.0	6.1	2.56	0.22	67 15	HARD	03--04--19--74--01	
NX04Y2107	60.0	10.4	0.4	30.0	7.1	2.72	0.28	62 14	HARD	02--08--35--55--01	
NW04Y2188	58.9	10.6	0.4	27.5	6.7	2.60	0.25	56 17	HARD	10--20--29--41--02	
HV9W03-1379R	60.4	10.0	0.5	23.4	6.0	2.47	0.25	83 17	HARD	00--03--05--92--01	
NE02533	58.6	9.9	0.5	27.6	6.6	2.59	0.25	70 16	HARD	01--07--15--77--01	
NE02558	58.9	10.3	0.4	26.3	6.8	2.59	0.25	73 17	HARD	01--07--11--81--01	
NW03666	59.9	10.1	0.5	25.7	6.2	2.53	0.26	66 15	HARD	02--09--20--69--01	
NE04490	60.1	10.2	0.5	28.6	7.3	2.64	0.28	66 15	HARD	02--10--19--69--01	
NI04420	60.4	10.1	0.5	29.4	7.0	2.69	0.26	66 16	HARD	01--11--19--69--01	
NI04427	60.7	10.7	0.4	25.6	6.3	2.58	0.25	64 16	HARD	03--12--22--63--01	
NE05548	58.9	10.5	0.6	28.5	8.3	2.61	0.29	64 16	HARD	03--11--21--65--01	
NE05549	58.5	10.5	0.5	27.8	7.2	2.60	0.27	63 16	HARD	05--09--28--58--01	
NE05569	59.3	10.1	0.5	28.7	6.2	2.65	0.25	52 16	MIXED	11--23--35--31--03	
MT0495	58.6	10.0	0.5	26.8	6.0	2.60	0.24	76 14	HARD	01--01--09--89--01	
MTS0531	59.5	10.2	0.4	26.6	7.8	2.46	0.25	68 16	HARD	03--06--16--75--01	
MT0552	59.0	10.1	0.6	24.5	6.0	2.49	0.23	71 13	HARD	01--03--13--83--01	

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Northern High Plains

LINE	Wheat		Flour			Noodle Color					
	Protein	Milling Yield	Ash	Protein	PPO	L @ 0	a @ 0	b @ 0	Delta L 24 hrs	Delta a 24 hrs	Delta b 24 hrs
	(%)	(%)	(%)	(%)							
Kharkof	15.2	66.2	0.43	13.8	0.501	79.46	-1.96	24.10	-10.07	1.05	0.15
Antelope	13.3	69.5	0.38	12.3	0.490	81.25	-2.33	23.18	-9.05	0.83	1.16
Wesley	14.3	72.0	0.41	13.1	0.611	80.78	-2.45	22.99	-11.44	1.36	-0.06
Jerry	14.5	70.6	0.42	13.4	0.569	80.37	-2.19	24.39	-11.45	1.12	1.80
SD06W117	14.5	71.0	0.42	13.0	0.555	81.32	-2.22	22.49	-10.64	1.29	0.05
SD06069	13.4	71.6	0.39	12.3	0.615	81.30	-2.96	26.32	-11.55	1.35	0.90
SD06163	12.1	71.8	0.39	13.1	0.574	80.40	-2.39	23.45	-11.76	1.35	-0.03
SD06165	14.5	71.6	0.39	13.0	0.561	81.17	-2.34	24.43	-13.82	1.36	1.05
SD06173	13.0	69.8	0.42	12.6	0.633	80.72	-2.37	24.11	-12.48	1.56	1.34
SD03164-1	15.2	71.9	0.40	13.8	0.518	80.72	-2.37	24.11	-12.08	1.52	0.58
SD03164-2	14.4	71.8	0.39	13.2	0.500	80.54	-2.31	24.43	-11.62	1.21	1.28
SD05118	14.1	69.6	0.41	13.2	0.571	81.22	-2.63	23.48	-11.06	1.25	0.89
SD05210	13.7	70.9	0.43	13.1	0.605	79.90	-2.37	23.51	-12.40	1.42	1.24
SD05W030	13.2	71.0	0.46	12.3	0.310	81.10	-2.65	24.95	-9.88	1.00	2.98
N98L20040-44	12.9	70.7	0.43	11.4	0.509	79.91	-2.25	24.47	-11.89	1.51	-0.44
NX03Y2489	13.9	66.3	0.46	12.7	0.356	82.80	-2.13	21.06	-13.10	1.40	2.55
NX04Y2107	14.4	66.0	0.42	12.8	0.693	84.62	-2.29	20.31	-13.98	1.17	2.83
NW04Y2188	14.1	68.9	0.37	12.3	0.561	81.96	-2.30	21.64	-12.52	0.98	1.56
HV9W03-1379R	13.6	70.2	0.48	12.2	0.626	80.00	-2.65	25.83	-12.53	1.44	0.02
NE02533	13.3	70.1	0.47	12.2	0.677	80.04	-2.30	23.93	-13.42	1.36	1.37
NE02558	13.4	69.9	0.44	11.7	0.521	80.21	-1.85	22.11	-11.87	1.26	2.42
NW03666	14.2	69.4	0.44	12.5	0.555	81.60	-2.32	22.88	-11.81	1.13	2.67
NE04490	13.5	70.0	0.42	12.2	0.617	80.30	-2.08	22.23	-13.20	1.37	1.80
NI04420	13.3	70.8	0.43	11.9	0.477	81.31	-2.51	23.54	-10.96	1.32	1.19
NI04427	14.6	71.0	0.59	12.6	0.580	80.11	-2.15	23.34	-12.53	0.99	2.80
NE05548	14.3	71.9	0.46	13.3	0.515	80.27	-1.81	22.01	-13.07	0.78	1.89
NE05549	14.0	70.2	0.45	12.2	0.612	81.04	-2.53	23.43	-11.62	1.27	0.86
NE05569	13.2	70.5	0.39	12.3	0.489	82.75	-2.68	22.43	-9.75	0.95	1.12
MT0495	13.9	68.8	0.40	12.7	0.186	81.43	-2.47	25.55	-8.05	0.63	1.72
MTS0531	14.4	70.8	0.43	12.6	0.822	82.05	-2.42	22.36	-13.56	0.82	3.98
MT0552	14.5	68.8	0.41	13.1	0.677	80.81	-1.84	21.00	-13.06	0.89	2.81

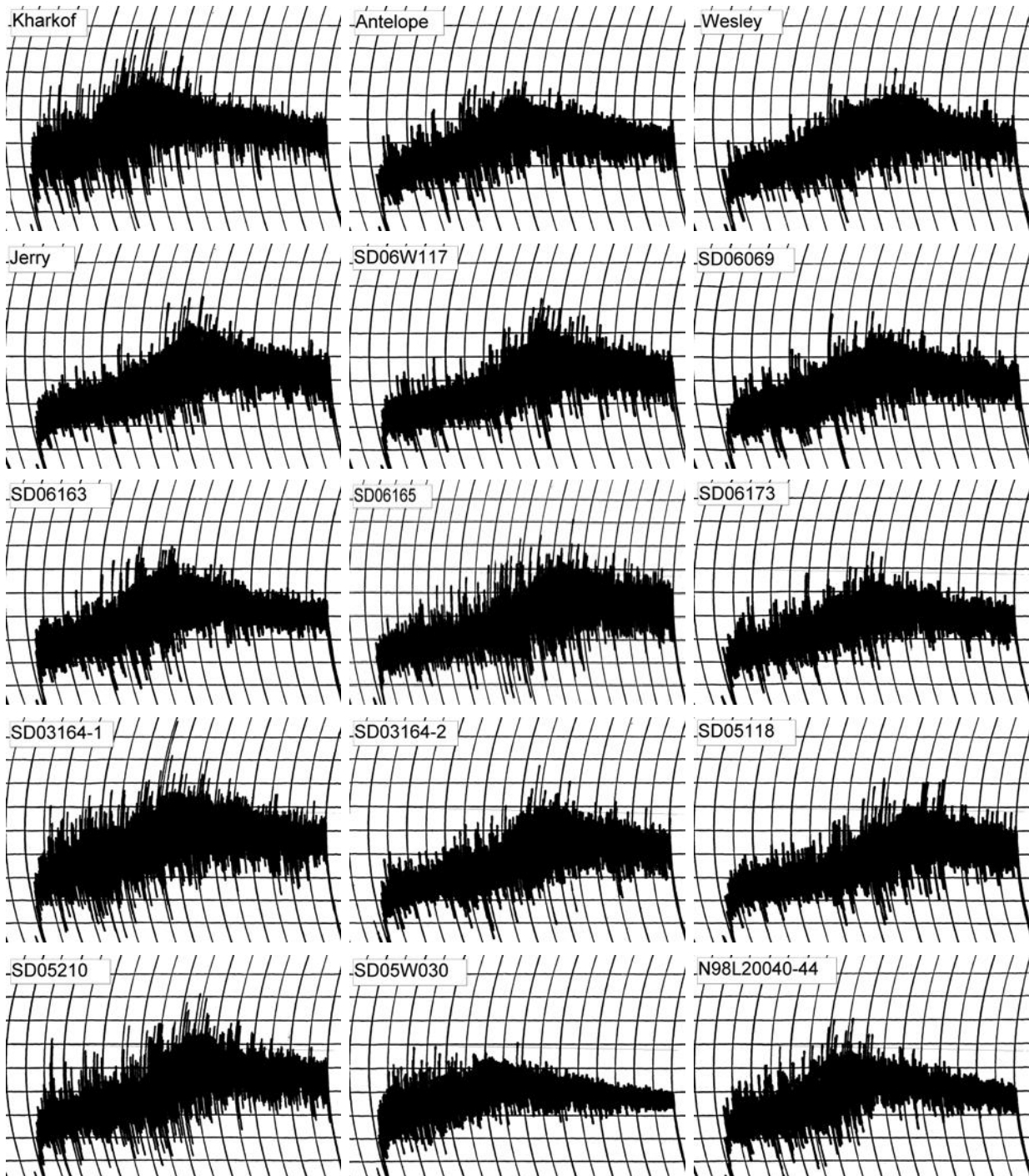
2008 NRPN Intraregional Production Zone

Northern High Plains

	Flour Protein	Mixograph			
		Absorption	As-Is	Corrected	Tolerance
Line	(%)	(%)	(min)	(min)	
Kharkof	13.8	63.9	3.25	3.25	3
Antelope	12.3	63.5	4.00	4.00	3
Wesley	13.1	63.7	5.00	5.00	4
Jerry	13.4	65.3	4.38	4.38	4
SD06W117	13.0	64.6	4.50	4.50	4
SD06069	12.3	63.5	4.38	4.38	4
SD06163	13.1	63.9	3.75	3.75	2
SD06165	13.0	63.7	6.38	6.38	6
SD06173	12.6	63.1	4.38	4.38	4
SD03164-1	13.8	64.0	4.38	4.38	3
SD03164-2	13.2	64.9	4.88	4.88	4
SD05118	13.2	64.0	5.38	5.38	5
SD05210	13.1	62.8	4.50	4.50	4
SD05W030	12.3	61.5	3.13	3.13	1
N98L20040-44	11.4	61.8	3.50	3.23	2
NX03Y2489	12.7	64.1	2.50	2.50	2
NX04Y2107	12.8	64.3	2.50	2.50	2
NW04Y2188	12.3	62.0	3.00	3.00	1
HV9W03-1379R	12.2	61.3	3.00	3.00	2
NE02533	12.2	62.4	3.88	3.88	2
NE02558	11.7	61.5	4.25	4.11	4
NW03666	12.5	62.9	5.00	5.00	4
NE04490	12.2	62.2	2.75	2.75	1
NI04420	11.9	60.9	3.13	3.10	3
NI04427	12.6	62.0	4.63	4.63	2
NE05548	13.3	63.6	3.75	3.75	3
NE05549	12.2	61.7	4.88	4.88	4
NE05569	12.3	61.4	4.25	4.25	2
MT0495	12.7	63.1	4.00	4.00	3
MTS0531	12.6	61.9	4.88	4.88	4
MT0552	13.1	63.9	6.38	6.38	4

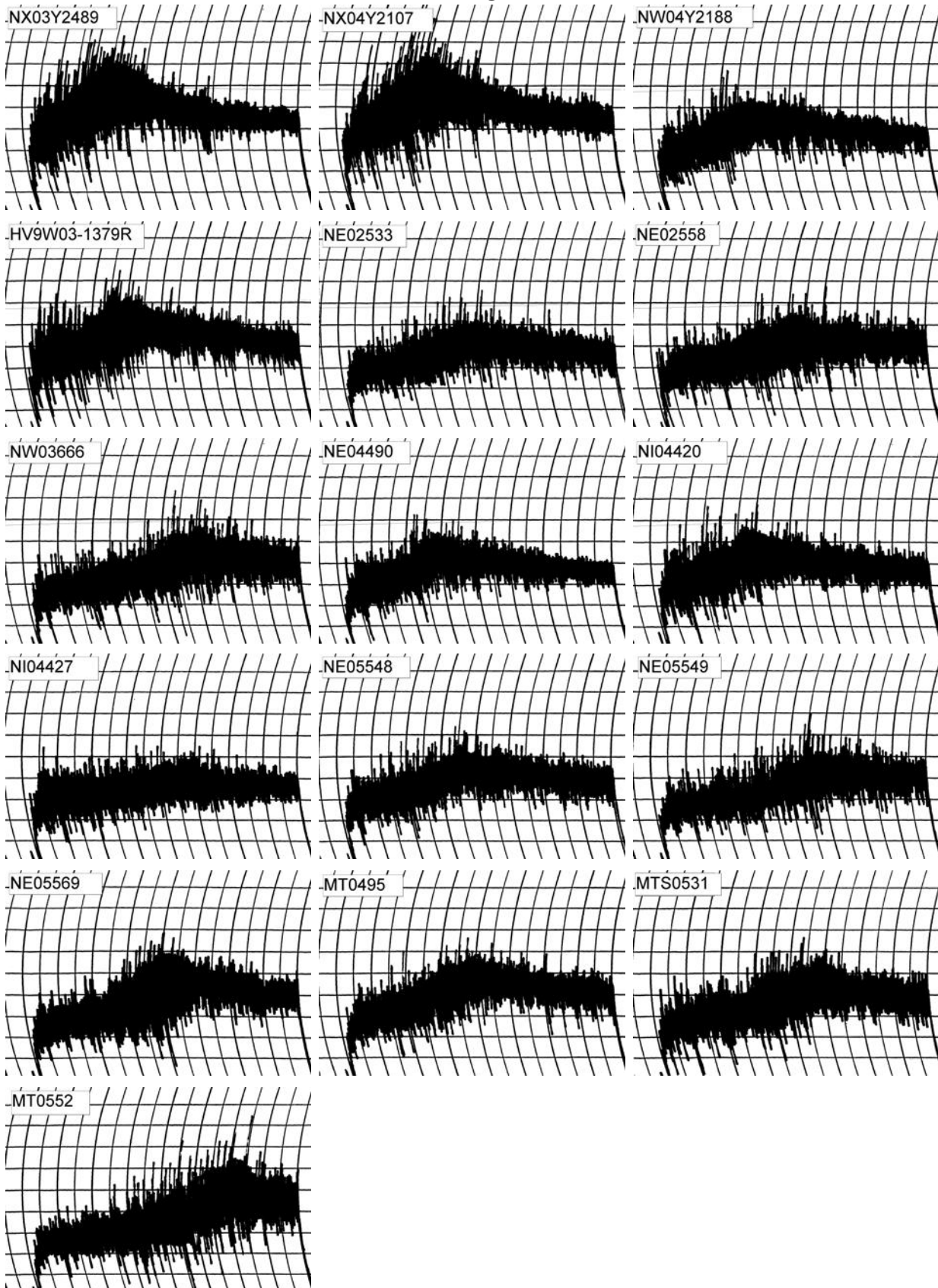
2008 NRPN Intraregional Production Zone

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Northern High Plains



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Line	RVA							Pasting Temp (Deg. C)
	Stirring Number (RVU)	Peak Viscosity (RVU)	Trough Viscosity (RVU)	Breakdown (RVU)	Final Viscosity (RVU)	Set back (RVU)	Peak Time (min)	
Kharkof	141.33	232.92	162.92	70.00	283.83	120.92	6.47	
Antelope	133.58	226.00	163.08	62.92	289.00	125.92	6.40	
Wesley	128.33	213.67	157.33	56.33	286.67	129.33	6.33	
Jerry	142.25	208.33	163.42	44.92	297.42	134.00	6.33	
SD06W117	129.92	221.08	168.33	52.75	291.00	122.67	6.47	
SD06069	134.08	207.50	159.83	47.67	293.08	133.25	6.33	
SD06163	124.08	217.08	163.83	53.25	295.75	131.92	6.33	
SD06165	132.92	240.67	182.33	58.33	314.33	132.00	6.40	
SD06173	141.50	239.08	180.08	59.00	319.50	139.42	6.33	
SD03164-1	130.17	243.58	176.67	66.92	302.33	125.67	6.47	
SD03164-2	131.17	243.83	177.00	66.83	301.33	124.33	6.47	
SD05118	145.25	217.67	167.50	50.17	293.67	126.17	6.40	
SD05210	126.75	207.42	158.67	48.75	278.67	120.00	6.40	
SD05W030	142.17	218.50	169.58	48.92	291.75	122.17	6.47	
N98L20040-44	118.42	212.83	146.42	66.42	263.25	116.83	6.27	
NX03Y2489	109.92	192.58	84.42	108.17	132.92	48.50	4.00	
NX04Y2107	96.67	198.17	91.83	106.33	140.08	48.25	4.00	
NW04Y2188	132.42	215.17	166.50	48.67	286.08	119.58	6.47	
HV9W03-1379R	132.83	212.75	160.83	51.92	286.58	125.75	6.33	
NE02533	141.33	221.17	165.67	55.50	294.83	129.17	6.33	
NE02558	120.17	256.17	178.42	77.75	301.25	122.83	6.40	
NW03666	138.83	258.08	185.08	73.00	313.92	128.83	6.47	
NE04490	133.00	214.58	164.08	50.50	289.58	125.50	6.40	
NI04420	125.50	209.17	155.83	53.33	276.17	120.33	6.40	
NI04427	142.50	217.42	172.00	45.42	308.08	136.08	6.40	
NE05548	140.17	218.50	170.08	48.42	296.17	126.08	6.47	
NE05549	133.42	226.58	162.42	64.17	284.08	121.67	6.40	
NE05569	128.92	212.50	160.75	51.75	288.92	128.17	6.40	
MT0495	128.83	201.58	146.92	54.67	271.17	124.25	6.33	
MTS0531	126.17	231.17	167.50	63.67	300.42	132.92	6.33	
MT0552	138.08	229.00	175.83	53.17	302.83	127.00	6.47	

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Line	Flour		Mix Time		Dough					
	Protein	Water Abs.	As-is	Corrected	Weight	Proof Height	Crumb Grain	As-Rec'd.	Specific Volume	Loaf Volume Potential
	(%)	(%)	(min)	(min)	(g)	(cm)		(cc)	(cc/g)	(cc/%)
Kharkof	13.8	62.8	4.88	4.88	172.3	7.9	3.5	985	6.6	64
Antelope	12.3	62.1	5.00	5.00	171.0	7.9	4.0	895	6.0	64
Wesley	13.1	63.0	7.00	7.00	172.1	7.7	4.0	950	6.4	64
Jerry	13.4	63.4	5.50	5.50	172.6	7.9	4.0	970	6.4	64
SD06W117	13.0	63.2	6.88	6.88	172.4	7.8	4.5	1005	6.6	70
SD06069	12.3	62.9	6.25	6.25	172.0	7.4	4.0	895	5.9	64
SD06163	13.1	61.0	4.88	4.88	170.5	7.7	4.5	925	6.3	62
SD06165	13.0	63.8	10.00	10.00	172.2	7.7	4.0	1030	7.0	73
SD06173	12.6	61.9	5.13	5.13	170.6	7.7	3.0	985	6.7	71
SD03164-1	13.8	61.8	5.75	5.75	171.0	7.7	4.0	935	6.3	59
SD03164-2	13.2	63.0	6.38	6.38	171.6	7.6	4.0	950	6.4	64
SD05118	13.2	63.2	7.00	7.00	172.0	7.7	3.0	985	6.6	67
SD05210	13.1	62.0	6.63	6.63	170.9	7.6	3.0	950	6.4	64
SD05W030	12.3	58.8	4.00	4.00	167.7	7.5	2.0	845	5.8	58
N98L20040-44	11.4	60.6	4.50	4.15	169.8	7.9	2.5	920	6.2	74
NX03Y2489	12.7	60.5	4.50	4.50	169.6	7.8	0.0	945	6.3	66
NX04Y2107	12.8	63.1	4.13	4.13	173.1	8.1	0.0	900	5.9	61
NW04Y2188	12.3	60.6	3.25	3.25	170.2	7.5	3.0	870	5.9	61
HV9W03-1379R	12.2	61.2	3.50	3.50	172.0	7.8	3.0	970	6.5	73
NE02533	12.2	63.7	4.50	4.50	171.8	7.8	4.5	950	6.3	70
NE02558	11.7	62.6	5.25	5.08	171.6	7.6	3.5	975	6.6	77
NW03666	12.5	62.9	6.38	6.38	171.7	7.6	4.5	975	6.6	71
NE04490	12.2	61.8	3.50	3.50	171.6	7.6	3.5	885	6.0	64
NI04420	11.9	59.8	4.25	4.22	168.5	7.3	3.5	840	5.7	60
NI04427	12.6	60.6	4.88	4.88	168.5	7.4	3.0	850	5.8	57
NE05548	13.3	61.5	3.88	3.88	170.8	7.6	3.0	910	6.1	59
NE05549	12.2	61.4	5.50	5.50	170.7	7.6	3.8	920	6.2	68
NE05569	12.3	61.4	5.50	5.50	170.5	7.5	4.0	895	6.0	64
MT0495	12.7	60.9	4.00	4.00	169.8	7.6	4.2	940	6.4	66
MTS0531	12.6	62.0	5.50	5.50	170.8	7.5	4.0	915	6.2	64
MT0552	13.1	61.8	6.38	6.38	170.8	7.7	3.0	970	6.6	66



Hard Winter Wheat Quality Report 2008 NRPN-NP

1 - Test weight	10	11 - Flour protein	8
2 - SKCS kernel weight	8	12 - Bake absorption	15
3 - Kernel weight SD	8	13 - Mixograph absorption	5
4 - SKCS kernel diameter	8	14 - Bake mix time	10
5 - Kernel diameter SD	8	15 - Mixograph mix time	5
6 - SKCS hardness	10	16 - Mixograph tolerance	5
7 - Hardness SD	8	17 - Dough weight	
8 - Flour yield	30	18 - Proof height	2
9 - Flour ash	10	19 - Loaf volume	20
10 - Milling score		20 - Volume regression	5
		21 - Crumb grain	25

ID	Milling Score	Rating	%	Baking Score	Rating	%	1RS	Trait Deficiencies
Kharkof	44.9	Very Poor	70.4	33.1	Average	72.2		8,
Antelope	59.3	Poor	93.1	33.8	Good	73.9		
Wesley	63.6	Very Good	99.7	45.3	Very Good	98.9		15,
Jerry	57.8	Poor	90.6	29.4	Poor	64.2		1,14,15,
SD06W117	59.5	Average	93.3	33.8	Good	73.7		12,14,15,17,
SD06069	63.6	Very Good	99.8	30.7	Average	66.9		3,14,
SD06163	63.2	Very Good	99.1	33.6	Good	73.4		3,12,
SD06165	60.9	Good	95.6	28.1	Very Poor	61.3		14,15,
SD06173	57.9	Poor	90.9	28.0	Poor	61.1		3,13,
SD03164-1	63.8	Very Good	100.0	23.2	Very Poor	50.7		14,18,
SD03164-2	62.8	Very Good	98.5	33.6	Average	73.3		
SD05118	59.4	Average	93.1	33.8	Good	73.7		14,15,
SD05210	61.7	Very Good	96.8	20.4	Very Poor	44.6	1AL	14,15,
SD05W030	57.9	Poor	90.8	29.2	Poor	63.7	1BL	16,
N98L20040-44	61.7	Good	96.7	36.7	Good	80.2		11,
NX03Y2489	51.7	Very Poor	81.0	41.3	Very Good	90.1		8,10,21,
NX04Y2107	53.4	Very Poor	83.8	42.9	Very Good	93.7		8,10,21,
NW04Y2188	56.4	Very Poor	88.4	28.4	Poor	62.0		12,16,17,
HV9W03-1379R	56.1	Very Poor	87.9	45.8	Very Good	100.0	1AL	2,4,6,9,10,21,
NE02533	60.1	Good	94.2	20.5	Very Poor	44.8		11,13,14,
NE02558	59.6	Average	93.5	22.1	Very Poor	48.2		11,13,15,
NW03666	61.6	Good	96.5	30.8	Poor	67.3		15,
NE04490	60.0	Good	94.1	32.2	Average	70.3		
NI04420	60.4	Good	94.8	38.8	Very Good	84.7		
NI04427	59.5	Average	93.2	26.5	Very Poor	57.8	1BL	
NE05548	56.7	Poor	88.9	28.3	Poor	61.7		1,15,
NE05549	56.5	Very Poor	88.5	43.8	Very Good	95.6		
NE05569	54.0	Very Poor	84.6	32.0	Average	69.9		
MT0495	57.1	Poor	89.6	24.3	Very Poor	53.0		15,
MTS0531	59.2	Average	92.9	30.3	Average	66.2		14,

Quality scores and ratings are calculated directly from the relative trait weightings (printed at the top of the page) and are applicable only to the nursery selected.



Hard Winter Wheat Quality Report 2008 NRPN-NP

1 - Test weight	10	11 - Flour protein	8
2 - SKCS kernel weight	8	12 - Bake absorption	15
3 - Kernel weight SD	8	13 - Mixograph absorption	5
4 - SKCS kernel diameter	8	14 - Bake mix time	10
5 - Kernel diameter SD	8	15 - Mixograph mix time	5
6 - SKCS hardness	10	16 - Mixograph tolerance	5
7 - Hardness SD	8	17 - Dough weight	
8 - Flour yield	30	18 - Proof height	2
9 - Flour ash	10	19 - Loaf volume	20
10 - Milling score		20 - Volume regression	5
		21 - Crumb grain	25

ID	Milling Score	Rating	%	Baking Score	Rating	%	1RS	Trait Deficiencies
MT0552	59.8	Average	93.9	37.6	Good	82.0		14,15,

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LINE	Wt/Bu (lb)	SKCS Average Kernel						Hardness			
		Moisture		Weight		Diameter		SKCS	Class	Distribution	
		(%)	(sd)	(mg)	(sd)	(mm)	(sd)				
								(sd)			
Kharkof	59.8	9.9	0.5	24.9	6.9	2.46	0.26	44 19	MIXED	28--31--21--20--03	
Antelope	60.5	9.5	0.6	29.5	8.1	2.60	0.29	60 15	HARD	03--15--26--56--01	
Wesley	60.4	9.3	0.7	29.5	8.7	2.64	0.31	66 16	HARD	02--09--24--65--01	
Jerry	58.3	10.0	0.3	26.7	7.8	2.47	0.27	67 15	HARD	02--06--21--71--01	
SD06W117	58.7	9.7	0.5	23.9	7.0	2.44	0.26	74 14	HARD	00--03--09--88--01	
SD06069	60.0	10.1	0.3	32.7	9.3	2.66	0.34	65 14	HARD	01--05--27--67--01	
SD06163	61.5	9.5	0.7	32.4	9.1	2.76	0.32	64 17	HARD	03--12--23--62--01	
SD06165	60.0	9.3	0.7	30.9	8.4	2.70	0.33	64 15	HARD	02--10--27--61--01	
SD06173	59.5	9.7	0.5	29.8	9.3	2.64	0.34	68 15	HARD	01--08--17--74--01	
SD03164-1	61.7	9.7	0.6	30.6	8.5	2.72	0.31	66 16	HARD	03--09--18--70--01	
SD03164-2	60.5	10.0	0.4	28.8	7.7	2.66	0.33	67 16	HARD	03--07--17--73--01	
SD05118	60.2	9.5	0.5	27.2	8.1	2.56	0.29	69 16	HARD	02--04--18--76--01	
SD05210	59.9	9.2	0.7	25.9	7.5	2.50	0.29	77 17	HARD	01--04--07--88--01	
SD05W030	60.0	9.8	0.5	26.1	7.9	2.52	0.32	74 14	HARD	00--03--13--84--01	
N98L20040-44	59.0	9.9	0.4	28.4	9.0	2.59	0.33	72 17	HARD	01--04--17--78--01	
NX03Y2489	59.2	10.0	0.4	27.5	7.3	2.57	0.24	71 15	HARD	00--04--15--81--01	
NX04Y2107	59.7	9.7	0.5	30.9	8.1	2.74	0.30	68 15	HARD	00--07--17--76--01	
NW04Y2188	59.3	9.7	0.5	24.6	7.0	2.46	0.26	63 15	HARD	02--11--28--59--01	
HV9W03-1379R	59.1	9.3	0.6	20.4	6.2	2.34	0.24	92 17	HARD	00--01--04--95--01	
NE02533	59.3	10.0	0.4	26.7	7.4	2.55	0.29	80 16	HARD	01--02--06--91--01	
NE02558	59.8	8.8	0.5	25.7	7.0	2.54	0.28	77 14	HARD	00--02--07--91--01	
NW03666	60.5	10.0	0.5	27.2	7.2	2.60	0.30	75 14	HARD	00--03--10--87--01	
NE04490	59.1	9.6	0.5	24.5	7.0	2.49	0.30	75 13	HARD	00--02--09--89--01	
NI04420	60.9	9.7	0.5	27.6	8.5	2.65	0.34	78 15	HARD	00--01--11--88--01	
NI04427	61.7	8.9	0.9	23.2	7.2	2.44	0.28	77 15	HARD	01--03--07--89--01	
NE05548	57.5	9.3	0.6	25.7	7.0	2.50	0.31	68 15	HARD	01--06--19--74--01	
NE05549	60.0	9.4	0.6	28.0	8.6	2.60	0.32	65 15	HARD	02--07--29--62--01	
NE05569	59.0	9.1	0.7	27.3	8.1	2.58	0.30	62 17	HARD	05--13--22--60--01	
MT0495	58.4	9.0	0.7	24.7	7.2	2.53	0.29	80 14	HARD	01--00--07--92--01	
MTS0531	60.3	9.0	0.6	25.8	7.4	2.45	0.24	72 15	HARD	01--03--15--81--01	
MT0552	60.5	9.0	0.7	24.7	7.5	2.52	0.29	76 15	HARD	01--02--11--86--01	

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Northern Plains

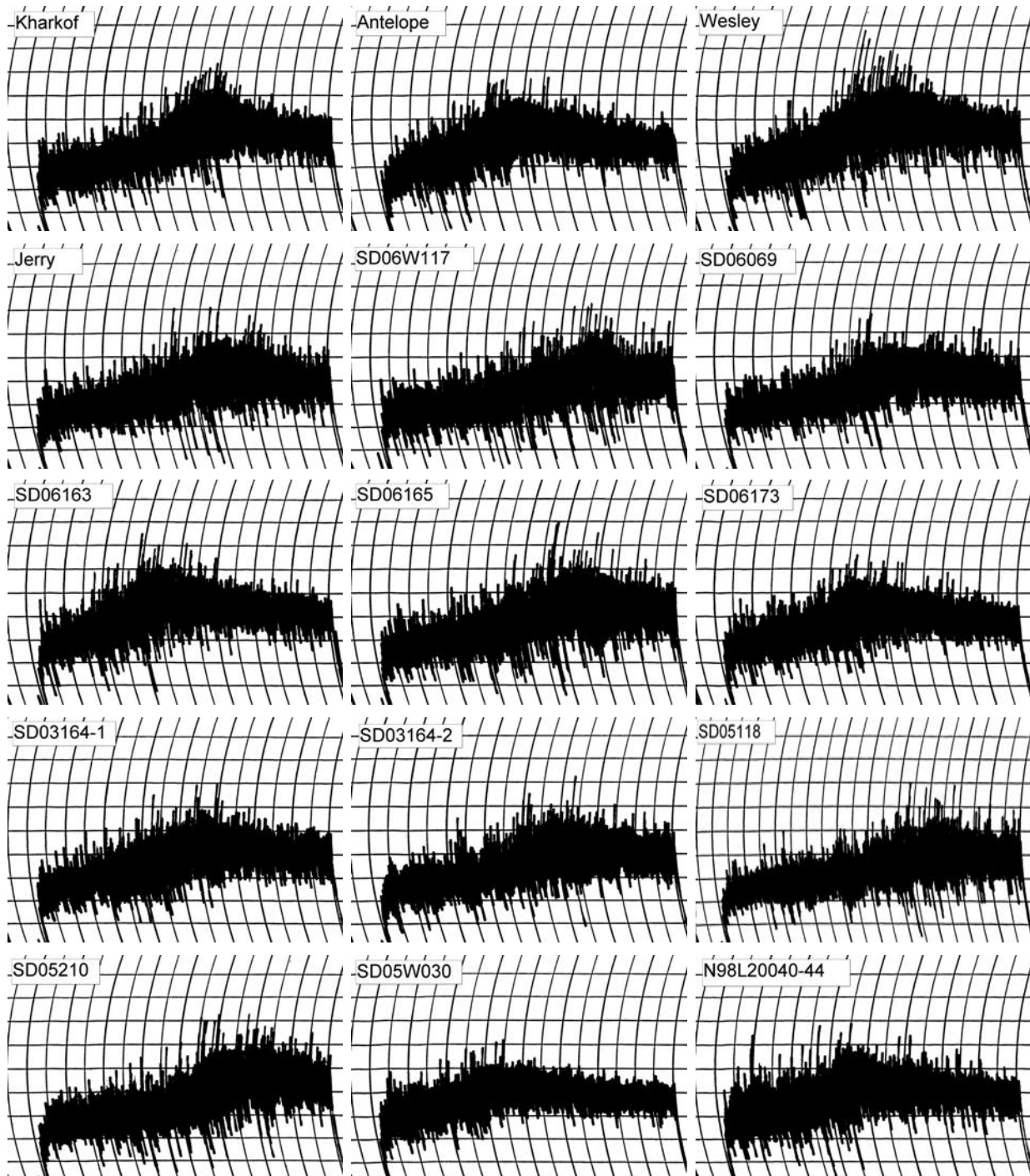
LINE	Wheat		Flour			Noodle Color					
	Protein	Milling Yield	Ash	Protein	PPO	L @ 0	a @ 0	b @ 0	Delta L 24 hrs	Delta a 24 hrs	Delta b 24 hrs
	(%)	(%)	(%)	(%)							
Kharkof	13.9	64.3	0.39	12.9	0.405	82.41	-2.33	22.55	-9.72	0.93	2.43
Antelope	13.4	68.1	0.32	12.2	0.411	82.51	-2.67	23.54	-8.94	0.95	1.96
Wesley	13.9	72.0	0.38	12.7	0.532	81.17	-2.28	22.75	-10.52	0.95	1.81
Jerry	12.6	69.8	0.41	11.7	0.487	82.21	-2.57	25.81	-10.40	0.96	2.65
SD06W117	12.1	69.5	0.42	11.2	0.435	82.44	-2.65	24.15	-9.57	1.52	0.85
SD06069	12.7	71.3	0.38	11.5	0.545	82.39	-2.98	26.17	-9.97	0.91	2.75
SD06163	13.8	70.9	0.38	12.6	0.486	81.55	-2.60	23.92	-9.64	1.45	0.72
SD06165	13.7	69.9	0.38	12.5	0.461	81.75	-2.30	23.92	-10.46	1.19	1.80
SD06173	12.3	69.4	0.40	11.1	0.503	81.56	-2.52	24.76	-10.47	1.27	1.64
SD03164-1	13.4	70.8	0.38	12.4	0.435	81.57	-2.66	24.85	-10.55	1.38	0.99
SD03164-2	12.9	70.9	0.38	12.1	0.434	80.92	-2.45	25.49	-9.90	1.06	1.80
SD05118	12.7	68.7	0.35	11.6	0.448	82.94	-2.62	24.17	-8.68	1.09	1.70
SD05210	12.6	70.1	0.35	11.7	0.485	80.95	-2.49	24.66	-10.07	1.35	1.49
SD05W030	13.0	68.4	0.41	11.9	0.305	82.21	-2.91	26.48	-9.10	1.00	2.49
N98L20040-44	11.8	71.6	0.36	10.6	0.455	81.97	-2.10	23.04	-10.05	1.02	2.55
NX03Y2489	13.7	64.0	0.44	12.3	0.314	82.45	-1.93	21.33	-11.88	1.06	2.85
NX04Y2107	13.1	64.4	0.40	11.7	0.670	83.86	-2.35	21.99	-13.91	1.41	4.51
NW04Y2188	12.6	67.5	0.34	11.1	0.440	83.83	-2.56	22.59	-10.03	1.07	1.86
HV9W03-1379R	13.7	68.2	0.50	12.3	0.665	80.84	-3.01	29.12	-13.25	1.37	1.29
NE02533	11.4	69.5	0.43	10.5	0.575	81.21	-2.47	25.48	-11.46	1.59	1.96
NE02558	11.8	67.6	0.38	10.3	0.470	82.14	-2.36	24.78	-10.82	1.18	2.51
NW03666	12.7	68.9	0.41	11.4	0.450	81.21	-2.45	24.33	-9.66	1.17	1.50
NE04490	12.6	68.4	0.37	11.5	0.567	81.37	-2.65	26.35	-9.79	1.31	0.60
NI04420	12.9	69.2	0.42	11.6	0.398	81.24	-2.48	24.47	-9.46	1.02	1.73
NI04427	13.1	67.8	0.37	12.0	0.527	81.22	-2.49	26.09	-9.98	0.86	1.63
NE05548	13.2	68.8	0.39	12.2	0.439	82.69	-2.20	24.18	-10.83	0.77	2.44
NE05549	13.1	68.5	0.40	11.8	0.545	79.88	-2.18	23.15	-9.86	1.24	1.09
NE05569	13.8	67.9	0.38	12.8	0.444	82.13	-2.54	22.88	-9.06	1.03	1.58
MT0495	12.5	67.0	0.38	11.5	0.143	81.66	-2.69	27.70	-7.25	0.75	2.29
MTS0531	12.2	68.5	0.39	11.0	0.646	81.96	-2.90	26.62	-9.79	0.89	2.39
MT0552	13.1	68.0	0.34	11.9	0.499	82.59	-2.04	22.02	-11.15	0.75	3.24

2008 NRPN Intraregional Production Zone

Northern Plains

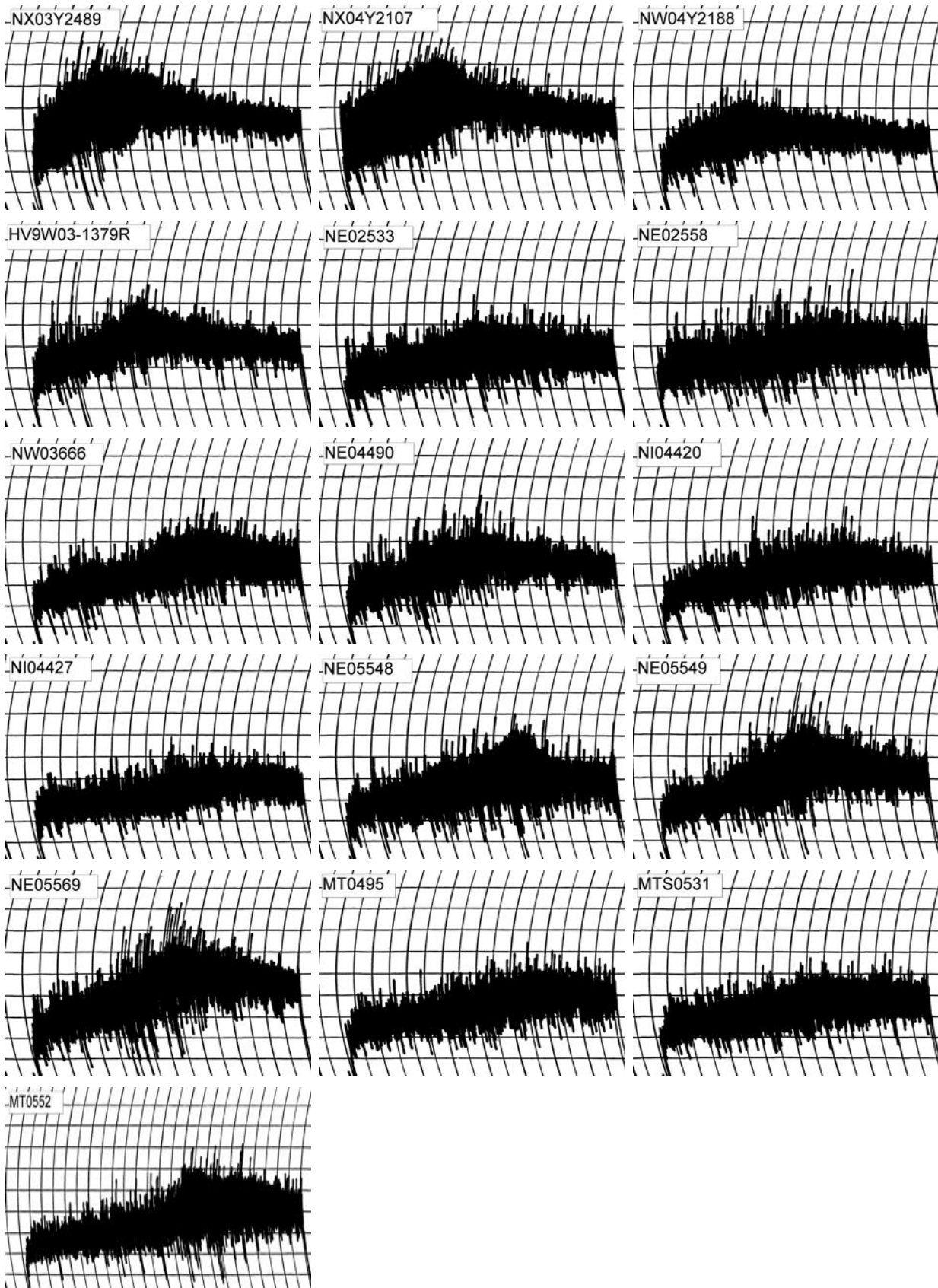
	Flour Protein	Mixograph			
		Absorption	As-Is	Corrected	Tolerance
Line	(%)	(%)	(min)	(min)	
Kharkof	12.9	63.4	4.88	4.88	4
Antelope	12.2	63.3	3.88	3.88	4
Wesley	12.7	63.1	5.63	5.63	5
Jerry	11.7	62.5	5.38	5.21	5
SD06W117	11.2	60.6	6.00	5.43	5
SD06069	11.5	62.1	4.75	4.46	4
SD06163	12.6	63.0	3.50	3.50	4
SD06165	12.5	63.7	5.50	5.50	5
SD06173	11.1	60.4	4.00	3.56	4
SD03164-1	12.4	63.6	4.63	4.63	4
SD03164-2	12.1	63.0	5.13	5.13	5
SD05118	11.6	62.2	7.25	6.86	5
SD05210	11.7	61.5	5.88	5.68	5
SD05W030	11.9	61.3	3.38	3.35	2
N98L20040-44	10.6	60.5	3.63	3.00	4
NX03Y2489	12.3	65.5	2.50	2.50	3
NX04Y2107	11.7	64.5	2.75	2.67	3
NW04Y2188	11.1	60.5	2.75	2.47	2
HV9W03-1379R	12.3	63.4	3.38	3.38	3
NE02533	10.5	60.4	4.50	3.67	4
NE02558	10.3	60.1	5.25	4.19	5
NW03666	11.4	62.0	5.25	4.90	5
NE04490	11.5	62.0	4.00	3.76	3
NI04420	11.6	62.2	4.75	4.51	4
NI04427	12.0	63.0	4.75	4.75	3
NE05548	12.2	63.2	5.25	5.25	5
NE05549	11.8	62.6	4.38	4.30	5
NE05569	12.8	63.4	4.50	4.50	3
MT0495	11.5	62.1	5.63	5.31	4
MTS0531	11.0	61.2	5.00	4.38	4
MT0552	11.9	62.9	7.75	7.70	5

2008 NRPN Intraregional Production Zone Northern Plains



2008 NRPN Intraregional Production Zone

Northern Plains



2008 NRPN Intraregional Production Zone

Northern Plains

Line	RVA							Pasting Temp (Deg. C)
	Stirring Number (RVU)	Peak Viscosity (RVU)	Trough Viscosity (RVU)	Breakdown (RVU)	Final Viscosity (RVU)	Set back (RVU)	Peak Time (min)	
Kharkof	139.17	250.67	175.08	75.58	294.58	119.50	6.40	
Antelope	141.25	222.25	164.25	58.00	284.25	120.00	6.40	
Wesley	120.58	206.33	148.67	57.67	270.00	121.33	6.27	
Jerry	113.92	222.17	165.75	56.42	296.17	130.42	6.27	
SD06W117	113.17	226.83	160.25	66.58	286.92	126.67	6.27	
SD06069	107.92	212.92	161.25	51.67	294.50	133.25	6.27	
SD06163	129.67	214.75	160.67	54.08	284.50	123.83	6.33	
SD06165	127.25	233.08	176.08	57.00	300.67	124.58	6.40	
SD06173	128.00	239.67	176.17	63.50	315.75	139.58	6.27	
SD03164-1	129.25	244.17	174.58	69.58	295.92	121.33	6.40	
SD03164-2	122.08	240.25	169.17	71.08	295.42	126.25	6.33	
SD05118	119.67	228.83	165.83	63.00	295.42	129.58	6.33	
SD05210	116.92	215.17	153.42	61.75	274.33	120.92	6.27	
SD05W030	125.83	225.17	167.50	57.67	292.83	125.33	6.40	
N98L20040-44	121.08	197.92	143.42	54.50	269.58	126.17	6.13	
NX03Y2489	107.42	176.25	81.17	95.08	122.42	41.25	3.93	
NX04Y2107	113.25	188.00	89.25	98.75	132.92	43.67	3.93	
NW04Y2188	107.58	221.17	166.50	54.67	294.08	127.58	6.33	
HV9W03-1379R	125.08	188.42	157.00	31.42	281.58	124.58	6.40	
NE02533	129.83	218.33	163.33	55.00	294.92	131.58	6.27	
NE02558	133.00	247.67	178.50	69.17	301.75	123.25	6.40	
NW03666	124.75	238.58	162.08	76.50	280.17	118.08	6.27	
NE04490	128.25	224.83	167.83	57.00	302.25	134.42	6.33	
NI04420	128.42	208.08	150.25	57.83	271.50	121.25	6.27	
NI04427	131.25	223.58	175.25	48.33	314.67	139.42	6.40	
NE05548	131.58	243.42	179.50	63.92	312.08	132.58	6.33	
NE05549	132.17	236.58	166.17	70.42	285.50	119.33	6.40	
NE05569	135.58	207.08	160.42	46.67	280.08	119.67	6.40	
MT0495	115.83	205.92	141.58	64.33	259.33	117.75	6.13	
MTS0531	136.58	241.25	179.00	62.25	307.42	128.42	6.40	
MT0552	131.75	245.50	175.00	70.50	295.92	120.92	6.40	

2008 NRPN Intraregional Production Zone

Northern Plains

Line	Flour		Mix Time		Dough					
	Protein	Water Abs.	As-is	Corrected	Weight	Proof Height	Crumb Grain	As-Rec'd.	Specific Volume	Loaf Volume Potential
	(%)	(%)	(min)	(min)	(g)	(cm)		(cc)	(cc/g)	(cc/%)
Kharkof	12.9	62.5	6.25	6.25	172.1	7.5	3.5	830	5.6	54
Antelope	12.2	62.0	5.00	5.00	171.2	7.2	3.2	750	5.0	49
Wesley	12.7	61.8	6.50	6.50	171.1	7.3	4.0	835	5.6	55
Jerry	11.7	61.7	7.75	7.51	171.0	6.9	3.0	720	4.8	48
SD06W117	11.2	58.8	7.50	6.78	167.5	6.9	4.0	770	5.3	57
SD06069	11.5	61.6	7.25	6.81	170.3	6.7	3.0	710	4.7	48
SD06163	12.6	60.0	4.50	4.50	169.8	6.9	2.5	800	5.4	52
SD06165	12.5	64.0	9.50	9.50	172.9	7.0	3.5	840	5.6	57
SD06173	11.1	60.4	5.13	4.57	169.9	6.8	2.8	720	4.9	52
SD03164-1	12.4	63.3	7.50	7.50	172.3	6.5	3.5	725	4.8	45
SD03164-2	12.1	61.7	7.00	7.00	170.4	6.7	3.0	735	4.9	48
SD05118	11.6	62.5	9.63	9.11	171.2	7.0	4.0	720	4.8	49
SD05210	11.7	61.6	8.63	8.34	170.3	7.0	3.5	770	5.1	54
SD05W030	11.9	61.7	4.50	4.46	170.7	7.0	3.5	745	5.0	50
N98L20040-44	10.6	60.3	6.00	4.96	169.3	7.2	3.0	735	5.0	57
NX03Y2489	12.3	63.7	4.00	4.00	173.2	6.9	0.0	950	6.4	70
NX04Y2107	11.7	63.5	4.25	4.12	172.9	7.0	0.0	960	6.4	75
NW04Y2188	11.1	58.7	3.50	3.14	168.3	6.8	3.0	705	4.8	50
HV9W03-1379R	12.3	62.9	5.25	5.25	172.7	7.1	2.0	900	5.9	65
NE02533	10.5	61.7	7.63	6.23	170.2	6.8	2.5	735	4.9	58
NE02558	10.3	60.3	7.00	5.59	169.1	6.7	3.2	770	5.2	63
NW03666	11.4	61.6	7.00	6.53	169.9	6.7	2.5	880	5.9	68
NE04490	11.5	62.3	5.25	4.93	171.7	7.2	2.5	765	5.1	55
NI04420	11.6	61.6	5.88	5.58	170.6	7.2	3.0	765	5.1	54
NI04427	12.0	64.0	6.13	6.13	172.8	6.9	3.5	720	4.7	47
NE05548	12.2	63.2	6.50	6.50	172.1	7.0	3.5	765	5.1	51
NE05549	11.8	62.5	6.50	6.37	172.2	6.9	4.0	750	5.0	51
NE05569	12.8	62.9	6.50	6.50	172.3	7.3	4.5	830	5.5	54
MT0495	11.5	61.7	6.50	6.14	170.8	7.0	4.5	765	5.0	54
MTS0531	11.0	60.9	7.75	6.78	169.8	6.9	4.0	680	4.5	47
MT0552	11.9	62.8	10.00	9.94	170.8	6.9	4.0	775	5.2	53

Southern Regional Performance Nursery

2008 SRPN Intraregional Production Zone

Entry	Selection No.	Pedigree	Source
1	Kharkof	Kharkof	check
2	Scout 66	Scout 66	check
3	TAM-107	TAM-107	check
4	Trego	Trego	check
5	OK00514-05806	KS96WGRC39/Jagger	OSU
6	OK05737W	KS96WGRC39/Jagger	OSU
7	OK03522	N566/OK94P597	OSU
8	OK03305	N40/OK94P455	OSU
9	OK04505	OK91724/2*Jagger	OSU
10	AP04T8211	W98-232/KS96WGRC38	AgriPro South
11	AP05T2413	(KS95U522/TX95VA0011)F1/Jagger	AgriPro South
12	AP05TW2821	HBK0935-29-15/KS90W077-2-2/VBF0589-1	AgriPro South
13	AP06T3832	HBK0935-29-15/KS90W077-2-2/VBF0589-1	AgriPro South
14	KS05HW15-2	KS98HW452(KS91H153/KS93HW255)/CO960293/KS920709B-5-2(T67/X8	KSU-HAYS
15	KS05HW121-2	KS99-5-16(94HW98/91H153)//STANTON/KS98HW423(JAG/93HW242)	KSU-HAYS
16	KS05HW122-5	KS99-5-16(94HW98/91H153)//STANTON/KS98HW423(JAG/93HW242)	KSU-HAYS
17	KS05HW136-3	KS98HW518(93HW91/93HW255)//KS98H245(IKE/TA2460/*3T200)/TREG	KSU-HAYS
18	HV9W96-1271R-1	HV9W00-1551WP/KS94U326	WestBred
19	HV9W03-539R	KS94U275/1878//JAGGER	WestBred
20	HV9W03-696R-1	N94L027/TBOLT//KS89180B	WestBred
21	HV9W02-942R	53/3/ABL/1113//K92/4/JAG/5/KS89180B	WestBred
22	T151	T81/ KS93U206	Trio
23	T153	T136/ T151	Trio
24	T154	T88/2180//T811	Trio
25	T158	KS93U206/ 2*T81	Trio
26	NE04424	KS92H363-2/COUGAR SIB(=NE85707/TBIRD)	UNL
27	NE05425	W95-091 (=KS85-663-8-9//WI81-133/THUNDERBIRD)/AKRON	UNL
28	NE05426	W95-091 (=KS85-663-8-9//WI81-133/THUNDERBIRD)/AKRON	UNL
29	NE05430	IN92823A1-1-4-5/NE92458	UNL
30	KS970093-8-9-#1	HBK1064-3/KS84063-9-39-3-4W//X960103	KSU-Manhattan
31	KS970187-1-10	TAM107*2/TA759//HBC197F-1/3/2145	KSU-Manhattan
32	KS980512-11-22	T67/X84W063-9-45//K92/3/SNF/4/X86509-1-1/X84W063-9-39-2//K92	KSU-Manhattan
33	KS980554-12--9	2180*K/2163//?/3/W1062A*HVA114/W3416	KSU-Manhattan
34	CO02W237	98HW519(93HW91/93HW255)/96HW94	CSU
35	CO03064	CO970547/Prowers 99	CSU
36	CO03W054	KS96HW94//Trego/CO960293	CSU
37	CO03W139	CO980862/Lakin	CSU
38	CO03W239	KS01-5539/CO99W165	CSU
39	CO03W043	KS96HW94/CO980352	CSU
40	NE05496	KS95HW62-6 (=KS87H325/RIO BLANCO)/HALLAM	UNL
41	KS980512-2-2	T67/X84W063-9-45//K92/3/SNF/4/X86509-1-1/X84W063-9-39-2//K92	KSU-Manhattan
42	OK03825-5403-6	(Custer*3/94M81)=STARS 0601W	OSU
43	TX02A0252	TX90V6313//TX94V3724(TAM-200 BC41254-1-8-1-1/TX86V1405	Texas A&M
44	TX03A0148	TX89A7137/TIPACNA	Texas A&M
45	TX03A0563	X96V107/OGALLALA	Texas A&M
46	TX04A001246	TX95V4339/TX94VT938-6	Texas A&M
47	TX01V5134RC-3	TAM-200/JAGGER	Texas A&M

Entry	Selection No.	Pedigree	Source
48	TX04M410164	MIT/TX93V5722//W95-301	Texas A&M
49	TX04M410211	MASON/JAGGER//OGALLALA	Texas A&M
50	TX04V075080	JAGGER/TX93V5722//TX95D8905	Texas A&M



Hard Winter Wheat Quality Report 2008 SRPN-NCP

1 - Test weight	10	11 - Flour protein	8
2 - SKCS kernel weight	8	12 - Bake absorption	15
3 - Kernel weight SD	8	13 - Mixograph absorption	5
4 - SKCS kernel diameter	8	14 - Bake mix time	10
5 - Kernel diameter SD	8	15 - Mixograph mix time	5
6 - SKCS hardness	10	16 - Mixograph tolerance	5
7 - Hardness SD	8	17 - Dough weight	
8 - Flour yield	30	18 - Proof height	2
9 - Flour ash	10	19 - Loaf volume	20
10 - Milling score		20 - Volume regression	5
		21 - Crumb grain	25

ID	Milling Score	Rating	%	Baking Score	Rating	%	1RS	Trait Deficiencies
Kharkof	44.4	Very Poor	68.0	46.2	Good	70.9		8,
Scout66	63.1	Very Good	96.7	38.1	Poor	58.5		
TAM 107	58.7	Average	89.9	59.8	Very Good	91.8	1AL	
Trego	60.8	Very Good	93.2	45.5	Good	69.8		18,19,
OK00514-05806	63.9	Very Good	97.9	41.7	Poor	64.0		
OK05737W	55.1	Poor	84.5	57.9	Very Good	88.9		1,20,
Billings	60.8	Good	93.2	44.3	Good	67.9		3,19,20,21,
Pete	63.7	Very Good	97.6	54.8	Very Good	84.0		
OK04505	53.9	Very Poor	82.6	40.5	Average	62.1		1,9,16,
Jackpot	60.7	Good	93.0	42.9	Average	65.8		16,
AP05T2413	58.7	Average	89.9	38.5	Poor	59.1	1AL	16,
AP05TW2821	57.1	Average	87.5	43.0	Average	65.9		
AP06T3832	53.9	Very Poor	82.6	59.1	Very Good	90.7		1,
KS05HW15-2	65.3	Very Good	100.0	41.9	Average	64.2		
KS05HW121-2	61.5	Very Good	94.3	65.2	Very Good	100.0		5,
KS05HW122-5	62.9	Very Good	96.4	41.8	Poor	64.2		16,
Tiger	57.7	Average	88.4	48.1	Good	73.7		13,14,15,
Armour	59.4	Good	91.1	39.9	Poor	61.2	1AL	16,
HV9W03-539R	57.1	Poor	87.5	44.7	Average	68.6		
HV9W03-696R-1	63.1	Very Good	96.7	41.8	Poor	64.1	1BL	13,16,
Hitch	57.5	Average	88.1	37.5	Very Poor	57.5	1BL	13,16,
T151	60.5	Good	92.7	52.8	Good	81.1	1AL	13,18,
T153	60.0	Good	91.9	49.6	Good	76.1	1AL	16,
T154	58.8	Average	90.1	46.4	Good	71.1	1AL	16,18,
T158	56.7	Poor	86.8	51.1	Good	78.5	1AL	5,11,12,16,
NE04424	57.8	Average	88.6	39.5	Poor	60.7	1BL	16,
NE05425	57.2	Average	87.6	34.4	Very Poor	52.8		14,15,
NE05426	59.1	Good	90.6	35.7	Very Poor	54.7		14,15,
NE05430	59.5	Good	91.2	57.0	Very Good	87.5		
KS970093-8-9-#1	61.1	Very Good	93.6	34.2	Very Poor	52.5		16,

Quality scores and ratings are calculated directly from the relative trait weightings (printed at the top of the page) and are applicable only to the nursery selected.



Hard Winter Wheat Quality Report 2008 SRPN-NCP

1 - Test weight	10	11 - Flour protein	8
2 - SKCS kernel weight	8	12 - Bake absorption	15
3 - Kernel weight SD	8	13 - Mixograph absorption	5
4 - SKCS kernel diameter	8	14 - Bake mix time	10
5 - Kernel diameter SD	8	15 - Mixograph mix time	5
6 - SKCS hardness	10	16 - Mixograph tolerance	5
7 - Hardness SD	8	17 - Dough weight	
8 - Flour yield	30	18 - Proof height	2
9 - Flour ash	10	19 - Loaf volume	20
10 - Milling score		20 - Volume regression	5
		21 - Crumb grain	25

ID	Milling Score	Rating	%	Baking Score	Rating	%	1RS	Trait Deficiencies
KS970187-1-10	55.0	Poor	84.2	57.5	Very Good	88.3		12,17,
KS980512-11-22	57.7	Average	88.4	52.1	Very Good	79.9		16,
KS980554-12--9	51.9	Very Poor	79.5	37.0	Very Poor	56.7		8,11,16,19,
CO02W237	49.9	Very Poor	76.4	40.5	Poor	62.2		4,14,15,
CO03064	53.6	Very Poor	82.1	25.1	Very Poor	38.5		1,4,11,14,15,19,
CO03W054	59.0	Good	90.4	30.1	Very Poor	46.3		9,10,14,15,
CO03W139	54.1	Very Poor	82.9	46.0	Good	70.6		2,14,15,
Thunder CL	50.9	Very Poor	77.9	39.2	Poor	60.2		1,4,
CO03W043	56.5	Poor	86.5	42.5	Average	65.1		
NE05496	60.3	Good	92.4	40.4	Poor	62.0		
KS980512-2-2	55.1	Very Poor	84.4	30.6	Very Poor	46.9		12,16,17,
STARS0601W	60.9	Very Good	93.3	34.2	Very Poor	52.5	1BL	16,20,
TX02A0252	55.3	Poor	84.7	42.2	Average	64.8		1,
TX03A0148	59.9	Good	91.8	43.3	Average	66.4		5,10,
TX03A0563	57.5	Average	88.2	58.7	Very Good	90.0		2,
TX04A001246	53.7	Very Poor	82.2	42.7	Average	65.5	1AL	5,8,10,
TX01V5134RC-3	55.6	Poor	85.2	58.4	Very Good	89.5	1AL	
TX04M410164	56.4	Poor	86.4	34.5	Very Poor	53.0		14,15,
TX04M410211	56.8	Poor	87.1	42.5	Average	65.2	1BL	
TX04V075080	55.0	Poor	84.3	49.4	Good	75.7		9,10,

2008 SRPN Intraregional Production Zone

North Central Plains

LINE	Wt/Bu (lb)	SKCS Average Kernel						Hardness			
		Moisture		Weight		Diameter		SKCS	Class	Distribution	
		(%)	(sd)	(mg)	(sd)	(mm)	(sd)				
								(sd)			
Kharkof	59.2	11.6	0.4	26.7	7.5	2.56	0.28	41 19	MIXED	34--33--17--16--03	
Scout 66	60.1	11.4	0.4	31.2	7.9	2.72	0.29	58 17	HARD	06--17--29--48--02	
TAM-107	58.1	11.2	0.4	28.3	7.7	2.61	0.30	68 15	HARD	01--06--21--72--01	
Trego	60.2	10.4	0.3	29.3	8.1	2.64	0.31	64 17	HARD	03--10--24--63--01	
OK00514-05806	60.0	10.5	0.3	28.5	7.8	2.69	0.33	78 16	HARD	00--03--12--85--01	
OK05737W	56.1	10.7	0.4	27.3	7.8	2.60	0.30	63 16	HARD	03--12--28--57--01	
OK03522	59.8	10.6	0.3	32.7	10.0	2.77	0.31	71 14	HARD	00--05--14--81--01	
OK03305	61.0	10.6	0.4	29.6	8.6	2.66	0.32	66 17	HARD	01--11--23--65--01	
OK04505	57.0	11.3	0.5	26.1	7.0	2.58	0.30	65 18	HARD	05--07--20--68--01	
AP04T8211	58.9	10.1	0.4	30.0	9.2	2.74	0.34	71 16	HARD	01--04--17--78--01	
AP05T2413	58.3	10.6	0.3	30.1	8.6	2.73	0.31	66 14	HARD	00--09--20--71--01	
AP05TW2821	57.2	10.8	0.4	27.4	7.4	2.59	0.30	61 17	HARD	04--16--28--52--01	
AP06T3832	56.4	11.0	0.3	26.2	7.7	2.54	0.31	65 16	HARD	01--12--23--64--01	
KS05HW15-2	61.2	10.8	0.3	28.9	7.9	2.68	0.31	63 14	HARD	01--08--31--60--01	
KS05HW121-2	59.8	10.4	0.4	30.8	9.3	2.74	0.35	64 16	HARD	02--07--27--64--01	
KS05HW122-5	60.1	10.6	0.4	29.2	9.1	2.65	0.34	67 15	HARD	01--07--21--71--01	
KS05HW136-3	59.9	11.1	0.4	27.5	8.7	2.57	0.30	62 17	HARD	05--12--27--56--01	
HV9W96-1271R-1	58.9	11.5	0.4	29.5	8.7	2.59	0.34	64 17	HARD	04--09--26--61--01	
HV9W03-539R	57.6	11.2	0.3	30.6	8.1	2.73	0.31	74 15	HARD	00--03--13--84--01	
HV9W03-696R-1	59.7	11.0	0.3	26.2	7.2	2.56	0.29	69 16	HARD	01--04--25--70--01	
HV9W02-942R	57.9	11.4	0.4	25.6	6.8	2.57	0.28	73 15	HARD	00--03--15--82--01	
T151	59.7	11.3	0.4	29.2	8.0	2.61	0.33	71 16	HARD	02--04--15--79--01	
T153	60.0	11.3	0.4	29.3	8.4	2.64	0.32	71 15	HARD	00--04--17--79--01	
T154	59.3	11.2	0.3	29.7	8.9	2.62	0.31	65 14	HARD	01--08--23--68--01	
T158	60.0	11.0	0.3	31.2	8.4	2.70	0.34	59 16	HARD	05--15--35--45--01	
NE04424	60.0	11.4	0.3	28.7	8.7	2.69	0.33	66 18	HARD	03--11--23--63--01	
NE05425	58.8	10.7	0.3	27.9	8.3	2.62	0.33	67 16	HARD	01--07--22--70--01	
NE05426	58.7	10.6	0.3	28.8	7.9	2.66	0.33	65 16	HARD	02--10--25--63--01	
NE05430	59.2	10.8	0.4	25.6	6.8	2.60	0.28	65 16	HARD	02--09--27--62--01	
KS970093-8-9-#1	60.6	11.4	0.4	28.2	6.9	2.63	0.28	64 16	HARD	02--09--27--62--01	
KS970187-1-10	59.0	11.2	0.4	26.3	6.6	2.64	0.27	66 17	HARD	02--08--25--65--01	
KS980512-11-22	58.0	11.1	0.4	27.4	7.9	2.65	0.28	55 15	HARD	06--23--32--39--02	
KS980554-12--9	58.1	11.1	0.3	27.8	7.2	2.62	0.30	75 19	HARD	01--07--14--78--01	
CO02W237	58.5	11.0	0.4	25.6	7.2	2.49	0.28	49 17	MIXED	16--29--30--25--03	
CO03064	56.7	11.4	0.4	25.3	6.7	2.51	0.26	70 17	HARD	02--06--16--76--01	
CO03W054	59.0	11.5	0.4	30.8	8.6	2.75	0.30	73 14	HARD	00--03--14--83--01	
CO03W139	57.8	11.4	0.4	24.8	7.2	2.53	0.29	63 17	HARD	03--10--27--60--01	
CO03W239	56.1	11.1	0.4	25.5	8.3	2.52	0.30	64 17	HARD	02--12--24--62--01	
CO03W043	59.2	11.3	0.4	28.0	8.9	2.61	0.33	60 17	HARD	05--16--24--55--01	
NE05496	59.9	11.2	0.3	26.5	7.3	2.62	0.30	64 16	HARD	01--11--26--62--01	
KS980512-2-2	60.9	11.4	0.4	31.2	8.8	2.70	0.33	55 17	HARD	06--23--32--39--02	
OK03825-5403-6	59.5	11.4	0.4	33.9	9.0	2.81	0.31	62 15	HARD	01--12--30--57--01	
TX02A0252	55.8	11.8	0.3	25.8	7.3	2.56	0.27	63 18	HARD	03--15--26--56--01	
TX03A0148	58.9	11.5	0.3	32.0	1.0	2.71	0.35	67 16	HARD	02--09--20--69--01	
TX03A0563	59.9	11.3	0.3	24.5	7.0	2.54	0.28	62 15	HARD	03--11--29--57--01	

LINE	Wt/Bu (lb)	SKCS Average Kernel						Hardness			
		Moisture		Weight		Diameter		SKCS		Class	Distribution
		(%)	(sd)	(mg)	(sd)	(mm)	(sd)	(sd)			
TX04A001246	60.1	11.5	0.4	29.9	9.1	2.62	0.35	76	17	HARD	01--03--10--86--01
TX01V5134RC-3	60.1	11.3	0.4	30.4	8.7	2.72	0.31	69	20	HARD	05--05--21--69--01
TX04M410164	58.9	11.3	0.3	27.1	7.9	2.62	0.30	55	16	HARD	08--18--35--39--02
TX04M410211	59.8	11.2	0.4	28.4	8.2	2.64	0.30	64	16	HARD	02--12--24--62--01
TX04V075080	60.0	11.4	0.4	29.7	8.2	2.70	0.31	71	18	HARD	01--08--19--72--01

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LINE	Wheat		Flour			Noodle Color					
	Protein	Milling Yield	Ash	Protein	PPO	L @ 0	a @ 0	b @ 0	Delta L 24 hrs	Delta a 24 hrs	Delta b 24 hrs
	(%)	(%)	(%)	(%)							
Kharkof	14.2	65.4	0.44	12.8	0.558	81.33	-2.37	22.97	-9.98	0.92	2.00
Scout 66	13.5	71.9	0.40	12.4	0.533	80.85	-1.93	22.08	-12.03	1.05	1.95
TAM-107	12.7	69.9	0.42	11.5	0.605	80.93	-2.49	24.59	-11.69	1.34	2.75
Trego	12.5	71.6	0.45	11.0	0.580	80.42	-2.38	23.98	-10.57	1.25	2.00
OK00514-05806	13.3	72.0	0.45	11.8	0.504	80.18	-2.01	24.09	-11.08	1.34	1.21
OK05737W	14.1	70.5	0.45	12.7	0.588	80.63	-1.76	22.63	-12.14	1.25	3.87
OK03522	13.4	69.7	0.41	11.7	0.149	81.27	-1.92	22.56	-10.90	0.94	4.21
OK03305	13.0	72.4	0.41	11.5	0.491	80.58	-2.00	23.46	-10.85	1.29	2.13
OK04505	13.7	70.2	0.48	12.1	0.563	79.20	-3.18	27.82	-13.40	2.17	0.31
AP04T8211	13.4	71.8	0.45	12.1	0.542	80.68	-2.00	22.37	-12.34	1.27	3.73
AP05T2413	14.3	70.1	0.46	13.1	0.481	79.40	-1.76	22.75	-13.21	1.22	3.10
AP05TW2821	13.0	71.1	0.43	11.8	0.592	80.45	-2.00	22.54	-10.24	1.23	4.48
AP06T3832	13.6	70.3	0.47	12.0	0.629	79.73	-2.31	24.98	-10.65	1.51	1.22
KS05HW15-2	13.6	71.9	0.39	12.0	0.566	81.49	-2.09	21.98	-10.54	1.16	3.02
KS05HW121-2	13.3	72.4	0.45	12.2	0.181	80.76	-2.19	23.92	-9.71	1.17	2.81
KS05HW122-5	13.0	73.1	0.45	12.0	0.178	81.20	-2.37	24.38	-9.15	1.01	3.05
KS05HW136-3	12.5	71.0	0.44	11.1	0.214	82.42	-2.45	21.93	-9.00	0.93	3.89
HV9W96-1271R-1	12.8	72.8	0.46	11.6	0.592	81.86	-2.79	23.37	-12.42	1.51	3.09
HV9W03-539R	13.1	68.7	0.47	12.2	0.458	81.10	-1.97	22.66	-11.72	1.21	3.54
HV9W03-696R-1	12.8	72.6	0.44	11.7	0.582	80.94	-2.96	26.02	-10.88	1.22	2.61
HV9W02-942R	12.9	69.4	0.47	11.8	0.614	80.17	-2.39	23.60	-13.56	1.88	1.89
T151	12.3	70.5	0.42	11.2	0.562	80.91	-2.77	25.32	-11.09	1.38	3.88
T153	12.7	69.4	0.42	11.2	0.555	80.97	-2.50	24.62	-12.05	1.70	1.80
T154	12.5	69.7	0.42	11.1	0.492	80.75	-2.41	23.69	-11.11	1.29	2.64
T158	12.2	68.8	0.43	10.8	0.573	81.39	-2.63	24.67	-9.23	1.16	1.79
NE04424	12.6	71.2	0.47	11.2	0.581	81.00	-2.40	22.70	-12.63	1.63	2.87
NE05425	13.9	69.9	0.43	12.2	0.493	81.08	-1.77	20.98	-11.98	0.99	3.11
NE05426	13.7	70.4	0.40	12.2	0.516	80.23	-1.82	22.09	-10.75	1.35	1.66
NE05430	12.8	70.6	0.44	11.8	0.603	82.33	-2.87	24.44	-12.02	1.47	2.63
KS970093-8-9-#1	13.1	70.0	0.42	11.8	0.554	81.88	-2.57	24.17	-12.48	1.53	1.82
KS970187-1-10	14.2	67.6	0.45	13.1	0.554	79.13	-2.28	26.49	-9.26	1.94	-1.10
KS980512-11-22	13.2	70.5	0.42	12.1	0.588	80.91	-2.41	23.54	-10.89	2.02	-0.14
KS980554-12--9	12.1	67.0	0.46	10.9	0.207	81.99	-2.55	22.90	-9.67	2.42	2.38
CO02W237	12.4	67.6	0.43	11.0	0.606	81.28	-2.96	24.50	-9.38	1.66	-0.15
CO03064	12.3	68.0	0.44	10.9	0.598	81.81	-2.25	21.81	-10.37	1.43	2.69
CO03W054	12.6	69.5	0.49	10.9	0.704	82.63	-2.70	23.00	-12.44	1.32	3.24
CO03W139	13.4	68.7	0.41	11.8	0.183	82.71	-2.67	23.33	-7.07	1.08	0.61
CO03W239	13.5	68.4	0.42	11.9	0.710	81.61	-2.65	23.71	-11.93	2.08	0.58
CO03W043	13.3	70.9	0.43	11.9	0.662	82.10	-2.13	22.24	-12.24	1.97	0.86
NE05496	12.4	71.0	0.45	11.2	0.570	82.24	-2.81	24.69	-12.59	2.07	0.53
KS980512-2-2	12.5	68.3	0.43	11.0	0.567	80.53	-2.00	22.73	-8.25	2.55	-1.38
OK03825-5403-6	13.3	70.4	0.45	11.9	0.554	80.11	-2.10	23.28	-9.19	1.84	-0.92

LINE	Wheat		Flour			Noodle Color					
	Protein	Milling Yield	Ash	Protein	PPO	L @ 0	a @ 0	b @ 0	Delta L 24 hrs	Delta a 24 hrs	Delta b 24 hrs
	(%)	(%)	(%)	(%)							
TX02A0252	12.6	71.6	0.47	11.2	0.591	80.14	-2.25	25.16	-10.66	1.55	-0.20
TX03A0148	13.7	68.9	0.47	12.1	0.492	79.32	-1.75	25.64	-11.03	1.32	3.13
TX03A0563	14.0	69.4	0.42	12.2	0.534	80.53	-1.94	23.07	-11.38	1.32	1.26
TX04A001246	13.1	67.3	0.48	11.7	0.523	80.26	-2.22	25.51	-11.89	1.26	2.61
TX01V5134RC-3	14.0	68.9	0.45	12.5	0.617	79.36	-1.96	24.94	-12.00	1.49	1.23
TX04M410164	13.0	70.3	0.43	11.8	0.586	79.93	-2.37	24.84	-10.19	1.37	0.47
TX04M410211	13.0	69.4	0.46	11.8	0.514	80.02	-1.71	22.48	-10.70	1.23	2.50
TX04V075080	13.0	68.4	0.49	11.7	0.686	78.90	-1.92	24.58	-12.69	1.78	1.42

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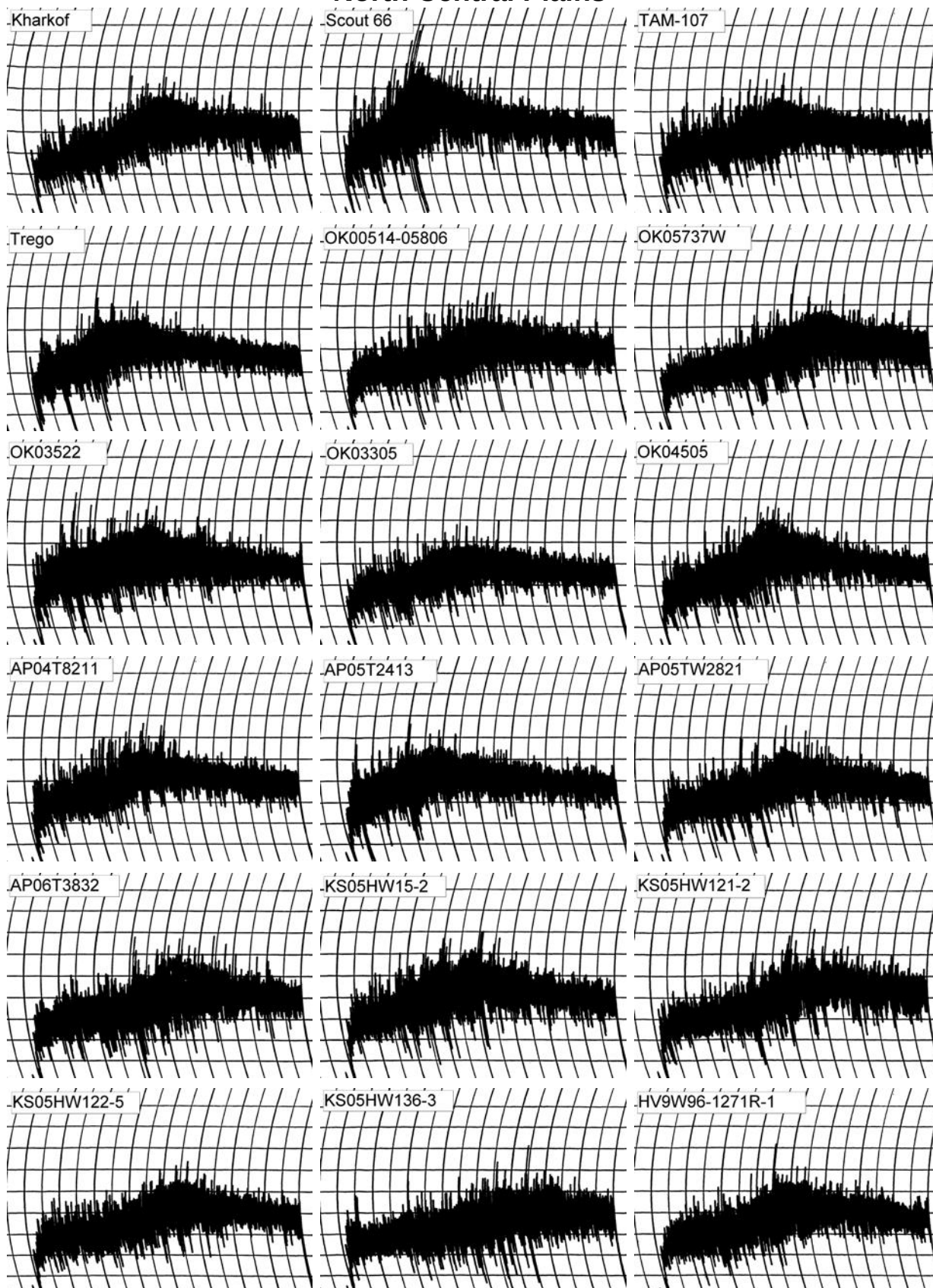
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	Flour Protein	Mixograph			
		Absorption	As-Is	Corrected	Tolerance
Line	(%)	(%)	(min)	(min)	
Kharkof	12.8	64.2	4.00	4.00	4
Scout 66	12.4	63.6	2.38	2.38	3
TAM-107	11.5	62.0	3.63	3.39	4
Trego	11.0	61.3	2.88	2.53	3
OK00514-05806	11.8	62.6	4.38	4.27	4
OK05737W	12.7	64.0	4.88	4.88	4
OK03522	11.7	63.5	3.63	3.50	4
OK03305	11.5	62.0	3.88	3.62	3
OK04505	12.1	62.2	3.50	3.50	2
AP04T8211	12.1	63.8	3.63	3.63	2
AP05T2413	13.1	63.7	2.88	2.88	2
AP05TW2821	11.8	61.5	3.88	3.77	3
AP06T3832	12.0	62.0	4.50	4.50	3
KS05HW15-2	12.0	64.0	4.00	4.00	3
KS05HW121-2	12.2	62.3	4.50	4.50	3
KS05HW122-5	12.0	62.0	4.38	4.38	2
KS05HW136-3	11.1	60.3	5.88	5.22	4
HV9W96-1271R-1	11.6	61.3	4.00	3.80	2
HV9W03-539R	12.2	63.3	4.38	4.38	3
HV9W03-696R-1	11.7	60.0	4.00	3.86	1
HV9W02-942R	11.8	60.5	4.50	4.38	2
T151	11.2	60.6	4.00	3.62	3
T153	11.2	62.2	3.88	3.53	2
T154	11.1	61.4	3.50	3.12	2
T158	10.8	61.0	3.50	3.01	2
NE04424	11.2	61.5	3.50	3.16	2
NE05425	12.2	62.3	7.00	7.00	6
NE05426	12.2	63.3	9.25	9.25	6
NE05430	11.8	62.7	4.38	4.28	3
KS970093-8-9-#1	11.8	62.6	3.25	3.15	1
KS970187-1-10	13.1	63.8	4.38	4.38	3
KS980512-11-22	12.1	63.1	3.13	3.13	2
KS980554-12--9	10.9	61.9	3.25	2.80	2
CO02W237	11.0	61.2	5.75	5.07	5
CO03064	10.9	61.1	7.00	6.06	4
CO03W054	10.9	61.2	0.38	9.04	4
CO03W139	11.8	61.5	6.00	5.86	4
CO03W239	11.9	63.3	5.13	5.07	4
CO03W043	11.9	62.7	3.25	3.20	4
NE05496	11.2	61.5	4.13	3.74	4
KS980512-2-2	11.0	61.1	2.88	2.53	2
OK03825-5403-6	11.9	61.6	3.63	3.57	2

	Flour Protein	Mixograph			
		Absorption	As-Is	Corrected	Tolerance
Line	(%)	(%)	(min)	(min)	
TX02A0252	11.2	61.5	4.00	3.60	3
TX03A0148	12.1	64.1	3.63	3.63	4
TX03A0563	12.2	63.3	3.13	3.13	3
TX04A001246	11.7	62.4	3.50	3.36	4
TX01V5134RC-3	12.5	63.8	3.50	3.50	4
TX04M410164	11.8	62.7	6.25	6.09	6
TX04M410211	11.8	62.6	2.88	2.82	3
TX04V075080	11.7	62.5	3.63	3.49	3

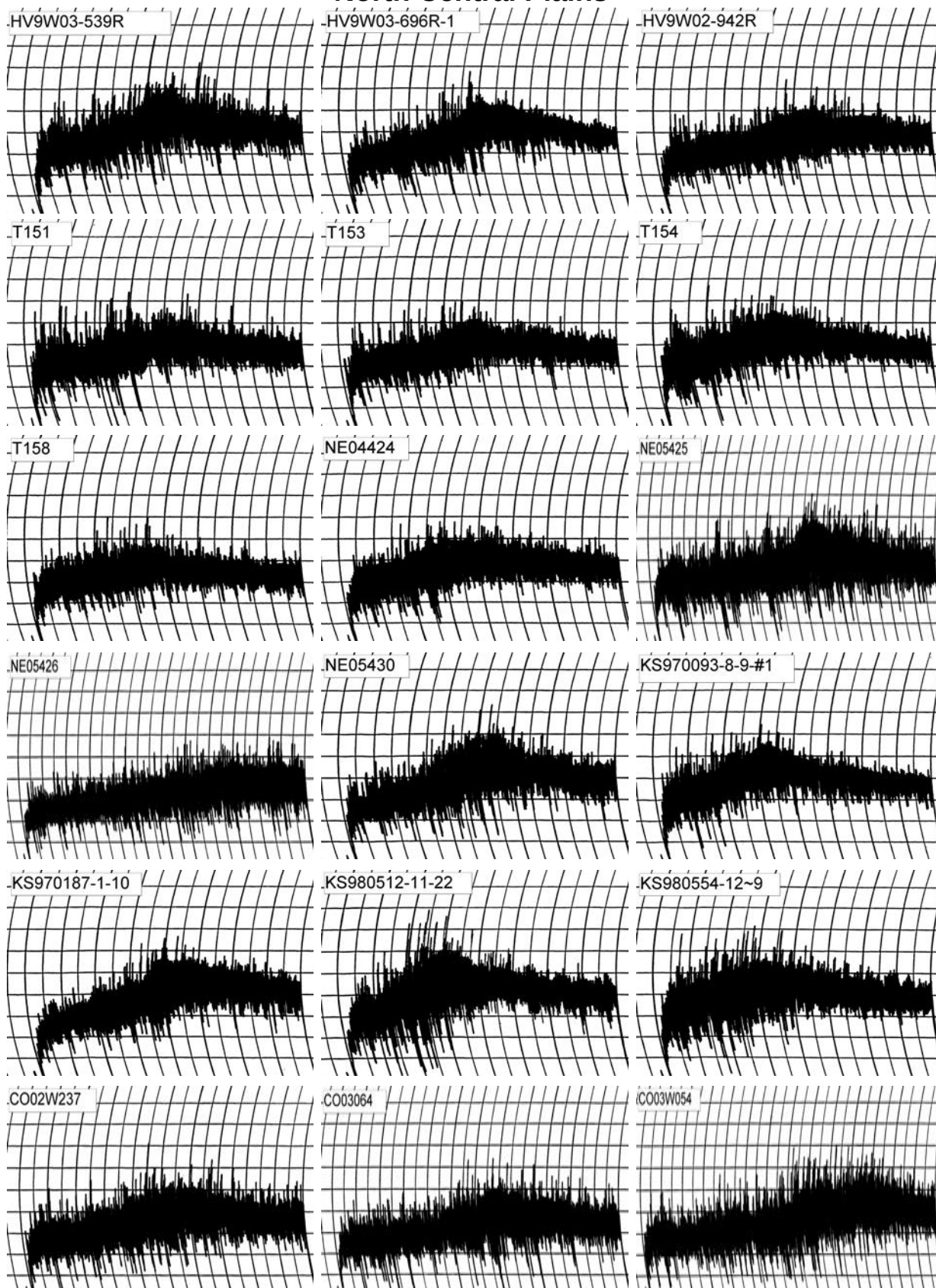
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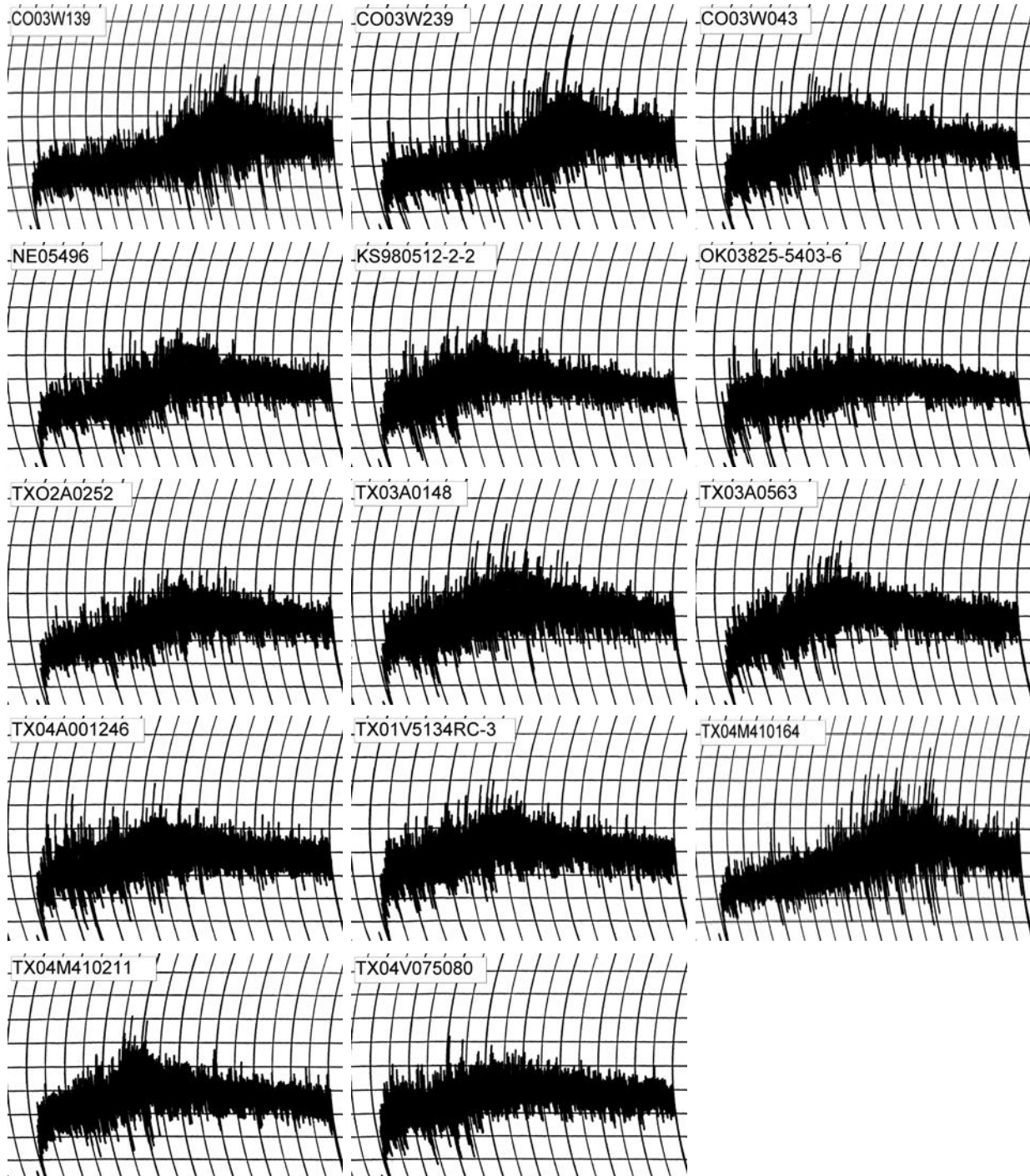
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Line	RVA							Pasting Temp (Deg. C)
	Stirring Number (RVU)	Peak Viscosity (RVU)	Trough Viscosity (RVU)	Breakdown (RVU)	Final Viscosity (RVU)	Set back (RVU)	Peak Time (min)	
Kharkof	145.42	245.50	170.50	75.00	291.58	121.08	6.47	
Scout 66	127.42	232.17	156.33	75.83	276.00	119.67	6.33	
TAM-107	124.50	284.08	192.92	91.17	318.58	125.67	6.53	
Trego	118.92	273.67	161.67	112.00	267.67	106.00	6.40	
OK00514-05806	114.33	252.58	165.17	87.42	284.75	119.58	6.40	
OK05737W	126.17	261.17	170.17	91.00	295.58	125.42	6.40	
OK03522	119.83	231.83	154.75	77.08	283.42	128.67	6.27	
OK03305	100.33	246.58	140.83	105.75	241.83	101.00	6.27	
OK04505	110.17	232.33	150.08	82.25	270.58	120.50	6.27	
AP04T8211	125.50	258.25	175.50	82.75	297.92	122.42	6.53	
AP05T2413	120.08	242.25	167.42	74.83	293.42	126.00	6.40	
AP05TW2821	117.75	241.17	154.25	86.92	267.83	113.58	6.33	
AP06T3832	118.00	255.83	166.50	89.33	283.17	116.67	6.40	
KS05HW15-2	105.67	242.33	158.83	83.50	281.67	122.83	6.27	
KS05HW121-2	102.75	262.17	154.17	108.00	251.17	97.00	6.33	
KS05HW122-5	112.42	258.58	145.42	113.17	245.58	100.17	6.27	
KS05HW136-3	96.33	207.33	97.17	110.17	182.17	85.00	6.07	
HV9W96-1271R-1	95.42	219.17	137.92	81.25	251.00	113.08	6.20	
HV9W03-539R	131.17	257.67	172.00	85.67	289.25	117.25	6.47	
HV9W03-696R-1	130.75	205.83	146.33	59.50	264.92	118.58	6.33	
HV9W02-942R	119.67	224.50	148.42	76.08	262.75	114.33	6.27	
T151	121.83	266.33	177.42	88.92	300.67	123.25	6.40	
T153	124.50	264.58	171.33	93.25	292.00	120.67	6.40	
T154	118.83	248.50	161.42	87.08	281.75	120.33	6.33	
T158	115.75	268.75	173.17	95.58	298.58	125.42	6.33	
NE04424	118.58	205.42	139.25	66.17	253.75	114.50	6.27	
NE05425	126.58	229.17	141.08	88.08	255.92	114.83	6.20	
NE05426	116.92	231.33	140.58	90.75	255.92	115.33	6.13	
NE05430	132.92	256.92	176.92	80.00	285.17	108.25	6.53	
KS970093-8-9-#1	167.08	263.83	191.42	72.42	306.17	114.75	6.60	
KS970187-1-10	142.25	260.42	174.50	85.92	278.58	104.08	6.60	
KS980512-11-22	117.42	245.58	160.08	85.50	281.92	121.83	6.33	
KS980554-12-~9	134.33	250.50	171.25	79.25	295.00	123.75	6.40	
CO02W237	101.00	260.17	155.17	105.00	274.00	118.83	6.20	
CO03064	125.17	237.00	159.67	77.33	296.25	136.58	6.20	
CO03W054	130.75	241.25	160.67	80.58	282.50	121.83	6.33	
CO03W139	109.42	240.83	152.58	88.25	278.75	126.17	6.20	
CO03W239	103.08	249.33	147.08	102.25	262.75	115.67	6.27	
CO03W043	109.00	211.58	125.83	85.75	231.83	106.00	6.13	
NE05496	123.92	258.33	172.92	85.42	279.33	106.42	6.53	
KS980512-2-2	111.25	246.42	159.75	86.67	281.25	121.50	6.27	
OK03825-5403-6	123.33	239.00	158.08	80.92	266.58	108.50	6.47	
TX02A0252	115.33	235.00	159.00	76.00	284.42	125.42	6.33	
TX03A0148	126.50	235.17	156.17	79.00	273.25	117.08	6.40	
TX03A0563	113.33	225.42	154.50	70.92	281.00	126.50	6.20	
TX04A001246	135.33	264.67	174.42	90.25	287.25	112.83	6.40	

RVA								
Line	Stirring Number (RVU)	Peak Viscosity (RVU)	Trough Viscosity (RVU)	Breakdown (RVU)	Final Viscosity (RVU)	Set back (RVU)	Peak Time (min)	Pasting Temp (Deg. C)
TX01V5134RC-3	116.92	246.58	155.25	91.33	247.83	92.58	6.33	
TX04M410164	124.83	246.67	165.25	81.42	291.08	125.83	6.33	
TX04M410211	94.75	245.83	152.50	93.33	250.67	98.17	6.33	
TX04V075080	123.42	240.67	149.50	91.17	244.92	95.42	6.40	

2008 SRPN Intraregional Production Zone

North Central Plains

Line	Flour		Mix Time		Dough					
	Protein	Water Abs.	As-is	Corrected	Weight	Proof Height	Crumb Grain	As-Rec'd.	Specific Volume	Loaf Volume Potential
	(%)	(%)	(min)	(min)	(g)	(cm)		(cc)	(cc/g)	(cc/%)
Kharkof	12.8	62.0	4.63	4.63	170.7	7.6	4.5	960	6.5	67
Scout 66	12.4	61.7	3.75	3.75	170.8	7.8	4.5	945	6.3	69
TAM-107	11.5	60.8	4.75	4.44	169.9	7.5	4.0	965	6.5	78
Trego	11.0	59.6	3.50	3.07	169.0	7.2	4.0	865	5.8	70
OK00514-05806	11.8	62.7	5.25	5.11	171.3	7.5	4.5	915	6.2	70
OK05737W	12.7	62.5	5.13	5.13	171.0	7.7	4.0	935	6.3	66
OK03522	11.7	61.6	4.75	4.58	170.5	7.5	2.0	840	5.6	62
OK03305	11.5	60.6	4.38	4.09	169.8	7.4	4.0	920	6.2	73
OK04505	12.1	60.3	4.25	4.25	169.0	7.6	3.2	955	6.6	72
AP04T8211	12.1	60.8	4.75	4.75	170.0	7.6	3.2	950	6.5	71
AP05T2413	13.1	60.4	3.13	3.13	169.2	7.6	3.8	1000	6.8	70
AP05TW2821	11.8	62.0	5.38	5.22	171.2	7.5	4.5	955	6.4	75
AP06T3832	12.0	62.6	6.00	6.00	171.9	7.7	4.0	1025	6.8	80
KS05HW15-2	12.0	62.9	4.63	4.62	172.8	7.4	4.5	900	6.0	67
KS05HW121-2	12.2	61.8	5.50	5.50	170.6	7.9	5.0	1025	7.0	79
KS05HW122-5	12.0	60.3	4.88	4.88	169.4	7.8	4.5	970	6.6	74
KS05HW136-3	11.1	59.9	7.25	6.44	169.1	7.6	4.0	990	6.7	85
HV9W96-1271R-1	11.6	59.5	5.88	5.59	168.6	7.8	4.5	990	6.7	80
HV9W03-539R	12.2	60.8	5.13	5.13	169.9	7.5	3.8	1005	6.8	77
HV9W03-696R-1	11.7	60.7	5.00	4.82	169.6	7.8	3.5	975	6.6	77
HV9W02-942R	11.8	59.4	5.13	4.99	168.7	7.6	3.2	935	6.4	72
T151	11.2	59.7	5.13	4.64	168.9	7.1	4.0	910	6.1	74
T153	11.2	60.7	4.38	3.98	169.8	7.3	3.0	935	6.3	77
T154	11.1	60.7	3.75	3.34	170.1	7.2	3.0	925	6.2	77
T158	10.8	59.5	4.00	3.44	168.9	7.3	4.0	940	6.4	81
NE04424	11.2	59.6	4.63	4.18	169.0	7.5	4.2	940	6.3	78
NE05425	12.2	61.9	9.25	9.25	170.7	8.0	4.5	970	6.5	73
NE05426	12.2	62.9	10.00	10.00	171.4	7.9	3.8	970	6.5	73
NE05430	11.8	61.0	5.75	5.62	170.5	7.7	4.0	995	6.7	79
KS970093-8-9-#1	11.8	60.0	3.88	3.77	170.2	7.6	3.5	900	6.1	68
KS970187-1-10	13.1	58.9	4.50	4.50	163.3	7.7	4.0	995	6.9	69
KS980512-11-22	12.1	60.1	3.75	3.75	169.7	7.6	4.0	950	6.4	71
KS980554-12--9	10.9	62.1	5.00	4.31	171.7	7.3	3.5	870	5.8	72
CO02W237	11.0	61.3	7.38	6.51	170.1	7.7	3.0	920	6.2	77
CO03064	10.9	61.1	8.75	7.58	170.6	7.3	4.2	880	5.9	73
CO03W054	10.9	63.9	15.00	13.06	171.5	7.6	3.2	915	6.1	77
CO03W139	11.8	62.6	10.00	9.77	171.3	7.5	4.0	960	5.4	75
CO03W239	11.9	62.2	6.75	6.68	171.5	7.7	4.2	1000	6.7	79
CO03W043	11.9	62.0	4.50	4.44	171.5	7.4	3.8	935	6.4	71
NE05496	11.2	61.2	5.25	4.75	170.6	7.6	2.8	920	6.3	75
KS980512-2-2	11.0	58.2	3.75	3.29	167.9	7.3	3.5	900	6.1	75
OK03825-5403-6	11.9	60.2	3.75	3.69	169.8	7.4	2.8	890	6.0	67
TX02A0252	11.2	60.0	5.50	4.94	169.8	7.8	4.5	990	6.8	84
TX03A0148	12.1	60.7	4.50	4.50	170.1	7.5	2.5	935	6.4	70

Line	Flour		Mix Time		Dough					
	Protein	Water Abs.	As-is	Corrected	Weight	Proof Height	Crumb Grain	As-Rec'd.	Specific Volume	Loaf Volume Potential
	(%)	(%)	(min)	(min)	(g)	(cm)		(cc)	(cc/g)	(cc/%)
TX03A0563	12.2	60.1	4.88	4.88	169.4	7.8	4.0	980	6.6	74
TX04A001246	11.7	61.4	5.63	5.40	170.4	7.6	4.5	950	6.4	75
TX01V5134RC-3	12.5	61.5	3.75	3.75	170.9	7.6	4.0	970	6.5	70
TX04M410164	11.8	61.6	8.25	8.03	169.0	7.4	4.5	980	6.7	77
TX04M410211	11.8	60.7	4.50	4.40	169.9	7.5	3.2	985	6.7	78
TX04V075080	11.7	60.4	4.13	3.97	170.3	7.4	3.0	920	6.1	71



Hard Winter Wheat Quality Report 2008 SRPN-NHP

1 - Test weight	10	11 - Flour protein	8
2 - SKCS kernel weight	8	12 - Bake absorption	15
3 - Kernel weight SD	8	13 - Mixograph absorption	5
4 - SKCS kernel diameter	8	14 - Bake mix time	10
5 - Kernel diameter SD	8	15 - Mixograph mix time	5
6 - SKCS hardness	10	16 - Mixograph tolerance	5
7 - Hardness SD	8	17 - Dough weight	
8 - Flour yield	30	18 - Proof height	2
9 - Flour ash	10	19 - Loaf volume	20
10 - Milling score		20 - Volume regression	5
		21 - Crumb grain	25

ID	Milling Score	Rating	%	Baking Score	Rating	%	1RS	Trait Deficiencies
Kharkof	45.5	Very Poor	66.4	43.7	Average	63.2		2,4,8,10,16,
Scout66	64.2	Very Good	93.7	52.8	Good	76.4		10,15,16,
TAM 107	58.6	Poor	85.5	42.7	Poor	61.8	1AL	5,16,21,
Trego	63.8	Good	93.0	32.5	Very Poor	47.0		12,15,16,17,18,21,
OK00514-05806	66.4	Very Good	96.9	61.0	Very Good	88.3		17,
OK05737W	64.8	Very Good	94.6	58.2	Very Good	84.2		9,16,
Billings	60.9	Average	88.9	55.1	Good	79.8		3,16,
Pete	66.6	Very Good	97.2	50.8	Good	73.6		11,13,16,
OK04505	61.7	Good	90.1	51.9	Good	75.2		16,
Jackpot	61.7	Average	90.1	37.8	Very Poor	54.7		3,16,
AP05T2413	54.3	Very Poor	79.2	32.0	Very Poor	46.3	1AL	1,10,14,16,19,20,21,
AP05TW2821	58.4	Poor	85.3	39.4	Poor	57.0		1,16,
AP06T3832	57.7	Very Poor	84.2	54.6	Good	79.0		1,16,
KS05HW15-2	60.2	Poor	87.9	41.4	Poor	60.0		10,16,
KS05HW121-2	63.0	Good	91.9	51.0	Good	73.8		3,5,
KS05HW122-5	64.4	Very Good	94.0	46.6	Average	67.5		16,
Tiger	60.8	Average	88.7	48.6	Average	70.3		16,
Armour	54.2	Very Poor	79.1	57.1	Very Good	82.6	1AL	16,
HV9W03-539R	53.2	Very Poor	77.6	41.9	Poor	60.6		1,8,9,16,
HV9W03-696R-1	61.3	Average	89.4	44.6	Average	64.6	1BL	13,16,
Hitch	57.0	Very Poor	83.2	36.6	Very Poor	52.9	1BL	16,
T151	57.9	Very Poor	84.5	29.0	Very Poor	42.0	1AL	13,16,18,
T153	58.2	Very Poor	84.9	34.4	Very Poor	49.9	1AL	16,21,
T154	58.5	Poor	85.4	32.2	Very Poor	46.6	1AL	14,15,16,18,19,21,
T158	63.8	Very Good	93.1	33.2	Very Poor	48.1	1AL	11,13,16,18,19,21,
NE04424	62.4	Good	91.0	57.6	Very Good	83.4	1BL	16,
NE05425	61.2	Average	89.3	47.8	Average	69.2		15,
NE05426	58.9	Poor	86.0	57.4	Good	83.0		14,15,
NE05430	58.6	Poor	85.6	47.9	Average	69.3		2,4,16,
KS970093-8-9-#1	58.6	Poor	85.5	40.2	Poor	58.2		14,16,

Quality scores and ratings are calculated directly from the relative trait weightings (printed at the top of the page) and are applicable only to the nursery selected.



Hard Winter Wheat Quality Report 2008 SRPN-NHP

1 - Test weight	10	11 - Flour protein	8
2 - SKCS kernel weight	8	12 - Bake absorption	15
3 - Kernel weight SD	8	13 - Mixograph absorption	5
4 - SKCS kernel diameter	8	14 - Bake mix time	10
5 - Kernel diameter SD	8	15 - Mixograph mix time	5
6 - SKCS hardness	10	16 - Mixograph tolerance	5
7 - Hardness SD	8	17 - Dough weight	
8 - Flour yield	30	18 - Proof height	2
9 - Flour ash	10	19 - Loaf volume	20
10 - Milling score		20 - Volume regression	5
		21 - Crumb grain	25

ID	Milling Score	Rating	%	Baking Score	Rating	%	1RS	Trait Deficiencies
KS970187-1-10	52.6	Very Poor	76.8	39.4	Poor	57.1		8,10,16,
KS980512-11-22	61.0	Average	89.0	43.4	Average	62.8		12,16,
KS980554-12--9	59.7	Poor	87.2	43.5	Average	63.0		
CO02W237	58.3	Poor	85.1	44.3	Poor	64.2		2,4,14,15,
CO03064	55.8	Very Poor	81.4	58.7	Very Good	85.0		1,2,4,14,15,
CO03W054	60.2	Average	87.9	55.8	Good	80.8		11,14,15,
CO03W139	62.5	Good	91.2	63.1	Very Good	91.3		15,
Thunder CL	61.1	Average	89.2	49.5	Average	71.6		
CO03W043	61.1	Average	89.2	59.9	Very Good	86.6		16,
NE05496	64.1	Very Good	93.6	61.2	Very Good	88.5		16,
KS980512-2-2	62.5	Good	91.2	38.1	Very Poor	55.1		11,14,16,21,
STARS0601W	63.6	Good	92.7	33.7	Very Poor	48.8	1BL	15,16,21,
TX02A0252	61.7	Average	90.0	57.3	Very Good	83.0		10,
TX03A0148	62.6	Good	91.4	42.7	Poor	61.7		3,11,
TX03A0563	68.5	Very Good	100.0	43.1	Poor	62.5		16,
TX04A001246	62.2	Good	90.8	51.5	Good	74.5	1AL	16,
TX01V5134RC-3	65.0	Very Good	94.9	47.1	Average	68.2	1AL	6,16,
TX04M410164	62.8	Good	91.7	69.1	Very Good	100.0		
TX04M410211	64.4	Very Good	94.0	41.9	Poor	60.7	1BL	16,
TX04V075080	59.2	Poor	86.4	52.2	Good	75.6		16,

2008 SRPN Intraregional Production Zone

Northern High Plains

LINE	Wt/Bu (lb)	SKCS Average Kernel						Hardness			
		Moisture		Weight		Diameter		SKCS	Class	Distribution	
		(%)	(sd)	(mg)	(sd)	(mm)	(sd)				
								(sd)			
Kharkof	60.0	11.0	0.6	23.0	5.6	2.40	0.23	53 19	MIXED	13--25--29--33--03	
Scout 66	61.1	10.6	0.7	28.3	7.7	2.60	0.28	65 15	HARD	03--07--21--69--01	
TAM-107	59.6	10.8	0.6	28.4	8.3	2.59	0.33	71 15	HARD	01--04--14--81--01	
Trego	62.0	11.1	0.6	28.9	7.4	2.61	0.28	74 14	HARD	00--03--11--86--01	
OK00514-05806	61.5	11.0	0.6	28.2	7.8	2.65	0.32	85 14	HARD	00--01--04--95--01	
OK05737W	59.0	10.8	0.6	27.5	6.8	2.62	0.28	70 13	HARD	00--04--17--79--01	
OK03522	60.3	11.0	0.5	32.1	9.5	2.71	0.30	74 15	HARD	01--03--10--86--01	
OK03305	62.3	11.0	0.7	30.7	8.5	2.65	0.32	70 15	HARD	01--03--16--80--01	
OK04505	59.4	10.8	0.7	27.6	7.0	2.58	0.26	70 16	HARD	02--06--14--78--01	
AP04T8211	60.1	10.7	0.6	30.4	8.8	2.68	0.31	74 16	HARD	00--06--11--83--01	
AP05T2413	58.6	10.5	0.6	30.4	8.3	2.62	0.31	65 15	HARD	01--08--23--68--01	
AP05TW2821	58.3	10.2	0.7	27.6	6.6	2.59	0.28	69 15	HARD	01--07--17--75--01	
AP06T3832	58.4	10.8	0.7	26.3	7.6	2.53	0.26	69 16	HARD	02--06--21--71--01	
KS05HW15-2	61.0	10.8	0.6	29.5	7.6	2.63	0.28	67 14	HARD	01--04--20--75--01	
KS05HW121-2	62.1	10.9	0.7	32.0	9.3	2.74	0.36	73 16	HARD	02--05--13--80--01	
KS05HW122-5	61.9	10.4	0.7	29.9	8.0	2.70	0.32	72 15	HARD	01--04--13--82--01	
KS05HW136-3	60.6	10.0	0.7	28.3	6.5	2.57	0.25	67 14	HARD	01--05--21--73--01	
HV9W96-1271R-1	59.7	10.6	0.7	26.0	8.0	2.49	0.29	74 15	HARD	00--03--11--86--01	
HV9W03-539R	57.8	10.2	0.7	26.5	6.5	2.56	0.26	78 14	HARD	00--01--06--93--01	
HV9W03-696R-1	60.0	10.7	0.8	26.3	6.9	2.55	0.27	70 16	HARD	02--05--18--75--01	
HV9W02-942R	59.9	10.3	0.7	24.7	6.3	2.53	0.25	74 15	HARD	00--03--11--86--01	
T151	60.5	10.2	0.7	28.4	8.2	2.57	0.32	72 16	HARD	02--04--12--82--01	
T153	60.5	9.9	0.8	29.3	8.1	2.63	0.30	71 14	HARD	01--02--14--83--01	
T154	60.6	10.1	0.8	29.4	8.1	2.63	0.27	70 15	HARD	01--04--19--76--01	
T158	61.3	9.7	0.8	29.0	7.2	2.65	0.32	72 15	HARD	01--05--13--81--01	
NE04424	61.5	9.8	0.9	27.5	7.6	2.63	0.30	69 15	HARD	01--06--19--74--01	
NE05425	60.2	9.6	0.8	27.7	7.2	2.62	0.27	73 14	HARD	01--03--11--85--01	
NE05426	60.3	9.5	0.8	26.0	7.4	2.57	0.31	74 17	HARD	01--03--14--82--01	
NE05430	60.3	9.4	0.8	23.3	6.4	2.47	0.25	72 16	HARD	01--04--14--81--01	
KS970093-8-9-#1	60.6	9.7	0.9	25.5	7.1	2.54	0.27	72 16	HARD	01--05--13--81--01	
KS970187-1-10	59.7	9.3	0.8	25.5	7.1	2.58	0.26	72 16	HARD	02--06--09--83--01	
KS980512-11-22	60.0	9.5	0.8	26.2	6.8	2.58	0.27	66 16	HARD	03--07--22--68--01	
KS980554-12--9	60.2	10.0	0.7	25.2	6.4	2.50	0.25	82 16	HARD	01--01--06--92--01	
CO02W237	60.6	9.5	0.9	24.1	6.3	2.44	0.24	65 16	HARD	04--06--29--61--01	
CO03064	57.6	10.0	0.6	23.8	7.1	2.46	0.26	78 15	HARD	01--02--07--90--01	
CO03W054	60.4	10.2	0.6	28.1	7.8	2.64	0.32	78 15	HARD	01--03--05--91--01	
CO03W139	60.3	10.0	0.7	25.3	6.3	2.55	0.26	71 15	HARD	00--05--14--81--01	
CO03W239	59.8	9.8	0.8	26.4	7.8	2.55	0.30	68 16	HARD	03--04--14--79--01	
CO03W043	59.3	9.9	0.6	28.1	7.6	2.59	0.27	67 15	HARD	03--07--14--76--01	
NE05496	60.3	10.0	0.7	25.2	6.6	2.50	0.26	63 15	HARD	02--10--27--61--01	
KS980512-2-2	61.2	9.6	0.7	28.9	7.7	2.62	0.30	67 16	HARD	02--07--22--69--01	
OK03825-5403-6	61.6	9.6	0.7	31.5	7.3	2.74	0.29	66 14	HARD	01--05--25--69--01	
TX02A0252	61.3	9.9	0.7	26.7	7.8	2.57	0.27	73 15	HARD	00--05--12--83--01	
TX03A0148	58.8	9.9	0.8	32.4	8.7	2.72	0.32	68 14	HARD	00--07--20--73--01	
TX03A0563	61.7	9.4	0.8	26.1	6.2	2.57	0.25	65 13	HARD	01--06--24--69--01	

LINE	Wt/Bu (lb)	SKCS Average Kernel						Hardness			
		Moisture		Weight		Diameter		SKCS		Class	Distribution
		(%)	(sd)	(mg)	(sd)	(mm)	(sd)	(sd)			
TX04A001246	59.9	9.7	0.7	28.1	7.0	2.55	0.26	71	15	HARD	01--05--17--77--01
TX01V5134RC-3	61.5	9.6	0.8	27.1	6.7	2.66	0.27	85	15	HARD	00--01--02--97--01
TX04M410164	60.6	9.3	0.9	25.6	6.5	2.55	0.26	66	16	HARD	02--08--21--69--01
TX04M410211	61.5	9.5	0.7	27.3	7.9	2.59	0.30	69	14	HARD	01--05--15--79--01
TX04V075080	60.0	9.4	0.8	29.3	7.6	2.65	0.27	63	14	HARD	02--09--27--62--01

2008 SRPN Intraregional Production Zone

Northern High Plains

LINE	Wheat		Flour			Noodle Color					
	Protein	Milling Yield	Ash	Protein	PPO	L @ 0	a @ 0	b @ 0	Delta L 24 hrs	Delta a 24 hrs	Delta b 24 hrs
	(%)	(%)	(%)	(%)							
Kharkof	15.0	64.3	0.46	13.7	0.503	80.41	-2.17	22.91	-13.11	1.56	1.38
Scout 66	15.8	71.7	0.41	13.6	0.503	79.40	-1.92	23.66	-13.38	1.75	0.38
TAM-107	14.7	69.8	0.44	13.5	0.503	77.74	-1.55	24.88	-14.97	1.96	1.57
Trego	14.5	69.0	0.41	13.3	0.585	80.50	-2.27	23.74	-13.41	1.77	1.39
OK00514-05806	15.3	71.5	0.46	14.0	0.382	79.18	-1.48	22.88	-14.27	1.84	1.97
OK05737W	15.0	72.8	0.49	14.3	0.519	79.90	-1.77	22.67	-17.03	1.98	2.15
OK03522	14.7	69.9	0.45	13.6	0.140	81.38	-1.57	22.11	-13.79	1.06	4.48
OK03305	13.5	72.1	0.41	12.4	0.443	80.49	-1.92	23.12	-12.08	1.41	1.73
OK04505	14.7	70.8	0.44	13.7	0.527	79.79	-2.87	26.77	-17.27	2.33	-1.95
AP04T8211	14.9	70.9	0.45	13.8	0.473	79.64	-1.77	23.39	-14.52	1.31	0.36
AP05T2413	16.1	67.6	0.47	14.7	0.414	78.42	-2.12	24.85	-15.60	1.77	-1.21
AP05TW2821	14.2	69.7	0.48	13.1	0.545	79.65	-2.24	24.49	-12.45	2.15	-1.86
AP06T3832	14.7	70.4	0.48	13.3	0.585	78.76	-2.03	22.37	-15.38	2.28	-0.23
KS05HW15-2	15.6	69.0	0.47	14.1	0.606	81.33	-1.79	20.59	-15.41	1.55	2.47
KS05HW121-2	14.2	70.7	0.42	13.4	0.145	81.44	-2.32	24.52	-10.44	1.02	1.13
KS05HW122-5	14.3	70.8	0.44	13.3	0.147	81.79	-2.47	24.41	-10.31	0.86	2.03
KS05HW136-3	14.8	68.4	0.43	13.4	0.186	81.69	-2.35	22.29	-9.46	0.79	3.16
HV9W96-1271R-1	14.8	67.2	0.46	13.9	0.555	79.91	-2.61	26.30	-13.91	1.83	-0.53
HV9W03-539R	15.2	65.5	0.49	14.4	0.335	78.88	-1.91	25.26	-13.97	1.45	0.11
HV9W03-696R-1	13.8	70.8	0.44	13.1	0.581	79.03	-2.75	27.09	-11.40	1.33	0.43
HV9W02-942R	14.5	67.2	0.45	13.7	0.630	79.09	-2.17	23.80	-15.66	2.08	2.53
T151	13.9	68.4	0.40	12.9	0.470	79.05	-2.65	27.93	-11.76	1.65	0.18
T153	14.1	67.4	0.41	13.0	0.492	78.77	-2.24	25.14	-13.90	2.04	-0.94
T154	14.3	67.5	0.41	13.1	0.492	78.17	-2.11	25.78	-13.26	1.80	-2.10
T158	13.4	70.4	0.42	12.6	0.478	79.69	-2.25	24.35	-13.56	1.63	0.08
NE04424	14.4	70.4	0.43	13.1	0.482	81.21	-2.38	22.76	-14.56	2.37	-0.54
NE05425	14.8	68.7	0.42	13.6	0.416	80.73	-1.95	21.77	-13.76	1.43	1.11
NE05426	15.0	69.2	0.40	13.7	0.470	80.21	-2.00	22.81	-13.61	1.78	-0.51
NE05430	14.4	68.7	0.42	13.6	0.561	80.37	-2.64	24.74	-13.09	1.90	-0.72
KS970093-8-9-#1	14.6	69.4	0.47	13.6	0.481	79.88	-2.46	24.85	-11.61	1.93	-0.23
KS970187-1-10	15.8	66.1	0.48	14.8	0.482	77.56	-2.15	27.31	-12.90	2.17	-2.85
KS980512-11-22	14.7	70.1	0.41	13.9	0.530	79.59	-2.27	23.79	-13.48	2.01	-0.37
KS980554-12--9	14.1	67.6	0.41	13.0	0.160	80.82	-2.14	24.30	-11.06	1.53	1.52
CO02W237	14.4	68.7	0.40	13.1	0.549	81.59	-2.64	23.16	-13.07	1.90	-0.22
CO03064	14.3	68.3	0.44	13.1	0.591	80.84	-1.50	21.48	-14.40	1.43	2.43
CO03W054	13.8	69.7	0.47	12.6	0.759	81.90	-2.67	23.53	-14.92	1.59	2.08
CO03W139	14.9	70.0	0.41	13.6	0.169	82.10	-2.24	23.58	-10.78	1.18	1.87
CO03W239	14.3	70.5	0.37	12.9	0.701	81.22	-2.62	23.22	-15.31	2.48	-0.72
CO03W043	14.7	70.1	0.40	13.5	0.593	82.79	-2.08	21.66	-16.65	1.59	2.21
NE05496	14.5	72.3	0.41	13.6	0.615	78.47	-2.16	25.89	-13.01	1.71	-1.47
KS980512-2-2	13.8	70.1	0.37	12.6	0.515	81.44	-2.05	22.66	-13.28	2.15	1.04
OK03825-5403-6	14.7	69.3	0.43	13.6	0.458	78.77	-1.71	23.70	-12.28	2.03	-0.91

LINE	Wheat		Flour			Noodle Color					
	Protein	Milling Yield	Ash	Protein	PPO	L @ 0	a @ 0	b @ 0	Delta L 24 hrs	Delta a 24 hrs	Delta b 24 hrs
	(%)	(%)	(%)	(%)							
TX02A0252	14.4	70.6	0.48	13.0	0.502	80.56	-2.01	22.59	-15.07	2.18	1.55
TX03A0148	13.8	71.0	0.41	12.5	0.385	79.72	-2.03	25.86	-11.40	1.84	1.37
TX03A0563	14.8	71.2	0.34	13.6	0.446	80.09	-1.86	23.64	-12.64	1.35	0.06
TX04A001246	13.8	70.9	0.47	13.0	0.381	80.21	-1.99	24.38	-14.73	1.84	2.88
TX01V5134RC-3	14.8	69.2	0.44	13.4	0.554	80.39	-1.99	24.22	-16.14	2.17	0.58
TX04M410164	14.9	70.9	0.41	13.9	0.498	79.76	-2.12	24.30	-14.12	2.16	-2.50
TX04M410211	15.4	71.2	0.41	14.4	0.424	78.92	-1.87	24.91	-14.86	2.19	-1.54
TX04V075080	15.9	68.6	0.42	14.8	0.601	78.63	-1.82	23.17	-17.06	2.37	-1.72

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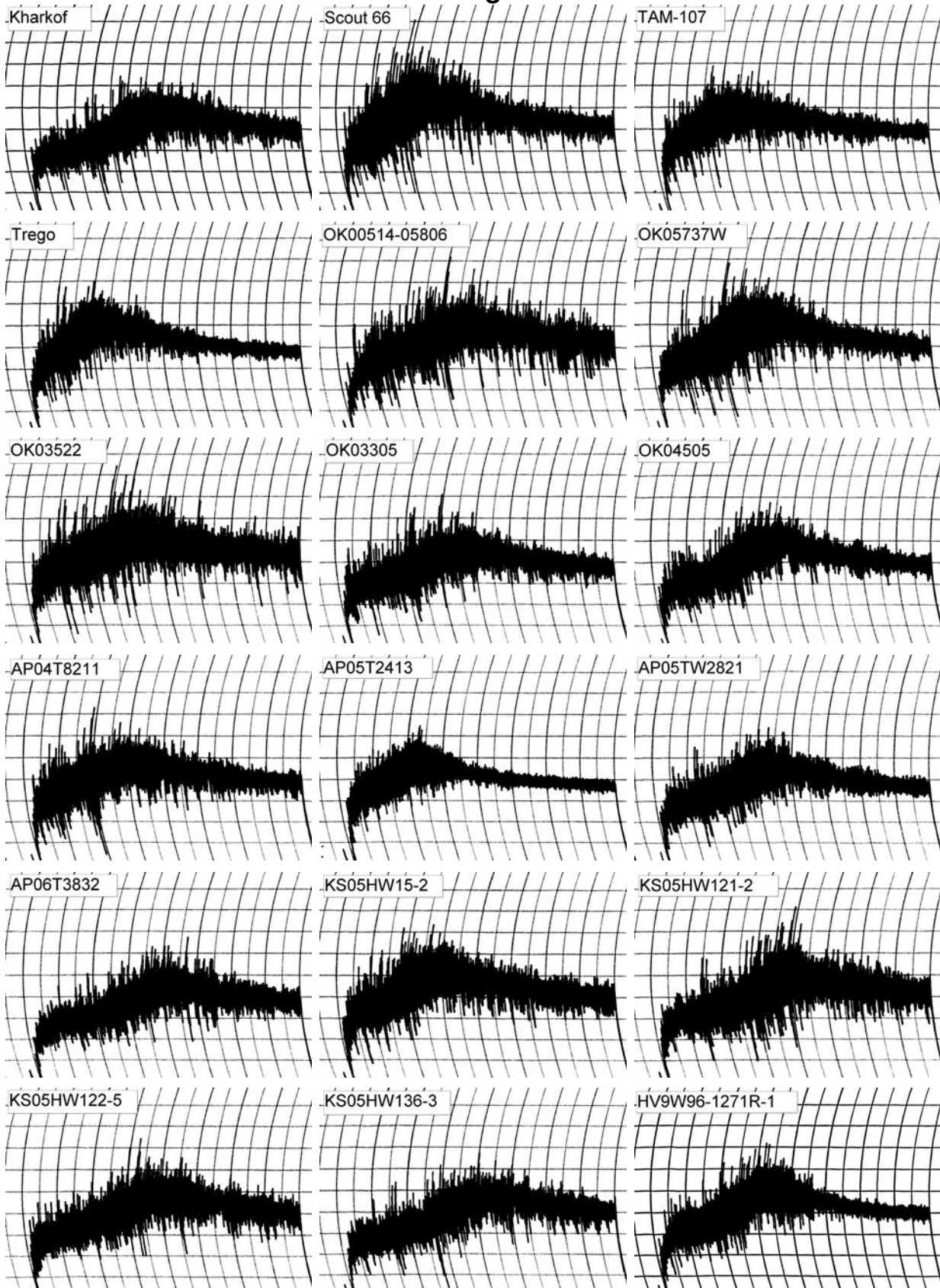
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	Flour Protein	Mixograph			
		Absorption	As-Is	Corrected	Tolerance
Line	(%)	(%)	(min)	(min)	
Kharkof	13.7	64.2	3.63	3.63	2
Scout 66	13.6	65.6	2.25	2.25	1
TAM-107	13.5	63.9	2.38	2.38	0
Trego	13.3	65.1	2.13	2.13	0
OK00514-05806	14.0	66.3	3.63	3.63	3
OK05737W	14.3	66.7	3.13	3.13	0
OK03522	13.6	65.6	3.50	3.50	2
OK03305	12.4	62.6	3.50	3.50	0
OK04505	13.7	63.8	3.50	3.50	0
AP04T8211	13.8	65.9	3.00	3.00	1
AP05T2413	14.7	65.9	2.38	2.38	0
AP05TW2821	13.1	63.4	3.38	3.38	0
AP06T3832	13.3	64.1	4.13	4.13	2
KS05HW15-2	14.1	66.5	3.00	3.00	2
KS05HW121-2	13.4	65.2	4.00	4.00	3
KS05HW122-5	13.3	65.2	3.75	3.75	2
KS05HW136-3	13.4	65.4	3.88	3.88	2
HV9W96-1271R-1	13.9	65.2	3.50	3.50	0
HV9W03-539R	14.4	65.9	2.88	2.88	2
HV9W03-696R-1	13.1	62.8	3.38	3.38	0
HV9W02-942R	13.7	63.7	3.38	3.38	0
T151	12.9	62.5	2.38	2.38	0
T153	13.0	63.1	2.75	2.75	0
T154	13.1	63.4	2.00	2.00	0
T158	12.6	62.5	2.50	2.50	1
NE04424	13.1	63.3	2.88	2.88	2
NE05425	13.6	64.6	5.75	5.75	6
NE05426	13.7	65.7	6.00	6.00	6
NE05430	13.6	65.6	3.63	3.63	2
KS970093-8-9-#1	13.6	64.6	2.50	2.50	0
KS970187-1-10	14.8	67.7	2.88	2.88	0
KS980512-11-22	13.9	65.1	2.63	2.63	0
KS980554-12--9	13.0	63.7	2.88	2.88	3
CO02W237	13.1	64.8	5.63	5.63	5
CO03064	13.1	63.8	7.00	7.00	6
CO03W054	12.6	64.0	9.88	9.88	5
CO03W139	13.6	65.7	5.38	5.38	5
CO03W239	12.9	64.4	4.38	4.38	4
CO03W043	13.5	65.5	3.00	3.00	2
NE05496	13.6	65.6	3.88	3.88	2
KS980512-2-2	12.6	64.0	2.38	2.38	1
OK03825-5403-6	13.6	64.2	1.88	1.88	0

	Flour Protein	Mixograph			
		Absorption	As-Is	Corrected	Tolerance
Line	(%)	(%)	(min)	(min)	
TX02A0252	13.0	64.6	3.00	3.00	3
TX03A0148	12.5	63.8	3.50	3.50	4
TX03A0563	13.6	65.6	2.50	2.50	2
TX04A001246	13.0	64.6	2.75	2.75	2
TX01V5134RC-3	13.4	64.3	2.50	2.50	2
TX04M410164	13.9	66.1	4.50	4.50	5
TX04M410211	14.4	66.8	2.50	2.50	2
TX04V075080	14.8	67.7	2.63	2.63	2

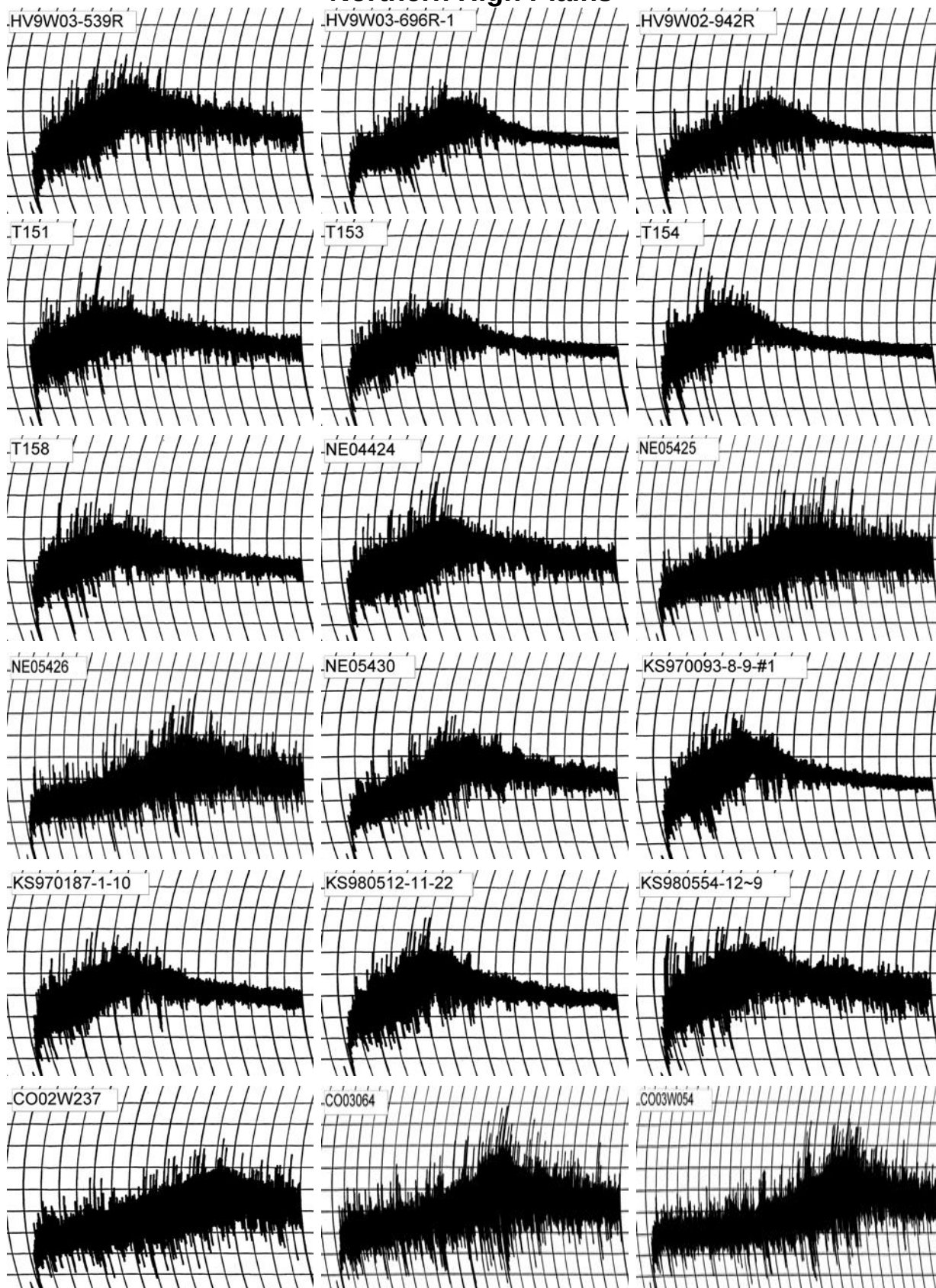
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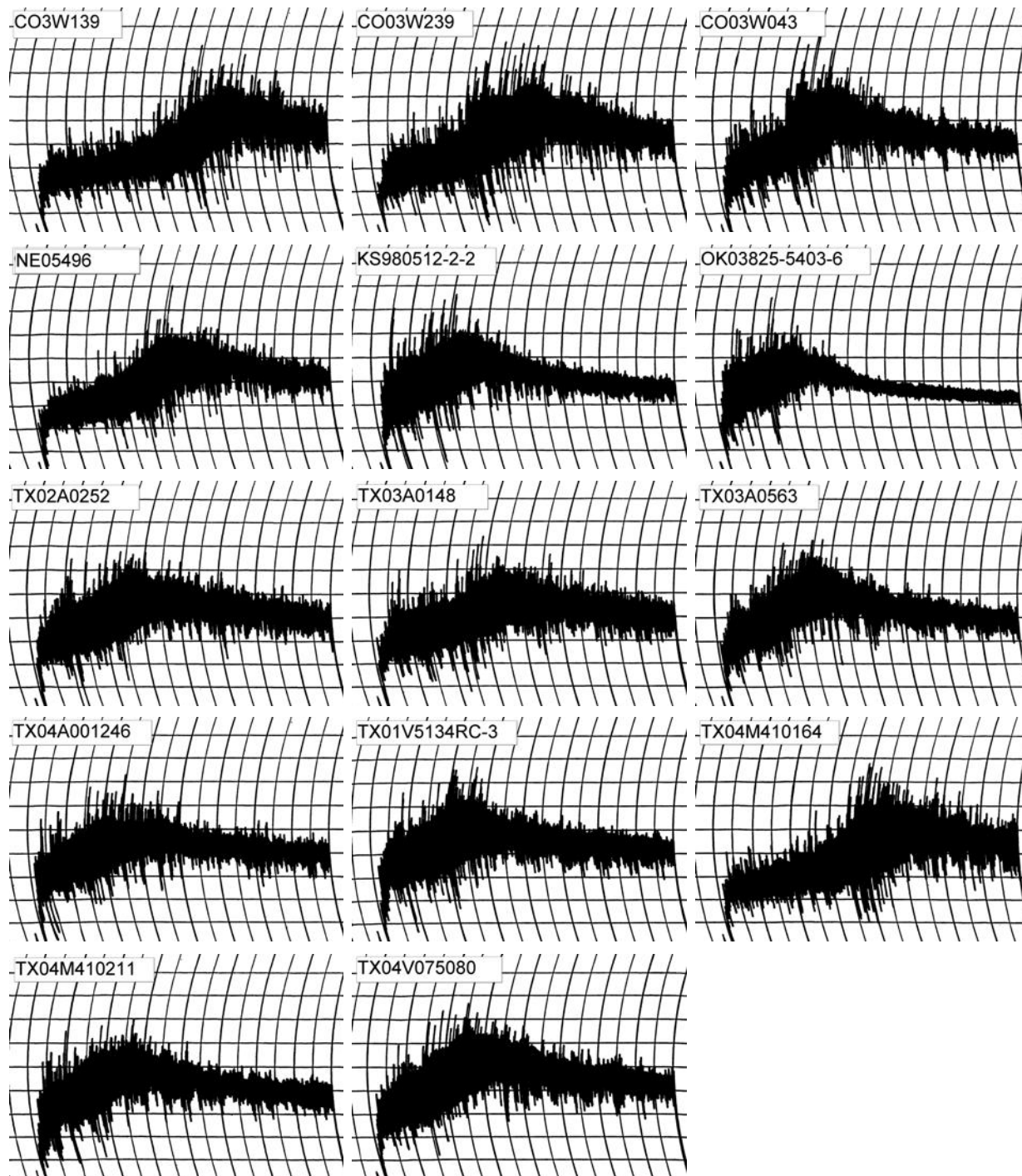
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Line	RVA							Pasting Temp (Deg. C)
	Stirring Number (RVU)	Peak Viscosity (RVU)	Trough Viscosity (RVU)	Breakdown (RVU)	Final Viscosity (RVU)	Set back (RVU)	Peak Time (min)	
Kharkof	152.42	230.42	178.58	51.83	294.17	115.58	6.60	
Scout 66	129.67	215.67	160.83	54.83	281.17	120.33	6.40	
TAM-107	132.92	245.75	187.25	58.50	304.58	117.33	6.67	
Trego	126.58	259.75	183.92	75.83	289.17	105.25	6.60	
OK00514-05806	133.00	242.50	166.75	75.75	287.50	120.75	6.40	
OK05737W	132.42	247.58	177.17	70.42	298.25	121.08	6.47	
OK03522	126.42	210.92	160.42	50.50	286.50	126.08	6.40	
OK03305	103.67	248.17	157.42	90.75	265.92	108.50	6.33	
OK04505	127.42	226.25	163.08	63.17	281.67	118.58	6.47	
AP04T8211	154.83	243.17	190.00	53.17	302.33	112.33	6.73	
AP05T2413	129.92	215.17	169.00	46.17	287.33	118.33	6.60	
AP05TW2821	149.42	239.00	177.75	61.25	290.17	112.42	6.60	
AP06T3832	146.33	244.42	179.83	64.58	297.33	117.50	6.60	
KS05HW15-2	138.17	237.00	176.17	60.83	301.83	125.67	6.53	
KS05HW121-2	122.75	263.25	178.08	85.17	276.33	98.25	6.47	
KS05HW122-5	119.25	267.33	173.75	93.58	273.58	99.83	6.40	
KS05HW136-3	126.75	266.17	176.75	89.42	283.58	106.83	6.47	
HV9W96-1271R-1	124.83	219.92	160.67	59.25	285.83	125.17	6.33	
HV9W03-539R	148.08	234.33	181.92	52.42	294.25	112.33	6.73	
HV9W03-696R-1	139.50	193.67	153.33	40.33	270.42	117.08	6.47	
HV9W02-942R	126.83	214.42	159.92	54.50	277.17	117.25	6.47	
T151	126.83	245.67	185.92	59.75	307.67	121.75	6.60	
T153	133.75	241.50	181.08	60.42	301.42	120.33	6.60	
T154	135.33	235.08	177.50	57.58	299.17	121.67	6.53	
T158	122.92	242.83	178.08	64.75	296.67	118.58	6.53	
NE04424	140.33	207.17	160.00	47.17	276.42	116.42	6.47	
NE05425	132.75	224.83	164.50	60.33	286.33	121.83	6.40	
NE05426	130.42	230.92	166.92	64.00	290.92	124.00	6.40	
NE05430	157.25	243.17	186.58	56.58	291.58	105.00	6.73	
KS970093-8-9-#1	181.75	243.67	200.42	43.25	307.25	106.83	6.80	
KS970187-1-10	130.75	240.42	176.58	63.83	284.58	108.00	6.67	
KS980512-11-22	127.92	224.58	162.50	62.08	282.08	119.58	6.47	
KS980554-12-~9	136.67	224.25	173.17	51.08	290.25	117.08	6.53	
CO02W237	140.83	275.00	197.25	77.75	328.25	131.00	6.53	
CO03064	135.83	218.42	172.58	45.83	307.58	135.00	6.40	
CO03W054	138.67	240.83	182.92	57.92	306.42	123.50	6.60	
CO03W139	117.75	236.75	170.17	66.58	298.42	128.25	6.40	
CO03W239	103.67	254.92	170.75	84.17	287.50	116.75	6.47	
CO03W043	138.92	232.00	168.67	63.33	293.50	124.83	6.40	
NE05496	140.75	261.08	186.58	74.50	291.25	104.67	6.53	
KS980512-2-2	126.75	241.08	175.08	66.00	297.92	122.83	6.47	
OK03825-5403-6	140.58	223.83	170.33	53.50	271.92	101.58	6.67	
TX02A0252	135.92	219.08	168.00	51.08	289.08	121.08	6.47	
TX03A0148	142.92	247.75	187.42	60.33	308.17	120.75	6.53	
TX03A0563	135.67	215.33	168.92	46.42	295.50	126.58	6.40	
TX04A001246	134.25	264.17	195.83	68.33	306.75	110.92	6.60	

RVA								
Line	Stirring Number (RVU)	Peak Viscosity (RVU)	Trough Viscosity (RVU)	Breakdown (RVU)	Final Viscosity (RVU)	Set back (RVU)	Peak Time (min)	Pasting Temp (Deg. C)
TX01V5134RC-3	140.42	217.67	167.92	49.75	287.25	119.33	6.53	
TX04M410164	131.33	219.42	166.25	53.17	280.00	113.75	6.47	
TX04M410211	119.00	240.92	161.33	79.58	257.83	96.50	6.40	
TX04V075080	117.00	240.00	148.33	91.67	245.25	96.92	6.40	

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Line	Flour		Mix Time		Dough					
	Protein	Water Abs.	As-is	Corrected	Weight	Proof Height	Crumb Grain	As-Rec'd.	Specific Volume	Loaf Volume Potential
	(%)	(%)	(min)	(min)	(g)	(cm)		(cc)	(cc/g)	(cc/%)
Kharkof	13.7	62.4	4.50	4.50	171.9	7.6	4.5	935	6.3	60
Scout 66	13.6	63.5	3.50	3.50	172.7	7.7	4.0	925	6.1	59
TAM-107	13.5	62.9	3.63	3.63	172.1	7.8	2.0	940	6.3	61
Trego	13.3	59.5	2.88	2.88	168.7	7.1	2.0	880	6.0	56
OK00514-05806	14.0	63.6	4.25	4.25	168.7	7.3	4.0	945	6.3	59
OK05737W	14.3	64.4	3.75	3.75	173.0	7.5	4.0	950	6.3	58
OK03522	13.6	64.8	4.13	4.13	173.5	7.5	3.0	940	6.2	60
OK03305	12.4	61.7	3.75	3.75	171.3	7.2	4.0	905	6.0	65
OK04505	13.7	61.0	3.38	3.38	170.5	7.5	4.0	925	6.2	58
AP04T8211	13.8	63.6	3.50	3.50	172.4	7.4	4.2	900	6.0	56
AP05T2413	14.7	61.5	2.50	2.50	170.6	7.4	1.0	870	5.9	49
AP05TW2821	13.1	61.7	3.50	3.50	171.0	7.5	4.5	975	6.6	67
AP06T3832	13.3	62.4	4.00	4.00	171.8	7.6	3.0	1000	6.8	68
KS05HW15-2	14.1	64.6	3.50	3.50	174.0	7.6	3.5	930	6.2	57
KS05HW121-2	13.4	65.4	4.75	4.75	174.3	7.6	3.5	990	6.6	67
KS05HW122-5	13.3	64.6	4.50	4.50	173.2	7.5	3.5	950	6.3	63
KS05HW136-3	13.4	63.2	4.25	4.25	171.8	7.8	4.5	1025	6.8	70
HV9W96-1271R-1	13.9	61.4	3.50	3.50	170.4	7.5	4.0	1000	6.7	64
HV9W03-539R	14.4	63.7	3.63	3.63	172.6	7.3	3.8	960	6.4	58
HV9W03-696R-1	13.1	61.5	3.63	3.63	170.6	7.2	3.0	890	6.0	58
HV9W02-942R	13.7	62.9	3.25	3.25	172.0	7.4	2.8	900	6.0	56
T151	12.9	62.1	3.00	3.00	171.5	7.0	2.5	880	5.8	58
T153	13.0	61.7	2.75	2.75	170.9	7.3	2.0	875	5.8	58
T154	13.1	62.6	2.50	2.50	170.2	7.0	2.0	870	5.8	56
T158	12.6	62.7	2.63	2.63	172.2	6.9	2.0	860	5.7	58
NE04424	13.1	62.6	3.75	3.75	171.7	8.0	4.0	1000	6.7	69
NE05425	13.6	65.8	6.25	6.25	173.1	8.1	4.5	1025	6.8	69
NE05426	13.7	65.0	7.88	7.88	174.2	8.1	4.0	1030	6.9	68
NE05430	13.6	63.1	3.75	3.75	172.3	8.1	4.5	1040	7.0	70
KS970093-8-9-#1	13.6	61.9	2.50	2.50	170.9	7.9	3.0	890	6.0	56
KS970187-1-10	14.8	61.4	3.25	3.25	170.5	8.1	3.2	960	6.5	56
KS980512-11-22	13.9	60.6	2.88	2.88	170.0	7.6	3.0	935	6.3	58
KS980554-12--9	13.0	65.3	3.75	3.75	174.8	7.8	2.5	950	6.3	65
CO02W237	13.1	64.7	7.25	7.25	173.5	7.9	4.5	1060	7.1	75
CO03064	13.1	65.7	9.50	9.50	173.6	8.0	4.0	1050	7.0	74
CO03W054	12.6	65.0	12.50	12.50	173.5	8.2	4.0	1020	6.8	75
CO03W139	13.6	65.2	7.00	7.00	173.9	8.0	4.0	1075	7.2	73
CO03W239	12.9	64.3	5.38	5.38	173.3	7.9	3.5	1005	6.7	71
CO03W043	13.5	63.2	3.50	3.50	173.6	8.0	4.0	1015	6.8	68
NE05496	13.6	64.1	4.88	4.88	172.6	8.0	3.0	1005	6.7	67
KS980512-2-2	12.6	62.3	2.50	2.50	171.2	7.8	2.0	935	6.3	66
OK03825-5403-6	13.6	61.4	2.75	2.75	170.9	7.6	2.0	885	5.9	55
TX02A0252	13.0	64.2	4.00	4.00	173.4	8.0	3.0	1005	6.6	71
TX03A0148	12.5	63.2	3.75	3.75	172.6	7.6	2.5	925	6.1	66

Line	Flour		Mix Time		Dough					
	Protein	Water Abs.	As-is	Corrected	Weight	Proof Height	Crumb Grain	As-Rec'd.	Specific Volume	Loaf Volume Potential
	(%)	(%)	(min)	(min)	(g)	(cm)		(cc)	(cc/g)	(cc/%)
TX03A0563	13.6	63.6	3.50	3.50	173.0	7.5	3.5	1015	6.7	68
TX04A001246	13.0	64.2	3.38	3.38	174.0	8.0	3.0	965	6.4	66
TX01V5134RC-3	13.4	64.5	3.13	3.13	174.3	7.5	3.0	920	6.0	60
TX04M410164	13.9	64.3	5.50	5.50	170.1	8.0	4.0	1065	7.3	70
TX04M410211	14.4	63.3	2.75	2.75	173.5	7.7	2.5	1020	6.8	63
TX04V075080	14.8	67.2	3.50	3.50	176.4	8.1	3.2	1075	7.1	65



Hard Winter Wheat Quality Report 2008 SRPN-SCP

1 - Test weight	10	11 - Flour protein	8
2 - SKCS kernel weight	8	12 - Bake absorption	15
3 - Kernel weight SD	8	13 - Mixograph absorption	5
4 - SKCS kernel diameter	8	14 - Bake mix time	10
5 - Kernel diameter SD	8	15 - Mixograph mix time	5
6 - SKCS hardness	10	16 - Mixograph tolerance	5
7 - Hardness SD	8	17 - Dough weight	
8 - Flour yield	30	18 - Proof height	2
9 - Flour ash	10	19 - Loaf volume	20
10 - Milling score		20 - Volume regression	5
		21 - Crumb grain	25

ID	Milling Score	Rating	%	Baking Score	Rating	%	1RS	Trait Deficiencies
Kharkof	44.1	Very Poor	67.9	60.2	Very Good	100.0		2,4,8,9,10,
Scout66	56.6	Good	87.3	48.9	Good	81.2		
TAM 107	52.6	Very Poor	81.1	39.5	Poor	65.6	1AL	
Trego	56.4	Good	86.9	29.0	Very Poor	48.2		16,
OK00514-05806	61.3	Very Good	94.5	52.5	Very Good	87.1		20,
OK05737W	55.2	Average	85.0	47.4	Good	78.7		1,20,
Billings	64.9	Very Good	100.0	42.6	Average	70.7		
Pete	62.4	Very Good	96.1	38.4	Poor	63.9		
OK04505	51.8	Very Poor	79.8	48.5	Good	80.6		12,17,
Jackpot	58.8	Very Good	90.6	33.6	Very Poor	55.9		5,
AP05T2413	54.5	Poor	84.0	53.9	Very Good	89.5	1AL	
AP05TW2821	54.8	Average	84.5	50.6	Good	84.0		1,
AP06T3832	53.4	Poor	82.3	52.8	Good	87.7		1,
KS05HW15-2	57.4	Good	88.5	53.0	Good	88.1		
KS05HW121-2	60.4	Very Good	93.1	51.4	Good	85.4		
KS05HW122-5	60.6	Very Good	93.4	53.3	Very Good	88.6		10,
Tiger	54.6	Poor	84.1	46.8	Good	77.7		14,15,
Armour	55.8	Average	86.0	39.3	Poor	65.3	1AL	
HV9W03-539R	50.3	Very Poor	77.5	58.7	Very Good	97.5		1,5,
HV9W03-696R-1	60.0	Very Good	92.5	41.3	Average	68.6	1BL	4,21,
Hitch	53.1	Very Poor	81.8	36.7	Poor	61.0	1BL	8,16,
T151	53.6	Poor	82.6	32.5	Very Poor	54.0	1AL	5,13,18,
T153	51.7	Very Poor	79.7	38.4	Poor	63.7	1AL	11,21,
T154	54.8	Poor	84.5	43.5	Average	72.3	1AL	13,16,
T158	57.0	Good	87.9	27.2	Very Poor	45.2	1AL	11,12,13,16,18,
NE04424	54.2	Poor	83.6	42.3	Average	70.2	1BL	
NE05425	58.3	Good	89.8	27.7	Very Poor	46.0		14,15,
NE05426	55.1	Average	85.0	44.1	Average	73.3		14,15,
NE05430	54.9	Average	84.6	35.5	Poor	58.9		
KS970093-8-9-#1	56.2	Average	86.6	39.4	Poor	65.5		16,

Quality scores and ratings are calculated directly from the relative trait weightings (printed at the top of the page) and are applicable only to the nursery selected.



Hard Winter Wheat Quality Report 2008 SRPN-SCP

1 - Test weight	10	11 - Flour protein	8
2 - SKCS kernel weight	8	12 - Bake absorption	15
3 - Kernel weight SD	8	13 - Mixograph absorption	5
4 - SKCS kernel diameter	8	14 - Bake mix time	10
5 - Kernel diameter SD	8	15 - Mixograph mix time	5
6 - SKCS hardness	10	16 - Mixograph tolerance	5
7 - Hardness SD	8	17 - Dough weight	
8 - Flour yield	30	18 - Proof height	2
9 - Flour ash	10	19 - Loaf volume	20
10 - Milling score		20 - Volume regression	5
		21 - Crumb grain	25

ID	Milling Score	Rating	%	Baking Score	Rating	%	1RS	Trait Deficiencies
KS970187-1-10	54.0	Poor	83.2	58.8	Very Good	97.6		8,
KS980512-11-22	56.3	Good	86.8	37.7	Poor	62.7		
KS980554-12--9	50.8	Very Poor	78.3	30.4	Very Poor	50.5		8,19,
CO02W237	49.7	Very Poor	76.6	26.9	Very Poor	44.7		2,4,14,15,
CO03064	53.6	Poor	82.6	40.1	Poor	66.5		14,15,
CO03W054	49.1	Very Poor	75.7	28.4	Very Poor	47.2		8,9,10,14,15,
CO03W139	47.0	Very Poor	72.4	41.8	Average	69.5		8,14,15,
Thunder CL	54.2	Poor	83.6	27.6	Very Poor	45.8		14,15,
CO03W043	55.8	Average	86.0	57.8	Very Good	96.0		
NE05496	56.3	Average	86.7	43.8	Average	72.8		20,
KS980512-2-2	56.7	Good	87.5	33.7	Very Poor	56.1		16,
STARS0601W	59.9	Very Good	92.3	42.4	Average	70.5	1BL	19,20,
TX02A0252	55.8	Average	86.0	53.7	Very Good	89.2		
TX03A0148	59.7	Very Good	92.1	37.2	Poor	61.7		1,20,
TX03A0563	57.7	Good	88.9	52.8	Very Good	87.8		
TX04A001246	56.2	Average	86.6	57.6	Very Good	95.7	1AL	9,
TX01V5134RC-3	56.5	Good	87.0	49.1	Good	81.5	1AL	9,
TX04M410164	57.7	Good	89.0	45.0	Average	74.8		14,15,
TX04M410211	60.5	Very Good	93.3	50.9	Good	84.5	1BL	
TX04V075080	54.7	Poor	84.2	43.7	Average	72.6		

2008 SRPN Intraregional Production Zone

South Central Plains

LINE	Wt/Bu (lb)	SKCS Average Kernel						Hardness			
		Moisture		Weight		Diameter		SKCS	Class	Distribution	
		(%)	(sd)	(mg)	(sd)	(mm)	(sd)				
								(sd)			
Kharkof	58.9	11.3	0.4	24.9	6.1	2.49	0.24	47 21	MIXED	25--24--26--25--03	
Scout 66	59.2	11.3	0.5	29.1	8.4	2.64	0.31	57 19	HARD	07--19--30--44--02	
TAM-107	57.5	11.2	0.4	29.7	8.2	2.64	0.34	60 21	HARD	08--19--24--49--02	
Trego	59.8	11.4	0.4	28.3	7.5	2.62	0.31	66 21	HARD	06--14--19--61--02	
OK00514-05806	60.3	11.2	0.4	29.6	8.2	2.71	0.34	75 17	HARD	01--03--14--82--01	
OK05737W	57.4	11.2	0.5	29.4	7.9	2.67	0.33	60 19	HARD	06--18--24--52--02	
OK03522	60.2	10.8	0.5	34.0	8.6	2.80	0.30	70 18	HARD	01--06--19--74--01	
OK03305	60.7	11.5	0.4	32.3	8.6	2.71	0.31	59 19	HARD	07--22--22--49--02	
OK04505	58.0	11.5	0.5	27.6	8.9	2.61	0.33	62 20	HARD	07--11--28--54--02	
AP04T8211	59.0	11.4	0.5	31.8	9.0	2.75	0.35	64 19	HARD	04--14--24--58--01	
AP05T2413	59.0	11.7	0.4	32.6	8.9	2.77	0.35	62 19	HARD	05--17--24--54--01	
AP05TW2821	57.1	11.9	0.6	28.1	7.2	2.62	0.31	63 18	HARD	03--15--26--56--01	
AP06T3832	57.3	11.2	0.4	29.7	8.5	2.64	0.32	59 18	HARD	06--19--28--47--02	
KS05HW15-2	60.5	11.4	0.4	29.1	8.5	2.66	0.31	64 19	HARD	05--14--25--56--01	
KS05HW121-2	60.2	11.4	0.4	31.2	8.5	2.72	0.33	64 17	HARD	04--10--28--58--01	
KS05HW122-5	59.8	11.6	0.4	30.3	8.4	2.72	0.35	66 18	HARD	03--10--26--61--01	
KS05HW136-3	59.0	11.5	0.5	29.3	8.6	2.66	0.32	59 20	HARD	10--18--24--48--02	
HV9W96-1271R-1	57.9	12.0	0.5	27.9	8.1	2.55	0.31	62 18	HARD	03--19--22--56--01	
HV9W03-539R	57.3	11.6	0.5	29.5	8.2	2.67	0.35	70 19	HARD	01--09--19--71--01	
HV9W03-696R-1	58.8	11.8	0.5	25.9	7.2	2.53	0.28	64 19	HARD	05--14--25--56--01	
HV9W02-942R	57.9	11.6	0.6	26.8	6.6	2.62	0.27	69 18	HARD	02--06--25--67--01	
T151	59.1	11.6	0.4	29.1	8.9	2.59	0.35	65 20	HARD	05--14--23--58--01	
T153	58.9	11.4	0.5	30.1	8.8	2.66	0.33	65 21	HARD	05--12--24--59--01	
T154	59.4	11.5	0.5	29.5	7.9	2.65	0.30	66 18	HARD	03--09--27--61--01	
T158	59.3	11.5	0.4	31.6	9.1	2.70	0.34	58 19	HARD	10--18--26--46--02	
NE04424	59.4	11.7	0.5	29.3	8.6	2.69	0.34	62 20	HARD	05--17--25--53--01	
NE05425	59.6	11.5	0.4	28.9	8.1	2.65	0.32	67 19	HARD	02--14--18--66--01	
NE05426	59.5	11.4	0.4	28.4	8.5	2.61	0.32	65 19	HARD	03--15--26--56--01	
NE05430	60.0	11.2	0.5	25.9	7.6	2.57	0.30	62 19	HARD	05--18--27--50--01	
KS970093-8-9-#1	60.4	11.4	0.4	30.2	7.6	2.69	0.31	57 20	HARD	10--22--27--41--02	
KS970187-1-10	59.6	11.3	0.5	26.5	6.2	2.61	0.28	66 19	HARD	02--12--22--64--01	
KS980512-11-22	57.9	11.4	0.4	26.9	7.4	2.62	0.31	57 16	HARD	06--18--34--42--02	
KS980554-12--9	58.5	11.6	0.5	28.3	7.5	2.62	0.28	73 19	HARD	01--06--20--73--01	
CO02W237	58.6	11.4	0.4	25.8	7.2	2.52	0.28	47 18	MIXED	21--32--22--25--03	
CO03064	58.0	11.7	0.4	27.6	7.1	2.58	0.28	63 19	HARD	05--13--25--57--01	
CO03W054	59.0	11.7	0.4	28.3	9.1	2.65	0.33	70 18	HARD	02--10--18--70--01	
CO03W139	58.2	11.7	0.5	26.7	8.1	2.57	0.30	58 20	MIXED	11--19--24--46--03	
CO03W239	57.5	11.2	0.4	27.0	7.8	2.57	0.30	64 18	HARD	05--12--23--60--01	
CO03W043	58.8	11.5	0.3	28.6	8.8	2.61	0.33	63 19	HARD	05--14--28--53--01	
NE05496	59.5	11.2	0.4	27.0	6.9	2.62	0.29	63 19	HARD	04--13--32--51--01	
KS980512-2-2	59.6	11.6	0.4	30.6	7.9	2.65	0.31	52 18	MIXED	17--22--28--33--03	
OK03825-5403-6	60.9	11.6	0.4	34.6	8.4	2.83	0.32	60 17	HARD	04--19--28--49--01	
TX02A0252	59.9	11.7	0.4	27.9	8.5	2.60	0.30	60 20	HARD	10--15--22--53--02	
TX03A0148	57.0	11.7	0.4	33.3	0.5	2.75	0.34	63 18	HARD	04--15--26--55--01	
TX03A0563	59.7	11.5	0.5	26.3	7.3	2.60	0.28	62 19	HARD	08--13--26--53--02	

LINE	Wt/Bu (lb)	SKCS Average Kernel						Hardness			
		Moisture		Weight		Diameter		SKCS		Class	Distribution
		(%)	(sd)	(mg)	(sd)	(mm)	(sd)	(sd)			
TX04A001246	59.7	11.8	0.4	30.4	8.4	2.65	0.30	72	19	HARD	02--07--17--74--01
TX01V5134RC-3	60.1	11.8	0.5	28.6	8.3	2.67	0.32	73	19	HARD	01--05--19--75--01
TX04M410164	60.2	11.5	0.4	27.5	8.1	2.61	0.32	59	20	HARD	08--19--28--45--02
TX04M410211	61.0	11.6	0.5	31.3	8.3	2.73	0.30	64	19	HARD	04--14--28--54--01
TX04V075080	58.8	11.7	0.5	31.4	8.7	2.69	0.31	59	19	HARD	08--18--26--48--02

2008 SRPN Intraregional Production Zone

South Central Plains

LINE	Wheat		Flour			Noodle Color					
	Protein	Milling Yield	Ash	Protein	PPO	L @ 0	a @ 0	b @ 0	Delta L 24 hrs	Delta a 24 hrs	Delta b 24 hrs
	(%)	(%)	(%)	(%)							
Kharkof	13.6	65.8	0.51	12.6	0.657	79.77	-1.70	21.69	-9.83	0.93	1.94
Scout 66	12.7	70.6	0.41	11.5	0.664	81.46	-1.70	20.51	-10.57	1.13	2.98
TAM-107	12.3	69.2	0.38	11.0	0.718	80.76	-2.17	24.16	-9.32	1.07	2.22
Trego	12.0	69.0	0.37	10.6	0.722	81.28	-2.32	23.38	-9.17	1.74	0.48
OK00514-05806	12.7	70.8	0.45	11.5	0.551	80.65	-1.70	22.42	-10.44	2.36	0.13
OK05737W	12.9	70.5	0.43	11.7	0.683	81.60	-1.77	21.71	-11.46	2.34	1.09
OK03522	12.6	70.8	0.35	11.2	0.208	81.21	-1.56	20.90	-10.67	2.31	1.19
OK03305	12.0	72.1	0.38	10.8	0.569	80.87	-1.89	21.68	-10.01	2.26	1.07
OK04505	12.6	69.5	0.42	11.1	0.750	80.92	-2.31	24.75	-12.54	1.58	2.22
AP04T8211	12.2	71.1	0.40	11.0	0.643	81.00	-2.20	23.56	-9.47	1.39	0.96
AP05T2413	13.4	68.3	0.40	12.2	0.568	80.40	-2.02	23.68	-11.37	1.53	1.33
AP05TW2821	12.5	69.3	0.41	11.1	0.722	80.92	-1.67	22.07	-10.42	1.45	1.48
AP06T3832	12.6	69.1	0.41	11.2	0.805	81.67	-1.77	21.07	-12.70	1.77	2.43
KS05HW15-2	12.4	69.3	0.36	11.2	0.707	82.40	-1.96	20.57	-9.86	1.84	1.10
KS05HW121-2	12.5	70.5	0.39	11.4	0.210	82.53	-2.35	23.21	-8.17	1.31	1.69
KS05HW122-5	13.6	71.7	0.43	11.3	0.216	81.09	-2.34	25.09	-7.90	1.49	1.62
KS05HW136-3	11.6	69.9	0.39	10.8	0.265	82.75	-2.12	21.25	-8.79	1.82	1.00
HV9W96-1271R-1	12.3	70.9	0.43	10.9	0.870	82.13	-2.39	22.58	-12.50	2.01	1.83
HV9W03-539R	12.8	66.8	0.43	11.5	0.589	80.89	-1.87	22.38	-11.92	2.45	1.52
HV9W03-696R-1	12.1	72.2	0.40	11.3	0.762	81.15	-2.76	25.86	-10.59	2.00	0.39
HV9W02-942R	12.4	66.4	0.42	11.2	0.766	79.56	-2.23	24.69	-11.97	2.30	-0.97
T151	11.6	69.4	0.39	10.6	0.688	80.65	-2.42	25.54	-11.28	2.03	0.29
T153	11.7	67.8	0.41	10.3	0.727	80.59	-2.23	23.34	-10.55	2.14	0.46
T154	12.2	67.5	0.40	10.6	0.693	80.09	-1.87	21.35	-12.06	1.53	3.15
T158	11.3	70.7	0.39	10.2	0.663	81.43	-2.16	22.68	-10.05	1.75	1.10
NE04424	11.7	69.5	0.43	10.8	0.660	82.02	-2.17	21.96	-12.04	2.59	1.18
NE05425	12.1	70.1	0.38	11.0	0.644	81.51	-2.01	22.63	-9.82	2.09	-0.70
NE05426	12.2	69.1	0.39	11.1	0.662	82.37	-1.83	20.62	-10.89	1.84	1.42
NE05430	11.9	69.2	0.41	10.7	0.686	81.66	-2.52	23.59	-9.19	2.57	-1.16
KS970093-8-9-#1	12.3	69.5	0.42	11.0	0.653	80.32	-2.19	24.40	-8.55	2.16	-1.01
KS970187-1-10	13.4	66.4	0.39	12.2	0.655	80.06	-1.96	23.96	-9.50	2.43	-0.26
KS980512-11-22	12.3	69.5	0.38	11.1	0.751	81.09	-2.10	22.60	-10.51	2.21	0.37
KS980554-12--9	11.7	65.5	0.43	10.4	0.254	82.62	-2.18	21.77	-9.81	2.35	0.97
CO02W237	11.7	67.3	0.38	10.4	0.716	82.13	-2.51	22.66	-10.41	2.14	-0.20
CO03064	12.3	68.4	0.42	10.6	0.731	82.42	-2.02	21.02	-9.92	2.46	-0.61
CO03W054	11.8	66.3	0.46	10.6	0.850	83.36	-2.61	22.55	-12.62	2.56	0.11
CO03W139	12.2	65.8	0.39	10.7	0.274	83.00	-2.16	20.86	-9.84	2.44	0.33
CO03W239	12.3	69.0	0.39	10.8	0.902	82.48	-2.34	21.59	-11.72	2.40	0.07
CO03W043	12.5	70.7	0.42	11.3	0.763	81.75	-2.21	22.58	-10.89	2.56	-1.36
NE05496	12.2	69.2	0.42	11.2	0.723	80.43	-2.20	23.93	-10.88	1.76	0.43
KS980512-2-2	12.2	69.4	0.36	10.6	0.699	81.66	-1.85	21.14	-10.55	1.64	1.73
OK03825-5403-6	12.9	68.4	0.37	11.2	0.638	81.82	-1.92	20.61	-11.74	1.63	2.37

LINE	Wheat		Flour			Noodle Color					
	Protein	Milling Yield	Ash	Protein	PPO	L @ 0	a @ 0	b @ 0	Delta L 24 hrs	Delta a 24 hrs	Delta b 24 hrs
	(%)	(%)	(%)	(%)							
TX02A0252	12.1	70.1	0.40	10.7	0.736	81.29	-2.00	22.73	-11.58	1.65	1.55
TX03A0148	12.7	69.3	0.41	11.5	0.531	79.46	-1.95	24.80	-10.70	2.56	-0.74
TX03A0563	12.6	69.7	0.36	11.1	0.612	80.62	-2.14	22.65	-9.87	2.48	-0.61
TX04A001246	12.8	68.8	0.45	11.7	0.552	79.91	-2.21	24.70	-11.52	2.44	0.14
TX01V5134RC-3	12.6	69.4	0.46	11.4	0.707	80.68	-2.28	23.17	-12.13	2.79	0.04
TX04M410164	13.0	71.2	0.39	11.3	0.723	81.04	-2.33	22.47	-11.10	1.39	1.62
TX04M410211	13.1	69.8	0.37	11.5	0.635	81.03	-1.96	20.77	-12.07	1.30	3.24
TX04V075080	13.6	68.9	0.39	11.9	0.848	80.32	-1.81	21.61	-13.80	1.57	3.05

2008 SRPN Intraregional Production Zone

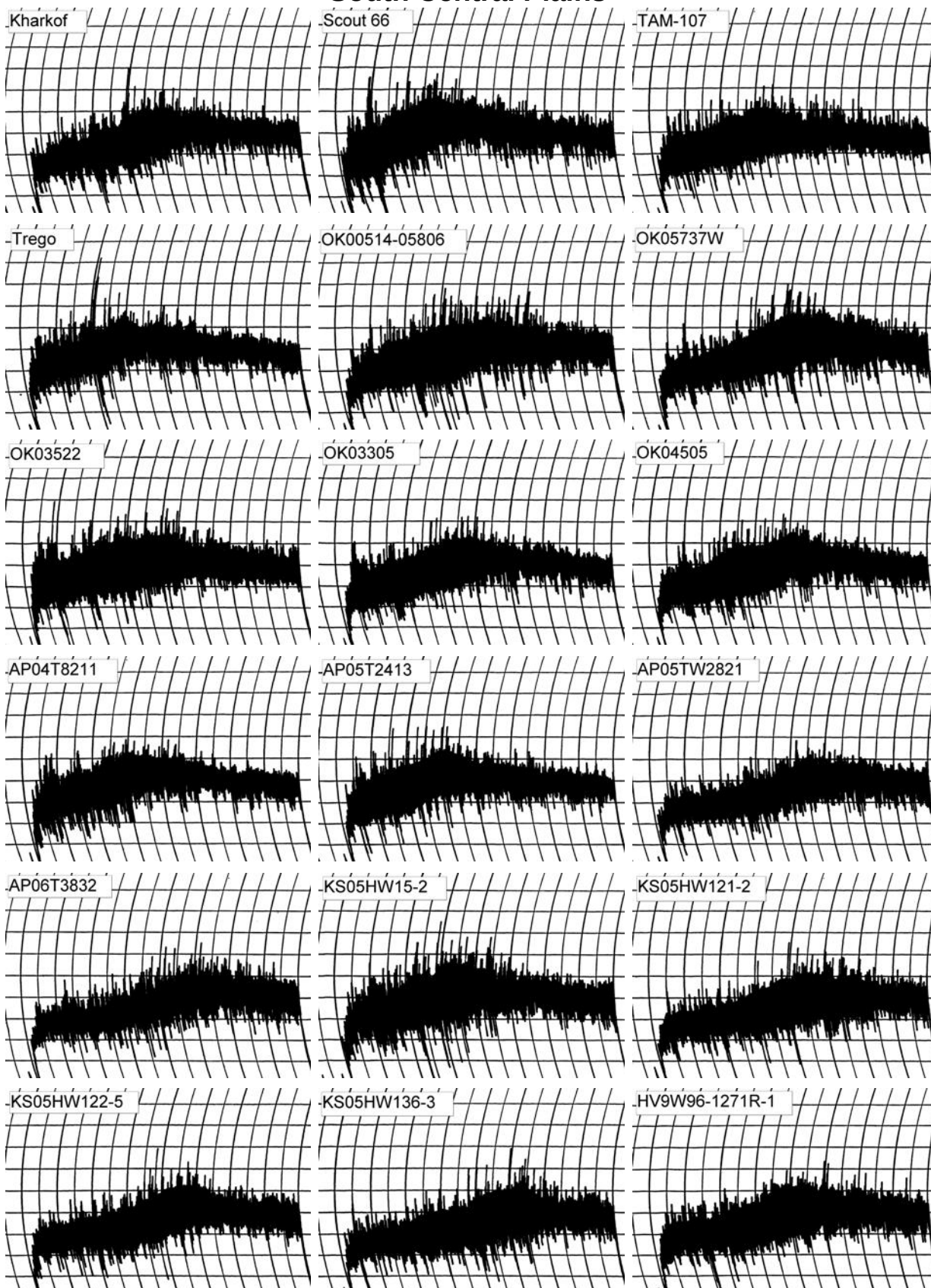
South Central Plains

	Flour Protein	Mixograph			
		Absorption	As-Is	Corrected	Tolerance
Line	(%)	(%)	(min)	(min)	
Kharkof	12.6	63.0	4.00	4.00	4
Scout 66	11.5	62.1	2.88	2.71	3
TAM-107	11.0	61.3	3.50	3.10	3
Trego	10.6	59.6	3.00	2.49	2
OK00514-05806	11.5	62.2	4.50	4.24	4
OK05737W	11.7	62.5	4.50	4.36	4
OK03522	11.2	61.7	4.25	3.86	4
OK03305	10.8	61.0	3.88	3.34	4
OK04505	11.1	60.3	4.25	3.77	3
AP04T8211	11.0	60.2	3.00	2.63	3
AP05T2413	12.2	63.3	3.00	3.00	3
AP05TW2821	11.1	60.4	4.75	4.23	3
AP06T3832	11.2	61.5	5.13	4.63	4
KS05HW15-2	11.2	61.7	3.88	3.52	4
KS05HW121-2	11.4	61.9	5.00	4.62	4
KS05HW122-5	11.3	61.8	4.88	4.48	4
KS05HW136-3	10.8	60.8	5.50	4.68	4
HV9W96-1271R-1	10.9	61.2	4.38	3.82	4
HV9W03-539R	11.5	62.0	4.50	4.21	4
HV9W03-696R-1	11.3	59.7	4.00	3.64	3
HV9W02-942R	11.2	60.1	3.88	3.49	2
T151	10.6	59.0	3.63	3.01	3
T153	10.3	60.1	4.00	3.19	3
T154	10.6	59.1	2.88	2.39	2
T158	10.2	58.4	3.50	2.72	2
NE04424	10.8	60.9	4.13	3.51	4
NE05425	11.0	61.4	7.00	6.19	6
NE05426	11.1	61.4	7.63	6.79	6
NE05430	10.7	60.8	4.13	3.49	4
KS970093-8-9-#1	11.0	61.3	2.88	2.52	2
KS970187-1-10	12.2	63.2	3.75	3.75	4
KS980512-11-22	11.1	61.4	3.38	3.00	3
KS980554-12--9	10.4	60.3	4.25	3.44	4
CO02W237	10.4	60.2	6.13	4.92	4
CO03064	10.6	60.6	8.13	6.73	5
CO03W054	10.6	60.6	0.75	8.91	6
CO03W139	10.7	60.8	6.50	5.52	4
CO03W239	10.8	61.0	5.25	4.52	4
CO03W043	11.3	61.7	3.50	3.19	4
NE05496	11.2	61.6	4.25	3.83	4
KS980512-2-2	10.6	60.6	3.00	2.48	2
OK03825-5403-6	11.2	60.6	4.13	3.76	3

	Flour Protein	Mixograph			
		Absorption	As-Is	Corrected	Tolerance
Line	(%)	(%)	(min)	(min)	
TX02A0252	10.7	60.8	4.38	3.71	4
TX03A0148	11.5	62.0	3.50	3.27	4
TX03A0563	11.1	61.5	3.50	3.14	4
TX04A001246	11.7	62.4	3.63	3.48	4
TX01V5134RC-3	11.4	61.9	3.75	3.48	4
TX04M410164	11.3	61.8	6.00	5.53	4
TX04M410211	11.5	62.2	3.50	3.30	4
TX04V075080	11.9	62.8	3.63	3.60	4

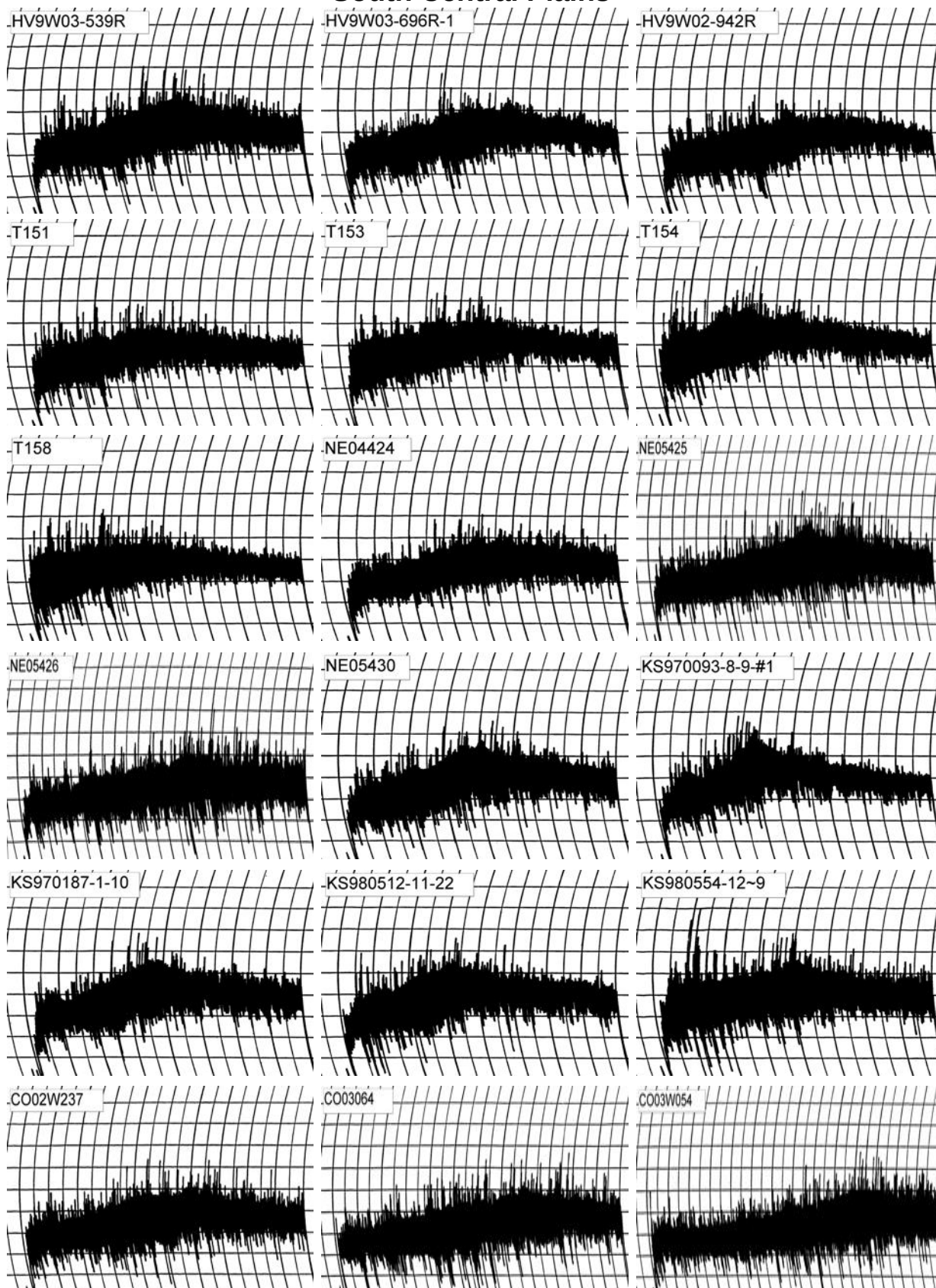
2008 SRPN Intraregional Production Zone

South Central Plains

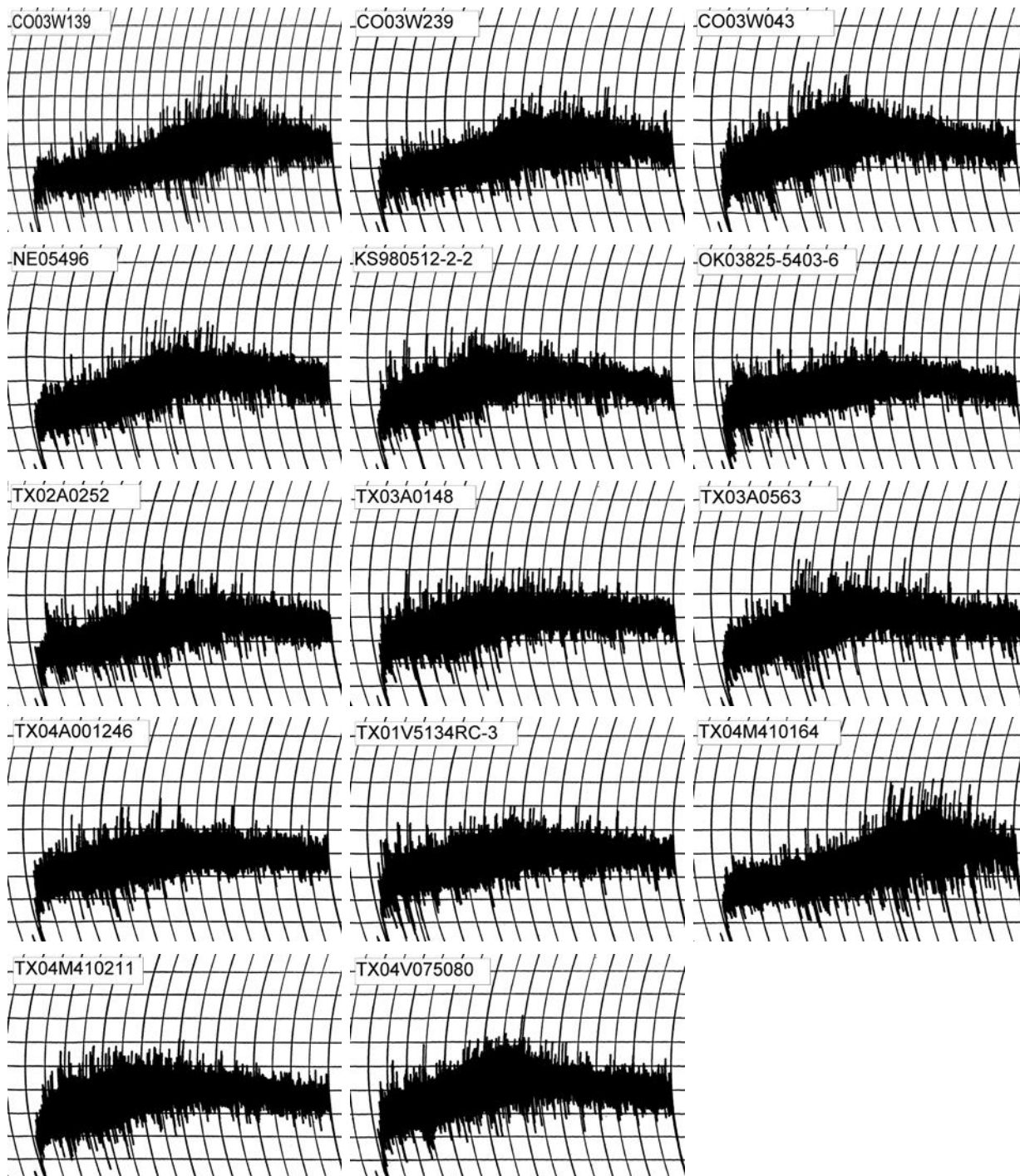


2008 SRPN Intraregional Production Zone

South Central Plains



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Line	RVA							Pasting Temp (Deg. C)
	Stirring Number (RVU)	Peak Viscosity (RVU)	Trough Viscosity (RVU)	Breakdown (RVU)	Final Viscosity (RVU)	Set back (RVU)	Peak Time (min)	
Kharkof	123.83	239.08	163.00	76.08	274.75	111.75	6.40	
Scout 66	95.33	215.50	134.83	80.67	245.08	110.25	6.13	
TAM-107	118.92	256.92	167.83	89.08	286.92	119.08	6.40	
Trego	75.33	180.75	77.25	103.50	155.00	77.75	5.80	
OK00514-05806	116.75	232.92	142.42	90.50	257.67	115.25	6.20	
OK05737W	111.25	218.75	126.17	92.58	234.08	107.92	6.00	
OK03522	61.00	108.58	37.58	71.00	88.75	51.17	5.13	
OK03305	79.17	168.42	71.50	96.92	145.33	73.83	5.60	
OK04505	110.08	206.00	120.75	85.25	226.50	105.75	6.07	
AP04T8211	118.42	253.58	167.92	85.67	288.25	120.33	6.40	
AP05T2413	131.08	251.75	174.92	76.83	304.92	130.00	6.40	
AP05TW2821	108.42	202.25	111.42	90.83	208.50	97.08	6.00	
AP06T3832	111.25	242.67	151.75	90.92	267.33	115.58	6.27	
KS05HW15-2	87.75	145.33	66.42	78.92	144.75	78.33	5.60	
KS05HW121-2	93.75	206.42	98.25	108.17	177.83	79.58	5.93	
KS05HW122-5	88.92	184.92	79.50	105.42	152.83	73.33	5.80	
KS05HW136-3	44.75	106.00	17.33	88.67	42.42	25.08	4.87	
HV9W96-1271R-1	78.75	149.25	69.67	79.58	151.00	81.33	5.53	
HV9W03-539R	128.92	230.50	151.25	79.25	263.67	112.42	6.33	
HV9W03-696R-1	117.75	195.83	134.33	61.50	249.58	115.25	6.20	
HV9W02-942R	120.08	226.67	148.83	77.83	268.67	119.83	6.20	
T151	100.50	251.33	160.67	90.67	285.08	124.42	6.27	
T153	118.50	247.58	161.83	85.75	281.83	120.00	6.33	
T154	107.42	235.75	151.75	84.00	271.33	119.58	6.20	
T158	115.25	252.92	162.83	90.08	286.00	123.17	6.27	
NE04424	119.42	203.33	141.67	61.67	258.00	116.33	6.27	
NE05425	114.92	187.75	104.33	83.42	201.17	96.83	5.93	
NE05426	112.25	184.67	98.00	86.67	193.58	95.58	5.87	
NE05430	106.42	247.75	165.58	82.17	276.33	110.75	6.40	
KS970093-8-9-#1	160.83	262.67	195.42	67.25	310.58	115.17	6.60	
KS970187-1-10	130.25	270.42	186.08	84.33	296.92	110.83	6.60	
KS980512-11-22	113.50	244.83	163.08	81.75	287.00	123.92	6.27	
KS980554-12-~9	135.33	239.08	159.67	79.42	283.42	123.75	6.33	
CO02W237	84.58	172.50	74.08	98.42	156.92	82.83	5.60	
CO03064	122.25	210.50	134.17	76.33	254.17	120.00	6.07	
CO03W054	121.17	210.42	126.58	83.83	239.50	112.92	6.13	
CO03W139	81.75	162.58	79.58	83.00	170.83	91.25	5.67	
CO03W239	68.42	146.67	51.42	95.25	118.17	66.75	5.40	
CO03W043	100.58	191.33	107.17	84.17	208.83	101.67	5.93	
NE05496	122.67	255.83	168.00	87.83	276.58	108.58	6.40	
KS980512-2-2	95.17	162.33	79.00	83.33	165.00	86.00	5.67	
OK03825-5403-6	112.00	224.17	138.92	85.25	240.50	101.58	6.33	
TX02A0252	114.25	234.17	157.25	76.92	286.42	129.17	6.27	
TX03A0148	132.25	234.58	155.83	78.75	271.67	115.83	6.33	
TX03A0563	115.00	221.17	151.67	69.50	279.08	127.42	6.20	
TX04A001246	116.33	223.58	131.75	91.83	232.75	101.00	6.27	

RVA								
Line	Stirring Number (RVU)	Peak Viscosity (RVU)	Trough Viscosity (RVU)	Breakdown (RVU)	Final Viscosity (RVU)	Set back (RVU)	Peak Time (min)	Pasting Temp (Deg. C)
TX01V5134RC-3	109.25	227.58	149.83	77.75	268.17	118.33	6.27	
TX04M410164	77.50	117.25	43.92	73.33	100.75	56.83	5.27	
TX04M410211	88.25	211.92	113.58	98.33	198.17	84.58	6.07	
TX04V075080	100.92	247.33	128.08	119.25	226.67	98.58	6.13	

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Line	Flour		Mix Time		Dough					
	Protein	Water Abs.	As-is	Corrected	Weight	Proof Height	Crumb Grain	As-Rec'd.	Specific Volume	Loaf Volume Potential
	(%)	(%)	(min)	(min)	(g)	(cm)		(cc)	(cc/g)	(cc/%)
Kharkof	12.6	61.8	5.00	5.00	170.7	7.5	4.0	955	6.4	68
Scout 66	11.5	62.0	3.38	3.18	171.1	7.3	4.0	890	6.1	69
TAM-107	11.0	62.1	4.63	4.09	171.2	7.0	3.8	900	6.0	74
Trego	10.6	59.9	4.00	3.32	169.3	6.9	3.5	840	5.6	70
OK00514-05806	11.5	62.5	4.75	4.47	171.6	7.0	4.0	850	5.7	64
OK05737W	11.7	62.9	5.50	5.33	170.9	7.4	3.0	860	5.8	64
OK03522	11.2	62.7	5.25	4.77	171.5	7.6	2.5	930	6.3	76
OK03305	10.8	59.8	4.50	3.88	169.0	7.2	3.8	900	6.2	76
OK04505	11.1	58.8	4.13	3.66	168.0	7.2	4.0	890	6.1	73
AP04T8211	11.0	59.9	4.00	3.51	169.2	7.4	3.5	890	6.1	73
AP05T2413	12.2	60.9	3.75	3.75	170.2	7.4	4.0	955	6.4	71
AP05TW2821	11.1	60.1	5.25	4.67	169.4	7.4	4.0	900	6.1	74
AP06T3832	11.2	61.7	6.00	5.42	170.4	7.4	4.0	950	6.4	79
KS05HW15-2	11.2	61.9	5.75	5.21	170.9	7.2	4.0	885	5.9	71
KS05HW121-2	11.4	61.9	6.75	6.24	170.4	7.4	4.0	960	6.5	79
KS05HW122-5	11.3	59.8	5.75	5.28	168.8	7.6	4.0	960	6.6	79
KS05HW136-3	10.8	60.7	7.38	6.29	169.0	7.5	4.0	960	6.6	84
HV9W96-1271R-1	10.9	60.6	5.75	5.01	170.5	7.5	3.8	945	6.4	81
HV9W03-539R	11.5	62.1	5.25	4.92	171.4	7.7	4.0	965	6.5	78
HV9W03-696R-1	11.3	60.6	5.13	4.67	169.3	7.3	2.0	870	5.8	69
HV9W02-942R	11.2	60.6	5.00	4.50	169.5	7.3	2.5	880	5.9	71
T151	10.6	59.7	4.13	3.42	168.7	6.7	2.5	855	5.7	73
T153	10.3	60.2	4.00	3.19	169.4	7.0	2.0	865	5.8	76
T154	10.6	60.0	4.13	3.43	168.9	7.3	3.0	905	6.1	79
T158	10.2	59.1	3.50	2.72	169.0	6.7	2.5	835	5.6	74
NE04424	10.8	60.5	6.63	5.64	169.3	7.1	3.0	870	5.8	73
NE05425	11.0	61.7	10.00	8.84	169.9	7.1	3.5	875	5.9	71
NE05426	11.1	61.8	9.75	8.68	170.3	7.1	4.0	900	6.1	74
NE05430	10.7	62.0	6.50	5.49	170.5	7.3	3.5	900	6.0	77
KS970093-8-9-#1	11.0	59.9	3.63	3.18	169.3	7.3	3.0	855	5.8	69
KS970187-1-10	12.2	60.8	4.63	4.63	169.9	7.5	4.0	940	6.4	70
KS980512-11-22	11.1	60.7	4.25	3.78	169.4	7.1	3.8	910	6.2	75
KS980554-12--9	10.4	61.6	6.38	5.17	170.1	7.0	2.2	820	5.5	69
CO02W237	10.4	62.1	8.13	6.53	170.3	7.4	4.2	900	6.0	80
CO03064	10.6	61.8	10.00	8.27	170.2	7.0	4.0	855	5.8	73
CO03W054	10.6	62.6	16.13	13.37	168.7	7.3	3.8	875	6.0	75
CO03W139	10.7	62.6	8.13	6.90	170.9	7.0	4.0	885	5.9	75
CO03W239	10.8	62.8	8.13	7.00	171.1	7.0	2.5	880	5.9	73
CO03W043	11.3	62.7	5.00	4.56	172.4	7.3	4.0	910	6.0	73
NE05496	11.2	61.9	5.88	5.30	170.8	7.3	3.0	835	5.6	65
KS980512-2-2	10.6	60.7	4.13	3.42	170.0	7.0	2.5	890	6.0	77
OK03825-5403-6	11.2	61.6	4.13	3.76	170.8	6.9	3.0	820	5.5	63
TX02A0252	10.7	62.4	5.75	4.87	171.4	7.2	4.0	910	6.1	78
TX03A0148	11.5	61.6	4.38	4.09	171.0	7.0	3.8	850	5.7	65

Line	Flour		Mix Time		Dough					
	Protein	Water Abs.	As-is	Corrected	Weight	Proof Height	Crumb Grain	As-Rec'd.	Specific Volume	Loaf Volume Potential
	(%)	(%)	(min)	(min)	(g)	(cm)		(cc)	(cc/g)	(cc/%)
TX03A0563	11.1	60.9	4.88	4.37	170.6	7.0	4.0	855	5.7	68
TX04A001246	11.7	61.7	5.25	5.03	170.7	7.6	4.0	920	6.2	71
TX01V5134RC-3	11.4	60.7	4.75	4.40	170.8	7.0	3.0	870	5.8	68
TX04M410164	11.3	61.8	9.00	8.29	170.7	6.9	4.0	950	6.3	78
TX04M410211	11.5	61.8	4.25	4.01	177.5	7.1	3.0	920	6.1	73
TX04V075080	11.9	60.4	4.88	4.84	170.2	7.0	2.5	940	6.4	72



Hard Winter Wheat Quality Report 2008 SRPN-SHP

1 - Test weight	10	11 - Flour protein	8
2 - SKCS kernel weight	8	12 - Bake absorption	15
3 - Kernel weight SD	8	13 - Mixograph absorption	5
4 - SKCS kernel diameter	8	14 - Bake mix time	10
5 - Kernel diameter SD	8	15 - Mixograph mix time	5
6 - SKCS hardness	10	16 - Mixograph tolerance	5
7 - Hardness SD	8	17 - Dough weight	
8 - Flour yield	30	18 - Proof height	2
9 - Flour ash	10	19 - Loaf volume	20
10 - Milling score		20 - Volume regression	5
		21 - Crumb grain	25

ID	Milling Score	Rating	%	Baking Score	Rating	%	1RS	Trait Deficiencies
Kharkof	42.0	Very Poor	76.4	62.6	Very Good	100.0		4,8,
Scout66	55.0	Very Good	100.0	60.8	Very Good	97.2		
TAM 107	48.8	Good	88.8	31.2	Very Poor	49.8	1AL	5,16,
Trego	53.1	Very Good	96.6	27.7	Very Poor	44.2		16,18,
OK00514-05806	50.6	Good	92.1	59.1	Very Good	94.4		9,10,16,
OK05737W	45.0	Very Poor	81.8	42.1	Average	67.3		1,9,10,16,
Billings	46.5	Poor	84.6	46.8	Good	74.8		3,16,
Pete	51.8	Very Good	94.2	51.6	Good	82.4		11,13,16,
OK04505	46.9	Average	85.3	42.3	Average	67.5		16,
Jackpot	53.9	Very Good	98.0	29.5	Very Poor	47.1		12,16,17,
AP05T2413	45.1	Very Poor	82.0	28.4	Very Poor	45.4	1AL	14,15,16,20,
AP05TW2821	43.2	Very Poor	78.6	52.3	Good	83.5		1,16,
AP06T3832	44.1	Very Poor	80.2	59.7	Very Good	95.4		1,9,16,
KS05HW15-2	50.2	Good	91.3	56.4	Very Good	90.0		16,
KS05HW121-2	50.9	Very Good	92.7	48.2	Good	77.0		16,
KS05HW122-5	53.5	Very Good	97.3	51.7	Good	82.6		13,16,
Tiger	45.2	Poor	82.2	46.5	Good	74.3		16,
Armour	48.7	Average	88.6	40.9	Poor	65.4	1AL	16,
HV9W03-539R	44.7	Very Poor	81.3	52.4	Good	83.8		9,16,21,
HV9W03-696R-1	48.0	Average	87.3	55.8	Very Good	89.2	1BL	16,
Hitch	41.5	Very Poor	75.5	45.9	Average	73.3	1BL	2,8,10,16,
T151	47.7	Average	86.8	35.1	Very Poor	56.1	1AL	16,
T153	48.3	Average	87.9	43.6	Average	69.6	1AL	3,16,
T154	46.3	Poor	84.3	32.1	Very Poor	51.3	1AL	3,13,14,16,21,
T158	52.9	Very Good	96.2	39.0	Poor	62.3	1AL	11,13,16,18,
NE04424	48.6	Average	88.4	41.4	Poor	66.0	1BL	16,
NE05425	48.1	Average	87.6	47.7	Good	76.1		15,
NE05426	46.7	Poor	85.0	60.7	Very Good	96.9		15,
NE05430	46.3	Poor	84.3	42.6	Average	68.0		2,16,
KS970093-8-9-#1	52.1	Very Good	94.9	26.2	Very Poor	41.9		12,16,19,20,

Quality scores and ratings are calculated directly from the relative trait weightings (printed at the top of the page) and are applicable only to the nursery selected.



Hard Winter Wheat Quality Report 2008 SRPN-SHP

1 - Test weight	10	11 - Flour protein	8
2 - SKCS kernel weight	8	12 - Bake absorption	15
3 - Kernel weight SD	8	13 - Mixograph absorption	5
4 - SKCS kernel diameter	8	14 - Bake mix time	10
5 - Kernel diameter SD	8	15 - Mixograph mix time	5
6 - SKCS hardness	10	16 - Mixograph tolerance	5
7 - Hardness SD	8	17 - Dough weight	
8 - Flour yield	30	18 - Proof height	2
9 - Flour ash	10	19 - Loaf volume	20
10 - Milling score		20 - Volume regression	5
		21 - Crumb grain	25

ID	Milling Score	Rating	%	Baking Score	Rating	%	1RS	Trait Deficiencies
KS970187-1-10	49.9	Good	90.8	38.8	Poor	61.9		16,21,
KS980512-11-22	48.8	Good	88.7	31.5	Very Poor	50.2		16,
KS980554-12--9	45.5	Poor	82.8	43.5	Average	69.4		2,4,8,
CO02W237	44.5	Very Poor	81.0	46.2	Average	73.8		4,15,
CO03064	45.7	Poor	83.1	43.9	Average	70.2		14,15,
CO03W054	46.6	Poor	84.8	56.1	Very Good	89.6		9,10,14,15,
CO03W139	50.6	Good	92.1	42.1	Poor	67.3		15,16,
Thunder CL	41.9	Very Poor	76.3	42.7	Average	68.2		1,4,6,16,
CO03W043	48.9	Good	88.9	39.6	Poor	63.3		3,5,16,
NE05496	48.5	Average	88.2	58.5	Very Good	93.4		16,
KS980512-2-2	47.5	Average	86.4	26.1	Very Poor	41.8		11,16,18,19,
STARS0601W	52.4	Very Good	95.3	26.9	Very Poor	43.0	1BL	12,14,16,17,
TX02A0252	50.9	Good	92.5	49.6	Good	79.2		16,
TX03A0148	45.9	Poor	83.5	45.0	Average	71.9		
TX03A0563	52.8	Very Good	96.1	37.2	Poor	59.4		16,
TX04A001246	46.8	Average	85.2	37.2	Poor	59.5	1AL	3,16,
TX01V5134RC-3	50.9	Good	92.6	40.9	Poor	65.3	1AL	10,16,
TX04M410164	45.0	Very Poor	81.9	50.0	Good	79.9		3,
TX04M410211	50.8	Good	92.4	41.2	Poor	65.9	1BL	16,
TX04V075080	46.2	Poor	84.1	54.4	Very Good	86.9		16,

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LINE	Wt/Bu (lb)	SKCS Average Kernel						Hardness			
		Moisture		Weight		Diameter		SKCS	Class	Distribution	
		(%)	(sd)	(mg)	(sd)	(mm)	(sd)				
								(sd)			
Kharkof	57.5	8.7	0.8	24.5	7.0	2.48	0.29	54 23	MIXED	16--19--26--39--03	
Scout 66	56.8	9.8	0.6	26.2	7.8	2.54	0.32	65 19	HARD	05--11--21--63--01	
TAM-107	55.5	9.2	0.6	29.1	8.7	2.65	0.36	65 20	HARD	07--13--17--63--02	
Trego	56.7	10.0	0.5	27.3	7.1	2.56	0.27	62 19	HARD	05--15--27--53--01	
OK00514-05806	56.9	9.8	0.5	24.9	7.6	2.52	0.32	75 18	HARD	00--06--15--79--01	
OK05737W	54.5	9.5	0.7	24.9	7.7	2.55	0.32	66 18	HARD	06--09--17--68--02	
OK03522	55.8	9.6	0.6	30.2	10.5	2.68	0.36	62 20	HARD	10--15--19--56--02	
OK03305	58.3	9.7	0.5	29.4	9.1	2.66	0.33	61 20	HARD	10--16--19--55--02	
OK04505	55.7	9.2	0.7	24.6	7.0	2.52	0.30	67 21	HARD	06--11--19--64--02	
AP04T8211	56.8	9.5	0.6	29.9	8.5	2.71	0.34	64 19	HARD	03--14--25--58--01	
AP05T2413	54.8	11.1	0.8	27.0	8.6	2.57	0.33	64 20	HARD	06--13--19--62--02	
AP05TW2821	53.5	11.4	0.7	25.5	8.6	2.54	0.33	63 22	HARD	08--17--19--56--02	
AP06T3832	54.2	11.6	0.8	27.2	8.7	2.56	0.31	63 22	HARD	07--18--21--54--02	
KS05HW15-2	56.8	11.4	0.7	26.5	7.6	2.55	0.31	66 21	HARD	06--15--18--61--02	
KS05HW121-2	57.3	11.0	0.6	29.7	9.6	2.68	0.32	65 21	HARD	08--12--19--61--02	
KS05HW122-5	56.7	11.5	0.6	29.3	8.0	2.67	0.32	67 21	HARD	06--11--20--63--02	
KS05HW136-3	55.7	9.1	0.8	26.1	7.5	2.53	0.32	59 20	HARD	09--17--26--48--02	
HV9W96-1271R-1	56.3	10.5	0.6	26.5	8.0	2.52	0.31	66 19	HARD	05--09--22--64--01	
HV9W03-539R	54.7	10.7	0.6	24.6	6.9	2.49	0.27	66 20	HARD	03--14--23--60--01	
HV9W03-696R-1	55.9	10.7	0.6	25.5	8.5	2.51	0.32	64 21	HARD	07--14--21--58--02	
HV9W02-942R	54.6	10.5	0.5	23.0	7.6	2.49	0.30	68 21	HARD	04--13--17--66--01	
T151	56.7	10.4	0.4	27.7	8.6	2.58	0.34	63 21	HARD	07--16--21--56--02	
T153	57.8	10.5	0.5	31.2	10.4	2.69	0.36	62 19	HARD	05--17--26--52--01	
T154	57.5	10.6	0.5	32.2	10.9	2.69	0.35	60 19	HARD	07--18--26--49--02	
T158	57.0	10.6	0.5	29.8	8.3	2.68	0.34	59 20	HARD	09--19--23--49--02	
NE04424	56.9	10.5	0.4	28.3	9.1	2.66	0.35	61 20	HARD	05--18--24--53--01	
NE05425	55.9	10.5	0.5	24.6	7.5	2.52	0.31	66 18	HARD	04--11--21--64--01	
NE05426	56.0	10.6	0.5	25.7	8.8	2.55	0.34	68 19	HARD	04--10--18--68--01	
NE05430	56.5	10.8	0.7	23.7	7.8	2.48	0.33	63 20	HARD	05--15--25--55--01	
KS970093-8-9-#1	56.7	10.8	0.6	27.0	8.3	2.59	0.31	63 19	HARD	04--18--22--56--01	
KS970187-1-10	56.8	10.5	0.6	26.7	8.0	2.61	0.30	63 19	HARD	07--14--19--60--02	
KS980512-11-22	56.6	10.4	0.6	27.9	8.6	2.62	0.34	57 21	MIXED	12--18--25--45--03	
KS980554-12--9	56.1	10.4	0.5	24.0	7.3	2.47	0.29	76 20	HARD	03--04--10--83--01	
CO02W237	56.5	10.8	0.5	24.9	7.6	2.47	0.27	52 23	MIXED	22--21--19--38--03	
CO03064	54.8	10.8	0.5	25.9	8.6	2.55	0.30	65 21	HARD	07--14--19--60--02	
CO03W054	55.9	10.9	0.5	26.7	8.2	2.58	0.33	69 21	HARD	03--09--20--68--01	
CO03W139	56.7	10.7	0.6	27.8	8.4	2.64	0.32	59 20	HARD	07--19--28--46--02	
CO03W239	54.5	11.0	2.1	28.6	8.7	2.47	0.30	34 26	MIXED	52--19--14--15--03	
CO03W043	55.7	11.0	0.4	30.3	10.3	2.66	0.37	57 21	MIXED	13--17--22--48--03	
NE05496	55.3	10.7	0.5	27.5	8.4	2.60	0.32	57 19	HARD	08--24--25--43--02	
KS980512-2-2	56.3	10.7	0.3	30.8	8.1	2.69	0.31	52 23	MIXED	21--23--18--38--03	
OK03825-5403-6	57.7	10.9	0.3	31.9	8.9	2.76	0.34	59 18	HARD	04--22--25--49--01	
TX02A0252	57.1	11.1	0.4	27.1	8.8	2.58	0.32	64 19	HARD	05--15--21--59--01	
TX03A0148	54.9	10.8	0.4	30.5	9.6	2.66	0.32	61 21	HARD	10--18--17--55--02	
TX03A0563	58.0	10.4	0.4	27.5	9.0	2.62	0.32	60 19	HARD	08--15--24--53--02	

LINE	Wt/Bu (lb)	SKCS Average Kernel						Hardness			
		Moisture		Weight		Diameter		SKCS		Class	Distribution
		(%)	(sd)	(mg)	(sd)	(mm)	(sd)	(sd)			
TX04A001246	54.8	10.8	0.4	29.7	10.2	2.63	0.35	64	18	HARD	05--13--19--63--01
TX01V5134RC-3	57.4	10.9	0.4	29.0	8.1	2.69	0.31	75	18	HARD	01--04--15--80--01
TX04M410164	55.8	10.2	0.5	28.1	10.3	2.61	0.35	59	21	MIXED	11--17--21--51--03
TX04M410211	57.7	10.7	0.4	29.1	9.2	2.63	0.35	56	17	HARD	07--20--28--45--02
TX04V075080	55.9	10.7	0.3	29.1	8.9	2.61	0.33	61	20	HARD	05--21--26--48--01

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LINE	Wheat		Flour			Noodle Color					
	Protein	Milling Yield	Ash	Protein	PPO	L @ 0	a @ 0	b @ 0	Delta L 24 hrs	Delta a 24 hrs	Delta b 24 hrs
	(%)	(%)	(%)	(%)							
Kharkof	15.2	64.9	0.41	13.5	0.717	78.79	-2.19	23.04	-11.33	2.04	-0.91
Scout 66	14.6	70.9	0.42	13.3	0.702	78.93	-2.04	23.54	-13.62	1.89	-1.00
TAM-107	14.3	68.5	0.42	12.9	0.583	78.80	-2.30	25.15	-11.87	1.88	-1.51
Trego	14.0	69.0	0.42	12.7	0.765	79.86	-2.45	22.55	-11.43	1.97	0.06
OK00514-05806	15.3	68.4	0.51	13.9	0.546	78.17	-1.54	22.57	-12.32	1.83	0.32
OK05737W	15.8	67.4	0.50	14.3	0.722	78.41	-1.81	23.10	-12.35	1.82	-0.79
OK03522	14.6	68.6	0.45	13.2	0.270	78.06	-1.46	22.28	-12.28	1.48	-0.57
OK03305	13.4	69.4	0.43	12.1	0.498	78.79	-1.95	23.03	-10.82	1.41	0.15
OK04505	14.8	67.6	0.46	13.3	0.656	78.31	-2.58	24.89	-12.76	2.16	-1.55
AP04T8211	14.6	70.8	0.49	13.3	0.566	78.43	-2.04	23.06	-12.32	1.52	0.00
AP05T2413	15.7	68.1	0.50	14.4	0.552	76.61	-1.96	24.46	-12.30	1.48	-1.32
AP05TW2821	14.8	68.3	0.47	13.4	0.657	77.33	-1.71	23.34	-10.60	1.44	-0.79
AP06T3832	14.7	68.7	0.51	13.4	0.673	77.75	-1.78	22.44	-12.49	1.39	-0.08
KS05HW15-2	15.0	69.0	0.45	13.5	0.698	78.38	-1.82	21.77	-12.57	1.39	-0.44
KS05HW121-2	14.4	69.4	0.44	12.9	0.280	80.08	-2.16	22.96	-9.13	2.56	-2.74
KS05HW122-5	14.4	70.0	0.43	12.9	0.222	80.10	-2.24	23.53	-8.71	2.01	-0.90
KS05HW136-3	14.2	67.0	0.45	13.0	0.338	80.08	-2.36	22.82	-8.24	1.60	-1.13
HV9W96-1271R-1	15.1	68.1	0.46	13.6	0.770	79.20	-2.45	24.73	-11.53	1.95	-2.56
HV9W03-539R	14.3	66.7	0.50	13.9	0.701	78.27	-1.76	23.17	-13.86	2.16	-0.56
HV9W03-696R-1	14.6	69.6	0.46	13.3	0.725	77.92	-2.45	23.56	-12.13	1.69	1.83
HV9W02-942R	14.9	65.8	0.48	13.3	0.789	77.18	-2.47	25.27	-11.28	1.92	-1.82
T151	14.1	68.2	0.44	12.7	0.623	78.44	-2.73	26.52	-10.75	1.43	-0.32
T153	14.3	67.5	0.43	12.8	0.692	79.14	-2.26	24.08	-11.23	1.85	-1.26
T154	14.3	67.1	0.44	12.8	0.719	78.96	-2.33	24.07	-12.71	2.10	-2.85
T158	13.7	69.8	0.41	12.1	0.621	79.57	-2.05	22.31	-12.33	1.38	1.54
NE04424	15.0	68.6	0.44	13.4	0.686	80.54	-2.28	22.21	-11.67	1.70	-0.96
NE05425	15.0	67.1	0.42	13.6	0.677	79.18	-1.75	22.57	-12.26	1.21	0.23
NE05426	15.1	67.5	0.44	13.5	0.632	78.25	-1.91	23.51	-10.95	1.21	-0.35
NE05430	14.2	67.9	0.45	13.0	0.701	79.48	-2.40	24.17	-10.69	2.01	-1.65
KS970093-8-9-#1	14.3	70.8	0.49	13.1	0.626	78.17	-2.03	24.48	-10.11	2.57	-2.03
KS970187-1-10	15.2	68.8	0.49	13.6	0.644	77.91	-2.01	24.00	-11.22	2.55	-1.47
KS980512-11-22	14.4	69.8	0.46	13.0	0.632	78.85	-1.75	21.99	-10.31	2.44	-2.03
KS980554-12--9	14.3	66.0	0.48	13.0	0.332	79.54	-1.79	22.37	-10.53	2.32	-0.53
CO02W237	14.4	67.7	0.43	12.8	0.733	79.62	-2.37	23.45	-11.57	2.16	-2.31
CO03064	14.8	68.2	0.45	13.2	0.699	79.89	-1.50	20.79	-13.10	1.54	0.88
CO03W054	14.7	68.3	0.51	13.1	0.838	79.91	-2.37	23.06	-13.56	1.67	-0.73
CO03W139	14.8	68.7	0.40	13.1	0.254	81.32	-2.02	21.41	-11.32	1.40	1.69
CO03W239	14.5	69.0	0.42	13.0	0.864	79.24	-2.36	22.08	-12.79	2.69	-2.19
CO03W043	15.3	70.5	0.43	13.6	0.862	80.77	-1.97	20.41	-13.19	1.91	-0.32
NE05496	14.7	69.3	0.45	13.1	0.850	79.57	-2.26	23.36	-12.18	1.63	-0.07
KS980512-2-2	13.8	68.4	0.44	12.4	0.630	79.80	-1.94	22.48	-9.30	2.59	-2.00
OK03825-5403-6	14.7	68.5	0.44	13.1	0.585	77.99	-1.83	23.04	-9.95	2.19	-3.53

LINE	Wheat		Flour			Noodle Color					
	Protein	Milling Yield	Ash	Protein	PPO	L @ 0	a @ 0	b @ 0	Delta L 24 hrs	Delta a 24 hrs	Delta b 24 hrs
	(%)	(%)	(%)	(%)							
TX02A0252	14.5	69.4	0.45	12.8	0.712	78.61	-2.16	24.71	-10.68	2.20	-2.45
TX03A0148	14.9	68.3	0.47	13.4	0.514	77.68	-1.74	25.16	-10.40	1.26	0.05
TX03A0563	15.2	69.9	0.41	13.7	0.596	79.87	-1.75	21.56	-12.75	1.11	0.77
TX04A001246	14.1	68.5	0.47	12.8	0.558	77.62	-2.19	24.09	-13.90	1.68	-1.13
TX01V5134RC-3	14.7	66.8	0.48	13.0	0.827	78.54	-2.03	24.80	-12.81	1.52	0.15
TX04M410164	15.0	69.4	0.47	13.5	0.633	78.09	-1.93	22.99	-12.85	1.26	-0.58
TX04M410211	15.6	69.0	0.44	13.9	0.668	77.96	-1.65	22.75	-11.69	1.30	0.56
TX04V075080	15.8	67.5	0.46	14.6	0.871	78.08	-1.64	21.42	-16.32	1.63	1.17

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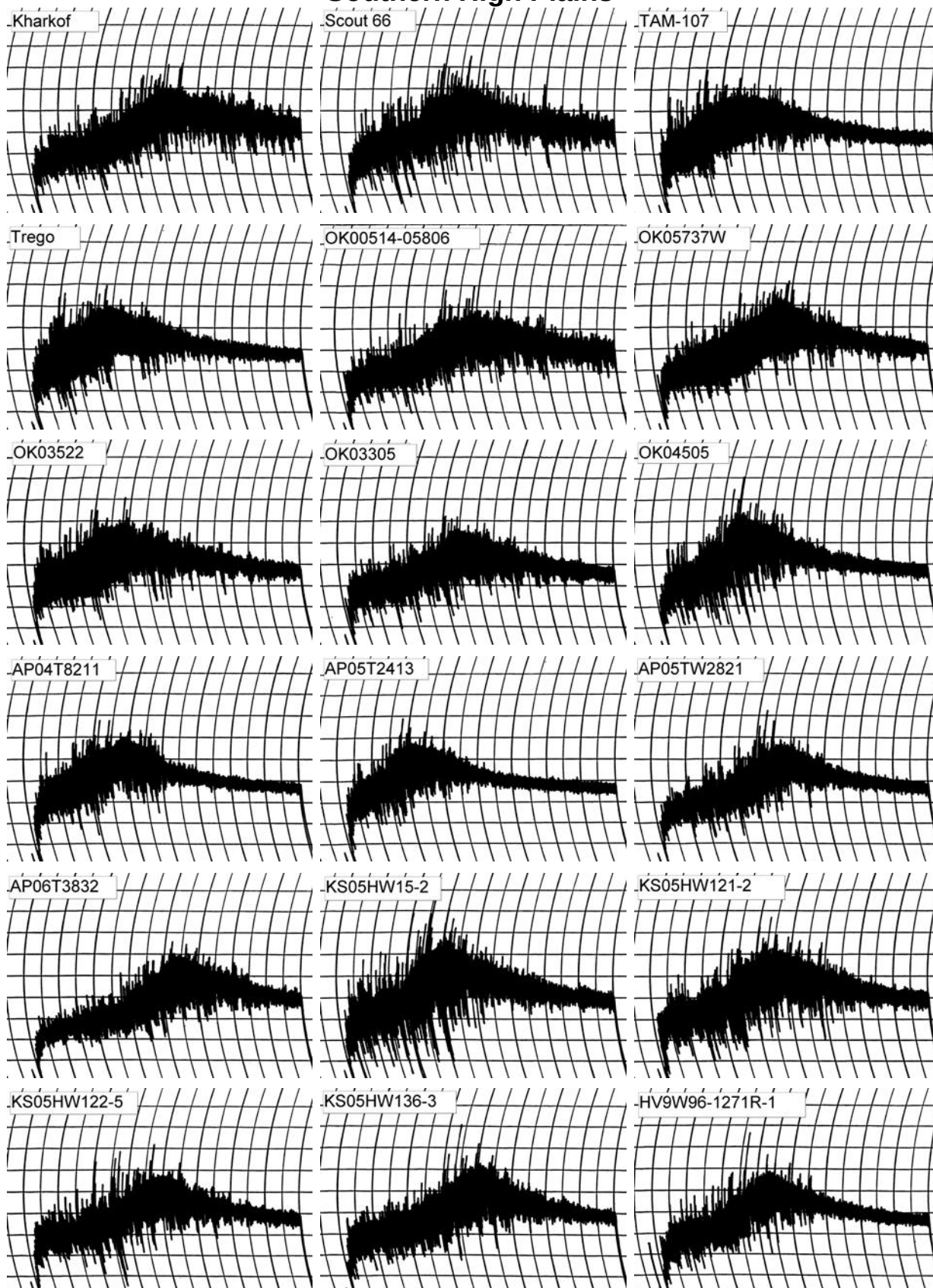
Southern High Plains

	Flour Protein	Mixograph			
		Absorption	As-Is	Corrected	Tolerance
Line	(%)	(%)	(min)	(min)	
Kharkof	13.5	63.4	4.13	4.13	3
Scout 66	13.3	64.1	3.63	3.63	3
TAM-107	12.9	62.8	2.63	2.63	0
Trego	12.7	62.6	2.38	2.38	0
OK00514-05806	13.9	65.1	4.00	4.00	2
OK05737W	14.3	65.8	3.50	3.50	0
OK03522	13.2	64.9	2.88	2.88	0
OK03305	12.1	62.1	3.50	3.50	0
OK04505	13.3	64.1	2.63	2.63	0
AP04T8211	13.3	64.1	2.88	2.88	0
AP05T2413	14.4	65.9	2.13	2.13	0
AP05TW2821	13.4	63.8	3.63	3.63	0
AP06T3832	13.4	65.7	4.38	4.38	0
KS05HW15-2	13.5	65.4	3.00	3.00	0
KS05HW121-2	12.9	64.5	3.50	3.50	1
KS05HW122-5	12.9	62.4	3.88	3.88	0
KS05HW136-3	13.0	62.6	4.13	4.13	0
HV9W96-1271R-1	13.6	63.7	3.38	3.38	0
HV9W03-539R	13.9	66.2	3.63	3.63	2
HV9W03-696R-1	13.3	63.1	3.75	3.75	0
HV9W02-942R	13.3	63.0	3.88	3.88	0
T151	12.7	63.2	3.38	3.38	1
T153	12.8	63.4	3.50	3.50	0
T154	12.8	62.3	2.38	2.38	0
T158	12.1	62.2	2.50	2.50	0
NE04424	13.4	64.1	3.13	3.13	1
NE05425	13.6	64.6	5.38	5.38	6
NE05426	13.5	64.5	5.50	5.50	5
NE05430	13.0	63.7	3.38	3.38	2
KS970093-8-9-#1	13.1	63.8	2.50	2.50	0
KS970187-1-10	13.6	64.7	2.75	2.75	0
KS980512-11-22	13.0	63.7	2.88	2.88	0
KS980554-12--9	13.0	64.6	3.38	3.38	3
CO02W237	12.8	64.3	5.25	5.25	5
CO03064	13.2	65.0	7.13	7.13	6
CO03W054	13.1	64.5	8.88	8.88	6
CO03W139	13.1	64.8	5.38	5.38	1
CO03W239	13.0	64.5	4.00	4.00	0
CO03W043	13.6	65.6	3.13	3.13	0
NE05496	13.1	64.7	4.25	4.25	0
KS980512-2-2	12.4	63.6	2.63	2.63	0
OK03825-5403-6	13.1	63.7	2.50	2.50	0

	Flour Protein	Mixograph			
		Absorption	As-Is	Corrected	Tolerance
Line	(%)	(%)	(min)	(min)	
TX02A0252	12.8	64.2	3.13	3.13	2
TX03A0148	13.4	65.3	3.88	3.88	4
TX03A0563	13.7	65.7	2.88	2.88	0
TX04A001246	12.8	63.2	3.00	3.00	0
TX01V5134RC-3	13.0	64.7	3.63	3.63	2
TX04M410164	13.5	65.4	4.75	4.75	3
TX04M410211	13.9	66.1	2.88	2.88	1
TX04V075080	14.6	67.3	3.38	3.38	1

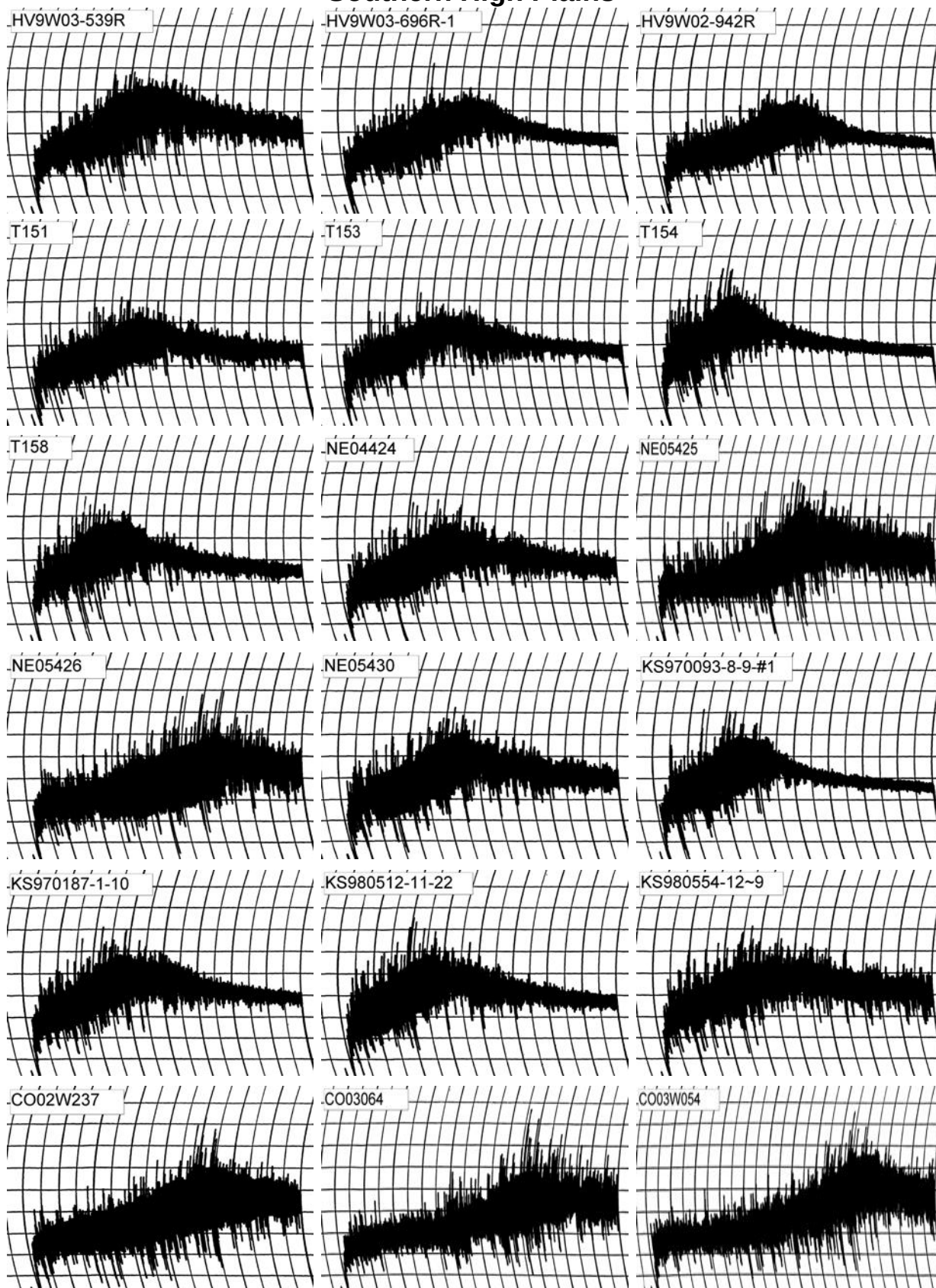
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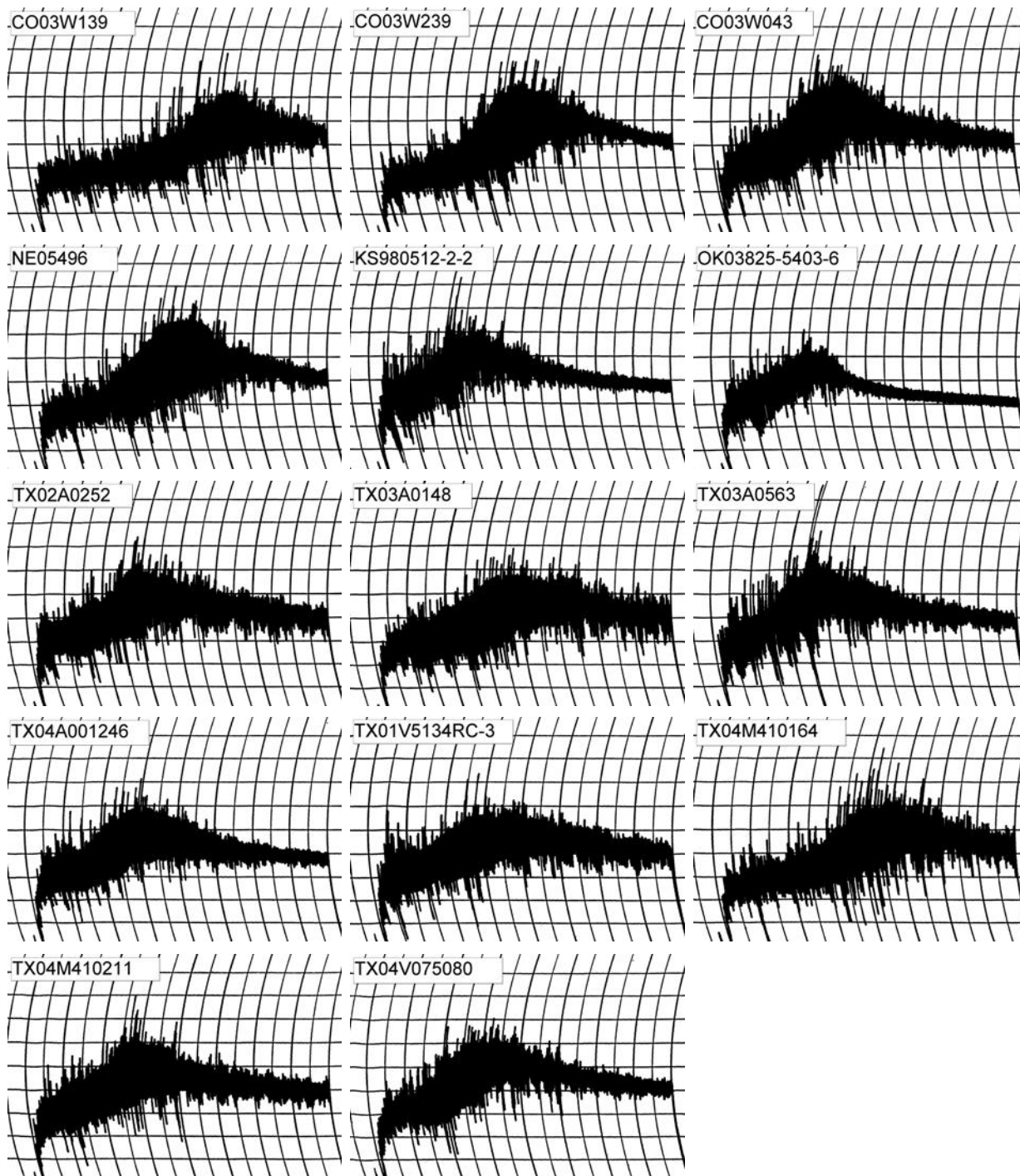


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Line	RVA							Pasting Temp (Deg. C)
	Stirring Number (RVU)	Peak Viscosity (RVU)	Trough Viscosity (RVU)	Breakdown (RVU)	Final Viscosity (RVU)	Set back (RVU)	Peak Time (min)	
Kharkof	84.67	115.92	50.92	65.00	114.33	63.42	5.47	
Scout 66	78.00	108.17	42.67	65.50	99.00	56.33	5.27	
TAM-107	58.83	103.00	30.17	72.83	70.83	40.67	5.07	
Trego	39.75	80.75	10.67	70.08	28.42	17.75	4.53	
OK00514-05806	60.00	86.50	20.25	66.25	50.17	29.92	4.87	
OK05737W	58.17	103.08	28.92	74.17	69.17	40.25	5.07	
OK03522	5.33	22.83	1.25	21.58	2.58	1.33	3.33	
OK03305	21.58	46.58	3.83	42.75	9.67	5.83	3.87	
OK04505	30.17	47.75	5.67	42.08	15.00	9.33	4.20	
AP04T8211	58.17	86.25	21.83	64.42	53.75	31.92	4.93	
AP05T2413	58.42	92.17	26.92	65.25	63.92	37.00	5.00	
AP05TW2821	45.50	70.33	11.08	59.25	28.83	17.75	4.67	
AP06T3832	51.25	81.67	17.50	64.17	43.92	26.42	4.93	
KS05HW15-2	15.58	39.00	3.50	35.50	8.42	4.92	3.87	
KS05HW121-2	28.25	61.58	4.92	56.67	13.75	8.83	4.07	
KS05HW122-5	13.17	47.92	2.42	45.50	5.33	2.92	3.67	
KS05HW136-3	10.25	46.58	2.33	44.25	5.08	2.75	3.67	
HV9W96-1271R-1	45.83	71.00	13.92	57.08	34.92	21.00	4.67	
HV9W03-539R	106.92	161.50	85.33	76.17	176.25	90.92	5.87	
HV9W03-696R-1	82.42	113.33	50.25	63.08	116.25	66.00	5.47	
HV9W02-942R	61.67	98.67	30.25	68.42	72.58	42.33	5.07	
T151	52.00	87.25	19.25	68.00	47.00	27.75	4.87	
T153	72.92	109.25	35.25	74.00	83.17	47.92	5.13	
T154	64.83	107.17	40.92	66.25	94.83	53.92	5.27	
T158	46.33	83.67	17.58	66.08	44.00	26.42	4.87	
NE04424	78.92	102.00	41.83	60.17	97.75	55.92	5.33	
NE05425	91.83	136.92	59.83	77.08	130.50	70.67	5.47	
NE05426	68.42	102.33	31.42	70.92	73.92	42.50	5.07	
NE05430	71.83	115.75	40.67	75.08	93.08	52.42	5.33	
KS970093-8-9-#1	136.08	170.33	104.08	66.25	192.42	88.33	6.13	
KS970187-1-10	83.00	132.58	47.58	85.00	108.00	60.42	5.47	
KS980512-11-22	108.83	179.67	103.83	75.83	201.83	98.00	6.00	
KS980554-12-~9	86.25	116.00	48.25	67.75	111.75	63.50	5.40	
CO02W237	31.75	62.08	6.92	55.17	18.50	11.58	4.27	
CO03064	83.83	114.67	50.67	64.00	116.50	65.83	5.40	
CO03W054	53.58	77.92	19.42	58.50	47.75	28.33	4.87	
CO03W139	15.92	42.58	3.58	39.00	8.67	5.08	3.87	
CO03W239	11.17	42.75	2.42	40.33	5.42	3.00	3.67	
CO03W043	42.75	64.33	12.42	51.92	32.92	20.50	4.67	
NE05496	80.25	157.00	60.50	96.50	129.42	68.92	5.53	
KS980512-2-2	28.33	53.17	5.42	47.75	14.92	9.50	4.13	
OK03825-5403-6	59.00	89.17	22.50	66.67	55.42	32.92	5.00	
TX02A0252	72.83	101.75	35.92	65.83	84.50	48.58	5.20	
TX03A0148	100.42	137.83	66.00	71.83	141.58	75.58	5.67	
TX03A0563	78.67	105.25	46.00	59.25	106.42	60.42	5.40	
TX04A001246	6.33	30.67	1.25	29.42	2.83	1.58	3.47	

RVA								
Line	Stirring Number (RVU)	Peak Viscosity (RVU)	Trough Viscosity (RVU)	Breakdown (RVU)	Final Viscosity (RVU)	Set back (RVU)	Peak Time (min)	Pasting Temp (Deg. C)
TX01V5134RC-3	73.50	94.08	33.67	60.42	81.75	48.08	5.20	
TX04M410164	13.08	33.67	3.00	30.67	7.17	4.17	3.80	
TX04M410211	53.33	101.00	21.67	79.33	51.75	30.08	4.93	
TX04V075080	89.42	179.17	79.00	100.17	147.58	68.58	5.80	

2008 SRPN Intraregional Production Zone

Southern High Plains

Line	Flour		Mix Time		Dough					
	Protein	Water Abs.	As-is	Corrected	Weight	Proof Height	Crumb Grain	As-Rec'd.	Specific Volume	Loaf Volume Potential
	(%)	(%)	(min)	(min)	(g)	(cm)		(cc)	(cc/g)	(cc/%)
Kharkof	13.5	61.8	4.75	4.75	170.6	8.1	4.0	1005	6.8	67
Scout 66	13.3	62.8	3.50	3.50	171.9	8.2	4.0	1010	6.9	69
TAM-107	12.9	59.1	2.75	2.75	168.4	7.6	2.5	960	6.6	67
Trego	12.7	59.0	2.75	2.75	168.2	7.3	2.5	915	6.3	63
OK00514-05806	13.9	62.0	4.25	4.25	171.5	7.7	4.0	975	6.6	62
OK05737W	14.3	62.0	3.75	3.75	171.1	8.0	3.8	970	6.6	59
OK03522	13.2	60.7	3.75	3.75	170.4	7.6	3.0	940	6.4	63
OK03305	12.1	59.4	3.63	3.63	168.9	7.7	4.0	955	6.6	72
OK04505	13.3	58.9	3.00	3.00	168.3	7.7	3.0	950	6.5	63
AP04T8211	13.3	57.7	2.75	2.75	167.4	7.4	3.5	925	6.4	61
AP05T2413	14.4	58.6	2.50	2.50	168.6	7.5	2.5	915	6.3	54
AP05TW2821	13.4	59.7	3.38	3.38	169.0	7.5	4.0	960	6.6	63
AP06T3832	13.4	60.6	4.13	4.13	170.1	8.0	4.0	1040	7.2	71
KS05HW15-2	13.5	62.7	3.75	3.75	172.0	7.8	4.0	975	6.6	64
KS05HW121-2	12.9	63.8	4.13	4.13	173.6	8.0	3.8	1035	7.0	74
KS05HW122-5	12.9	62.6	4.13	4.13	171.9	7.7	3.0	960	6.5	67
KS05HW136-3	13.0	62.0	4.50	4.50	171.5	7.8	3.5	1050	7.1	75
HV9W96-1271R-1	13.6	58.8	3.50	3.50	168.4	8.0	4.5	1040	7.2	70
HV9W03-539R	13.9	63.7	3.75	3.75	172.9	7.7	2.0	1015	6.8	65
HV9W03-696R-1	13.3	60.0	4.00	4.00	169.6	7.9	4.0	985	6.7	67
HV9W02-942R	13.3	59.9	3.50	3.50	169.2	7.7	3.0	935	6.4	62
T151	12.7	60.1	3.50	3.50	169.3	7.5	2.5	925	6.3	64
T153	12.8	59.9	2.75	2.75	169.5	7.4	3.0	945	6.4	66
T154	12.8	58.8	2.50	2.50	168.7	7.4	2.0	920	6.3	63
T158	12.1	60.0	2.88	2.88	169.6	7.3	3.0	915	6.1	67
NE04424	13.4	60.9	3.75	3.75	169.7	7.7	3.5	1005	6.8	68
NE05425	13.6	61.9	5.75	5.75	170.8	7.9	4.5	1050	7.1	71
NE05426	13.5	62.0	6.13	6.13	170.6	8.0	4.0	1060	7.2	72
NE05430	13.0	60.0	4.38	4.38	169.0	7.7	3.5	990	6.8	69
KS970093-8-9-#1	13.1	58.2	2.75	2.75	167.7	7.8	2.5	880	6.0	57
KS970187-1-10	13.6	59.3	3.13	3.13	168.6	7.9	2.0	955	6.6	62
KS980512-11-22	13.0	59.4	3.00	3.00	168.7	7.6	2.5	930	6.3	63
KS980554-12--9	13.0	63.3	3.75	3.75	172.6	7.7	2.5	970	6.5	67
CO02W237	12.8	63.3	6.00	6.00	171.5	7.6	3.2	1045	7.2	76
CO03064	13.2	63.5	7.50	7.50	172.0	7.7	4.2	1075	7.3	76
CO03W054	13.1	63.5	10.00	10.00	171.0	7.8	4.0	1050	7.2	74
CO03W139	13.1	62.9	6.00	6.00	171.4	7.9	4.5	1030	7.1	72
CO03W239	13.0	59.8	4.25	4.25	168.8	7.7	3.5	1010	7.0	71
CO03W043	13.6	60.0	3.58	3.58	169.4	7.5	3.5	1000	6.8	66
NE05496	13.1	60.9	4.50	4.50	170.0	7.8	4.0	1000	6.9	69
KS980512-2-2	12.4	58.9	2.63	2.63	168.2	7.1	2.5	880	6.0	62
OK03825-5403-6	13.1	57.8	2.50	2.50	167.2	7.7	2.5	910	6.2	61
TX02A0252	12.8	59.6	3.25	3.25	168.4	7.8	3.0	1010	6.8	73
TX03A0148	13.4	61.5	4.13	4.13	170.8	7.6	3.5	960	6.4	64

Line	Flour		Mix Time		Dough					
	Protein	Water Abs.	As-is	Corrected	Weight	Proof Height	Crumb Grain	As-Rec'd.	Specific Volume	Loaf Volume Potential
	(%)	(%)	(min)	(min)	(g)	(cm)		(cc)	(cc/g)	(cc/%)
TX03A0563	13.7	59.7	2.75	2.75	168.9	7.6	4.5	1015	6.8	67
TX04A001246	12.8	59.6	3.50	3.50	168.5	7.8	3.2	985	6.8	70
TX01V5134RC-3	13.0	60.4	3.38	3.38	170.0	7.6	3.5	985	6.7	68
TX04M410164	13.5	62.5	5.50	5.50	171.6	7.7	4.5	1085	7.4	75
TX04M410211	13.9	59.5	3.50	3.50	168.5	7.6	3.5	1030	7.1	67
TX04V075080	14.6	62.4	3.38	3.38	172.9	7.7	3.0	1005	6.8	61

Results of 2008 RPN Flour Protein Analysis

Nursery#	Selection No.	class	HMW-GS composition (1)	Glutenin/gliadin ratio (2)	HMW-GS/LMW- GS ratio (3)	%IPP (4)
08-NNC1101	Kharkof	HRW	1/2*, 7+9, 5+10	0.77	0.48	44.02
08-NNC1102	Antelope	HWW	2*, 7+9, 5+10	0.81	0.53	40.78
08-NNC1103	Wesley	HRW	2*, 7+8, 5+10	0.73	0.44	46.54
08-NNC1104	Jerry	HRW	2*, 7+9, 5+10	0.86	0.57	44.72
08-NNC1105	SD06W117	HRW	2*, 7+8, 5+10	0.82	0.46	47.65
08-NNC1106	SD06069	HRW	2*, 7+8/7+9, 5+10	0.80	0.29	46.36
08-NNC1107	SD06163	HRW	2*, 7+9, 5+10	0.68	0.39	42.86
08-NNC1108	SD06165	HRW	2*, 7+8, 5+10	0.65	0.37	48.14
08-NNC1109	SD06173	HRW	2*, 7+9, 5+10/2+10	0.66	0.33	42.79
08-NNC1110	SD03164-1	HRW	2*, 7+9, 5+10	0.91	0.42	44.22
08-NNC1111	SD03164-2	HRW	2*, 7+9, 5+10	0.92	0.41	44.84
08-NNC1112	SD05118	HRW	2*, 7+9, 5+10	1.20	0.48	47.18
08-NNC1113	SD05210	HRW	2*, 7+8 ^f /17+18, 5+10	1.23	0.52	48.32
08-NNC1114	SD05W030	HWW	2*, 7+9, 5+10	0.85	0.72	43.95
08-NNC1115	N98L20040-44	HRW	null, 7+8, 5+10	1.02	0.52	46.34
08-NNC1116	NX03Y2489	waxy	2*, 7+9, 5+10	0.97	0.37	46.32
08-NNC1117	NX04Y2107	waxy	2*, 7+9, 5+10	0.82	0.44	47.40
08-NNC1118	NW04Y2188	HWW	1, 7+9, 2+12	1.16	0.55	38.34
08-NNC1119	HV9W03-1379R	HRWW	2*, 7+8/17+18, 5+10	0.99	0.47	43.97
08-NNC1120	NE02533	HRW	1, 7+9, 17+18, 5+10	0.97	0.38	45.40
08-NNC1121	NE02558	HRW	1/2*, 7+8, 17+18, 5+10	1.06	0.49	47.39
08-NNC1122	NW03666	HRW	1, 7+8, 5+10	0.92	0.45	46.85
08-NNC1123	NE04490	HRW	2*, 17+18/20+20/7+8 ^{vf} , 5+10	1.12	0.61	42.01
08-NNC1124	NI04420	HRW	2*, 7+8/7+9, 2+12	1.50	0.43	41.73
08-NNC1125	NI04427	HRW	2*, 7+8, 5+10	0.85	0.72	43.11
08-NNC1126	NE05548	HRW	2*, 17+18 [?] , 5+10	0.92	0.39	38.43
08-NNC1127	NE05549	HRW	2*, 7+8, 5+10	0.84	0.55	42.59
08-NNC1128	NE05569	HRW	2*, 7+8/7+9, 5+10	0.91	0.50	43.16
08-NNC1129	MT0495	HRW	1, 7+9, 5+10	1.01	0.58	44.40
08-NNC1130	MTS0531	HRW	2*, 7+9, 5+10	0.96	0.53	44.82
08-NNC1131	MT0552	HRW	2*, 7+9, 5+10	0.77	0.47	50.12
08-SNC1001	Kharkof	HRW	1/2*, 7+9, 5+10	0.90	0.41	47.08
08-SNC1002	Scout 66	HRW	2*, 7+9, 2+12	0.88	0.39	46.68
08-SNC1003	TAM-107	HRW	2*, 7+8, 2+12	failed	0.37	42.74
08-SNC1004	Trego	HWW	2*, 20+20/7+9, 5+10	0.75	0.34	41.72
08-SNC1005	OK00514-05806	HRW	1, 17+18/7+9 ^f , 5+10	0.94	0.37	48.71
08-SNC1006	OK05737W	HW	1, 17+18/7+9 ^{vf} , 5+10	0.89	0.46	48.59
08-SNC1007	OK03522	HRW	1, 17+18/7+9 ^{vf} , 5+10	1.03	0.38	47.42
08-SNC1008	OK03305	HRW	2*, 7+8/7+9, 5+10	1.01	0.38	43.35
08-SNC1009	OK04505	HRW	2*, 7+9 ^f /17+18, 5+10	1.20	0.47	44.12
08-SNC1010	AP04T8211	HRW	1/2*, 17+18/7+9 ^f , 5+10	0.95	0.55	45.77
08-SNC1011	AP05T2413	HRW	1, 7+8/17+18, 5+10	0.98	0.36	43.16
08-SNC1012	AP05TW2821	HWW	1/2*, 7+9 ^f /17+18, 5+10	1.02	0.44	46.09
08-SNC1013	AP06T3832	HRW	1, 7+9 ^f /17+18, 5+10	0.91	0.55	49.71
08-SNC1014	KS05HW15-2	HWW	1, 7+9/17+18 ^f , 2+12	0.80	0.49	45.04
08-SNC1015	KS05HW121-2	HWW	1/2* ^f , 7+9/17+18 ^f , 5+10	0.85	0.52	45.91

Nursery#	Selection No.	class	HMW-GS composition (1)	Glutenin/gliadin ratio (2)	HMW-GS/LMW- GS ratio (3)	%IPP (4)
08-SNC1016	KS05HW122-5	HWW	2*, 7+9, 5+10	1.31	0.50	45.92
08-SNC1017	KS05HW136-3	HWW	2*, 7+9, 5+10	1.59	0.45	48.45
08-SNC1018	HV9W96-1271R-1	HRWW	2*, 7+9/6+8, 5+10	1.57	0.36	42.46
08-SNC1019	HV9W03-539R	HRWW	2*, 7+8/17+18 ^{vf} , 5+10	1.03	0.48	45.85
08-SNC1020	HV9W03-696R-1	HRWW	2*, 7+9, 5+10	0.83	0.58	45.80
08-SNC1021	HV9W02-942R	HRWW	2*, 7+9, 5+10	0.80	0.67	45.92
08-SNC1022	T151	HRW	2*, 7+8, 2+12	0.83	0.44	44.34
08-SNC1023	T153	HRW	2*, 7+8, 2+12	0.82	0.41	41.31
08-SNC1024	T154	HRW	2*, 7+8, 2+12	0.79	0.32	39.76
08-SNC1025	T158	HRW	2*, 7 ^{OE} +9, 2+12	0.87	0.40	43.75
08-SNC1026	NE04424	HRW	2*, 7+9/17+18 ^{vf} , 5+10	0.88	0.50	45.60
08-SNC1027	NE05425	HRW	2*, 7+9/17+18 ^{vf} , 5+10	0.83	0.64	49.07
08-SNC1028	NE05426	HRW	2*, 7+9, 5+10	0.83	0.52	49.72
08-SNC1029	NE05430	HRW	2*, 7+9, 5+10	0.82	0.42	45.38
08-SNC1030	KS970093-8-9-#1	HRW	1, 7+8, 2+12	0.81	0.36	41.82
08-SNC1031	KS970187-1-10	HRW	1, 20+20?/7+8/7+9, 2+12	0.83	0.55	45.15
08-SNC1032	KS980512-11-22	HRW	1, 7+8, 2+12	0.84	0.41	43.23
08-SNC1033	KS980554-12-~9	HRW	1, 7+8, 5+10	failed	0.41	46.46
08-SNC1034	CO02W237	HWW	2*, 13+18/17+18 ^f , 5+10	0.88	0.47	51.24
08-SNC1035	CO03064	HRW	2*, 7+9, 5+10	0.85	0.51	53.44
08-SNC1036	CO03W054	HWW	2*, 7+8, 5+10	0.81	0.48	56.46
08-SNC1037	CO03W139	HWW	2*, 7+8, 5+10	0.79	0.45	48.90
08-SNC1038	CO03W239	HWW	2*, 7+8, 5+10	0.83	0.48	47.36
08-SNC1039	CO03W043	HW	2*, 7+9, 2+12	0.78	0.43	44.51
08-SNC1040	NE05496	HRW	2*, 7+8, 5+10	0.85	0.45	47.68
08-SNC1041	KS980512-2-2	HWW	2*, 7+8, 2+12	0.99	0.46	42.97
08-SNC1042	OK03825-5403-6	HRW	2*, 7+8, 2+12	0.87	0.83	41.44
08-SNC1043	TX02A0252	HRWW	2*, 7+8, 5+10	0.90	0.48	43.01
08-SNC1044	TX03A0148	HRWW	2*, 7+9, 2+12	0.89	0.53	47.00
08-SNC1045	TX03A0563	HRWW	2*, 7+9 ^f /20+20,5+10	failed	0.42	41.66
08-SNC1046	TX04A001246	HRWW	2*, 7+8, 5+10	0.92	0.52	47.30
08-SNC1047	TX01V5134RC-3	HRWW	2*, 7+8/17+18, 5+10	1.09	0.45	46.26
08-SNC1048	TX04M410164	HRWW	2*, 7+8/17+18 ^f , 2+12	0.90	0.49	49.26
08-SNC1049	TX04M410211	HRWW	2*, 7+8/17+18, 5+10	0.94	0.42	46.17
08-SNC1050	TX04V075080	HRWW	2*, 17+18, 5+10	0.98	0.53	44.55

(1) Determined by bioanalyser and SDS-PAGE. f= faint, vf=very faint

(2) Determined by SE-HPLC -area of chromatograms

(3) Determined by RP-HPLC- area of chromatograms

(4) Determined by LECO

Due to initial sample availability, SRPN samples used were from the composite zone SSH, NRPN samples used were from the NNP composite zone.