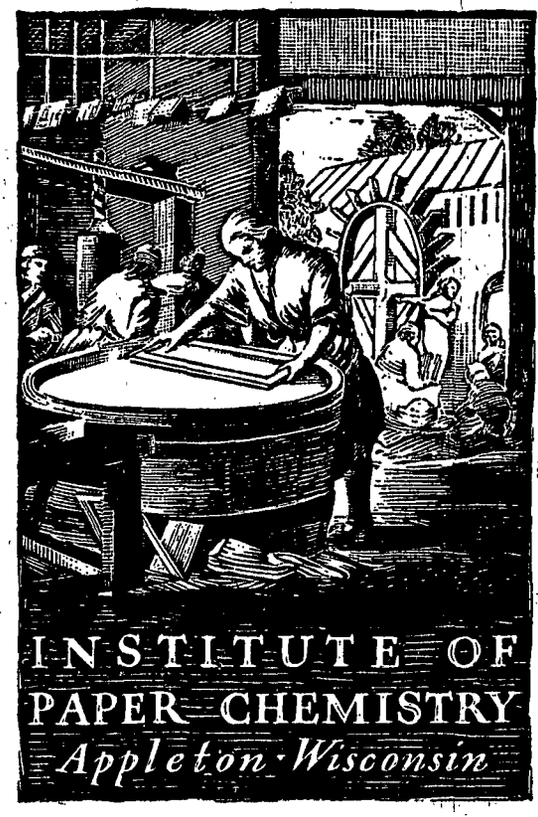


CONTINUOUS BASELINE STUDY

Project 1108-13

Progress Report 108

to

FOURDRINIER KRAFT BOARD INSTITUTE, INC.

July 1, 1956

Your mills are identified by the following code letters in this report:

Mill	Code Letter
Jacksonville	M
Valdosta	K

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

CONTINUOUS BASELINE STUDY

Project 1108-13

Progress Report 108

to

FOURDRINIER KRAFT BOARD INSTITUTE, INC.

July 1, 1956

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

In conjunction with the F.K.I. Continuous Baseline Study, The Institute of Paper Chemistry has been directed to identify the participating mills by means of a scrambled system of code letters. Under this system, which was initiated in Progress Report 105, each mill is identified by a code letter different from that used for the previous month.

During the period from June 1 to June 30, one hundred and three different sample lots of 42-lb. F ourdrinier kraft linerboard were submitted by seventeen different F.K.I. mills to The Institute of Paper Chemistry for testing. In addition to the samples of 42-lb. kraft linerboard, two samples of drum linerboard were submitted for evaluation by one of the participating mills. The results on the special stock are tabulated separately in this report. A tabulation of the number of samples classified according to mill may be seen in Table I.

TABLE I

DISTRIBUTION OF 42-LB. LINERBOARD SAMPLES

Mill Code	Samples Submitted
A	4
B	8
C	5
D	9
E	2
F	6
G	8
H	2
I	4
J	6

TABLE I--Continued

DISTRIBUTION OF 42-LB. LINERBOARD SAMPLES

Mill Code	Samples Submitted
K	7
L	8
M	12
N	7
O	1
P	6
Q	8
Total	103

These sample lots were tested for basis weight, caliper, bursting strength, and Elmendorf tear. The average strength results for each mill may be seen in Table II and are graphically presented in Figures 1 to 5. In addition to a comparison of the mill averages for the various tests, Table II also shows the current F.K.I. averages, the cumulative F.K.I. averages, and the F.K.I. indexes. The cumulative F.K.I. average is based on the results for the previous twelve months excluding the current period. Hence, in the case of the current report, it covers the period from June 1, 1955 to May 31, 1956. The F.K.I. indexes are obtained as follows:

$$\frac{\text{current F.K.I. average}}{\text{cumulative F.K.I. average}} \times 100 = \text{F.K.I. index (\%)}$$

The F.K.I. index provides a ready means of comparing the current quality with previous results. For example, the current F.K.I. average basis weight is 43.0 lb., and the cumulative F.K.I. average basis weight

is 42.9 lb. Hence, the index for basis weight determined in per cent as indicated above is 100.2. This signifies that the current average basis weight is slightly higher than the cumulative average.

A comparison of the results in Table II and Figure 1 shows that the average basis weight results for all mills except H conform to the 42-lb. specification set forth in Rule 41. Mills D and G share the highest average basis weight, it being 44.1 lb. or approximately 5.0% higher than the 42-lb. specification. On the other hand, Mill H has the lowest average basis weight, it being 41.7 lb. or approximately 0.7% lower than the 42-lb. specification.

The amount by which the mills vary from the 42-lb. specification is as follows:

Mill Code	Per Cent
A	+4.3
B	+3.1
C	+0.5
D	+5.0
E	+1.0
F	+1.4
G	+5.0
H	-0.7
I	+2.9
J	+1.0
K	+2.9
L	+1.7
M	+2.4
N	+1.9
O	+4.3
P	+1.0
Q	+3.6

A comparison of the average basis weight data for the previous period with the current F.K.I. average indicates that the basis weight results have increased slightly from 42.9 lb. to 43.0 lb.

A comparison of the average caliper values for the various mills (see Figure 2) shows that the mill averages vary from a low of 11.7 points for Mill E to a high of 13.7 points for Mill B. The current F.K.I. average is 12.7 points, the same as the cumulative F.K.I. average.

The average bursting strength values obtained for each mill are graphically presented in Figure 3. It may be observed in Table II and Figure 3 that the average bursting strength values for the various mills range from a low of 100 for Mill M to a high of 115 for Mill L. The current F.K.I. average bursting strength is 107, slightly lower than the cumulative F.K.I. average of 109.

A graphic comparison of the Elmendorf tear results for the various mills is given in Figures 4 and 5. The data of Table II show that Mill A has the highest average machine direction tear value of 393 units whereas Mill N has the lowest value of 295 units. Mill M has the highest cross-machine direction tear value of 419 units and Mill C has the lowest value of 338 units. It may be noted that the current F.K.I. average machine and cross-machine direction tear results are slightly lower than the respective cumulative averages.

A comparison of the F.K.I. indexes indicates that, for the current period, the current F.K.I. average for basis weight is slightly higher than the cumulative F.K.I. average and the current F.K.I. average for caliper is the same as the cumulative F.K.I. average, whereas the current F.K.I.

averages for bursting strength and Elmendorf tear are slightly lower than the respective cumulative F.K.I. averages.

In order to compare the variation within a given mill, the test results for each particular mill have been tabulated in Tables III to XIX for Mills A to Q, respectively. In addition to the current and cumulative averages, the mill factor and mill index are given for each mill. The cumulative mill average is the average test result obtained on the samples submitted by the particular mill for the previous twelve months excluding the current period. The mill factor and the mill index are obtained as follows:

$$\frac{\text{current mill average}}{\text{cumulative mill average}} \times 100 = \text{mill factor (\%)}$$

$$\frac{\text{current mill average}}{\text{cumulative F.K.I. average}} \times 100 = \text{mill index (\%)}$$

The mill factor and the mill index serve as a ready means for comparing the current mill results either with the previous results for that particular mill or with the cumulative F.K.I. results. The reports also contain a comparison of the test data obtained at the mills with test data obtained at The Institute of Paper Chemistry.

The results obtained on the special drum stock may be seen in Table XX.

It may be noted in Tables III through XX that the test data include information about the sheet finish. The summarized results for the mills which submitted sample lots during the current period are as follows:

Mill Code	No. of Sample Lots W.F.	D.F.	Misc.
A	4		
B	8		
C	5[a]		
D	9		
E	2		
F	6		
G	8		
H	2[a]		
I	4		
J	6		
K	7		
L			8[b]
M	12		
N	7[a]		
O	1[a]		
P	6		
Q	8		
R[c]	2[a]		

[a] One side only.
[b] Sheet finish not reported.
[c] Drum linerboard.

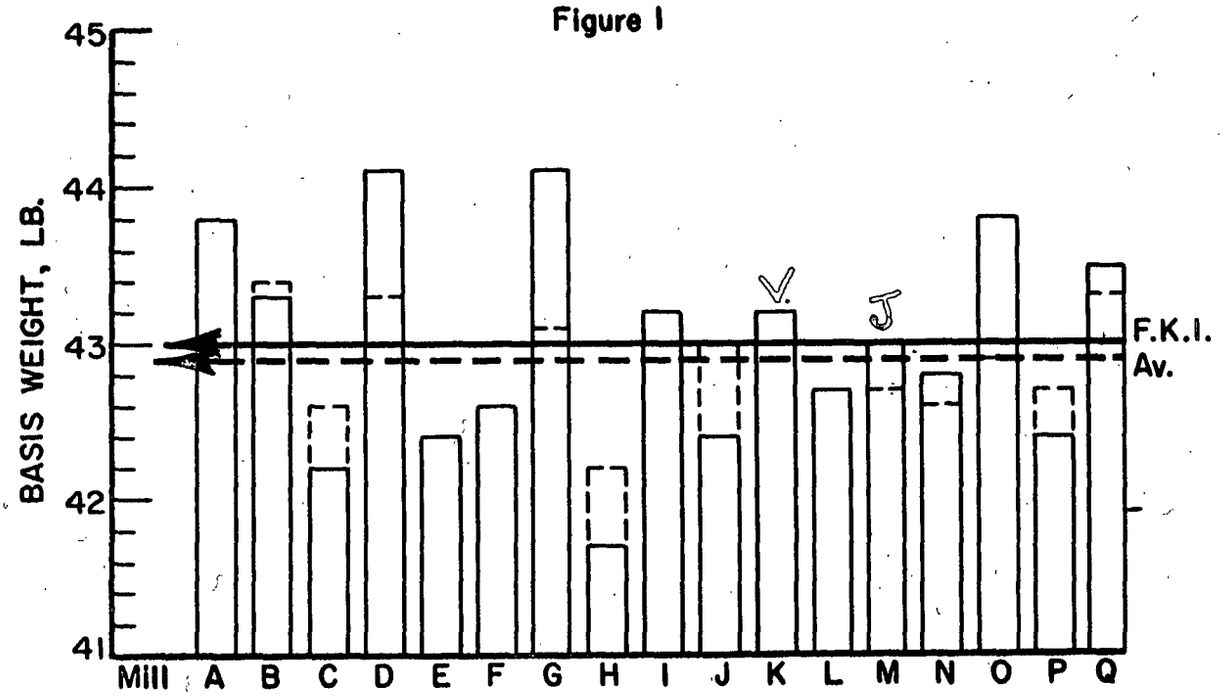
The results indicate that a majority of the mills are using a water finish on their 42-lb. linerboard.

TABLE II

SUMMARY OF COMPOSITE MILL AVERAGES--JUNE 1 THROUGH JUNE 30, 1956

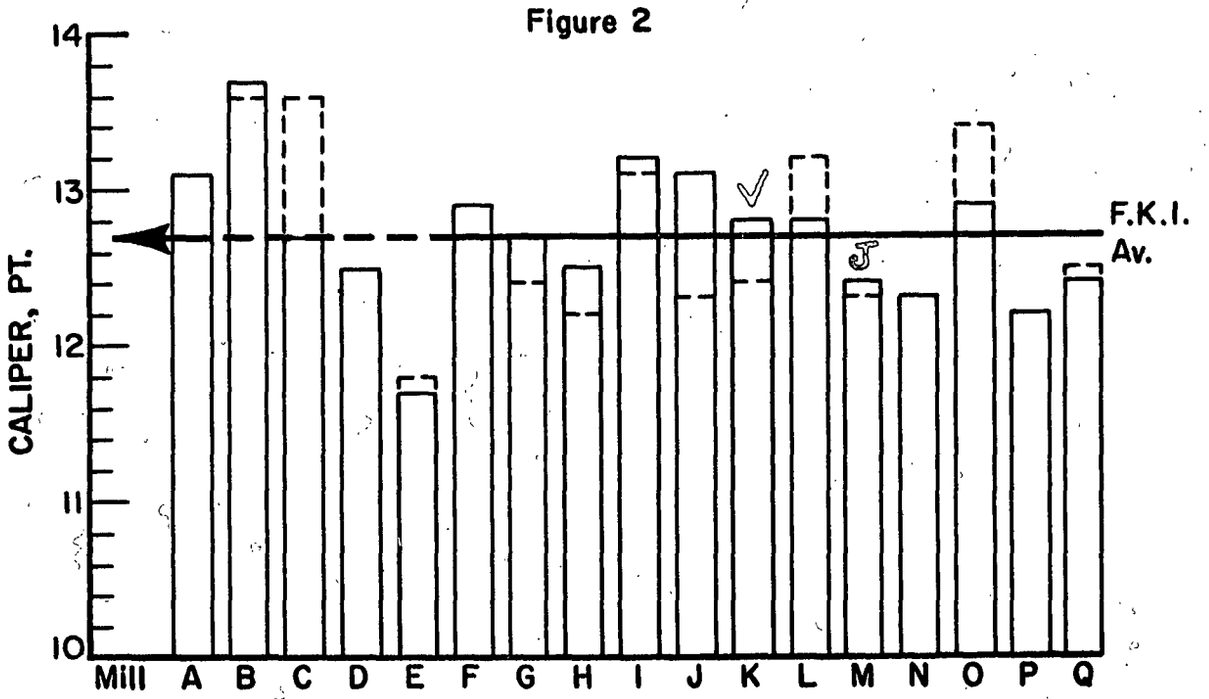
Mill	Basis Weight, lb.	Caliper, points	Bursting Strength, p.s.i. gage	Elmendorf Tear, g./sheet	
				In Machine	Cross Machine
A	43.8	13.1	104	393	395
B	43.3	13.7	107	318	355
C	42.2	12.7	104	332	338
D	44.1	12.5	110	369	389
E	42.4	11.7	104	340	371
F	42.6	12.9	107	361	358
G	44.1	12.7	110	333	373
H	41.7	12.5	104	365	401
I	43.2	13.2	108	359	398
J	42.4	13.1	107	320	341
K	43.2	12.8	108	346	383
L	42.7	12.8	115	309	384
M	43.0	12.4	100	385	419
N	42.8	12.3	110	295	360
O	43.8	12.9	104	356	371
P	42.4	12.2	109	343	384
Q	43.5	12.4	106	313	354
Current FKI Average:	43.0	12.7	107	343	375
Cumulative FKI Average:	42.9	12.7	109	348	381
FKI Index, %	100.2	100.0	98.2	98.6	98.4

Figure 1



COMPARISON OF BASIS WEIGHT RESULTS
(Period June 1 - June 30, 1956)

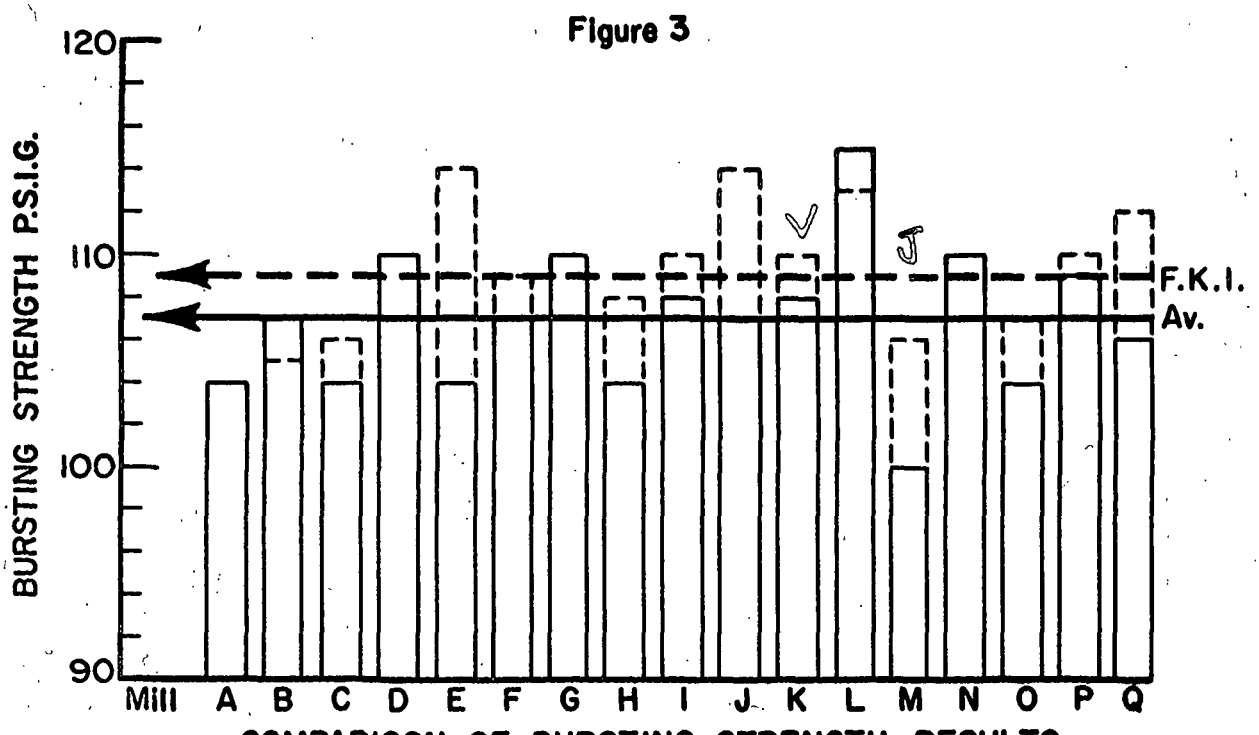
Figure 2



COMPARISON OF CALIPER RESULTS
(Period June 1 - June 30, 1956)

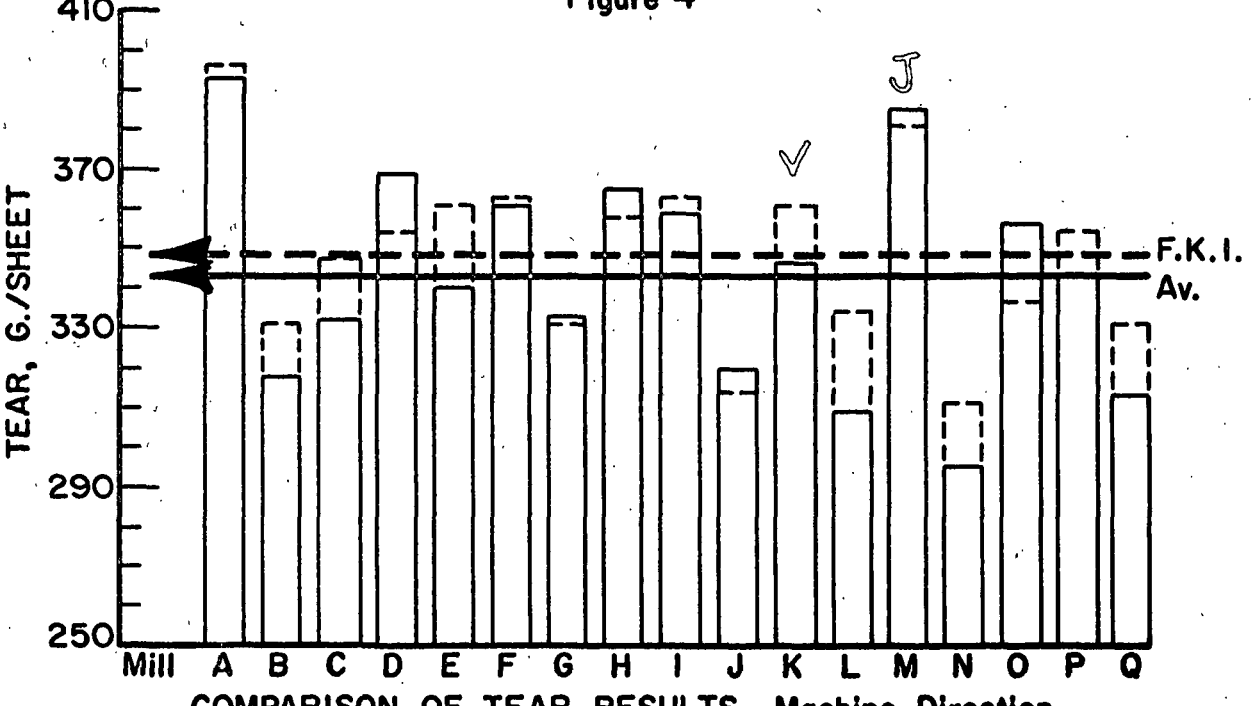
——— Current mill average
- - - - - Cumulative mill average

Figure 3



COMPARISON OF BURSTING STRENGTH RESULTS
(Period June 1 - June 30, 1956)

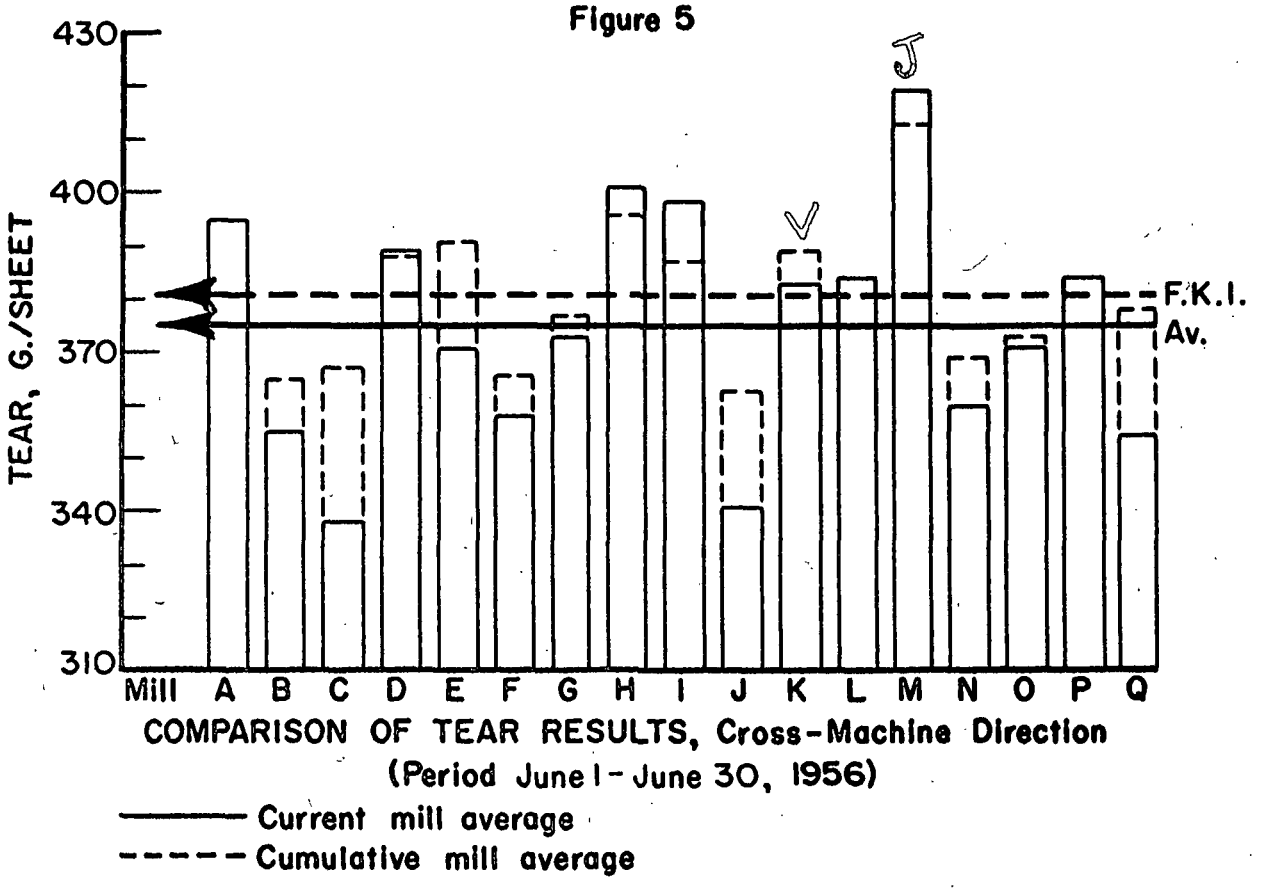
Figure 4



COMPARISON OF TEAR RESULTS, Machine Direction
(Period June 1 - June 30, 1956)

——— Current mill average
- - - - - Cumulative mill average

Figure 5



COMPARISON OF TEAR RESULTS, Cross-Machine Direction
(Period June 1 - June 30, 1956)

——— Current mill average
- - - - - Cumulative mill average

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956

TABLE III

MILL A -- 42-LB. LINERBOARD

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
170095	S.F.	6/ 2/56	5/28/56	7	44.4	42.0	43.5	13.7	12.5	13.0	141	70	109	464	416	439[a]	448	384	414[a]
170189	S.F.	6/ 9/56	6/ 4/56	7	46.0	44.0	44.9	14.0	12.9	13.4	125	89	107	480	344	395	456	336	395
170294	S.F.	6/20/56	6/15/56	7	44.4	42.4	43.4	13.8	12.4	12.9	130	69	106	416	344	379[a]	424	360	395[a]
170378	S.F.	6/25/56	6/21/56	7	46.0	42.0	43.2	13.9	12.5	13.0	122	75	92	408	320	361[a]	416	352	377
Current Mill Average:							43.8			13.1			104			393			395
Cumulative Mill Average:							43.8			13.1			104			396			395
Mill Factor, %							100.0			100.0			100.0			99.2			100.0
Mill Index, %							102.1			103.1			95.4			112.9			103.7

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE IV

MILL B -- 42-LB. LINERBOARD

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
170211	W.F.	6/11/56	5/23/56	1	44.2	42.0	42.9	14.0	12.3	13.8	115	87	104	352	288	322	424	296	342[a]
170212	W.F.	6/11/56	5/24/56	1	46.0	42.6	44.4	14.8	13.4	14.1	130	85	105	384	272	319	448	312	372[a]
170213	W.F.	6/11/56	5/26/56	1	43.8	41.8	42.4	13.7	12.3	13.2	132	86	111	352	240	295	400	320	359[a]
170214	W.F.	6/11/56	5/29/56	1	44.0	42.0	42.9	14.0	13.0	13.3	127	88	108	376	264	335	392	320	355[a]
170215	W.F.	6/11/56	5/31/56	1	44.0	42.2	43.3	14.4	12.3	13.7	125	72	106	352	280	307	384	320	357[a]
170216	W.F.	6/11/56	5/31/56	1	44.0	42.8	43.6	14.9	13.8	14.2	128	92	108	328	264	291[a]	416	320	352[a]
170217	W.F.	6/11/56	6/ 1/56	1	45.8	42.4	43.7	14.9	13.5	13.9	129	87	107	400	312	345[a]	392	296	345[a]
170218	W.F.	6/11/56	6/ 1/56	1	44.0	42.2	43.3	14.3	12.8	13.5	129	94	109	376	296	334[a]	392	320	363[a]
Current Mill Average:							43.3			13.7			107			318			355
Cumulative Mill Average:							43.4			13.6			105			331			365
Mill Factor, %							99.8			100.7			101.9			96.1			97.3
Mill Index, %							100.9			107.9			98.2			91.4			93.2

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE V

MILL C -- 42-LB. LINERBOARD

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
170118	WF1S	6/ 6/56	5/31/56	2	43.0	42.0	42.2	13.0	12.0	12.5	121	80	103	352	280	327	384	320	348[a]
170119	WF1S	6/ 6/56	6/ 1/56	2	43.6	41.8	42.5	12.6	11.9	12.2	127	81	113	368	288	333[a]	376	320	341[a]
170221	WF1S	6/11/56	6/ 7/56	2	43.4	42.4	42.8	14.0	12.8	13.4	121	90	102	424	280	337[a]	392	304	343[a]
170293	WF1S	6/20/56	6/13/56	2	44.0	42.0	42.8	14.0	12.8	13.2	119	76	94	416	320	361[a]	368	288	334[a]
170382	WF1S	6/25/56	6/19/56	2	41.8	40.0	40.7	12.7	11.7	12.1	120	86	105	328	272	303	352	296	323
Current Mill Average:							42.2			12.7			104			332			338
Cumulative Mill Average:							42.6			13.6			106			347			367
Mill Factor, %							99.1			93.4			98.1			95.7			92.1
Mill Index, %							98.4			100.0			95.4			95.4			88.7

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE VI

MILL D -- 42-LB. LINERBOARD

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
170109	W.F.	6/ 4/56	5/30/56	4	45.6	44.2	45.0	13.0	11.9	12.4	127	93	109	408	304	366[a]	448	360	410[a]
170110	W.F.	6/ 4/56	5/31/56	4	47.8	46.0	47.1	13.9	13.0	13.3	135	95	113	496	392	450[a]	448	384	413
170111	W.F.	6/ 4/56	6/ 1/56	4	44.2	43.8	44.0	13.3	11.7	12.2	132	88	113	432	304	353[a]	416	328	377[a]
170199	W.F.	6/11/56	6/ 6/56	4	44.8	43.6	44.2	12.8	12.0	12.2	142	97	115	416	312	374[a]	432	336	393[a]
170200	W.F.	6/11/56	6/ 7/56	4	43.8	41.6	42.8	12.9	12.0	12.4	120	91	107	424	320	363[a]	424	320	367[a]
170201	W.F.	6/11/56	6/ 8/56	4	44.2	43.6	44.1	13.7	12.6	13.2	132	93	112	408	336	372[a]	496	368	401[a]
170295	W.F.	6/20/56	6/13/56	4	44.0	42.4	43.3	13.3	12.0	12.7	131	87	105	360	288	330[a]	432	296	365[a]
170296	W.F.	6/20/56	6/14/56	4	44.2	40.0	43.6	13.0	12.0	12.4	139	95	108	424	304	354[a]	488	392	412[a]
170297	W.F.	6/20/56	6/15/56	4	43.8	42.4	43.1	12.0	11.0	11.7	121	93	110	416	312	355[a]	432	328	363[a]
Current Mill Average:							44.1			12.5			110			369			389
Cumulative Mill Average:							43.3			12.5			110			354			388
Mill Factor, %							101.8			100.0			100.0			104.2			100.3
Mill Index, %							102.8			98.4			100.9			106.0			102.1

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE VII

MILL E -- 42-LB. LINERBOARD

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
170107	W.F.	6/ 4/56	5/28/56	4	44.0	41.4	42.4	12.3	11.3	11.8	125	74	109	424	304	346[a]	408	336	377[a]
170108	W.F.	6/ 4/56	5/28/56	4	43.4	40.6	42.4	12.1	11.1	11.6	121	71	99	384	296	334[a]	400	328	364[a]
Current Mill Average:							42.4			11.7			104			340			371
Cumulative Mill Average:							42.4			11.8			114			361			391
Mill Factor, %							100.0			99.2			91.2			94.2			94.9
Mill Index, %							98.8			92.1			95.4			97.7			97.4

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE VIII

MILL F -- 42-LB. LINERBOARD

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
170134	W.F.	6/ 9/56	5/27/56	-	43.0	42.0	42.3	13.1	12.0	12.6	133	90	113	392	320	345[a]	376	296	345[a]
170185	W.F.	6/ 9/56	6/ 4/56	-	44.4	42.4	43.2	13.4	11.8	12.9	122	85	106	408	336	376[a]	416	328	376[a]
170303	W.F.	6/21/56	6/ 3/56	-	44.0	42.0	43.3	14.0	12.2	12.9	119	91	105	400	336	365[a]	416	336	369[a]
170304	W.F.	6/21/56	6/13/56	-	43.2	42.0	42.4	13.8	11.8	12.9	117	95	105	400	312	361[a]	376	312	346[a]
170305	W.F.	6/21/56	6/11/56	-	43.8	42.0	42.5	13.4	12.2	12.9	121	81	105	400	320	354[a]	424	320	349[a]
170306	W.F.	6/21/56	6/13/56	-	43.6	40.6	42.1	13.8	12.0	12.9	125	90	108	432	320	363[a]	408	304	361[a]
Current Mill Average:							42.6			12.9			107			361			358
Cumulative Mill Average:							42.6			12.7			109			363			366
Mill Factor, %							100.0			101.6			98.2			99.4			97.8
Mill Index, %							99.3			101.6			98.2			103.7			94.0

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE IX

MILL G -- 42-LB. LINERBOARD

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
170105	W.F.	6/ 4/56	5/21/56	1	45.2	43.4	44.0	13.1	11.8	12.5	143	82	110	424	296	340[a]	408	304	375[a]
170106	W.F.	6/ 4/56	5/21/56	1	45.0	43.6	44.2	13.0	12.2	12.6	144	88	112	368	320	341[a]	416	336	377[a]
170186	W.F.	6/ 9/56	5/21/56	1	45.6	42.6	44.0	13.2	12.0	12.8	137	93	110	368	320	341[a]	416	352	371[a]
170187	W.F.	6/ 9/56	5/21/56	1	45.2	43.2	44.1	13.0	12.0	12.6	122	100	110	368	288	322	432	336	381[a]
170222	W.F.	6/11/56	5/22/56	1	44.6	43.0	44.1	13.1	11.7	12.5	129	82	108	368	288	327[a]	424	344	372[a]
170223	W.F.	6/11/56	5/22/56	1	44.8	43.4	44.1	13.2	12.0	12.8	135	85	113	360	280	322[a]	384	312	354[a]
170247	W.F.	6/18/56	5/31/56	2	44.4	43.8	44.1	13.8	12.2	13.0	134	85	107	408	288	342	400	336	379[a]
170248	W.F.	6/18/56	5/31/56	2	44.0	43.4	43.8	13.1	12.3	12.9	129	90	107	368	304	327	408	336	375[a]
Current Mill Average:							44.1			12.7			110			333			373
Cumulative Mill Average:							43.1			12.4			110			331			377
Mill Factor, %							102.3			102.4			100.0			100.6			98.9
Mill Index, %							102.8			100.0			100.9			95.7			97.9

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE X

MILL H -- 42-LB. LINERBOARD

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
170266	WF1S	6/19/56	6/ 9/56	1	42.2	41.8	41.9	13.1	11.5	12.4	121	90	106	400	336	367[a]	464	360	413[a]
170267	WF1S	6/19/56	6/10/56	1	42.0	41.0	41.5	13.4	12.0	12.6	118	83	103	400	304	363[a]	424	360	390[a]
Current Mill Average:							41.7			12.5			104			365			401
Cumulative Mill Average:							42.2			12.2			108			358			396
Mill Factor, %							98.8			102.5			96.3			102.0			101.3
Mill Index, %							97.2			98.4			95.4			104.9			105.2

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE XI

MILL I -- 42-LB. LINERBOARD

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
170116	W.	6/ 5/56	5/ 9/56	2	44.0	40.4	42.3	13.3	12.0	12.9	139	84	112	368	304	334[a]	448	336	391[a]
170117	W.	6/ 5/56	5/26/56	4	44.2	42.2	43.1	14.0	12.6	13.2	126	87	107	408	328	366[a]	440	360	386[a]
170245	W.	6/18/56	5/29/56	4	44.2	43.0	43.8	14.0	13.1	13.8	120	74	102	408	336	368	464	360	411[a]
170246	W.	6/18/56	6/ 7/56	4	44.0	43.0	43.8	13.2	12.5	13.0	130	102	111	408	336	367[a]	456	344	403[a]
Current Mill Average:							43.2			13.2			108			359			398
Cumulative Mill Average:							43.0			13.1			110			363			387
Mill Factor, %							100.5			100.8			98.2			98.9			102.8
Mill Index, %							100.7			103.9			99.1			103.2			104.5

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE XII

MILL J -- 42-LB. LINERBOARD

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
170101	W.F.	6/ 4/56	5/22/56	1	43.6	42.0	42.7	13.9	12.6	13.3	131	82	107	384	280	327[a]	360	312	342[a]
170102	W.F.	6/ 4/56	5/24/56	1	43.8	42.0	42.6	13.7	12.9	13.2	130	84	109	400	272	316[a]	416	272	337[a]
170103	W.F.	6/ 4/56	5/29/56	1	42.8	41.6	42.1	13.5	12.6	13.1	123	94	108	344	264	307[a]	368	304	335[a]
170234	W.F.	6/15/56	6/ 8/56	1	43.8	42.0	42.6	13.5	12.2	13.0	127	89	109	368	272	330	368	320	338[a]
170235	W.F.	6/15/56	6/10/56	1	44.0	42.0	42.6	13.5	12.8	13.1	125	90	106	400	264	316[a]	384	312	352[a]
170263	W.F.	6/19/56	6/14/56	1	42.4	41.0	42.0	13.5	12.6	13.1	124	81	103	352	280	323[a]	360	320	345[a]
Current Mill Average:							42.4			13.1			107			320			341
Cumulative Mill Average:							43.0			12.3			114			314			363
Mill Factor, %							98.6			106.5			93.9			101.9			93.9
Mill Index, %							98.8			103.1			98.2			92.0			89.5

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE XIII

MILL K -- 42-LB. LINERBOARD

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
170253	W.F.	6/18/56	6/ 4/56	-	44.0	42.0	43.2	13.5	11.9	12.3	125	91	111	392	280	341[a]	456	352	394[a]
170254	W.F.	6/18/56	6/ 5/56	-	44.0	41.6	42.8	13.0	12.1	12.7	129	83	106	384	288	345	384	336	369[a]
170255	W.F.	6/18/56	6/ 5/56	-	44.4	42.0	43.1	13.7	12.0	12.7	130	100	111	400	304	351[a]	456	368	400[a]
170256	W.F.	6/18/56	6/ 7/56	-	44.2	42.2	43.3	14.1	12.9	13.3	123	90	106	400	312	345[a]	432	360	399[a]
170257	W.F.	6/18/56	6/ 7/56	-	44.2	41.2	43.1	13.9	12.3	13.1	123	92	106	416	304	354[a]	408	312	364[a]
170379	W.F.	6/25/56	6/14/56	-	44.4	42.0	43.2	13.3	12.0	12.6	130	89	107	360	312	331[a]	416	336	371[a]
170380	W.F.	6/25/56	6/15/56	-	44.0	42.0	43.6	13.5	12.2	12.9	129	85	112	392	320	355	408	352	385[a]
Current Mill Average:							43.2			12.8			108			346			383
Cumulative Mill Average:							43.0			12.4			110			361			389
Mill Factor, %							100.5			103.2			98.2			95.8			98.5
Mill Index, %							100.7			100.8			99.1			99.4			100.5

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE XIV

MILL L -- 42-LB. LINERBOARD

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
170067		6/ 1/56	5/ 1/56	1	44.0	42.0	42.6	14.7	11.3	12.6	122	87	110	368	280	319[a]	424	336	374[a]
170068		6/ 1/56	5/ 5/56	1	42.8	42.0	42.2	13.5	11.7	12.6	147	104	124	384	288	319	416	320	375[a]
170069		6/ 1/56	5/ 9/56	1	44.0	42.0	43.0	13.2	11.5	12.8	134	97	119	320	272	290	432	368	394[a]
170070		6/ 1/56	5/11/56	1	43.8	41.8	42.4	13.7	11.7	12.7	125	69	105	400	288	329[a]	408	320	372[a]
170249		6/18/56	5/15/56	1	43.6	42.4	43.1	14.0	12.2	13.3	131	98	117	352	240	291	464	336	381[a]
170250		6/18/56	5/20/56	1	43.8	42.0	42.8	13.6	11.8	12.7	135	90	119	352	272	317[a]	432	384	402[a]
170251		6/18/56	5/26/56	1	44.0	42.0	42.8	13.4	12.0	12.9	135	80	114	376	272	316	464	344	408[a]
170252		6/18/56	5/31/56	1	43.8	42.0	42.6	13.5	12.2	13.0	142	100	115	344	264	290	400	336	367[a]
Current Mill Average:							42.7			12.8			115			309			384
Cumulative Mill Average:							42.7			13.2			113			334			375
Mill Factor, %							100.0			97.0			101.8			92.5			102.4
Mill Index, %							99.5			100.8			105.5			88.8			100.8

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE XV

MILL M -- 42-LB. LINERBOARD

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
170307	W.B.	6/21/56	5/ 7/56	-	44.6	42.0	42.9	13.2	12.0	12.6	114	84	100	408	352	385	488	368	418[a]
170308	W.B.	6/21/56	5/10/56	-	45.8	42.8	44.0	13.9	12.2	13.1	112	80	99	448	344	395[a]	528	416	460[a]
170309	W.B.	6/21/56	5/17/56	-	44.0	40.0	42.4	13.0	11.0	12.0	112	82	97	408	328	362	440	376	405[a]
170310	W.B.	6/21/56	5/18/56	-	44.0	41.0	42.7	13.0	12.0	12.4	117	77	99	464	320	378[a]	464	376	415[a]
170311	W.B.	6/21/56	5/29/56	-	44.0	41.8	42.8	13.0	12.0	12.5	116	71	98	448	336	385[a]	464	368	412[a]
170312	W.B.	6/21/56	5/29/56	-	44.0	41.0	42.8	13.0	11.9	12.4	122	76	100	416	336	381[a]	472	368	421[a]
170313	W.B.	6/21/56	5/30/56	-	46.0	42.0	43.9	13.0	12.0	12.7	121	80	103	480	336	407[a]	488	368	436[a]
170314	W.B.	6/21/56	5/31/56	-	44.2	41.8	43.0	13.1	12.0	12.6	124	88	101	504	368	409[a]	448	344	395[a]
170388	W.B.	6/26/56	6/11/56	-	44.4	42.0	43.3	13.0	11.6	12.2	121	83	100	432	376	397[a]	496	400	431[a]
170389	W.B.	6/26/56	6/13/56	-	44.0	41.6	43.2	13.3	11.8	12.5	119	74	96	400	336	367	432	384	405
170390	W.B.	6/26/56	6/15/56	-	43.6	40.4	42.0	12.8	11.5	12.1	124	85	103	416	304	371[a]	464	368	405[a]
170391	W.B.	6/26/56	6/15/56	-	44.4	41.0	42.4	12.7	11.2	12.0	117	89	100	432	336	385[a]	512	352	425[a]
Current Mill Average:							43.0			12.4			100			385			419
Cumulative Mill Average:							42.7			12.3			106			381			413
Mill Factor, %							100.7			100.8			94.3			101.0			101.5
Mill Index, %							100.2			97.6			91.7			110.6			110.0

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE XVI

MILL N -- 42-LB. LINERBOARD

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
170096	WF1S	6/ 2/56	5/29/56	1	43.8	42.0	42.7	13.1	11.7	12.3	128	95	107	328	272	287	384	328	353[a]
170097	WF1S	6/ 2/56	5/28/56	1	44.0	41.8	42.7	12.8	11.7	12.3	123	89	112	352	264	303[a]	424	344	369[a]
170188	WF1S	6/ 9/56	6/ 2/56	1	43.8	42.0	43.1	12.7	11.9	12.2	128	78	107	336	256	295	384	320	355[a]
170238	WF1S	6/15/56	6/ 8/56	1	43.8	42.0	42.7	12.9	11.9	12.2	138	94	111	368	248	299[a]	384	336	361[a]
170383	WF1S	6/25/56	6/17/56	1	43.8	42.0	42.9	12.9	11.9	12.3	124	85	108	352	232	297[a]	392	320	355[a]
170384	WF1S	6/25/56	6/19/56	1	43.6	41.8	42.8	13.0	11.4	12.3	129	95	111	344	256	292	432	328	367[a]
170385	WF1S	6/25/56	6/20/56	1	43.8	42.2	42.9	12.9	11.9	12.4	127	100	111	336	248	294[a]	376	320	361[a]
Current Mill Average:							42.8			12.3			110			295			360
Cumulative Mill Average:							42.6			12.3			107			311			369
Mill Factor, %							100.5			100.0			102.8			94.9			97.6
Mill Index, %							99.8			96.9			100.9			84.8			94.5

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE XVII

MILL O -- 42-LB. LINERBOARD

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
170104	WF1S	6/ 4/56	5/28/56	1	44.4	43.2	43.8	13.4	12.4	12.9	137	68	104	416	304	356[a]	416	296	371[a]
Current Mill Average:							43.8			12.9			104			356			371
Cumulative Mill Average:							42.9			13.4			107			336			373
Mill Factor, %							102.1			96.3			97.2			106.0			99.5
Mill Index, %							102.1			101.6			95.4			102.3			97.4

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE XVIII

MILL P -- 42-LB. LINERBOARD

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
170114	W.F.	6/ 5/56	5/30/56	2	43.2	42.0	42.4	13.0	12.1	12.7	130	74	105	384	304	333	392	336	371[a]
170115	W.F.	6/ 5/56	5/31/56	2	42.8	42.0	42.3	12.0	11.0	11.7	143	75	103	376	320	348	448	336	379[a]
170219	W.F.	6/11/56	6/ 4/56	2	43.6	41.6	42.8	12.4	11.8	12.2	148	84	116	376	280	338[a]	416	360	387[a]
170220	W.F.	6/11/56	6/ 5/56	2	43.8	41.8	42.5	12.8	11.9	12.2	136	89	115	400	304	347	432	376	401[a]
170264	W.F.	6/19/56	6/11/56	2	42.0	41.6	41.9	12.9	12.2	12.5	125	78	103	376	288	321[a]	416	336	362[a]
170265	W.F.[b]	6/19/56	6/12/56	2	43.0	42.0	42.1	12.5	12.0	12.1	138	88	110	424	328	371[a]	440	360	403[a]
Current Mill Average:							42.4			12.2			109			343			384
Cumulative Mill Average:							42.7			12.2			110			354			384
Mill Factor, %							99.3			100.0			99.1			96.9			100.0
Mill Index, %							98.8			96.1			100.0			98.6			100.8

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

[b]The mill data sheet identifies the finish as WF1S.

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE XIX

MILL Q -- 42-LB. LINERBOARD

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
170112	W.F.	6/ 5/56	5/27/56	1	44.6	43.8	44.2	13.6	12.6	13.0	120	86	103	368	240	304	384	336	357[a]
170113	W.F.	6/ 5/56	5/28/56	2	43.4	42.4	42.9	12.6	11.3	12.1	119	96	108	320	248	287	376	320	347[a]
170162	W.F.	6/ 8/56	6/ 3/56	2	44.4	42.4	43.5	12.7	12.0	12.2	124	80	103	368	304	326	400	320	350[a]
170163	W.F.	6/ 8/56	6/ 3/56	2	44.0	43.4	43.8	12.3	12.0	12.2	121	78	100	368	312	332	400	320	361[a]
170236	W.F.	6/15/56	6/10/56	2	43.2	42.0	42.4	12.6	12.0	12.2	118	95	105	360	280	313[a]	400	320	354[a]
170237	W.F.	6/15/56	6/10/56	1	44.2	42.4	43.7	13.3	12.4	12.9	132	85	109	368	280	324[a]	400	320	358[a]
170370	W.F.	6/22/56	6/17/56	2	44.0	42.4	43.5	13.0	12.1	12.4	129	100	107	328	280	307	392	336	359[a]
170371	W.F.	6/22/56	6/17/56	1	44.2	43.0	43.8	12.4	12.0	12.2	130	101	111	336	272	309	376	320	351
Current Mill Average:							43.5			12.4			106			313			354
Cumulative Mill Average:							43.3			12.5			112			331			378
Mill Factor, %							100.5			99.2			94.6			94.6			93.7
Mill Index, %							101.4			97.6			97.2			89.9			92.9

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

SUMMARY OF INSTITUTE DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE XX

MILL R -- MISCELLANEOUS

File No.	Finish	Date Recd.	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
														In			Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
47-lb. Drum Linerboard																			
170066	WFlS	6/ 1/56	5/23/56	2	50.4	47.6	48.5	16.0	14.8	15.2	137	103	117	408	328	375[a]	480	352	412[a]
170381	WFlS	6/25/56	6/18/56	2	49.6	48.0	48.5	14.7	13.8	14.1	110	70	98	448	352	395[a]	448	384	407[a]
Current Mill Average:							48.5			14.7			107			385			410
Cumulative Mill Average:							47.0			14.2			100			387			394
Mill Factor, %							103.2			103.5			107.0			99.5			104.1

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

As a supplementary part of the Continuous Baseline Study, comparisons of the mill test results with those obtained at The Institute of Paper Chemistry on corresponding samples have been included in this report. As may be noted in Table XXI, the atmospheric conditions used prior to and during the testing period varied considerably.

TABLE XXI

	Preconditioning			Conditioning		
Code	R.H., %	Temp., °F.	Time, hr.	R.H., %	Temp., °F.	Time, hr.
A	50	73	24	50	73	--
B	50	73	24-144	50	73	24-144
C		None		52-62	78-88	--
D	30	78	8	49-52	72-73	16
E		None		50	73	2
F		None		50	72-73	0.5
G	50	73	24	50	73	24
H		None		50	73	24
I		None		50-64	72-76	--
J	44-78	63-94	0.5	50	70	24-48
K	50	73	48-72	50	73	30-48
L		None		34-78	76-85	--
M		None		49-52	71-72	48
N		None		50-54	72-75	--
O	68	84	24	74	76	2
P		None		50	73	24
Q		None		50-53	73-74	24

A summary of the Institute and mill test results for the current period is shown in Table XXII, and a comparison of differences between Institute and mill test results is given in Table XXIII for the current period and the two previous periods. The comparisons are given in Tables XXIV to XXXX, for the 42-lb. liner samples. A comparison of the special

drum stock is given in Table XLI. In all, the comparisons given in Tables XXII to XLI, the Institute's test values have been used as the reference line.

A comparison of the test data in Tables XXII and XXIII reveals the level of agreement between mill and Institute data for basis weight, caliper, bursting strength, and Elmendorf tear. Table XXII shows the average difference encountered in the comparison of Institute and mill test results for the sample lots submitted by each mill for the current period, as well as the maximum difference encountered in comparing the Institute and mill test results for a given sample lot. In Table XXIII, the average differences shown for each test in Table XXII have been calculated on a percentage basis for each mill. In addition, for purposes of comparison, the average percentage differences for the preceding two periods are shown.

It may be noted in Table XXIII that the maximum variation between the average basis weight results of the Institute and those of a given mill on corresponding samples is two per cent for the current period. By comparison, the maximum percentage variation noted for the previous two periods was also two per cent. A variation of the magnitude of two per cent indicates that the agreement between Institute and mill test results is satisfactory. Further, it may be noted that the average basis weight results for Mills A, C, D, F, and P are higher than those for the Institute, the average result for Mill O is the same, and the average results for the other mills are lower. None of the variations encountered appear to be exorbitant.

The maximum variation in caliper for the current period is five per cent. This variation is comparable to the maximum variations for the previous two periods--namely, seven per cent. Compared with the Imstitute's test results, the test results for all mills are slightly lower. None of the variations appear to be excessive with the possible exception of the variations noted for Mills G and O.

It may be noted in Table XXIII that the bursting strength results exhibit a maximum variation of nine per cent (Mill O) for the current period. The average results for Mills A, B, C, D, G, H, M, N, P, and Q are higher than those for the Institute, the results for Mills J and K are the same, and the results for the other mills are lower. The variations noted for Mills A, G, M, O, and Q appear to be excessive.

It may be seen in Tables XXII and XXIII that the average machine direction tear results for Mills G, H, I, K, M, N, O, and Q are higher than those for the Institute, and the results for the other mills are lower. The maximum variation for the current period is sixteen per cent. The differences encountered for Mills B, G, and N appear to be excessive.

With regard to the cross-machine direction tear results, it may be noted that the average results for Mills A, C, F, G, H, I, J, K, N, O, and Q are higher than those for the Institute, and the average results for the other mills are lower. The maximum variation for the current period

is seventeen per cent. The variations noted for Mills G, H, and O appear to be excessive.

TABLE XXII

SUMMARY OF TEST RESULT COMPARISONS
(Average Mill and Institute Results)

	Mills*																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
No. of Samples Compared	4	8	5	9	2	6	8	2	4	6	7	8	12	7	1	6	8
Basis Weight																	
Institute	43.8	43.3	42.2	44.1	42.4	42.6	44.1	41.7	43.2	42.4	43.2	42.7	43.0	42.8	43.8	42.4	43.5
Mill	44.0	42.9	42.8	44.2	42.3	42.8	44.0	41.4	43.0	42.3	42.8	42.2	42.8	42.5	43.8	43.2	42.8
Av. Diff.**	+0.2	-0.4	+0.6	+0.1	-0.1	+0.2	-0.1	-0.3	-0.2	-0.1	-0.4	-0.5	-0.2	-0.3	0.0	+0.8	-0.7
Max. Diff.***	+0.6	-0.7	+1.2	-1.1	-0.3	-0.8	+0.4	-0.7	-0.9	+0.8	-0.7	-1.3	-1.0	-0.6	0.0	+1.2	-1.0
Caliper																	
Institute	13.1	13.7	12.7	12.5	11.7	12.9	12.7	12.5	13.2	13.1	12.8	12.8	12.4	12.3	12.9	12.2	12.4
Mill	12.8	13.2	12.3	12.3	11.4	12.4	12.1	12.0	12.9	13.0	12.5	12.6	12.0	12.0	12.3	12.1	12.2
Av. Diff.**	-0.3	-0.5	-0.4	-0.2	-0.3	-0.5	-0.6	-0.5	-0.3	-0.1	-0.3	-0.2	-0.4	-0.3	-0.6	-0.1	-0.2
Max. Diff.***	-0.5	-0.7	-0.9	-0.4	-0.3	-0.6	-0.9	-0.5	-0.9	-0.3	-0.6	-0.6	-0.7	-0.4	-0.6	-0.3	-0.6
Bursting Strength																	
Institute	104	107	104	110	104	107	110	104	108	107	108	115	100	110	104	109	106
Mill	110	111	108	112	102	104	117	106	104	107	108	114	106	111	95	111	112
Av. Diff.**	+6	+4	+4	+2	-2	-3	+7	+2	-4	0	0	-1	+6	+1	-9	+2	+6
Max. Diff.***	+10	+5	+9	+5	-5	-6	+11	+2	-7	+4	+6	+7	+10	+6	-9	+4	+11
Tearing Strength, in																	
Institute	393	318	332	369	340	361	333	365	359	320	346	309	385	295	356	343	313
Mill	376	266	324	352	325	344	371	388	372	312	374	291	395	326	380	320	327
Av. Diff.**	-17	-52	-8	-17	-15	-17	+38	+23	+13	-8	+28	-18	+10	+31	+24	-23	+14
Max. Diff.***	-55	-77	+38	-62	-33	-55	+73	+28	+31	-24	+51	-29	+48	+48	+24	-28	+46
Tearing Strength, across																	
Institute	395	355	338	389	371	358	373	401	398	341	383	384	419	360	371	384	354
Mill	417	327	366	386	350	382	419	457	407	362	403	375	416	385	433	365	364
Av. Diff.**	+22	-28	+28	-3	-21	+24	+46	+56	+9	+21	+20	-9	-3	+25	+62	-19	+10
Max. Diff.***	+35	-47	+65	+56	-33	+50	+67	+91	-42	+46	+51	-27	-54	+34	+62	-25	+26

* Comparison based on averages involved only those samples on which mill test data were submitted.
** Average difference is the difference between the Institute mill average and the mill average based on mill test data.
*** Maximum difference encountered in comparing the Institute average and the mill average for any sample submitted by that particular mill.

TABLE XXIII

COMPARISON OF INSTITUTE-MILL DIFFERENCES BY PERIODS
Average Difference, per cent

Mill	Period	Basis Weight	Caliper	Bursting Strength	Tearing Strength, In	Tearing Strength, Across
A	Current	+0.5	-2	+6	-4	+6
	107th	-0.9	-2	+2	-10	+7
	106th	-0.5	-2	+6	0	+7
B	Current	-0.9	-4	+4	-16	-8
	107th	-0.2	-3	+4	-14	-6
	106th	-0.5	-4	+2	-16	-5
C	Current	+1	-3	+4	-2	+8
	107th	+1	-7	+6	-4	+3
	106th	-1	-5	+3	-17	-10
D	Current	+0.2	-2	+2	-5	-0.8
	107th	+0.7	0	+2	+2	+3
	106th	+0.2	-2	-0.9	+3	+4
E	Current	-0.2	-3	-2	-4	-6
	107th	-0.9	-2	-5	-2	-1
	106th	+2	-2	+5	-8	-4
F	Current	+0.5	-4	-3	-5	+7
	107th	+0.7	-3	-3	+0.6	+10
	106th	+2	-2	-1	+6	+14
G	Current	-0.2	-5	+6	+11	+12
	107th	+0.5	-3	+7	+7	+10
	106th	+0.5	-4	+5	+11	+9
H	Current	-0.7	-4	+2	+6	+14
	107th	+0.5	-2	-2	+7	+19
	106th	+0.2	-4	-5	+10	+22
I	Current	-0.5	-2	-4	+4	+2
	107th	-0.7	-4	0	-3	-0.3
	106th	-0.7	-5	-0.9	-7	-2
J	Current	-0.2	-0.8	0	-2	+6
	107th	0	+0.8	+0.9	-0.3	+1
	106th	-1	0	+3	-4	+1
K	Current	-0.9	-2	0	+8	+5
	107th	+0.2	-2	-1	+4	+4
	106th	+0.5	-2	-4	+2	+2
L	Current	-1	-2	-0.9	-6	-2
	107th	-0.9	-2	-5	-5	+0.3
	106th	-1	-3	-7	-11	-5
M	Current	-0.5	-3	+6	+3	-0.7
	107th	+0.5	-3	+7	0	-1
	106th	+0.9	-2	+8	-2	+3
N	Current	-0.7	-2	+0.9	+11	+7
	107th	-1	-2	+2	+4	+4
	106th	+0.5	-2	+0.9	+11	+4
O	Current	0	-5	-9	+7	+17
	107th	+0.2	-2	-8	-3	+7
	106th	-0.7	-4	-8	+5	+4
P	Current	+2	-0.8	+2	-7	-5
	107th	+2	-2	+2	-1	0
	106th	+2	-2	0	-7	-2
Q	Current	-2	-2	+6	+4	+3
	107th	-0.7	-2	+5	-4	+2
	106th	-0.5	-2	+4	+1	+2

COMPARISON OF INSTITUTE AND MILL DATA--JUNE 1 THROUGH JUNE 30, 1956

TABLE XXIV

MILL A -- 42-LB. LINERBOARD

File No.	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet In			Elmendorf Tear, g./sheet Across		
				IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
170095	S.F.	5/28/56	7	43.5	43.6	+0.1	13.0	12.9	-0.1	109	115	+ 6	439[a]	384	-55	414[a]	423	+ 9
170189	S.F.	6/ 4/56	7	44.9	44.7	-0.2	13.4	12.9	-0.5	107	110	+ 3	395	386	- 9	395	429	+34
170294	S.F.	6/15/56	7	43.4	44.0	+0.6	12.9	12.7	-0.2	106	114	+ 8	379[a]	356	-23	395[a]	405	+10
170378	S.F.	6/21/56	7	43.2	43.7	+0.5	13.0	12.8	-0.2	92	102	+10	361[a]	379	+18	377	412	+35
Current Mill Average:				43.8	44.0	+0.2	13.1	12.8	-0.3	104	110	+ 6	393	376	-17	395	417	+22

TABLE XXV

MILL B -- 42-LB. LINERBOARD

170211	W.F.	5/23/56	1	42.9	42.5	-0.4	13.8	13.4	-0.4	104	108	+ 4	322	268	-54	342[a]	322	-20
170212	W.F.	5/24/56	1	44.4	43.8	-0.6	14.1	13.8	-0.3	105	109	+ 4	319	265	-54	372[a]	338	-34
170213	W.F.	5/26/56	1	42.4	42.1	-0.3	13.2	12.7	-0.5	111	114	+ 3	295	250	-45	359[a]	327	-32
170214	W.F.	5/29/56	1	42.9	42.6	-0.3	13.3	13.2	-0.1	108	112	+ 4	335	284	-51	355[a]	339	-16
170215	W.F.	5/31/56	1	43.3	42.9	-0.4	13.7	13.3	-0.4	106	110	+ 4	307	259	-48	357[a]	330	-27
170216	W.F.	5/31/56	1	43.6	43.1	-0.5	14.2	13.5	-0.7	108	110	+ 2	291[a]	262	-29	352[a]	323	-29
170217	W.F.	6/ 1/56	1	43.7	43.0	-0.7	13.9	13.2	-0.7	107	112	+ 5	345[a]	268	-77	345[a]	324	-21
170218	W.F.	6/ 1/56	1	43.3	43.1	-0.2	13.5	12.9	-0.6	109	114	+ 5	334[a]	269	-65	363[a]	316	-47
Current Mill Average:				43.3	42.9	-0.4	13.7	13.2	-0.5	107	111	+ 4	318	266	-52	355	327	-28

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--JUNE 1 THROUGH JUNE 30, 1956 (Continued)

TABLE XXVI

MILL C -- 42-LB. LINERBOARD

File No.	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet In			Elmendorf Tear, g./sheet Across		
				IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
170118	WFlS	5/31/56	2	42.2	43.2	+1.0	12.5	12.0	-0.5	103	112	+ 9	327	304	-23	348[a]	364	+16
170119	WFlS	6/ 1/56	2	42.5	43.4	+0.9	12.2	11.6	-0.6	113	120	+ 7	333[a]	316	-17	341[a]	370	+29
170221	WFlS	6/ 7/56	2	42.8	42.4	-0.4	13.4	12.5	-0.9	102	107	+ 5	337[a]	314	-23	343[a]	364	+21
170293	WFlS	6/13/56	2	42.8	44	+1.2	13.2	13.3	+0.1	94	96	+ 2	361[a]	399	+38	334[a]	399	+65
170382	WFlS	6/19/56	2	40.7	41.2	+0.5	12.1	11.9	-0.2	105	106	+ 1	303	288	-15	323	334	+11
Current Mill Average:				42.2	42.8	+0.6	12.7	12.3	-0.4	104	108	+ 4	332	324	- 8	338	366	+28

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--JUNE 1 THROUGH JUNE 30, 1956 (Continued)

TABLE XXVII

MILL D -- 42-LB. LINERBOARD

File No.	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
													In			Across		
				IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
170109	W.F.	5/30/56	4	45.0	45.2	+0.2	12.4	12.0	-0.4	109	110	+1	366[a]	337	-29	410[a]	375	-35
170110	W.F.	5/31/56	4	47.1	46.0	-1.1	13.3	13.1	-0.2	113	113	0	450[a]	388	-62	413	380	-33
170111	W.F.	6/ 1/56	4	44.0	43.9	-0.1	12.2	12.1	-0.1	113	115	+2	353[a]	343	-10	377[a]	352	-25
170199	W.F.	6/ 6/56	4	44.2	44.3	+0.1	12.2	12.1	-0.1	115	116	+1	374[a]	367	- 7	393[a]	401	+ 8
170200	W.F.	6/ 7/56	4	42.8	43.5	+0.7	12.4	12.0	-0.4	107	110	+3	363[a]	345	-18	367[a]	395	+28
170201	W.F.	6/ 8/56	4	44.1	44.2	+0.1	13.2	12.9	-0.3	112	112	0	372[a]	372	0	401[a]	380	-21
170295	W.F.	6/13/56	4	43.3	44.0	+0.7	12.7	12.4	-0.3	105	110	+5	330[a]	333	+ 3	365[a]	421	+56
170296	W.F.	6/14/56	4	43.6	43.0	-0.6	12.4	12.6	+0.2	108	111	+3	354[a]	340	-14	412[a]	382	-30
170297	W.F.	6/15/56	4	43.1	43.3	+0.2	11.7	11.8	+0.1	110	112	+2	355[a]	341	-14	363[a]	384	+21
Current Mill Average:				44.1	44.2	+0.1	12.5	12.3	-0.2	110	112	+2	369	352	-17	389	386	- 3

TABLE XXVIII

MILL E -- 42-LB. LINERBOARD

170107	W.F.	5/28/56	4	42.4	42.5	+0.1	11.8	11.5	-0.3	109	104	-5	346[a]	313	-33	377[a]	369	- 8
170108	W.F.	5/28/56	4	42.4	42.1	-0.3	11.6	11.4	-0.2	99	100	+1	334[a]	336	+ 2	364[a]	331	-33
Current Mill Average:				42.4	42.3	-0.1	11.7	11.4	-0.3	104	102	-2	340	325	-15	371	350	-21

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--JUNE 1 THROUGH JUNE 30, 1956 (continued)

TABLE XXIX

MILL F -- 42-LB. LINERBOARD

File No.	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
													In			Across		
				IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
170184	W.F.	5/27/56	-	42.3	42.9	+0.6	12.6	12.0	-0.6	113	111	-2	345[a]	354	+ 9	345[a]	395	+50
170185	W.F.	6/ 4/56	-	43.2	42.7	-0.5	12.9	12.6	-0.3	106	100	-6	376[a]	321	-55	376[a]	365	-11
170303	W.F.	6/ 3/56	-	43.3	42.5	-0.8	12.9	12.4	-0.5	105	101	-4	365[a]	357	- 8	369[a]	398	+29
170304	W.F.	6/13/56	-	42.4	43.1	+0.7	12.9	12.7	-0.2	105	104	-1	361[a]	343	-18	346[a]	370	+24
170305	W.F.	6/11/56	-	42.5	43.1	+0.6	12.9	12.6	-0.3	105	104	-1	354[a]	351	- 3	349[a]	384	+35
170306	W.F.	6/13/56	-	42.1	42.6	+0.5	12.9	12.5	-0.4	108	108	0	363[a]	341	-22	361[a]	379	+18
Current Mill Average:				42.6	42.8	+0.2	12.9	12.4	-0.5	107	104	-3	361	344	-17	358	382	+24

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--JUNE 1 THROUGH JUNE 30, 1956 (Continued)

TABLE XXX

MILL G -- 42-LB. LINERBOARD

File No.	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
													In			Across		
				IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
170105	W.F.	5/21/56	1	44.0	43.9	-0.1	12.5	12.0	-0.5	110	114	+ 4	340[a]	360	+20	375[a]	415	+40
170106	W.F.	5/21/56	1	44.2	43.8	-0.4	12.6	12.0	-0.6	112	116	+ 4	341[a]	356	+15	377[a]	423	+46
170186	W.F.	5/21/56	1	44.0	44.0	0.0	12.8	12.1	-0.7	110	120	+10	341[a]	338	- 3	371[a]	404	+33
170187	W.F.	5/21/56	1	44.1	44.0	-0.1	12.6	12.1	-0.5	110	120	+10	322	376	+54	381[a]	414	+33
170222	W.F.	5/22/56	1	44.1	43.9	-0.2	12.5	12.0	-0.5	108	116	+ 8	327[a]	390	+63	372[a]	413	+41
170223	W.F.	5/22/56	1	44.1	44.2	+0.1	12.8	12.1	-0.7	113	120	+ 7	322[a]	395	+73	354[a]	421	+67
170247	W.F.	5/31/56	2	44.1	44.3	+0.2	13.0	12.1	-0.9	107	118	+11	342	389	+47	379[a]	445	+66
170248	W.F.	5/31/56	2	43.8	44.2	+0.4	12.9	12.2	-0.7	107	113	+ 6	327	361	+34	375[a]	415	+40
Current Mill Average:				44.1	44.0	-0.1	12.7	12.1	-0.6	110	117	+ 7	333	371	+38	373	419	+46

TABLE XXXI

MILL H -- 42-LB. LINERBOARD

170266	WF1S	6/ 9/56	1	41.9	41.2	-0.7	12.4	12.0	-0.4	106	108	+ 2	367[a]	384	+17	413[a]	432	+19
170267	WF1S	6/10/56	1	41.5	41.6	+0.1	12.6	12.1	-0.5	103	105	+ 2	363[a]	391	+28	390[a]	481	+91
Current Mill Average:				41.7	41.4	-0.3	12.5	12.0	-0.5	104	106	+ 2	365	388	+23	401	457	+56

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--JUNE 1 THROUGH JUNE 30, 1956 (Continued)

TABLE XXXII

MILL I -- 42-LB. LINERBOARD

File No.	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
													In			Across		
				IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
170116	W.	5/ 9/56	2	42.3	42.4	+0.1	12.9	12.5	-0.4	112	105	- 7	334[a]	356	+22	391[a]	414	+23
170117	W.	5/26/56	4	43.1	43.6	+0.5	13.2	13.3	+0.1	107	104	- 3	366[a]	397	+31	386[a]	419	+33
170245	W.	5/29/56	4	43.8	42.9	-0.9	13.8	12.9	-0.9	102	98	- 4	368	363	- 5	411[a]	369	-42
170246	W.	6/ 7/56	4	43.8	43.2	-0.6	13.0	13.1	+0.1	111	110	- 1	367[a]	374	+ 7	403[a]	425	+22
Current Mill Average:				43.2	43.0	-0.2	13.2	12.9	-0.3	108	104	- 4	359	372	+13	398	407	+ 9

TABLE XXXIII

MILL J -- 42-LB. LINERBOARD

170101	W.F.	5/22/56	1	42.7	42.1	-0.6	13.3	13.0	-0.3	107	105	- 2	327[a]	303	-24	342[a]	365	+23
170102	W.F.	5/24/56	1	42.6	42.1	-0.5	13.2	13.0	-0.2	109	109	0	316[a]	311	- 5	337[a]	383	+46
170103	W.F.	5/29/56	1	42.1	42.3	+0.2	13.1	13.0	-0.1	108	107	- 1	307[a]	307	0	335[a]	347	+12
170234	W.F.	6/ 8/56	1	42.6	42.4	-0.2	13.0	13.0	0.0	109	109	0	330	313	-17	338[a]	355	+17
170235	W.F.	6/10/56	1	42.6	42.3	-0.3	13.1	13.0	-0.1	106	107	+ 1	316[a]	320	+ 4	352[a]	353	+ 1
170263	W.F.	6/14/56	1	42.0	42.8	+0.8	13.1	13.0	-0.1	103	107	+ 4	323[a]	320	- 3	345[a]	371	+26
Current Mill Average:				42.4	42.3	-0.1	13.1	13.0	-0.1	107	107	0	320	312	- 8	341	362	+21

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--JUNE 1 THROUGH JUNE 30, 1956 (Continued)

TABLE XXXIV

MILL K -- 42-LB. LINERBOARD

File No.	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
													In			Across		
				IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
170253	W.F.	6/ 4/56	-	43.2	42.5	-0.7	12.3	11.9	-0.4	111	110	- 1	341[a]	392	+51	394[a]	419	+25
170254	W.F.	6/ 5/56	-	42.8	42.3	-0.5	12.7	12.1	-0.6	106	112	+ 6	345	392	+47	369[a]	420	+51
170255	W.F.	6/ 5/56	-	43.1	43.5	+0.4	12.7	12.1	-0.6	111	113	+ 2	351[a]	392	+41	400[a]	429	+29
170256	W.F.	6/ 7/56	-	43.3	42.8	-0.5	13.3	13.0	-0.3	106	104	- 2	345[a]	328	-17	399[a]	416	+17
170257	W.F.	6/ 7/56	-	43.1	42.4	-0.7	13.1	12.8	-0.3	106	101	- 5	354[a]	345	- 9	364[a]	361	- 3
170379	W.F.	6/14/56	-	43.2	43.0	-0.2	12.6	12.7	+0.1	107	104	- 3	331[a]	375	+44	371[a]	384	+13
170380	W.F.	6/15/56	-	43.6	43.1	-0.5	12.9	12.9	0.0	112	107	- 5	355	393	+38	385[a]	395	+10
Current Mill Average:				43.2	42.8	-0.4	12.8	12.5	-0.3	108	108	0	346	374	+28	383	403	+20

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--JUNE 1 THROUGH JUNE 30, 1956 (Continued)

TABLE XXXV

MILL L -- 42-LB. LINERBOARD

File No.	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
													In			Across		
				IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
170067		5/ 1/56	1	42.6	42.7	+0.1	12.6	12.5	-0.1	110	108	- 2	319[a]	294	-25	374[a]	365	- 9
170068		5/ 5/56	1	42.2	42.4	+0.2	12.6	12.3	-0.3	124	119	- 5	319	290	-29	375[a]	386	+11
170069		5/ 9/56	1	43.0	42.0	-1.0	12.8	12.5	-0.3	119	116	- 3	290	305	+15	394[a]	380	-14
170070		5/11/56	1	42.4	42.8	+0.4	12.7	12.6	-0.1	105	112	+ 7	329[a]	305	-24	372[a]	345	-27
170249		5/15/56	1	43.1	41.8	-1.3	13.3	12.7	-0.6	117	116	- 1	291	277	-14	381[a]	379	- 2
170250		5/20/56	1	42.8	42.0	-0.8	12.7	12.5	-0.2	119	116	- 3	317[a]	292	-25	402[a]	384	-18
170251		5/26/56	1	42.8	41.9	-0.9	12.9	12.6	-0.3	114	113	- 1	316	294	-22	408[a]	381	-27
170252		5/31/56	1	42.6	41.8	-0.8	13.0	12.7	-0.3	115	116	+ 1	290	273	-17	367[a]	377	+10
Current Mill Average:				42.7	42.2	-0.5	12.8	12.6	-0.2	115	114	- 1	309	291	-18	384	375	- 9

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--JUNE 1 THROUGH JUNE 30, 1956 (Continued)

TABLE XXXVI

MILL M -- 42-LB. LINERBOARD

File No.	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
													In			Across		
				IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
170307	W.B.	5/ 7/56	-	42.9	43.2	+0.3	12.6	12.1	-0.5	100	107	+ 7	385	384	- 1	418[a]	435	+17
170308	W.B.	5/10/56	-	44.0	43.8	-0.2	13.1	12.4	-0.7	99	105	+ 6	395[a]	387	- 8	460[a]	421	-39
170309	W.B.	5/17/56	-	42.4	42.3	-0.1	12.0	11.6	-0.4	97	104	+ 7	362	365	+ 3	405[a]	400	- 5
170310	W.B.	5/18/56	-	42.7	43.3	+0.6	12.4	11.9	-0.5	99	104	+ 5	378[a]	407	+29	415[a]	432	+17
170311	W.B.	5/29/56	-	42.8	42.7	-0.1	12.5	12.1	-0.4	98	103	+ 5	385[a]	417	+32	412[a]	415	+ 3
170312	W.B.	5/29/56	-	42.8	42.8	0.0	12.4	12.1	-0.3	100	110	+10	381[a]	429	+48	421[a]	440	+19
170313	W.B.	5/30/56	-	43.9	44.0	+0.1	12.7	12.5	-0.2	103	103	0	407[a]	401	- 6	436[a]	429	- 7
170314	W.B.	5/31/56	-	43.0	42.7	-0.3	12.6	12.3	-0.3	101	107	+ 6	409[a]	416	+ 7	395[a]	431	+36
170388	W.B.	6/11/56	-	43.3	42.5	-0.8	12.2	11.8	-0.4	100	108	+ 8	397[a]	407	+10	431[a]	441	+10
170389	W.B.	6/13/56	-	43.2	42.9	-0.3	12.5	12.0	-0.5	96	103	+ 7	367	381	+14	405	392	-13
170390	W.B.	6/15/56	-	42.0	42.0	0.0	12.1	11.8	-0.3	103	110	+ 7	371[a]	383	+12	405[a]	389	-16
170391	W.B.	6/15/56	-	42.4	41.4	-1.0	12.0	11.7	-0.3	100	105	+ 5	385[a]	359	-26	425[a]	371	-54
Current Mill Average:				43.0	42.8	-0.2	12.4	12.0	-0.4	100	106	+ 6	385	395	+10	419	416	- 3

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--JUNE 1 THROUGH JUNE 30, 1956 (Continued)

TABLE XXXVII

MILL N -- 42-LB. LINERBOARD

File No.	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
													In			Across		
				IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
170096	WFlS	5/29/56	1	42.7	42.6	-0.1	12.3	12.1	-0.2	107	113	+ 6	287	335	+48	353[a]	385	+32
170097	WFlS	5/28/56	1	42.7	42.6	-0.1	12.3	12.1	-0.2	112	112	0	303[a]	333	+30	369[a]	382	+13
170188	WFlS	6/ 2/56	1	43.1	42.5	-0.6	12.2	12.0	-0.2	107	110	+ 3	295	324	+29	355[a]	377	+22
170238	WFlS	6/ 8/56	1	42.7	42.3	-0.4	12.2	12.1	-0.1	111	112	+ 1	299[a]	316	+17	361[a]	385	+24
170383	WFlS	6/17/56	1	42.9	42.5	-0.4	12.3	12.0	-0.3	108	110	+ 2	297[a]	329	+32	355[a]	389	+34
170384	WFlS	6/19/56	1	42.8	42.5	-0.3	12.3	11.9	-0.4	111	112	+ 1	292	333	+41	367[a]	397	+30
170385	WFlS	6/20/56	1	42.9	42.6	-0.3	12.4	12.0	-0.4	111	112	+ 1	294[a]	314	+20	361[a]	379	+18
Current Mill Average:				42.8	42.5	-0.3	12.3	12.0	-0.3	110	111	+ 1	295	326	+31	360	385	+25

TABLE XXXVIII

MILL O -- 42-LB. LINERBOARD

170104	WFlS	5/28/56	1	43.8	43.8	0.0	12.9	12.3	-0.6	104	95	- 9	356[a]	380	+24	371[a]	433	+62
Current Mill Average:				43.8	43.8	0.0	12.9	12.3	-0.6	104	95	- 9	356	380	+24	371	433	+62

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--JUNE 1 THROUGH JUNE 30, 1956 (Continued)

TABLE XXXIX

MILL P -- 42-LB. LINERBOARD

File No.	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
													In			Across		
				IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
170114	W.F.	5/30/56	2	42.4	43.3	+0.9	12.7	12.4	-0.3	105	109	+4	333	313	-20	371[a]	361	-10
170115	W.F.	5/31/56	2	42.3	43.3	+1.0	11.7	11.8	+0.1	103	104	+1	348	320	-28	379[a]	361	-18
170219	W.F.	6/ 4/56	2	42.8	44.0	+1.2	12.2	12.0	-0.2	116	119	+3	338[a]	317	-21	387[a]	368	-19
170220	W.F.	6/ 5/56	2	42.5	43.4	+0.9	12.2	12.0	-0.2	115	116	+1	347	325	-22	401[a]	376	-25
170264	W.F.	6/11/56	2	41.9	42.5	+0.6	12.5	12.4	-0.1	103	104	+1	321[a]	301	-20	362[a]	345	-17
170265	W.F.[b]	6/12/56	2	42.1	42.7	+0.6	12.1	12.0	-0.1	110	113	+3	371[a]	345	-26	403[a]	381	-22
Current Mill Average:				42.4	43.2	+0.8	12.2	12.1	-0.1	109	111	+2	343	320	-23	384	365	-19

[a]This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.
[b]The mill data sheet identifies the finish as WF1S.

Note: All "current mill average" data are calculated from the totals of the individual readings.

COMPARISON OF INSTITUTE AND MILL DATA--JUNE 1 THROUGH JUNE 30, 1956 (Continued)

TABLE XL

MILL Q -- 42-LB. LINERBOARD

File No.	Finish	Date Made	Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, p.s.i. gage			Elmendorf Tear, g./sheet					
													In			Across		
				IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
170112	W.F.	5/27/56	1	44.2	43.2	-1.0	13.0	12.4	-0.6	103	112	+ 9	304	299	- 5	357[a]	361	+ 4
170113	W.F.	5/28/56	2	42.9	42.4	-0.5	12.1	12.0	-0.1	108	112	+ 4	287	301	+14	347[a]	359	+12
170162	W.F.	6/ 3/56	2	43.5	42.7	-0.8	12.2	12.0	-0.2	103	112	+ 9	326	313	-13	350[a]	349	- 1
170163	W.F.	6/ 3/56	2	43.8	42.9	-0.9	12.2	12.0	-0.2	100	111	+11	332	323	- 9	361[a]	355	- 6
170236	W.F.	6/10/56	2	42.4	42.3	-0.1	12.2	12.2	0.0	105	112	+ 7	313[a]	333	+20	354[a]	362	+ 8
170237	W.F.	6/10/56	1	43.7	43.2	-0.5	12.9	12.6	-0.3	109	113	+ 4	324[a]	352	+28	358[a]	384	+26
170370	W.F.	6/17/56	2	43.5	42.6	-0.9	12.4	12.1	-0.3	107	114	+ 7	307	353	+46	359[a]	372	+13
170371	W.F.	6/17/56	1	43.8	42.8	-1.0	12.2	12.1	-0.1	111	109	- 2	309	341	+32	351	368	+17
Current Mill Average:				43.5	42.8	-0.7	12.4	12.2	-0.2	106	112	+ 6	313	327	+14	354	364	+10

TABLE XLI

MILL R -- MISCELLANEOUS

47-lb. Drum Linerboard

170066	WF1S	5/23/56	2	48.5	49.2	+0.7	15.2	14.7	-0.5	117	110	- 7	375[a]	363	-12	412[a]	427	+15
170381	WF1S	6/18/56	2	48.5	48.4	-0.1	14.1	13.8	-0.3	98	96	- 2	395[a]	392	- 3	407[a]	484	+77
Current Mill Average:				48.5	48.8	+0.3	14.7	14.2	-0.5	107	103	- 4	385	378	- 7	410	456	+46

[a] This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.

Note: All "current mill average" data are calculated from the totals of the individual readings.