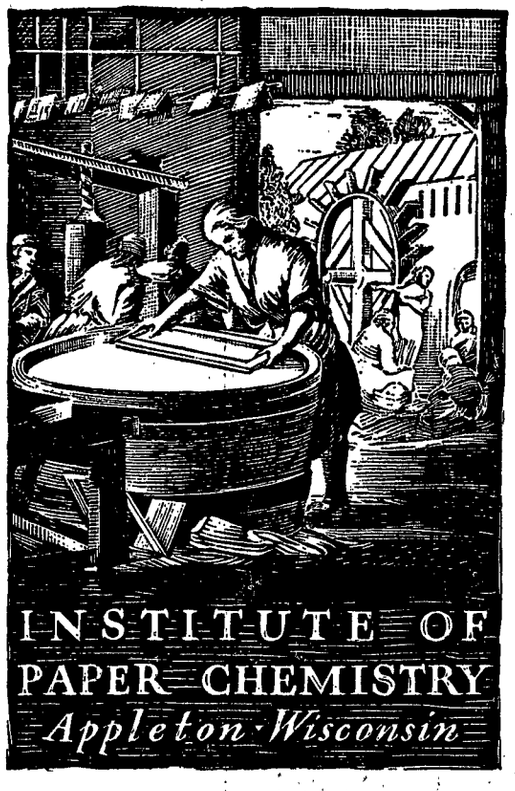


CONTINUOUS BASELINE STUDY

Project 1108-13

Progress Report 107

to

FOURDRINIER KRAFT BOARD INSTITUTE, INC.

June 1, 1956

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

Mill	Code Letter
Jacksonville	B
Valdosta	Q

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

CONTINUOUS BASELINE STUDY

Project 1108-13

Progress Report 107

to

FOURDRINIER KRAFT BOARD INSTITUTE, INC.

June 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 May 1 through May 31, ninety-eight different sample lots of 42-lb. Fourdrinier 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, one sample of drum linerboard and three samples of miscellaneous 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	9
D	6
E	5
F	8
G	2
H	10
I	2
J	2

TABLE I--Continued

DISTRIBUTION OF 42-LB. LINERBOARD SAMPLES

Mill Code	Samples Submitted
K	1
L	8
M	10
N	6
O	8
P	2
Q	7
Total	98

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 May 1, 1955, to April 30, 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 42.9 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 100.0. This signifies that the current average basis weight is the same as 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 N conform to the 42-lb. specification set forth in Rule 41. Mills B and C share the highest average basis weight, it being 43.6 lb. or approximately 3.8% higher than the 42-lb. specification. On the other hand, Mill N has the lowest average basis weight, it being 41.9 lb. or approximately 0.2% lower than the 42-lb. specification.

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

Mill Code	Percent
A	+1.0
B	+3.8
C	+3.8
D	+2.9
E	0.0
F	+2.9
G	+2.6
H	+0.7
I	+2.4
J	+2.6
K	+0.5
L	+2.6
M	+2.4
N	-0.2
O	+3.6
P	+3.1
Q	+1.2

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 decreased slightly from 43.0 lb. to 42.9 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 11.8 points for Mill K to a high of 13.4 points for Mill O. The current F.K.I. average is 12.6 points, slightly lower than the cumulative F.K.I. average of 12.7 points.

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 B to a high of 121 for Mill A. The current F.K.I. average bursting strength is 109, the same as the cumulative F.K.I. average.

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 I has the highest average machine direction tear value of 404 units whereas Mill M has the lowest value of 311 units. Mill B has the highest cross-machine direction tear value of 413 units and Mill N has the lowest value of 337 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. averages for basis weight and bursting strength are the same as the respective cumulative F.K.I. averages, whereas the current F.K.I. averages for caliper 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[a]
B	8		
C	9		
D	6[b]		
E	5[b]		
F	8		
G	2[b]		
H	10		
I	2		
J	2		
K	1		
L	8		
M	10		
N	6		
O	8		
P	2		
Q	7		
R[c]	1		

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

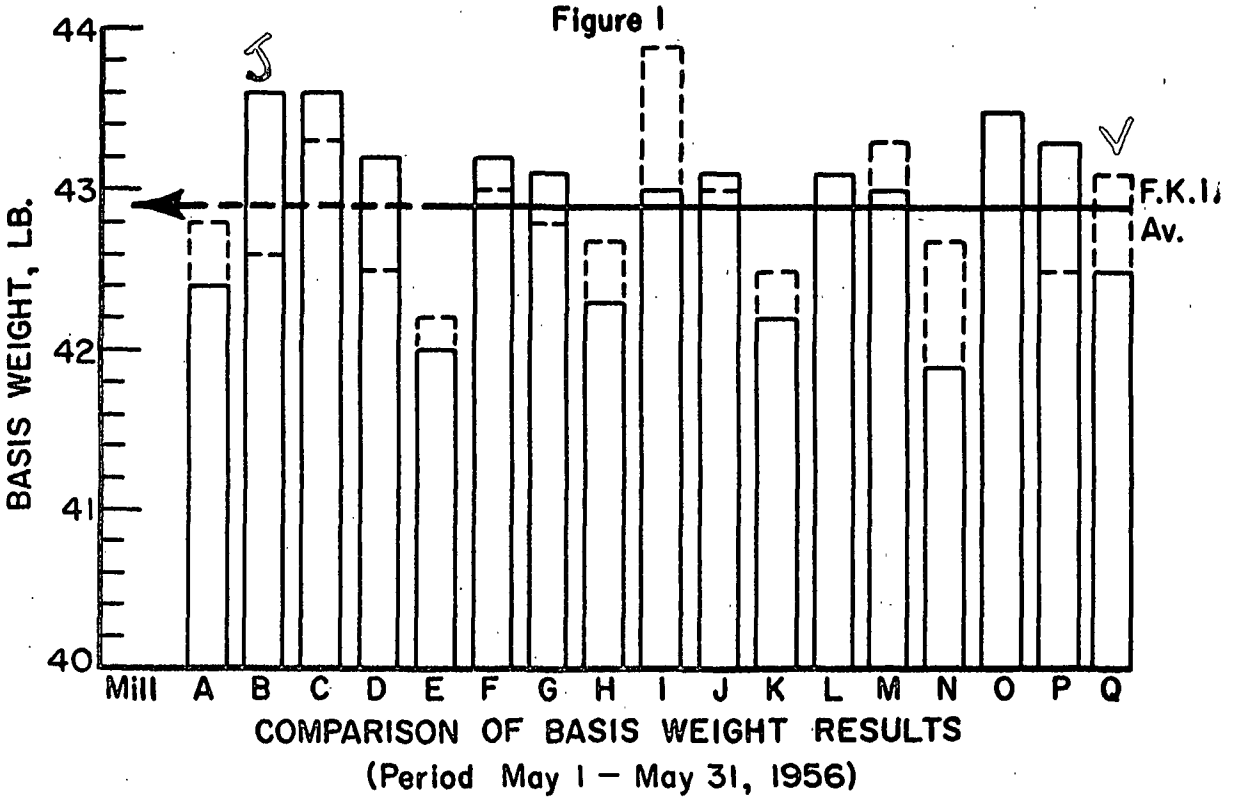
The results indicate that a majority of the mills are using a water finish on their 42-lb. linerboard.

TABLE II

SUMMARY OF COMPOSITE MILL AVERAGES--MAY 1 THROUGH MAY 31, 1956

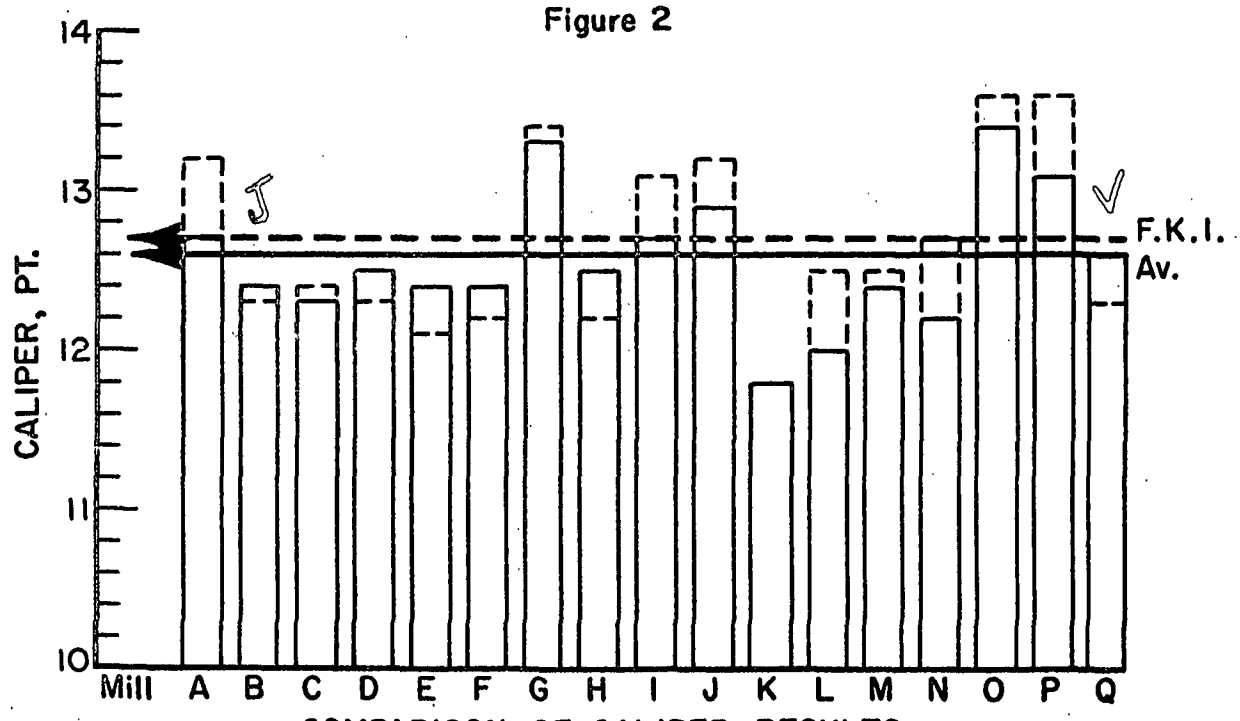
Mill	Basis Weight, lb.	Caliper, points	Bursting Strength, p.s.i. gage	Elmendorf Tear, g./sheet	
				In Machine	Cross Machine
A	42.4	12.7	121	314	372
B	43.6	12.4	100	383	413
C	43.6	12.3	110	350	383
D	43.2	12.5	110	315	378
E	42.0	12.4	106	365	393
F	43.2	12.4	114	312	371
G	43.1	13.3	112	336	373
H	42.3	12.5	107	331	369
I	43.0	12.7	103	404	391
J	43.1	12.9	107	357	388
K	42.2	11.8	115	345	382
L	43.1	12.0	109	334	368
M	43.0	12.4	110	311	352
N	41.9	12.2	109	338	337
O	43.5	13.4	108	328	363
P	43.3	13.1	109	331	350
Q	42.5	12.6	105	344	370
Current FKI Average:	42.9	12.6	109	341	374
Cumulative FKI Average:	42.9	12.7	109	350	382
FKI Index, %	100.0	99.2	100.0	97.4	97.9

Figure 1



COMPARISON OF BASIS WEIGHT RESULTS
(Period May 1 – May 31, 1956)

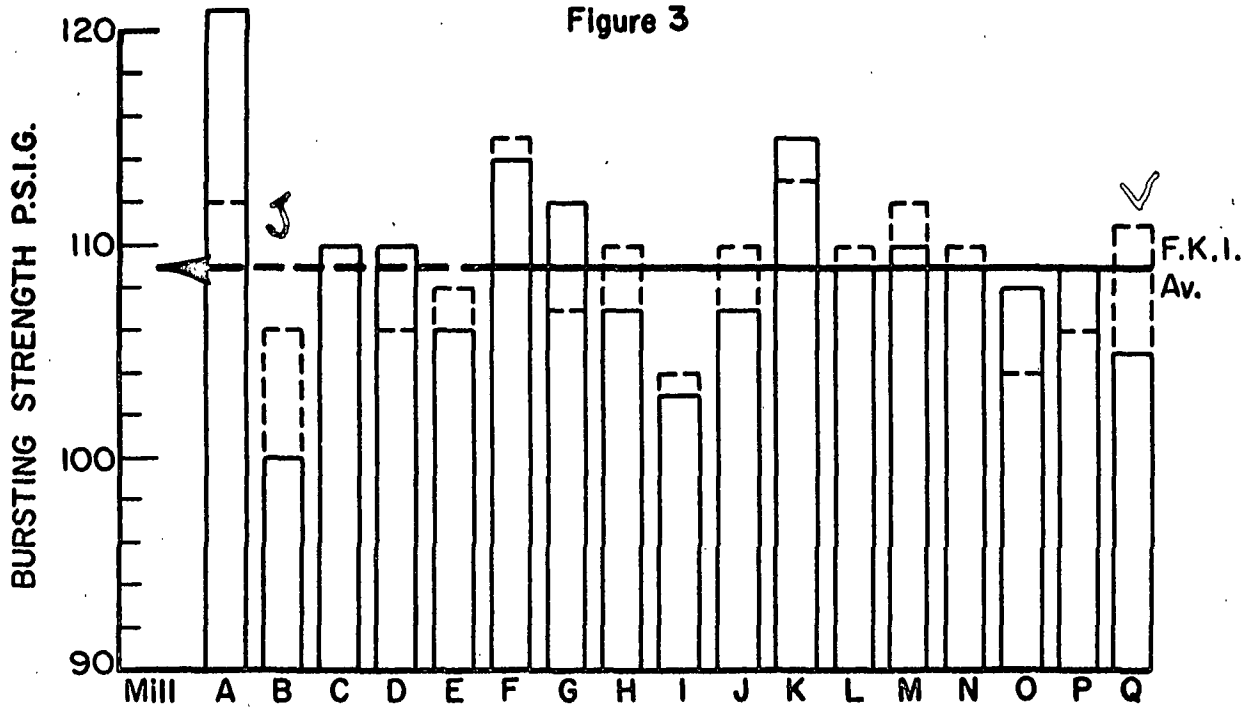
Figure 2



COMPARISON OF CALIPER RESULTS
(Period May 1 – May 31, 1956)

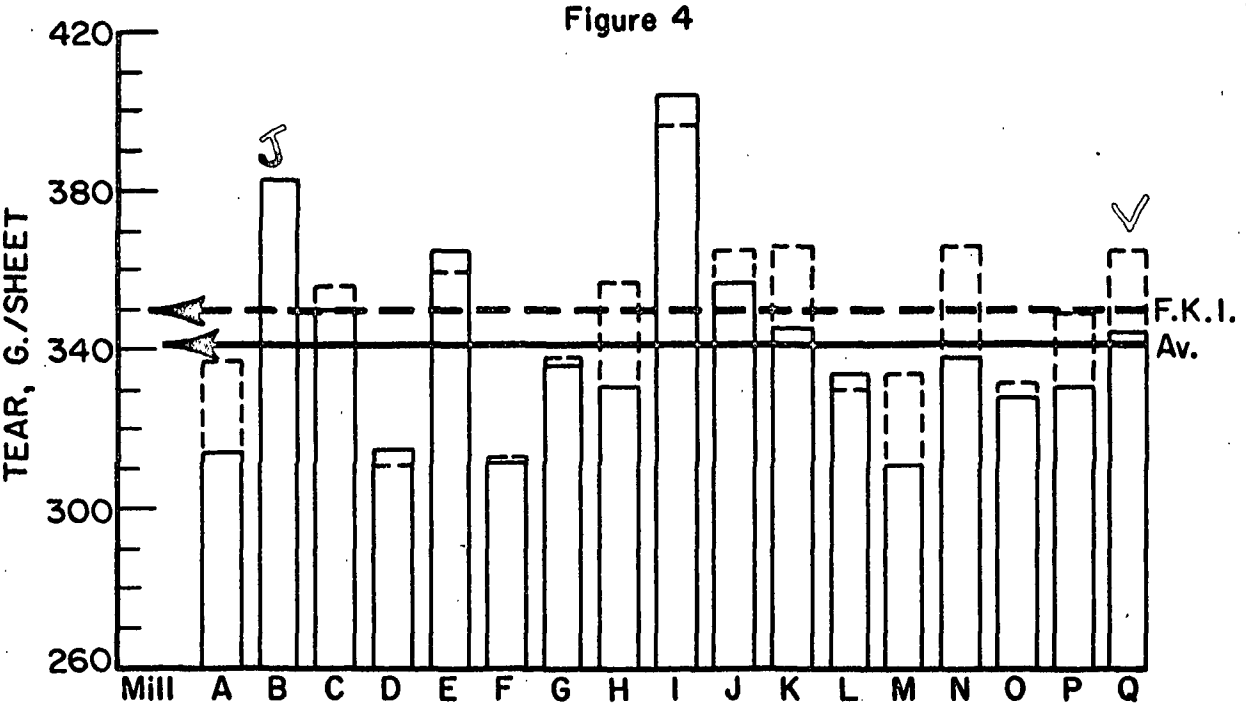
——— Current mill average
– – – – – Cumulative mill average

Figure 3



COMPARISON OF BURSTING STRENGTH RESULTS
(Period May 1 – May 31, 1956)

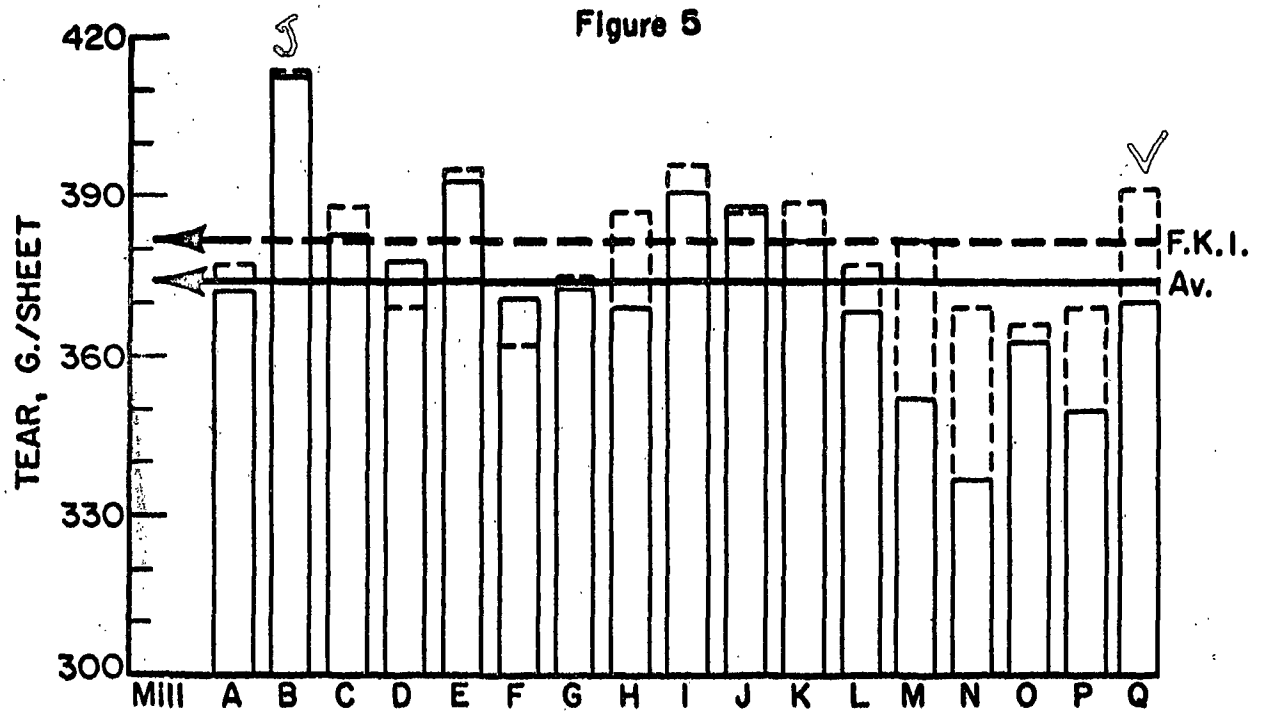
Figure 4



COMPARISON OF TEAR RESULTS, Machine Direction
(Period May 1 – May 31, 1956)

——— Current mill average
– – – – – Cumulative mill average

Figure 5



COMPARISON OF TEAR RESULTS, Cross-Machine Direction
(Period May 1 – May 31, 1956)

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

SUMMARY OF INSTITUTE DATA--MAY 1 THROUGH MAY 31, 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.
169510		5/ 1/56	4/17/56	1	43.8	41.8	42.4	13.4	11.8	12.7	150	101	128	352	264	309	424	288	373[a]
169511		5/ 1/56	4/20/56	1	44.0	42.0	42.7	13.4	12.0	12.7	131	98	115	344	272	301	432	352	382[a]
169652		5/ 8/56	4/24/56	1	44.0	40.4	42.0	13.6	11.9	12.5	155	107	122	368	288	331[a]	416	320	365[a]
169653		5/ 8/56	4/28/56	1	43.2	41.8	42.4	13.8	12.1	12.9	149	89	120	360	280	317	400	272	369[a]
Current Mill Average:							42.4			12.7			121			314			372
Cumulative Mill Average:							42.8			13.2			112			337			377
Mill Factor, %							99.1			96.2			108.0			93.2			98.7
Mill Index, %							98.8			100.0			111.0			89.7			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--MAY 1 THROUGH MAY 31, 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.
169521	W.B.	5/ 1/56	3/30/56	-	44.0	41.8	43.0	12.7	11.8	12.2	126	64	102	416	336	370	464	352	397[a]
169522	W.B.	5/ 1/56	4/ 2/56	-	44.8	42.2	43.7	12.7	11.7	12.2	121	78	99	408	320	360[a]	432	384	405[a]
169523	W.B.	5/ 1/56	4/ 3/56	-	45.8	41.6	43.4	13.3	12.0	12.6	120	84	100	480	336	415[a]	480	336	395[a]
169524	W.B.	5/ 1/56	4/11/56	-	46.0	42.8	44.1	12.8	11.0	11.9	125	71	103	440	344	376	432	360	393[a]
169525	W.B.	5/ 1/56	4/13/56	-	45.0	43.0	44.2	13.4	12.0	12.9	121	85	105	464	360	400[a]	496	400	436[a]
169526	W.B.	5/ 1/56	4/16/56	-	46.0	40.0	42.8	13.0	11.7	12.5	115	70	94	400	296	364	512	376	422[a]
170001	W.B.	5/25/56	4/18/56	-	44.0	42.0	43.2	12.9	12.0	12.3	115	76	97	440	352	382	448	384	422[a]
170002	W.B.	5/25/56	4/24/56	-	46.0	42.0	44.4	13.2	12.2	12.9	130	84	101	456	352	399[a]	520	392	433[a]
Current Mill Average:							43.6			12.4			100			383			413
Cumulative Mill Average:							42.6			12.3			106			383			414
Mill Factor, %							102.3			100.8			94.3			100.0			99.8
Mill Index, %							101.6			97.6			91.7			109.4			108.1

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

SUMMARY OF INSTITUTE DATA--MAY 1 THROUGH MAY 31, 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.
169516	W.F.	5/ 1/56	4/25/56	4	44.0	42.2	43.4	13.8	13.0	13.2	136	83	104	432	304	363[a]	464	320	397[a]
169517	W.F.	5/ 1/56	4/26/56	4	45.6	44.0	44.5	12.5	11.0	12.1	131	90	108	376	264	332[a]	448	320	387[a]
169518	W.F.	5/ 1/56	4/27/56	4	44.4	43.8	44.0	12.9	11.7	12.2	130	90	111	408	320	371[a]	440	320	398[a]
169692	W.F.	5/10/56	5/ 2/56	4	44.0	43.4	43.8	13.0	12.0	12.4	138	95	114	376	312	345	424	344	389[a]
169693	W.F.	5/10/56	5/ 3/56	4	44.2	43.8	44.0	13.1	11.1	12.3	128	102	116	480	352	389[a]	440	320	379[a]
169694	W.F.	5/10/56	5/ 4/56	4	44.0	42.4	43.5	13.1	11.8	12.3	135	95	111	376	288	323[a]	408	304	366[a]
169752	W.F.	5/14/56	5/ 9/56	4	43.6	42.2	43.0	13.0	11.9	12.4	134	98	112	376	288	345[a]	400	352	381[a]
169753	W.F.	5/14/56	5/10/56	4	43.8	41.8	43.0	12.7	11.5	12.1	132	84	108	384	312	352[a]	416	320	375[a]
169754	W.F.	5/14/56	5/11/56	4	43.8	42.2	42.8	12.8	11.8	12.2	131	83	110	376	304	329[a]	424	320	373[a]
Current Mill Average:							43.6			12.3			110			350			383
Cumulative Mill Average:							43.3			12.4			110			356			388
Mill Factor, %							100.7			99.2			100.0			98.3			98.7
Mill Index, %							101.6			96.9			100.9			100.0			100.3

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

SUMMARY OF INSTITUTE DATA--MAY 1 THROUGH MAY 31, 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.
169594	WF1S	5/ 4/56	4/25/56	1	43.6	42.0	42.5	13.0	11.9	12.3	119	94	109	336	272	298[a]	416	352	377[a]
169595	WF1S	5/ 4/56	4/26/56	1	43.8	42.0	42.6	12.8	12.0	12.3	136	79	109	352	272	316[a]	416	352	382[a]
169621	WF1S	5/ 7/56	5/ 1/56	1	44.0	42.6	43.4	13.1	12.2	12.8	130	90	112	368	296	326[a]	408	328	381[a]
169622	WF1S	5/ 7/56	5/ 2/56	1	44.0	43.4	43.8	13.1	12.0	12.5	135	87	112	384	288	327	448	264	381[a]
169822	WF1S	5/15/56	5/ 3/56	1	44.0	42.8	43.6	13.1	12.4	12.8	135	92	109	344	288	318	400	344	375[a]
169926	WF1S	5/22/56	5/10/56	1	44.0	42.2	43.2	12.9	12.0	12.5	130	90	111	328	280	303	400	336	369[a]
Current Mill Average:							43.2			12.5			110			315			378
Cumulative Mill Average:							42.5			12.3			106			311			369
Mill Factor, %							101.6			101.6			103.8			101.3			102.4
Mill Index, %							100.7			98.4			100.9			90.0			99.0

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

SUMMARY OF INSTITUTE DATA--MAY 1 THROUGH MAY 31, 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.
169626	WF1S	5/ 7/56	4/26/56	1	42.2	41.2	41.9	12.6	11.5	12.0	125	85	104	432	304	357[a]	432	360	385[a]
169913	WF1S	5/21/56	5/10/56	1	43.2	41.8	42.6	12.7	11.9	12.3	123	91	106	440	344	373[a]	448	360	405[a]
169914	WF1S	5/21/56	5/11/56	1	42.4	41.0	41.6	12.9	11.4	12.1	133	88	108	400	328	362[a]	448	368	399[a]
170027	WF1S	5/28/56	5/20/56	1	42.8	42.0	42.2	13.4	12.2	12.8	125	92	107	424	320	361[a]	480	352	395[a]
170028	WF1S	5/28/56	5/20/56	1	42.4	41.0	41.8	13.4	12.4	12.8	120	91	106	480	304	370[a]	416	336	381[a]
Current Mill Average:							42.0			12.4			106			365			393
Cumulative Mill Average:							42.2			12.1			108			359			395
Mill Factor, %							99.5			102.5			98.1			101.7			99.5
Mill Index, %							97.9			97.6			97.2			104.3			102.9

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

SUMMARY OF INSTITUTE DATA--MAY 1 THROUGH MAY 31, 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.
169592	W.F.	5/ 4/56	4/17/56	1	44.2	42.2	43.6	13.5	12.6	13.1	138	87	110	384	264	320	432	344	382[a]
169593	W.F.	5/ 4/56	4/20/56	1	44.2	43.4	43.9	14.1	13.0	13.4	135	94	113	368	288	323	440	352	382[a]
169615	W.F.	5/ 5/56	4/24/56	1	43.4	42.0	42.7	12.0	11.0	11.5	135	104	118	368	256	297	408	336	368[a]
169616	W.F.	5/ 5/56	4/27/56	1	44.0	43.0	43.6	12.5	11.6	12.0	134	101	116	352	264	315	408	328	365[a]
169710	W.F.	5/11/56	4/30/56	1	43.8	42.0	43.1	12.6	11.5	12.0	132	100	114	360	304	326	432	344	381[a]
169755	W.F.	5/14/56	5/ 8/56	1	43.8	42.0	42.6	12.4	11.2	11.8	139	101	119	352	248	303	432	304	368[a]
169897	W.F.	5/18/56	5/10/56	1	46.0	42.6	44.4	13.4	12.9	13.1	130	89	108	360	288	319	408	344	382[a]
169912	W.F.	5/21/56	5/17/56	1	42.4	40.8	41.8	12.7	11.8	12.3	128	92	110	320	280	295	360	304	339[a]
Current Mill Average:							43.2			12.4			114			312			371
Cumulative Mill Average:							43.0			12.2			115			313			362
Mill Factor, %							100.5			101.6			99.1			99.7			102.5
Mill Index, %							100.7			97.6			104.6			89.1			97.1

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

SUMMARY OF INSTITUTE DATA--MAY 1 THROUGH MAY 31, 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.
169625	WF1S	5/ 7/56	5/ 1/56	1	43.6	42.0	42.9	13.5	12.2	12.9	130	95	111	392	280	351	408	336	375[a]
169911	WF1S	5/19/56	5/11/56	1	43.8	42.6	43.3	14.0	13.2	13.7	127	81	112	368	280	321	400	336	371[a]
Current Mill Average:							43.1			13.3			112			336			373
Cumulative Mill Average:							42.8			13.4			107			338			375
Mill Factor, %							100.7			99.3			104.7			99.4			99.5
Mill Index, %							100.5			104.7			102.8			96.0			97.6

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

SUMMARY OF INSTITUTE DATA--MAY 1 THROUGH MAY 31, 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			Elmendorf Tear, g./sheet Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
169512	W.F.	5/ 1/56	4/22/56	2	42.8	42.0	42.2	13.0	12.2	12.7	124	74	105	384	296	335	384	336	365[a]
169513	W.F.	5/ 1/56	4/23/56	2	42.6	42.0	42.2	13.0	12.2	12.6	130	90	110	368	304	324	416	360	378
169708	W.F.	5/11/56	4/29/56	2	43.6	42.0	42.6	13.0	12.0	12.5	117	75	99	384	304	351	416	320	382[a]
169709	W.F.	5/11/56	4/30/56	2	43.0	41.8	42.1	13.1	12.1	12.8	128	94	107	432	272	341	400	328	365[a]
169846	W.F.	5/16/56	5/ 6/56	2	42.0	41.6	41.9	13.0	12.2	12.7	122	90	106	376	304	329	400	328	357[a]
169847	W.F.	5/16/56	5/ 7/56	2	42.0	41.6	41.9	13.0	12.1	12.7	124	78	104	384	288	324	400	320	367
169927	W.F.	5/22/56	5/13/56	2	43.6	42.0	42.8	12.7	12.0	12.2	151	85	117	376	288	325	408	328	387
169928	W.F.	5/22/56	5/14/56	2	43.2	42.0	42.5	12.3	12.0	12.1	140	100	116	376	296	343	416	336	377[a]
170034	W.F.	5/28/56	5/20/56	2	43.2	42.0	42.4	13.1	11.9	12.5	122	85	107	368	280	327[a]	392	344	365[a]
170035	W.F.	5/28/56	5/21/56	2	43.2	42.0	42.6	13.0	11.9	12.3	122	85	103	368	216	309[a]	392	288	341[a]
Current Mill Average:							42.3			12.5			107			331			369
Cumulative Mill Average:							42.7			12.2			110			357			387
Mill Factor, %							99.1			102.5			97.3			92.7			95.3
Mill Index, %							98.6			98.4			98.2			94.6			96.6

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

SUMMARY OF INSTITUTE DATA--MAY 1 THROUGH MAY 31, 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.
169573	S.F.	5/ 3/56	4/28/56	7	44.0	40.8	42.8	13.4	11.5	12.5	140	71	107	448	328	389	480	360	399[a]
169976	S.F.	5/23/56	5/18/56	7	45.0	41.6	43.2	13.3	12.2	12.9	120	78	99	544	336	418[a]	432	352	382[a]
Current Mill Average:							43.0			12.7			103			404			391
Cumulative Mill Average:							43.9			13.1			104			396			396
Mill Factor, %							97.9			96.9			99.0			102.0			98.7
Mill Index, %							100.2			100.0			94.5			115.4			102.4

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

SUMMARY OF INSTITUTE DATA--MAY 1 THROUGH MAY 31, 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			Elmendorf Tear, g./sheet Across		
					Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
169514	W.	5/ 1/56	4/10/56	2	44.0	42.0	42.7	13.0	12.3	12.8	124	95	107	368	312	337	400	360	381[a]
169515	W.	5/ 1/56	4/19/56	4	44.2	42.0	43.5	13.3	12.2	13.0	124	91	108	400	336	377	432	344	395[a]
Current Mill Average:							43.1			12.9			107			357			388
Cumulative Mill Average:							43.0			13.2			110			365			387
Mill Factor, %							100.2			97.7			97.3			97.8			100.3
Mill Index, %							100.5			101.6			98.2			102.0			101.6

TABLE XIII

MILL K -- 42-LB. LINERBOARD

169686	W.F.	5/ 9/56	4/26/56	4	43.2	41.2	42.2	12.1	11.3	11.8	133	97	115	408	312	345[a]	416	360	382[a]
Current Mill Average:							42.2			11.8			115			345			382
Cumulative Mill Average:							42.5			11.8			113			366			389
Mill Factor, %							99.3			100.0			101.8			94.3			98.2
Mill Index, %							98.4			92.9			105.5			98.6			100.0

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

SUMMARY OF INSTITUTE DATA--MAY 1 THROUGH MAY 31, 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.
169623	W.F.	5/ 7/56	3/30/56[b]	2	42.8	41.0	42.1	12.9	11.3	12.0	134	92	112	360	288	322	400	320	363[a]
169624	W.F.	5/ 7/56	3/31/56[b]	2	42.6	41.4	42.0	13.0	11.9	12.6	120	86	102	384	280	331[a]	400	328	361[a]
169684	W.F.	5/ 9/56	4/30/56	1	44.0	42.4	43.3	12.1	11.0	11.6	138	78	112	368	312	337	408	328	366[a]
169685	W.F.	5/ 9/56	4/30/56	1	45.2	43.2	44.1	13.1	12.1	12.8	133	86	111	392	320	357[a]	400	352	381[a]
169823	W.F.	5/15/56	5/ 1/56	1	44.0	42.0	43.3	12.0	11.0	11.6	131	80	108	360	288	319	400	336	369[a]
169824	W.F.	5/15/56	5/ 1/56	1	43.8	42.8	43.5	12.0	11.0	11.5	135	76	111	368	312	341[a]	416	336	371[a]
169756	W.F.	5/14/56	5/ 1/56	1	44.0	42.0	42.8	12.1	10.5	11.6	125	87	109	360	272	324	440	328	368[a]
169757	W.F.	5/14/56	5/ 1/56	1	44.4	43.6	43.9	13.0	12.2	12.6	141	80	109	384	304	338[a]	400	320	369[a]
Current Mill Average:							43.1			12.0			109			334			368
Cumulative Mill Average:							43.1			12.5			110			330			377
Mill Factor, %							100.0			96.0			99.1			101.2			97.6
Mill Index, %							100.5			94.5			100.0			95.4			96.3

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

[b]This date appeared on the sample received by the Institute. On the outer wrapping of the sample and on the mill data sheet the date was indicated as "4-16-56."

SUMMARY OF INSTITUTE DATA--MAY 1 THROUGH MAY 31, 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.
169551	W.F.	5/ 2/56	4/22/56	2	43.6	42.0	42.7	12.9	11.3	12.4	135	93	113	344	272	306	400	344	359[a]
169552	W.F.	5/ 2/56	4/25/56	1	44.0	42.2	43.5	13.0	11.3	12.4	137	90	118	352	288	318	400	320	363[a]
169617	W.F.	5/ 5/56	4/29/56	2	44.0	42.2	43.2	13.0	11.9	12.3	134	81	113	320	264	293	376	328	352[a]
169618	W.F.	5/ 5/56	5/ 1/56	1	44.0	43.8	43.9	13.2	12.6	13.0	130	83	104	352	288	314[a]	392	336	353[a]
169744	W.F.	5/12/56	5/ 6/56	2	43.2	41.8	42.6	13.0	12.1	12.5	121	80	106	320	256	299	352	320	329
169745	W.F.	5/12/56	5/ 6/56	2	43.8	42.0	42.9	12.9	12.1	12.5	120	93	107	336	272	302	384	320	345[a]
169898	W.F.	5/18/56	5/13/56	2	43.6	42.0	42.8	12.4	12.0	12.1	129	100	111	368	280	321	384	336	357[a]
169899	W.F.	5/18/56	5/13/56	2	43.2	41.8	42.3	12.2	12.0	12.1	131	100	111	360	288	319	368	320	340[a]
170022	W.F.	5/26/56	5/20/56	1	43.6	42.8	43.1	12.6	12.0	12.4	134	93	111	384	280	323[a]	408	320	361[a]
170023	W.F.	5/26/56	5/21/56	2	43.6	42.4	42.8	12.5	12.0	12.3	125	86	105	368	280	315[a]	416	328	363[a]
Current Mill Average:							43.0			12.4			110			311			352
Cumulative Mill Average:							43.3			12.5			112			334			382
Mill Factor, %							99.3			99.2			98.2			93.1			92.1
Mill Index, %							100.2			97.6			100.9			88.9			92.1

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

SUMMARY OF INSTITUTE DATA--MAY 1 THROUGH MAY 31, 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.
169553	W.F.	5/ 2/56	4/21/56	-	43.6	41.0	42.3	12.9	12.0	12.3	136	81	106	392	320	348	408	336	364
169554	W.F.	5/ 2/56	4/21/56	-	43.6	40.6	42.1	12.9	11.7	12.2	121	85	106	400	312	344	368	320	349
169682	W.F.	5/ 9/56	4/29/56	-	42.0	41.0	41.7	13.1	12.0	12.5	124	89	107	352	288	316	344	312	325[a]
169683	W.F.	5/ 9/56	4/29/56	-	42.4	41.4	41.9	13.0	12.0	12.5	118	78	105	360	304	329[a]	368	312	330
170029	W.F.	5/28/56	5/13/56	-	42.0	40.6	41.8	12.0	11.0	11.6	129	90	112	448	304	357[a]	384	304	345[a]
170030	W.F.	5/28/56	5/13/56	-	42.0	41.6	41.9	12.3	11.5	11.9	128	100	115	400	272	333	368	256	309
Current Mill Average:							41.9			12.2			109			338			337
Cumulative Mill Average:							42.7			12.7			110			366			369
Mill Factor, %							98.1			96.1			99.1			92.3			91.3
Mill Index, %							97.7			96.1			100.0			96.6			88.2

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

SUMMARY OF INSTITUTE DATA--MAY 1 THROUGH MAY 31, 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.
169711	W.F.	5/11/56	4/25/56	1	44.2	42.2	43.6	13.9	11.9	12.9	133	97	109	368	288	321	408	336	374[a]
169712	W.F.	5/11/56	4/26/56	1	44.2	42.6	43.5	14.1	13.0	13.6	132	94	110	384	272	326[a]	456	336	373[a]
169713	W.F.	5/11/56	4/26/56	1	44.0	42.2	43.4	14.0	12.3	13.1	133	64	109	352	280	324	400	304	358[a]
169714	W.F.	5/11/56	4/28/56	1	45.0	42.2	43.5	14.0	13.2	13.6	121	83	103	384	336	363[a]	384	320	355[a]
169715	W.F.	5/11/56	4/30/56	1	44.8	42.8	44.0	14.3	12.7	13.4	125	88	109	368	272	328	416	336	367[a]
169716	W.F.	5/11/56	5/ 2/56	1	44.2	42.8	43.5	13.8	13.0	13.3	127	85	111	344	280	325[a]	392	336	363[a]
169717	W.F.	5/11/56	5/ 2/56	1	44.8	42.0	43.7	14.4	12.9	13.7	122	82	105	336	280	310	416	320	359[a]
169718	W.F.	5/11/56	5/ 4/56	1	44.0	42.0	43.1	14.3	13.5	13.9	125	90	107	368	304	331	384	320	355[a]
Current Mill Average:							43.5			13.4			108			328			363
Cumulative Mill Average:							43.5			13.6			104			332			366
Mill Factor, %							100.0			98.5			103.8			98.8			99.2
Mill Index, %							101.4			105.5			99.1			93.7			95.0

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

SUMMARY OF INSTITUTE DATA--MAY 1 THROUGH MAY 31, 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.
169848	W.F.	5/16/56	5/10/56	2	45.2	43.2	43.9	14.0	12.9	13.1	137	94	113	360	280	322[a]	416	320	353[a]
169849	W.F.	5/16/56	5/11/56	2	43.8	40.8	42.6	13.6	12.8	13.0	118	87	105	384	288	339[a]	392	304	348[a]
Current Mill Average:							43.3			13.1			109			331			350
Cumulative Mill Average:							42.5			13.6			106			349			369
Mill Factor, %							101.9			96.3			102.8			94.8			94.9
Mill Index, %							100.9			103.1			100.0			94.6			91.6

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

SUMMARY OF INSTITUTE DATA--MAY 1 THROUGH MAY 31, 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.
169758	W.F.	5/14/56	5/ 8/56	-	43.6	41.6	42.6	13.1	12.3	12.8	130	88	107	384	312	343	408	352	376[a]
169759	W.F.	5/14/56	5/ 8/56	-	44.0	41.2	42.3	13.2	12.1	12.6	117	80	97	408	288	362[a]	416	352	387[a]
169977	W.F.	5/23/56	5/16/56	-	44.2	40.4	42.0	13.6	11.3	12.4	124	70	105	384	304	342	440	288	359[a]
169978	W.F.	5/23/56	5/17/56	-	44.2	42.2	43.7	14.0	13.0	13.6	125	95	110	400	304	345[a]	456	336	390[a]
170031	W.F.	5/28/56	5/22/56	-	42.4	41.0	41.9	12.5	12.0	12.1	126	89	111	352	312	333[a]	384	336	353[a]
170032	W.F.	5/28/56	5/22/56	-	42.6	41.2	41.7	12.4	11.7	12.1	126	97	106	368	304	330	376	320	341[a]
170033	W.F.	5/28/56	5/23/56	-	43.8	41.8	42.9	13.1	12.1	12.6	114	64	99	384	336	355	416	352	383
Current Mill Average:							42.5			12.6			105			344			370
Cumulative Mill Average:							43.1			12.3			111			365			392
Mill Factor, %							98.6			102.4			94.6			94.2			94.4
Mill Index, %							99.1			99.2			96.3			98.3			96.9

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

SUMMARY OF INSTITUTE DATA--MAY 1 THROUGH MAY 31, 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																			
169720	W.F.	5/11/56	5/ 4/56	2	48.2	45.6	46.8	14.6	12.8	13.8	113	77	98	432	336	391[a]	424	296	371[a]
Current Mill Average:							46.8			13.8			98			391			371
Cumulative Mill Average:							47.0			14.3			100			389			398
Mill Factor, %							99.6			96.5			98.0			100.5			93.2
38-lb. Linerboard																			
169719	WFlS	5/11/56	5/ 2/56	2	40.2	38.4	39.2	12.9	11.2	12.1	112	77	95	400	264	331[a]	336	288	315[a]
69-lb. Linerboard																			
169915	W.F.	5/21/56	5/16/56	2	70.0	68.0	69.4	22.6	20.0	21.4	155	94	130	656	536	595[a]	720	592	639[a]
169916	W.F.	5/21/56	5/17/56	2	72.0	70.0	70.7	22.1	20.3	21.2	171	116	145	680	528	588[a]	864	592	687[a]

[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		None		32-58	76-82	--
B		None		50-52	71-73	48
C	31-32	77-78	8	49-51	72-73	16
D		None		50-54	70-72	--
E	50	70-73	24	50	70-73	24
F	42-65	60-92	0.5	50	70	24-96
G	64	72-76	48-64	65-70	75-85	2
H		None		50	73	24
I	50	73	24	50	73	--
J		None		52-62	74	--
K		None		50	73	8
L	50	73	24	50	73	24
M		None		50-74	50-73	24
N		None		47-51	72-74	0.5
O	50	73	24-120	50	73	24-120
P		None		65-67	74	--
Q	50	73	48	50	73	48

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 B, C, E, G, H, K, L, N, P, and Q are higher than those for the Institute, the average result for Mill F 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 seven per cent. This variation is comparable to the maximum variations for the previous two periods--namely, six per cent. Compared with the Institute's test results, the test results for all mills except C and F are slightly lower. The average result for Mill C is the same as that for the Institute, and the average result for Mill F is higher. The variation for Mill P appears to be rather large.

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

It may be seen in Tables XXII and XXIII that the average machine direction tear results for Mills C, D, E, L, N, and Q are higher than those for the Institute, the result for Mill B is the same as that for the Institute, and the results for the other mills are lower. The maximum variation for the current period is fourteen per cent. The difference encountered for Mill O appears to be excessive. Mill I exhibits a variation which is on the borderline--i.e., ten per cent.

With regard to the cross-machine direction tear results, it may be noted that the average results for Mills A, C, D, E, F, G, I, L, M, N, P, and Q are higher than those for the Institute, the average result for

Mill H is the same, and the average results for the other mills are lower. The maximum variation for the current period is nineteen per cent. The only obviously excessive difference is the variation of nineteen per cent associated with Mill E. Several other mills exhibit variations which are on the borderline--namely, Mills L and N.

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	9	6	5	8	2	10	2	2	1	8	10	6	8	2	7
Basis Weight																	
Institute	42.4	43.6	43.6	43.2	42.0	43.2	43.1	42.3	43.0	43.1	42.2	43.1	43.0	41.9	43.5	43.3	42.5
Mill	42.0	43.8	43.9	42.6	42.2	43.2	43.2	43.0	42.6	42.8	42.6	43.3	42.7	42.2	43.4	43.8	42.6
Av. Diff.**	-0.4	+0.2	+0.3	-0.6	+0.2	0.0	+0.1	+0.7	-0.4	-0.3	+0.4	+0.2	-0.3	+0.3	-0.1	+0.5	+0.1
Max. Diff.***	-0.7	+0.7	+0.7	-1.2	+0.8	-0.6	+0.2	+1.2	-0.7	-0.6	+0.4	+0.9	-0.8	+0.5	-0.4	+0.6	+0.9
Caliper																	
Institute	12.7	12.4	12.3	12.5	12.4	12.4	13.3	12.5	12.7	12.9	11.8	12.0	12.4	12.2	13.4	13.1	12.6
Mill	12.4	12.0	12.3	12.3	12.2	12.5	13.1	12.3	12.4	12.4	11.6	11.6	12.1	11.8	13.0	12.2	12.4
Av. Diff.**	-0.3	-0.4	0.0	-0.2	-0.2	+0.1	-0.2	-0.2	-0.3	-0.5	-0.2	-0.4	-0.3	-0.4	-0.4	-0.9	-0.2
Max. Diff.***	-0.4	-0.5	-0.2	-0.5	-0.4	+0.5	-0.3	-0.4	-0.6	-0.7	-0.2	-0.5	-0.8	-0.5	-0.6	-0.9	-0.5
Bursting Strength																	
Institute	121	100	110	110	106	114	112	107	103	107	115	109	110	109	108	109	105
Mill	115	107	112	112	104	115	103	109	105	107	109	117	115	106	112	116	104
Av. Diff.**	-6	+7	+2	+2	-2	+1	-9	+2	+2	0	-6	+8	+5	-3	+4	+7	-1
Max. Diff.***	-8	+15	+5	+4	-10	+6	-10	+7	+5	+3	-6	+13	+8	-7	+5	+7	-4
Tearing Strength, in																	
Institute	314	383	350	315	365	312	336	331	404	357	345	334	311	338	328	331	344
Mill	299	383	357	327	391	311	325	327	362	345	337	356	300	340	282	318	357
Av. Diff. **	-15	0	+7	+12	+26	-1	-11	-4	-42	-12	-8	+22	-11	+2	- 46	-13	+13
Max. Diff.***	-34	+11	-36	+28	+49	-22	-23	-41	-57	-16	-8	+37	-39	+19	-62	-22	+38
Tearing Strength, across																	
Institute	372	413	383	378	393	371	373	369	391	388	382	368	352	337	363	350	370
Mill	373	409	396	393	466	375	398	369	420	387	377	404	358	371	343	361	385
Av. Diff.**	+1	-4	+13	+15	+73	+4	+25	0	+29	-1	-5	+36	+6	+34	-20	+11	+15
Max. Diff.***	-42	+38	+44	+42	+95	+26	+33	-33	+36	-14	-5	+56	+23	+54	-37	+13	+45

* 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	Across
A	Current	-0.9	-2	-5	-5	+0.3
	106th	-1	-3	-7	-11	-5
	105th	-0.5	-2	-4	-0.3	+2
B	Current	+0.5	-3	+7	0	-1
	106th	+0.9	-2	+8	-2	+3
	105th	-0.9	-5	+4	-10	-8
C	Current	+0.7	0	+2	+2	+3
	106th	+0.2	-2	-0.9	+3	+4
	105th	-0.5	-0.8	-2	-0.6	-0.3
D	Current	-1	-2	+2	+ 4	+4
	106th	+0.5	-2	+0.9	+11	+4
	105th	0	-2	+0.9	+9	+3
E	Current	+0.5	-2	-2	+7	+19
	106th	+0.2	-4	-5	+10	+22
	105th	-0.2	-2	-0.9	+ 1	+19
F	Current	0	+0.8	+0.9	-0.3	+1
	106th	-1	0	+3	-4	+1
	105th	0	+0.8	+0.9	-2	-0.5
G	Current	+0.2	-2	-8	-3	+7
	106th	-0.7	-4	-8	+5	+4
	105th	0	-4	-4	+4	+3
H	Current	+2	-2	+2	-1	0
	106th	+2	-2	0	-7	-2
	105th	+1	-2	+1	-12	-6
I	Current	-0.9	-2	+2	-10	+7
	106th	-0.5	-2	+6	0	+7
	105th	-0.7	-2	+6	-7	+5
J	Current	-0.7	-4	0	-3	-0.3
	106th	-0.7	-5	-0.9	-7	-2
	105th	-0.7	-5	-2	-3	+1
K	Current	-0.9	-2	-5	-2	-1
	106th	+2	-2	+5	-8	-4
	105th	+0.9	-4	-4	-14	-8
L	Current	+0.5	-3	+7	+7	+10
	106th	+0.5	-4	+5	+11	+9
	105th	+0.9	-6	+0.9	+14	+10
M	Current	-0.7	-2	+5	-4	+2
	106th	-0.5	-2	+4	+1	+2
	105th	-0.7	-2	0	-3	-2
N	Current	+0.7	-3	-3	+0.6	+10
	106th	+2	-2	-1	+6	+14
	105th	+0.2	-4	-4	-7	+3
O	Current	-0.2	-3	+4	-14	-6
	106th	-0.5	-4	+2	-16	-5
	105th	+0.7	-1	+4	-2	+3
P	Current	+1	-7	+6	-4	+3
	106th	-1	-5	+3	-17	-10
	105th	-0.2	-4	-0.9	-17	-9
Q	Current	+0.2	-2	-1	+4	+4
	106th	+0.5	-2	-4	+2	+2
	105th	+0.5	-2	-2	-0.3	-2

COMPARISON OF INSTITUTE AND MILL DATA--MAY 1 THROUGH MAY 31, 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			Across		
				IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
169510		4/17/56	1	42.4	42.3	-0.1	12.7	12.3	-0.4	128	122	- 6	309	282	-27	373[a]	385	+12
169511		4/20/56	1	42.7	42.0	-0.7	12.7	12.6	-0.1	115	108	- 7	301	267	-34	382[a]	340	-42
169652		4/24/56	1	42.0	41.8	-0.2	12.5	12.2	-0.3	122	114	- 8	331[a]	361	+30	365[a]	389	+24
169653		4/28/56	1	42.4	41.9	-0.5	12.9	12.6	-0.3	120	115	- 5	317	285	-32	369[a]	377	+ 8
Current Mill Average:				42.4	42.0	-0.4	12.7	12.4	-0.3	121	115	- 6	314	299	-15	372	373	+ 1

TABLE XXV

MILL B -- 42-LB. LINERBOARD

169521	W.B.	3/30/56	-	43.0	43.1	+0.1	12.2	11.7	-0.5	102	112	+10	370	380	+10	397[a]	388	- 9
169522	W.B.	4/ 2/56	-	43.7	43.9	+0.2	12.2	11.9	-0.3	99	106	+ 7	360[a]	371	+11	405[a]	415	+10
169523	W.B.	4/ 3/56	-	43.4	43.3	-0.1	12.6	12.1	-0.5	100	103	+ 3	415[a]	413	- 2	395[a]	433	+38
169524	W.B.	4/11/56	-	44.1	44.8	+0.7	11.9	11.6	-0.3	103	111	+ 8	376	371	- 5	393[a]	400	+ 7
169525	W.B.	4/13/56	-	44.2	44.5	+0.3	12.9	12.4	-0.5	105	106	+ 1	400[a]	395	- 5	436[a]	409	-27
169526	W.B.	4/16/56	-	42.8	43.2	+0.4	12.5	12.0	-0.5	94	102	+ 8	364	367	+ 3	422[a]	392	-30
170001	W.B.	4/18/56	-	43.2	43.5	+0.3	12.3	11.9	-0.4	97	112	+15	382	372	-10	422[a]	413	- 9
170002	W.B.	4/24/56	-	44.4	44.1	-0.3	12.9	12.4	-0.5	101	103	+ 2	399[a]	397	- 2	433[a]	421	-12
Current Mill Average:				43.6	43.8	+0.2	12.4	12.0	-0.4	100	107	+ 7	383	383	0	413	409	- 4

[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--MAY 1 THROUGH MAY 31, 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			Across		
				IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
169516	W.F.	4/25/56	4	43.4	43.8	+0.4	13.2	13.0	-0.2	104	103	-1	363[a]	359	- 4	397[a]	407	+10
169517	W.F.	4/26/56	4	44.5	45.1	+0.6	12.1	12.2	+0.1	108	109	+1	332[a]	363	+31	387[a]	395	+ 8
169518	W.F.	4/27/56	4	44.0	44.7	+0.7	12.2	12.1	-0.1	111	113	+2	371[a]	384	+13	398[a]	411	+13
169692	W.F.	5/ 2/56	4	43.8	44.2	+0.4	12.4	12.3	-0.1	114	117	+3	345	375	+30	389[a]	400	+11
169693	W.F.	5/ 3/56	4	44.0	44.2	+0.2	12.3	12.1	-0.2	116	117	+1	389[a]	353	-36	379[a]	377	- 2
169694	W.F.	5/ 4/56	4	43.5	43.8	+0.3	12.3	12.2	-0.1	111	113	+2	323[a]	335	+12	366[a]	372	+ 6
169752	W.F.	5/ 9/56	4	43.0	43.4	+0.4	12.4	12.5	+0.1	112	108	-4	345[a]	339	- 6	381[a]	395	+14
169753	W.F.	5/10/56	4	43.0	42.6	-0.4	12.1	11.9	-0.2	108	113	+5	352[a]	359	+ 7	375[a]	388	+13
169754	W.F.	5/11/56	4	42.8	43.3	+0.5	12.2	12.2	0.0	110	112	+2	329[a]	351	+22	373[a]	417	+44
Current Mill Average:				43.6	43.9	+0.3	12.3	12.3	0.0	110	112	+2	350	357	+ 7	383	396	+13

[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--MAY 1 THROUGH MAY 31, 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.
169594	WF1S	4/25/56	1	42.5	42.6	+0.1	12.3	12.2	-0.1	109	108	- 1	298[a]	325	+27	377[a]	381	+ 4
169595	WF1S	4/26/56	1	42.6	42.7	+0.1	12.3	12.2	-0.1	109	111	+ 2	316[a]	323	+ 7	382[a]	382	0
169621	WF1S	5/ 1/56	1	43.4	42.6	-0.8	12.8	12.3	-0.5	112	114	+ 2	326[a]	333	+ 7	381[a]	409	+28
169622	WF1S	5/ 2/56	1	43.8	42.6	-1.2	12.5	12.3	-0.2	112	113	+ 1	327	325	- 2	381[a]	387	+ 6
169822	WF1S	5/ 3/56	1	43.6	42.6	-1.0	12.8	12.3	-0.5	109	113	+ 4	318	327	+ 9	375[a]	386	+11
169926	WF1S	5/10/56	1	43.2	42.6	-0.6	12.5	12.3	-0.2	111	113	+ 2	303	331	+28	369[a]	411	+42
Current Mill Average:				43.2	42.6	-0.6	12.5	12.3	-0.2	110	112	+ 2	315	327	+12	378	393	+15

TABLE XXVIII

MILL E -- 42-LB. LINERBOARD

169626	WF1S	4/26/56	1	41.9	41.8	-0.1	12.0	11.9	-0.1	104	103	- 1	357[a]	393	+36	385[a]	456	+71
169913	WF1S	5/10/56	1	42.6	42.8	+0.2	12.3	12.1	-0.2	106	115	+ 9	373[a]	416	+43	405[a]	500	+95
169914	WF1S	5/11/56	1	41.6	42.4	+0.8	12.1	12.3	+0.2	108	108	0	362[a]	411	+49	399[a]	481	+82
170027	WF1S	5/20/56	1	42.2	42.3	+0.1	12.8	12.4	-0.4	107	101	- 6	361[a]	390	+29	395[a]	486	+91
170028	WF1S	5/20/56	1	41.8	41.8	0.0	12.8	12.5	-0.3	106	96	-10	370[a]	348	-22	381[a]	408	+27
Current Mill Average:				42.0	42.2	+0.2	12.4	12.2	-0.2	106	104	- 2	365	391	+26	393	466	+73

[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--MAY 1 THROUGH MAY 31, 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.
169592	W.F.	4/17/56	1	43.6	43.6	0.0	13.1	13.2	+0.1	110	110	0	320	329	+ 9	382[a]	379	- 3
169593	W.F.	4/20/56	1	43.9	44.0	+0.1	13.4	13.3	-0.1	113	110	- 3	323	315	- 8	382[a]	378	- 4
169615	W.F.	4/24/56	1	42.7	42.9	+0.2	11.5	12.0	+0.5	118	118	0	297	293	- 4	368[a]	386	+18
169616	W.F.	4/27/56	1	43.6	43.0	-0.6	12.0	12.0	0.0	116	118	+ 2	315	314	- 1	365[a]	369	+ 4
169710	W.F.	4/30/56	1	43.1	43.0	-0.1	12.0	11.8	-0.2	114	120	+ 6	326	304	-22	381[a]	359	-22
169755	W.F.	5/ 8/56	1	42.6	43.1	+0.5	11.8	11.8	0.0	119	118	- 1	303	313	+10	368[a]	379	+11
169897	W.F.	5/10/56	1	44.4	43.9	-0.5	13.1	13.3	+0.2	108	109	+ 1	319	314	- 5	382[a]	385	+ 3
169912	W.F.	5/17/56	1	41.8	41.7	-0.1	12.3	12.3	0.0	110	114	+ 4	295	302	+ 7	339[a]	365	+26
Current Mill Average:				43.2	43.2	0.0	12.4	12.5	+0.1	114	115	+ 1	312	311	- 1	371	375	+ 4

TABLE XXX

MILL G -- 42-LB. LINERBOARD

169625	WFlS	5/ 1/56	1	42.9	43.1	+0.2	12.9	12.9	0.0	111	101	-10	351	328	-23	375[a]	408	+33
169911	WFlS	5/11/56	1	43.3	43.4	+0.1	13.7	13.4	-0.3	112	106	- 6	321	323	+ 2	371[a]	388	+17
Current Mill Average:				43.1	43.2	+0.1	13.3	13.1	-0.2	112	103	- 9	336	325	-11	373	398	+25

[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--MAY 1 THROUGH MAY 31, 1956 (continued)

TABLE XXXI

MILL H -- 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.
169512	W.F.	4/22/56	2	42.2	43.2	+1.0	12.7	12.4	-0.3	105	108	+3	335	341	+ 6	365[a]	391	+26
169513	W.F.	4/23/56	2	42.2	43.4	+1.2	12.6	12.3	-0.3	110	109	-1	324	349	+25	378	399	+21
169708	W.F.	4/29/56	2	42.6	43.0	+0.4	12.5	12.3	-0.2	99	106	+7	351	310	-41	382[a]	349	-33
169709	W.F.	4/30/56	2	42.1	42.7	+0.6	12.8	12.5	-0.3	107	105	-2	341	330	-11	365[a]	353	-12
169846	W.F.	5/ 6/56	2	41.9	42.7	+0.8	12.7	12.4	-0.3	106	106	0	329	334	+ 5	357[a]	361	+ 4
169847	W.F.	5/ 7/56	2	41.9	42.8	+0.9	12.7	12.3	-0.4	104	104	0	324	345	+21	367	372	+ 5
169927	W.F.	5/13/56	2	42.8	42.8	0.0	12.2	12.0	-0.2	117	116	-1	325	315	-10	387	367	-20
169928	W.F.	5/14/56	2	42.5	43.0	+0.5	12.1	12.1	0.0	116	119	+3	343	332	-11	377[a]	374	- 3
170034	W.F.	5/20/56	2	42.4	43.2	+0.8	12.5	12.5	0.0	107	109	+2	327[a]	314	-13	365[a]	369	+ 4
170035	W.F.	5/21/56	2	42.6	43.0	+0.4	12.3	12.1	-0.2	103	105	+2	309[a]	301	- 8	341[a]	358	+17
Current Mill Average:				42.3	43.0	+0.7	12.5	12.3	-0.2	107	109	+2	331	327	- 4	369	369	0

[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--MAY 1 THROUGH MAY 31, 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.
169573	S.F.	4/28/56	7	42.8	42.7	-0.1	12.5	12.4	-0.1	107	107	0	389	364	-25	399[a]	422	+23
169976	S.F.	5/18/56	7	43.2	42.5	-0.7	12.9	12.3	-0.6	99	104	+5	418[a]	361	-57	382[a]	418	+36
Current Mill Average:				43.0	42.6	-0.4	12.7	12.4	-0.3	103	105	+2	404	362	-42	391	420	+29

TABLE XXXIII

MILL J -- 42-LB. LINERBOARD

169514	W.	4/10/56	2	42.7	42.7	0.0	12.8	12.1	-0.7	107	110	+3	337	321	-16	381[a]	367	-14
169515	W.	4/19/56	4	43.5	42.9	-0.6	13.0	12.7	-0.3	108	105	-3	377	369	- 8	395[a]	407	+12
Current Mill Average:				43.1	42.8	-0.3	12.9	12.4	-0.5	107	107	0	357	345	-12	388	387	- 1

[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--MAY 1 THROUGH MAY 31, 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.
169686	W.F.	4/26/56	4	42.2	42.6	+0.4	11.8	11.6	-0.2	115	109	- 6	345[a]	337	- 8	382[a]	377	- 5
Current Mill Average:				42.2	42.6	+0.4	11.8	11.6	-0.2	115	109	- 6	345	337	- 8	382	377	- 5

TABLE XXV

MILL L -- 42-LB. LINERBOARD

169623	W.F.	3/30/56[b]	2	42.1	43.0	+0.9	12.0	11.6	-0.4	112	115	+ 3	322[a]	359	+37	363[a]	419	+56
169624	W.F.	3/31/56[b]	2	42.0	42.2	+0.2	12.6	12.1	-0.5	102	107	+ 5	331[a]	367	+36	361[a]	417	+56
169684	W.F.	4/30/56	1	43.3	43.4	+0.1	11.6	11.2	-0.4	112	119	+ 7	337	359	+22	366[a]	412	+46
169685	W.F.	4/30/56	1	44.1	44.3	+0.2	12.8	12.3	-0.5	111	118	+ 7	357[a]	347	-10	381[a]	401	+20
169823	W.F.	5/ 1/56	1	43.3	43.3	0.0	11.6	11.2	-0.4	108	121	+13	319	348	+29	369[a]	395	+26
169824	W.F.	5/ 1/56	1	43.5	43.0	-0.5	11.5	11.2	-0.3	111	119	+ 8	341[a]	359	+18	371[a]	393	+22
169756	W.F.	5/ 1/56	1	42.8	43.2	+0.4	11.6	11.1	-0.5	109	120	+11	324	336	+12	368[a]	383	+15
169757	W.F.	5/ 1/56	1	43.9	44.2	+0.3	12.6	12.2	-0.4	109	118	+ 9	338[a]	371	+33	369[a]	413	+44
Current Mill Average:				43.1	43.3	+0.2	12.0	11.6	-0.4	109	117	+ 8	334	356	+22	368	404	+36

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

[b]This date appeared on the sample received by the Institute. On the outer wrapping of the sample and on the mill data sheet the date was indicated as "4-16-56."

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

COMPARISON OF INSTITUTE AND MILL DATA--MAY 1 THROUGH MAY 31, 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.
169551	W.F.	4/22/56	2	42.7	42.5	-0.2	12.4	12.2	-0.2	113	116	+3	306	267	-39	359[a]	360	+ 1
169552	W.F.	4/25/56	1	43.5	42.9	-0.6	12.4	12.1	-0.3	118	116	-2	318	315	- 3	363[a]	378	+15
169617	W.F.	4/29/56	2	43.2	43.0	-0.2	12.3	12.0	-0.3	113	115	+2	293	308	+15	352[a]	366	+14
169618	W.F.	5/ 1/56	1	43.9	43.1	-0.8	13.0	12.2	-0.8	104	110	+6	314[a]	293	-21	353[a]	360	+ 7
169744	W.F.	5/ 6/56	2	42.6	42.5	-0.1	12.5	12.1	-0.4	106	114	+8	299	305	+ 6	329	352	+23
169745	W.F.	5/ 6/56	2	42.9	42.4	-0.5	12.5	12.1	-0.4	107	112	+5	302	283	-19	345[a]	337	- 8
169898	W.F.	5/13/56	2	42.8	42.7	-0.1	12.1	12.0	-0.1	111	117	+6	321	323	+ 2	357[a]	370	+13
169899	W.F.	5/13/56	2	42.3	42.2	-0.1	12.1	12.0	-0.1	111	115	+4	319	313	- 6	340[a]	353	+13
170022	W.F.	5/20/56	1	43.1	42.8	-0.3	12.4	12.1	-0.3	111	116	+5	323[a]	299	-24	361[a]	354	- 7
170023	W.F.	5/21/56	2	42.8	42.4	-0.4	12.3	12.0	-0.3	105	113	+8	315[a]	290	-25	363[a]	352	-11
Current Mill Average:				43.0	42.7	-0.3	12.4	12.1	-0.3	110	115	+5	311	300	-11	352	358	+ 6

[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--MAY 1 THROUGH MAY 31, 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			Elmendorf Tear, g./sheet Across		
				IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
169553	W.F.	4/21/56	-	42.3	42.2	-0.1	12.3	11.9	-0.4	106	104	-2	348	343	- 5	364	365	+ 1
169554	W.F.	4/21/56	-	42.1	42.5	+0.4	12.2	12.0	-0.2	106	106	0	344	356	+12	349	380	+31
169682	W.F.	4/29/56	-	41.7	42.2	+0.5	12.5	12.1	-0.4	107	104	-3	316	335	+19	325[a]	379	+54
169683	W.F.	4/29/56	-	41.9	42.1	+0.2	12.5	12.2	-0.3	105	105	0	329[a]	339	+10	330	377	+47
170029	W.F.	5/13/56	-	41.8	42.1	+0.3	11.6	11.5	-0.1	112	108	-4	357[a]	339	-18	345[a]	369	+24
170030	W.F.	5/13/56	-	41.9	42.2	+0.3	11.9	11.4	-0.5	115	108	-7	333	331	- 2	309	357	+48
Current Mill Average:				41.9	42.2	+0.3	12.2	11.8	-0.4	109	106	-3	338	340	+ 2	337	371	+34

[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--MAY 1 THROUGH MAY 31, 1956 (continued)

TABLE XXXVIII

MILL O -- 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.
169711	W.F.	4/25/56	1	43.6	43.4	-0.2	12.9	12.6	-0.3	109	113	+4	321[a]	288	-33	374[a]	350	-24
169712	W.F.	4/26/56	1	43.5	43.1	-0.4	13.6	13.1	-0.5	110	112	+2	326[a]	275	-51	373[a]	336	-37
169713	W.F.	4/26/56	1	43.4	43.2	-0.2	13.1	12.8	-0.3	109	112	+3	324[a]	285	-39	358[a]	356	- 2
169714	W.F.	4/28/56	1	43.5	43.3	-0.2	13.6	13.2	-0.4	103	107	+4	363[a]	301	-62	355[a]	337	-18
169715	W.F.	4/30/56	1	44.0	43.9	-0.1	13.4	13.0	-0.4	109	114	+5	328	288	-40	367[a]	343	-24
169716	W.F.	5/ 2/56	1	43.5	43.5	0.0	13.3	12.9	-0.4	111	114	+3	325[a]	274	-51	363[a]	345	-18
169717	W.F.	5/ 2/56	1	43.7	43.3	-0.4	13.7	13.2	-0.5	105	110	+5	310	270	-40	359[a]	339	-20
169718	W.F.	5/ 4/56	1	43.1	43.1	0.0	13.9	13.3	-0.6	107	112	+5	331	277	-54	355[a]	337	-18
Current Mill Average:				43.5	43.4	-0.1	13.4	13.0	-0.4	108	112	+4	328	282	-46	363	343	-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--MAY 1 THROUGH MAY 31, 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			Elmendorf Tear, g./sheet Across		
				IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
169848	W.F.	5/10/56	2	43.9	44.4	+0.5	13.1	12.3	-0.8	113	120	+7	322[a]	300	-22	353[a]	361	+ 8
169849	W.F.	5/11/56	2	42.6	43.2	+0.6	13.0	12.1	-0.9	105	112	+7	339[a]	335	- 4	348[a]	361	+13
Current Mill Average:				43.3	43.8	+0.5	13.1	12.2	-0.9	109	116	+7	331	318	-13	350	361	+11

TABLE XL

MILL Q -- 42-LB. LINERBOARD

169758	W.F.	5/ 8/56	-	42.6	42.9	+0.3	12.8	12.4	-0.4	107	105	-2	343[a]	381	+38	376[a]	389	+13
169759	W.F.	5/ 8/56	-	42.3	42.9	+0.6	12.6	12.4	-0.2	97	99	+2	362[a]	373	+11	387[a]	388	+ 1
169977	W.F.	5/16/56	-	42.0	42.9	+0.9	12.4	12.2	-0.2	105	104	-1	342[a]	363	+21	359[a]	404	+45
169978	W.F.	5/17/56	-	43.7	43.6	-0.1	13.6	13.4	-0.2	110	106	-4	345[a]	364	+19	390[a]	407	+17
170031	W.F.	5/22/56	-	41.9	42.2	+0.3	12.1	12.2	+0.1	111	111	0	333[a]	333	0	353[a]	373	+20
170032	W.F.	5/22/56	-	41.7	40.9	-0.8	12.1	11.9	-0.2	106	103	-3	330	324	- 6	341[a]	349	+ 8
170033	W.F.	5/23/56	-	42.9	42.8	-0.1	12.6	12.1	-0.5	99	97	-2	355	361	+ 6	383	383	0
Current Mill Average:				42.5	42.6	+0.1	12.6	12.4	-0.2	105	104	-1	344	357	+13	370	385	+15

[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--MAY 1 THROUGH MAY 31, 1956 (continued)

TABLE XLI

MILL R -- MISCELLANEOUS

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.
47-lb. Drum Linerboard																		
169720	W.F.	5/ 4/56	2	46.8	48.0	+1.2	13.8	13.0	-0.8	98	99	+ 1	391[a]	417	+26	371[a]	439	+68
Current Mill Average:				46.8	48.0	+1.2	13.8	13.0	-0.8	98	99	+ 1	391	417	+26	371	439	+68
38-lb. Linerboard																		
169719	WFlS	5/ 2/56	2	39.2	38.9	-0.3	12.1	11.5	-0.6	95	99	+ 4	331[a]	278	-53	315[a]	300	-15
69-lb. Linerboard																		
169915	W.F.	5/16/56	2	69.4	70.3	+0.9	21.4	21	-0.4	130	143	+13	595[a]	528	-67	639[a]	560	- 79
169916	W.F.	5/17/56	2	70.7	71.5	+0.8	21.2	21	-0.2	145	141	- 4	588[a]	604	+16	687[a]	561	-126

[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.