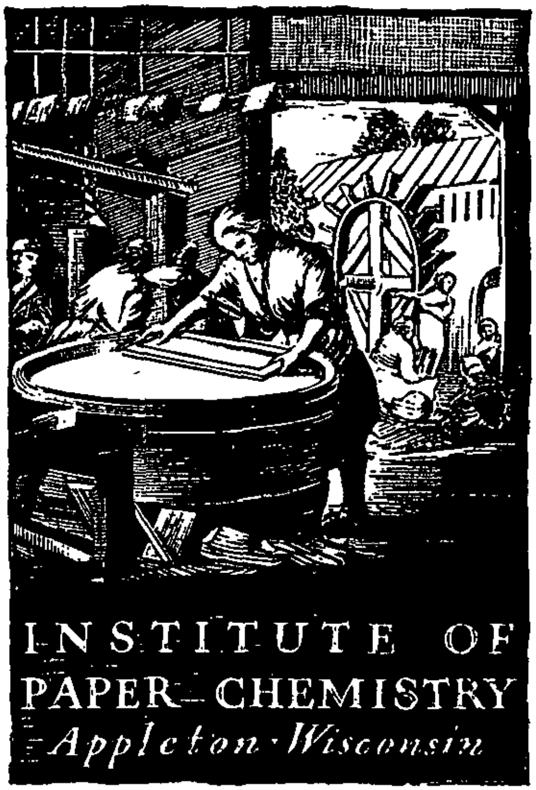

CONTINUOUS BASELINE STUDY

Project 1108-B

Progress Report 16
to
FOURDRINIER KRAFT BOARD INSTITUTE

November 1, 1948

THE INSTITUTE OF PAPER CHEMISTRY

APPLETON, WISCONSIN

CONTINUOUS BASELINE STUDY

Project 1108-B

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November 1, 1948

THE INSTITUTE OF PAPER CHEMISTRY

APPLETON, WISCONSIN

In conjunction with the F.K.I. Continuous Baseline Study, fifty-eight different sample lots of 42-lb. Fourdrinier kraft linerboard were submitted by nine different F.K.I. mills to The Institute of Paper Chemistry for testing during the period October 1 through October 31. In addition to the 42-lb. kraft linerboard, four samples of special drum stock were also submitted for evaluation. The results on the special stock are reported 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	6
B	6
C	6
D	8
E	1
F	7
G	10
H	6
J	8
	58

The above sample lots were tested for basis weight, caliper, bursting strength, G. E. puncture, and Elmendorf tear. A comparison of the average strength results for each mill may be seen in Table II and graphically presented in Figures 1 to 6, inclusive. In addition to a comparison of the mill averages, Table II also shows the cumulative F.K.I. averages and the F.K.I. indexes. The cumulative F.K.I. averages include all the results up to but not including the current period; the current period in the case of this report is October 1 through October 31. The F.K.I. index is 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 furnishes a ready means of comparing the current quality with previous results. For example, the current F.K.I. average basis weight is 43.3 lb., whereas the cumulative F.K.I. average basis weight is 43.1. The index for basis weight determined in per cent as indicated above is 100.5%. This signifies that the current average basis weight is approximately 0.5% higher than the cumulative average which, in this case, covered the period from July 25, 1947, through September 30, 1948.

A comparison of the results in Table II and Figure I shows that the average basis weight for all mills submitting samples is above the 42-lb. specification set forth in Rule 41. Mill F has the highest average basis weight, it being approximately 6.0% higher than the 42-lb. specification. The amount by which the mills exceed the 42-lb. specification is as follows:

Mill Code	Per cent
A	1.7
B	3.6
C	2.9
D	3.1
E	6.2
F	4.0
G	1.7
H	2.4
J	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 is slightly higher.

A comparison of the average calipers for the various mills (see Figure 2) shows that the mill averages vary from a low of 13.6 for Mill G to a high of 15.7 for Mill D, the average being 14.8, which is lower than the cumulative average.

The average bursting strength values obtained for each mill are graphically shown in Figure 3. It may be observed that the average bursting strength for the various mills ranges from a low of 96 for Mill E to a high of 109 for Mill G. The current F.K.I. average bursting strength is 104, slightly higher than the cumulative average.

The data of Table II and Figure 4 show that the average G. E. puncture for all mills is 34 units, Mill J having the lowest value. In connection with Mill J, it may be observed that this mill had the lowest G. E. puncture during the last period.

A graphic comparison of the Elmendorf tear results for the various mills is given in Figures 5 and 6. The data of Table II show that Mill E has the highest average machine direction tear value, while Mill J has the lowest. Similarly, Mill A has the highest average across machine direction tear value while Mill J has the lowest. It may be noted that the current F.K.I. average machine direction and across-machine direction tear results are lower than the cumulative averages.

A comparison of the F.K.I. indexes indicates that, for the current period, the test averages for caliper, G. E. puncture, and machine and across machine direction Elmendorf tear are lower than the respective cumulative averages while the test averages for bursting strength and basis weight are higher than the cumulative 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 XI for Mills A to J, respectively. In addition to the current averages, cumulative averages for each mill, together with the mill factor and mill index, are given for each mill. The cumulative mill average is the average test results obtained on the samples submitted by the particular mill up to, but not including, the current averages. The mill factor and the mill index are obtained as follows:

TABLE II

SUMMARY OF COMPOSITE MILL AVERAGES--OCTOBER 1 THROUGH OCTOBER 31, 1948

Code No.	Basis Weight, lb.	Caliper, points	Bursting Strength, points	G. E. Puncture, units	Elmendorf Tear, g./sheet In Direction	Elmendorf Tear, g./sheet Across Direction
A	42.7	14.5	105	34	376	426+
B	43.5	15.0	106	33	370	393
C	43.2	14.5	104	37+	367	417
D	43.3	15.7+	103	35	385	397
E	44.6+	13.8	96-	35	412+	404
F	43.7	15.6	100	36	351	403
G	42.7	13.6-	109+	34	363	398
H	43.0	15.5	106	34	387	411
J	42.5-	14.8	102	28-	323-	347-
Current FKI Average:	43.3	14.8	104	34	370	400
Cumulative FKI Average:	43.1	15.0	103	38	385	416
FKI Index, %:	100.5	98.7	101.0	89.5	96.1	96.2

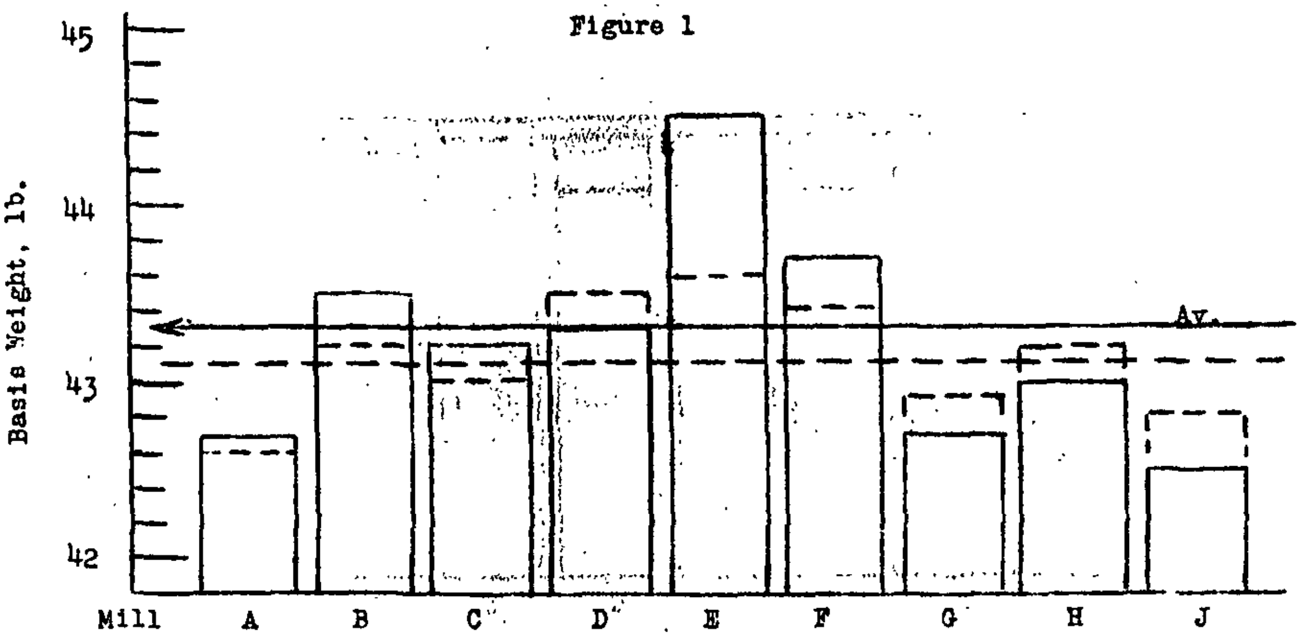
$$\frac{\text{current mill average}}{\text{cumulative mill average}} \times 100 = \text{mill factor } (\%)$$

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

The mill factor and the mill index serve as a ready means for comparing the current mill results either with the previous result for that particular mill or with the cumulative F.K.I. results. As more samples are included and as the test data accumulate, the factors and indexes will have added significance. Since December, 1947, the reports have contained a comparison of the test data obtained at the mills with that obtained at The Institute of Paper Chemistry.

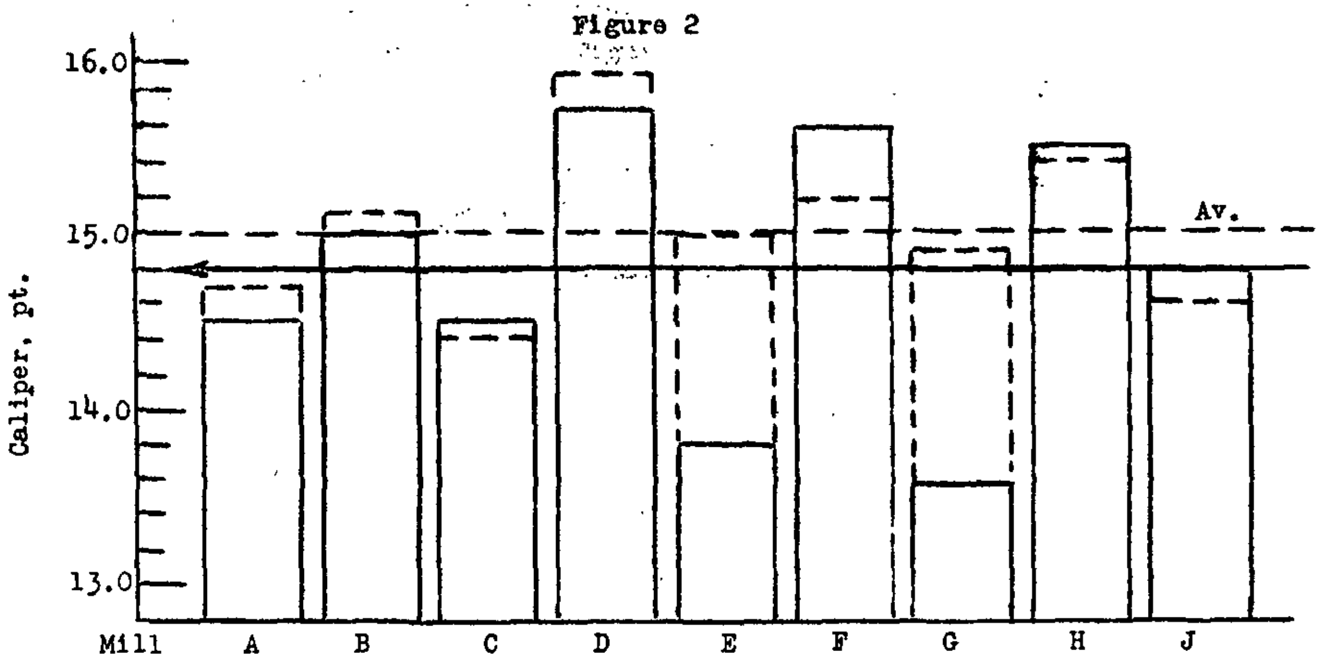
The results obtained on the special drum stock may be seen in Table XII.

Figure 1



COMPARISON OF BASIS WEIGHT RESULTS
(Period Oct. 1 - Oct. 31)

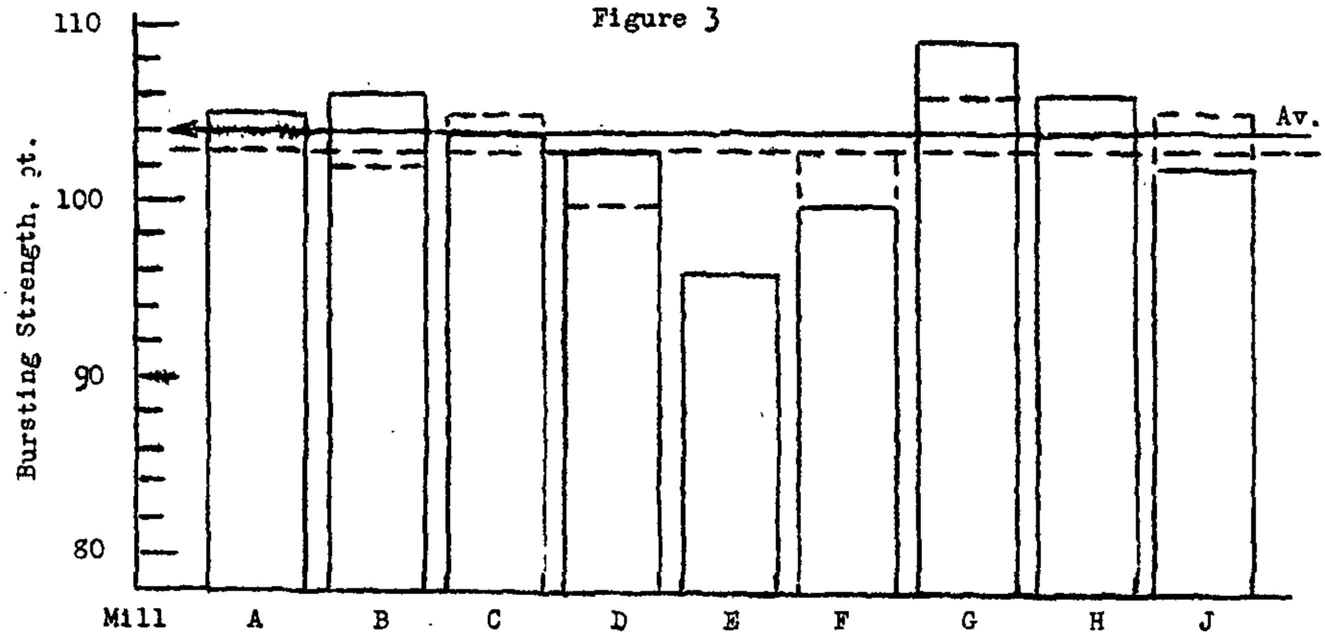
Figure 2



COMPARISON OF CALIPER RESULTS
(Period Oct. 1 - Oct. 31)

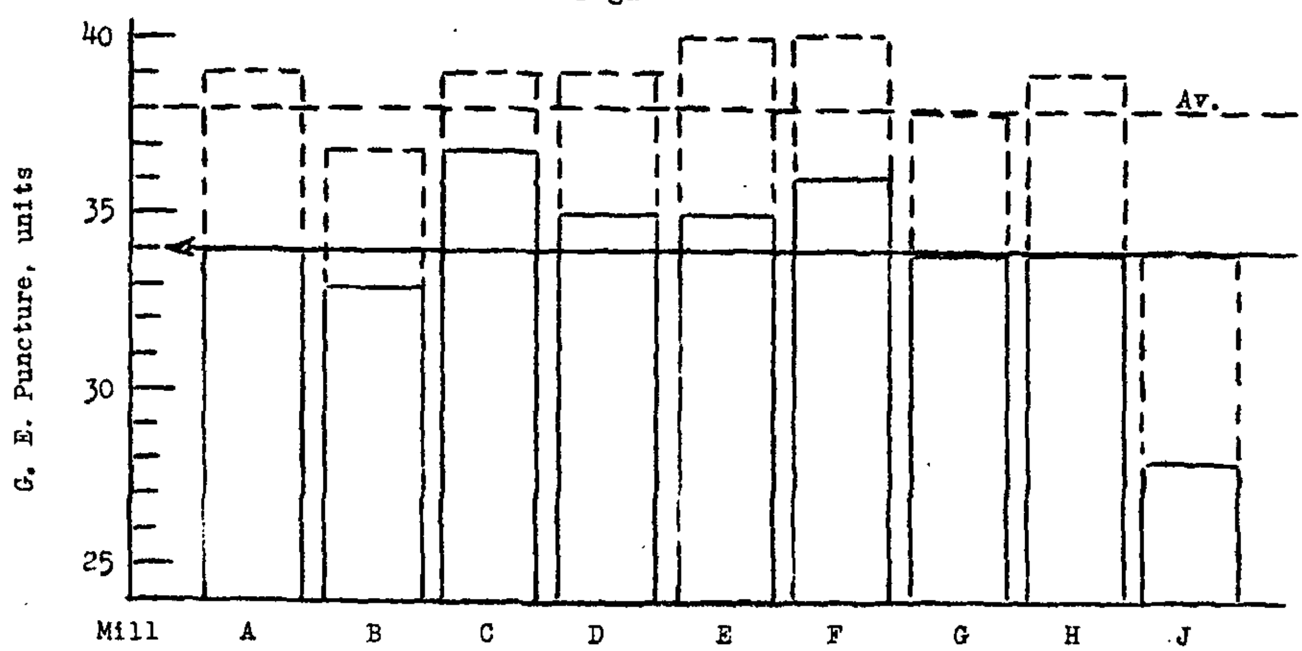
—— Current Mill Average
– – Cumulative Mill Average

Figure 3



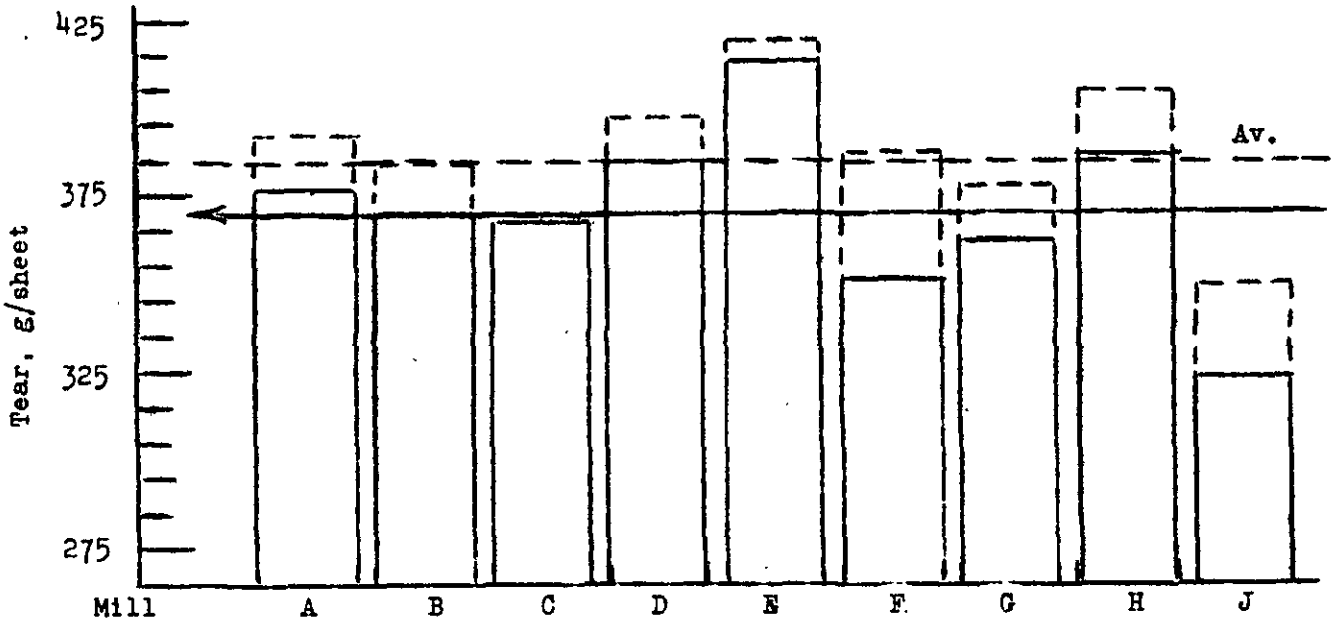
COMPARISON OF BURSTING STRENGTH RESULTS
(Period Oct.1 - Oct.31)

Figure 4



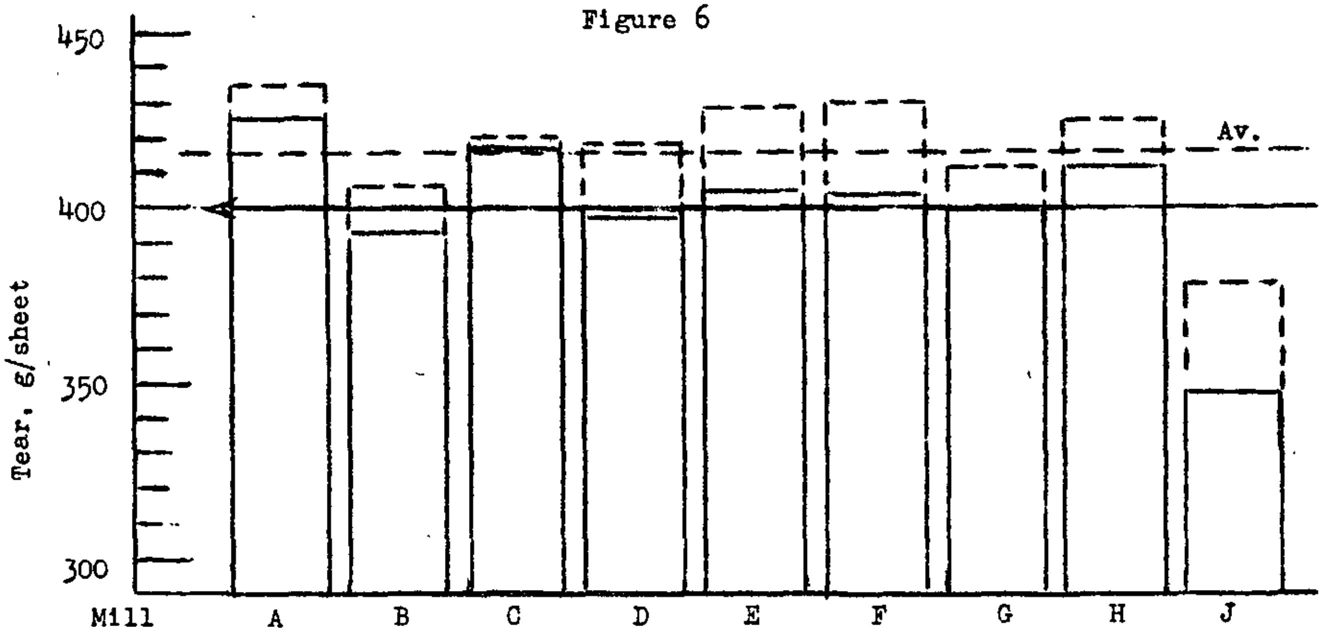
COMPARISON OF G. E. PUNCTURE RESULTS
(Period Oct.1 - Oct.31)

Figure 5



COMPARISON OF TEAR RESULTS, Machine Direction
(Period Oct.1 - Oct.31)

Figure 6



COMPARISON OF TEAR RESULTS, Across-Machine Direction
(Period Oct.1 - Oct.31)

TABLE III

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948

Basis Weight, lb.			Caliper, points			Bursting Strength, points			G. E. Puncture, units			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.	Max.	Min.	Av.
Mill A--42-lb. Linerboard																	
45.0	42.0	43.0	17.6	15.0	16.2	137	82	100	39	30	35	456	328	387	496	376	431[a]
44.0	40.4	42.4	14.8	13.0	14.0	135	86	105	38	32	34	480	320	401[a]	456	384	429[a]
42.8	40.0	41.9	15.0	13.1	14.0	120	88	108	35	29	32	424	328	361	472	360	409[a]
44.4	42.0	43.5	15.0	13.3	14.2	121	90	108	39	33	36	416	344	366	496	384	444[a]
43.8	42.0	42.8	14.5	13.0	13.9	124	84	103	38	31	35	464	328	370[a]	512	352	420[a]
43.8	40.0	42.6	15.2	13.6	14.7	130	90	106	38	28	34	472	320	371[a]	472	336	421[a]
		42.7			14.5			105			34			376			426
		42.6			14.7			103			39			393			435
		100.2			98.6			101.9			87.2			95.7			97.9
		99.1			96.7			101.9			89.5			97.7			102.4

[a] one or more specimens which tore beyond the 3/8-inch limit.

TABLE III

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948

File No.	Mill Code	Date Recd.	Date Made	Mch. No.	Basis Weight, lb. Max.	Min.	Av.	Caliper, points Max.	Min.	Av.	Bursting Strength, points Max.	Min.	Av.	G. E. Puncture, units Max.	Min.	Av.	Max.	Eln In Mir
								Mill A--42-lb. Linerboard										
133950	A-72	10/ 4/48	9/28/48	2	45.0	42.0	43.0	17.6	15.0	16.2	137	82	100	39	30	35	456	32[illegible]
133951	A-73	10/ 4/48	9/29/48	2	44.0	40.4	42.4	14.8	13.0	14.0	135	86	105	38	32	34	480	32[illegible]
134020	A-74	10/ 8/48	10/ 4/48	1	42.8	40.0	41.9	15.0	13.1	14.0	120	88	108	35	29	32	424	32[illegible]
134021	A-75	10/ 8/48	10/ 5/48	1	44.4	42.0	43.6	15.0	13.3	14.2	121	90	108	39	33	36	416	34[illegible]
134157	A-76	10/22/48	10/18/48	2	43.8	42.0	42.8	14.5	13.0	13.9	124	84	103	38	31	35	464	32[illegible]
134158	A-77	10/22/48	10/19/48	2	43.8	40.0	42.6	15.2	13.6	14.7	130	90	106	38	28	34	472	32[illegible]
Current Mill Average:							42.7			14.5			105			34		
Cumulative Mill Average							42.6			14.7			103			39		
Mill Factor, %:							100.2			98.6			101.9			87.2		
Mill Index,%:							99.1			96.7			101.9			89.5		

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

TABLE IV

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948

Basis Weight, lb.			Caliper, points			Bursting Strength, points			G. E. Puncture, units			Elmendorf Tear, g./sheet In			Elmendorf Tear, g./sheet Across		
:.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
				Mill B--42-lb. Linerboard													
.8	41.8	42.7	15.4	14.9	15.1	125	94	107	36	31	34	416	336	368	464	320	385[a]
.6	42.0	43.2	16.0	13.9	15.0	128	86	106	37	30	34	432	296	374	432	368	397[a]
.6	42.6	44.0	15.7	14.2	14.9	113	89	103	34	30	32	408	344	361[a]	432	352	393[a]
.0	41.0	42.8	15.0	12.7	14.0	123	96	109	38	30	32	424	328	352[a]	416	336	373[a]
.0	42.6	43.8	15.9	14.1	15.0	133	99	112	36	31	34	448	320	374[a]	448	368	401[a]
.0	43.0	44.6	16.9	15.6	16.3	123	87	103	38	33	35	464	352	393[a]	432	384	411[a]
		43.5			15.0			106			33			370			393
		43.2			15.1			102			37			384			407
		100.7			99.3			103.9			89.2			96.4			96.6
		100.9			100.0			102.9			86.8			96.1			94.5

ne or more specimens which tore beyond the 3/8-inch limit.

TABLE IV

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948

File No.	Mill Code	Date Recd.	Date Made	Mch. No.	Basis Weight, lb. Max.	Min.	Av.	Caliper, points Max.	Min.	Av.	Bursting Strength, points Max.	Min.	Av.	G. E. Puncture, units Max.	Min.	Av.	Elmend g. In Max.	Min.
										Mill B--42-lb. Linerboard								
134016	B-101	10/ 8/48	9/30/48	3	43.8	41.8	42.7	15.4	14.9	15.1	125	94	107	36	31	34	416	336
134017	B-102	10/ 8/48	10/ 1/48	3	44.6	42.0	43.2	16.0	13.9	15.0	128	86	106	37	30	34	432	296
134074	B-103	10/15/48	10/ 7/48	3	45.6	42.6	44.0	15.7	14.2	14.9	113	89	103	34	30	32	408	344
134099	B-104	10/18/48	10/ 8/48	3	44.0	41.0	42.8	15.0	12.7	14.0	123	96	109	38	30	32	424	328
134085	B-105	10/16/48	10/10/48	3	46.0	42.6	43.8	15.9	14.1	15.0	133	99	112	36	31	34	448	320
134100	B-106	10/18/48	10/10/48	1	46.0	43.0	44.6	16.9	15.6	16.3	123	87	103	38	33	35	464	352
Current Mill Average:							43.5			15.0			106			33		
Cumulative Mill Average:							43.2			15.1			102			37		
Mill Factor, %:							100.7			99.3			103.9			89.2		
Mill Index, %:							100.9			100.0			102.9			86.8		

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

TABLE V

UMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

ch.	Basis Weight, lb.			Caliper, points			Bursting Strength, points			G. E. Puncture, units			Elmendorf Tear g./sheet In			Elmendorf Tear g./sheet Across		
No.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.	Max.	Min.	Av.
					Mill C--42-lb. Linerboard													
1	44.2	42.2	43.6	15.6	14.1	14.9	138	81	112	42	36	39	424	328	384	488	368	433[a]
1	44.0	42.0	43.2	15.2	13.3	14.4	138	89	107	46	38	42	432	328	375[a]	488	384	433[a]
1	43.8	41.8	42.4	15.2	14.0	14.7	118	60	96	38	31	34	432	304	352[a]	456	328	395[a]
1	44.0	43.0	43.3	15.4	13.8	14.5	125	86	103	38	32	35	432	320	381[a]	480	384	427[a]
1	44.0	42.0	42.9	15.5	13.2	14.6	122	80	101	35	31	33	392	304	343	424	368	388[a]
1	44.2	43.0	43.9	14.5	12.3	13.7	131	74	108	40	35	37	432	296	365[a]	472	368	426[a]
			43.2			14.5			104			37			367			417
			43.0			14.4			105			39			367			420
			100.5			100.7			99.0			94.9			100.0			99.3
			100.2			96.7			101.0			97.4			95.3			100.2

for one or more specimens which tore beyond the 3/8-inch limit.

TABLE V

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

File No.	Mill Code	Date Recd.	Date Made	Mch. No.	Basis Weight, lb. Max.	Min.	Av.	Caliper, points Max.	Min.	Av.	Bursting Strength, points Max.	Min.	Av.	G. E. Puncture, units Max.	Min.	Av.	Elmer & In Max.	Min.
										Mill C--42-lb. Linerboard								
133949	C-67	10/ 2/48	9/27/48	1	44.2	42.2	43.6	15.6	14.1	14.9	138	81	112	42	36	39	424	328
134031	C-68	10/ 9/48	9/30/48	1	44.0	42.0	43.2	15.2	13.3	14.4	138	89	107	46	38	42	432	328
134043	C-69	10/11/48	10/ 4/48	1	43.8	41.8	42.4	15.2	14.0	14.7	118	60	96	38	31	34	432	304
134075	C-70	10/15/48	10/ 8/48	1	44.0	43.0	43.3	15.4	13.8	14.5	125	86	103	38	32	35	432	320
134084	C-71	10/16/48	10/11/48	1	44.0	42.0	42.9	15.5	13.2	14.6	122	80	101	35	31	33	392	304
134168	C-72	10/23/48	10/14/48	1	44.2	43.0	43.9	14.5	12.3	13.7	131	74	108	40	35	37	432	296
Current Mill Average:							43.2			14.5			104			37		
Cumulative Mill Average:							43.0			14.4			105			39		
Mill Factor, %							100.5			100.7			99.0			94.9		
Mill Index, %:							100.2			96.7			101.0			97.4		

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

TABLE VI

ARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

Basis Weight, lb.			Caliper, points			Bursting Strength, points			G. E. Puncture, units			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.	Max.	Min.	Av.
						Mill D--42-lb. Linerboard											
44.0	41.2	42.7	16.0	14.4	15.3	126	87	103	36	30	33	456	360	395[a]	448	352	389[a]
44.8	42.0	43.6	16.6	14.0	15.4	125	90	107	37	31	34	448	336	388	456	336	402[a]
43.4	40.8	42.2	16.2	13.6	15.1	132	84	105	36	29	32	392	344	370[a]	408	328	362
44.0	42.2	43.4	17.0	14.6	15.9	120	79	102	40	33	35	440	344	389[a]	448	352	397[a]
44.0	42.4	43.1	16.4	14.8	15.6	119	75	100	38	32	35	416	360	383[a]	432	360	391[a]
44.2	42.6	43.4	16.8	15.2	16.2	119	76	100	38	33	36	488	352	403[a]	552	368	417[a]
44.8	42.4	43.8	17.0	14.6	15.7	131	86	105	40	33	36	408	312	360[a]	432	336	395[a]
45.0	43.6	44.5	17.2	15.1	16.2	124	81	103	41	36	38	448	336	392	464	368	420[a]
		43.3			15.7			103			35			385			397
		43.5			15.9			100			39			396			418
		99.5			98.7			103.0			89.7			97.2			95.0
		100.5			104.7			100.0			92.1			100.0			95.4

r one or more specimens which tore beyond the 3/8-inch limit.

should have been "F-6" had "E-6" in its place.

the mill data sheet gives the date of manufacture as October 20, 1948.

TABLE VI

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

File No.	Mill Code	Date Recd.	Date Made	Mch. No.	Basis Weight, lb. Max.	Basis Weight, lb. Min.	Basis Weight, lb. Av.	Caliper, points Max.	Caliper, points Min.	Caliper, points Av.	Bursting Strength, points Max.	Bursting Strength, points Min.	Bursting Strength, points Av.	G. E. Puncture, units Max.	G. E. Puncture, units Min.	G. E. Puncture, units Av.	Elmendor g./sh In Max.	Elmendor g./sh In Min.
Mill D--42-lb. Linerboard																		
133931	D-42	10/ 1/48	9/26/48	4	44.0	41.2	42.7	16.0	14.4	15.3	126	87	103	36	30	33	456	360
133932	D-43	10/ 1/48	9/28/48	4	44.8	42.0	43.6	16.6	14.0	15.4	125	90	107	37	31	34	448	336
134036	D-44	10/11/48	10/ 5/48	4	43.4	40.8	42.2	16.2	13.6	15.1	132	84	105	36	29	32	392	344
134037	D-45	10/11/48	10/ 6/48	4	44.0	42.2	43.4	17.0	14.6	15.9	120	79	102	40	33	35	440	344
134088	D-46[b]	10/16/48	10/13/48	4	44.0	42.4	43.1	16.4	14.8	15.6	119	75	100	38	32	35	416	360
134130	D-47	10/20/48	10/15/48	4	44.2	42.6	43.4	16.8	15.2	16.2	119	76	100	38	33	36	488	352
134183	D-48	10/25/48	10/21/48[c]	4	44.8	42.4	43.8	17.0	14.6	15.7	131	86	105	40	33	36	408	312
134184	D-49	10/25/48	10/22/48	4	45.0	43.6	44.5	17.2	15.1	16.2	124	81	103	41	36	38	448	336
Current Mill Average:							43.3			15.7			103			35		
Cumulative Mill Average:							43.5			15.9			100			39		
Mill Factor, %:							99.5			98.7			103.0			89.7		
Mill Index, %:							100.5			104.7			100.0			92.1		

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

b The specimen in the "F" series which should have been "F-6" had "E-6" in its place.

c This date was taken from the sample; the mill data sheet gives the date of manufacture as October 20, 1948.

TABLE VII

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

h.	Basis Weight, lb.			Caliper, points			Bursting Strength, points			G. E. Puncture, units			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.	Max.	Min.	Av.
					Mill E--42-lb. Linerboard													
1	45.4	44.0	44.6	14.9	13.1	13.8	110	84	96	37	32	35	472	376	412[a]	440	368	404[a]
			44.6			13.8			96			35			412			404
			43.6			15.0			96			40			419			428
			102.3			92.0			100.0			87.5			98.3			94.4
			103.5			92.0			93.2			92.1			107.0			97.1

TABLE VIII

h.	Basis Weight, lb.			Caliper, points			Bursting Strength, points			G. E. Puncture, units			Elmendorf Tear, g./sheet, in			Elmendorf Tear, g./sheet, Across		
					Mill F--42-lb. Linerboard													
--	42.4	40.0	41.8	16.3	14.1	15.5	108	77	97	40	33	37	432	328	369	480	376	421[a]
--	44.2	42.0	43.2	17.3	15.5	16.2	107	85	98	41	36	38	416	328	355[a]	472	384	421[a]
--	44.2	43.2	43.9	16.6	15.1	15.6	108	80	96	38	34	36	400	312	344	448	288	355[a]
--	44.0	43.0	43.5	15.5	13.9	14.6	110	86	100	36	33	34	352	288	321	392	344	371[a]
--	46.0	44.2	45.4	16.7	15.5	16.2	133	99	108	39	33	36	392	304	346	432	368	409[a]
	44.6	43.0	44.0	16.4	14.8	15.6	115	85	100	40	32	36	392	320	360[a]	448	376	413[a]
	45.0	44.0	44.4	16.5	14.6	15.5	116	82	101	41	33	38	416	304	360[a]	488	344	427[a]
			43.7			15.6			100			36			351			403
			43.4			15.2			103			40			387			430
			100.7			102.6			97.1			90.0			90.7			93.7
			101.4			104.0			97.1			94.7			91.2			96.9

for one or more specimens which tore beyond the 3/8-inch limit.

[redacted]

TABLE VII

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

File No.	Mill; Code	Date Recd.	Date Made	Mch. No.	Basis Weight, lb. Max.	Min.	Av.	Caliper, points Max.	Min.	Av.	Bursting Strength, points Max.	Min.	Av.	G. E. Puncture, units Max.	Min.	Av.	Elm g. in Max.	Min.
										Mill E--42-lb. Linerboard								
134244	E-44	10/29/48	10/26/48	1	45.4	44.0	44.6	14.9	13.1	13.8	110	84	96	37	32	35	472	376
Current Mill Average:							44.6			13.8			96			35		
Cumulative Mill Average:							43.6			15.0			96			40		
Mill Factor, %:							102.3			92.0			100.0			87.5		
Mill Index, %:							103.5			92.0			93.2			92.1		1

TABLE VIII

File No.	Mill; Code	Date Recd.	Date Made	Mch. No.	Basis Weight, lb. Max.	Min.	Av.	Caliper, points Max.	Min.	Av.	Bursting Strength, points Max.	Min.	Av.	G. E. Puncture, units Max.	Min.	Av.	Elm g. in Max.	Min.
										Mill F--42-lb. Linerboard								
134018	F-57	10/ 8/48	9/15/48	--	42.4	40.0	41.8	16.3	14.1	15.5	108	77	97	40	33	37	432	328
134019	F-58	10/ 8/48	9/28/48	--	44.2	42.0	43.2	17.3	15.5	16.2	107	85	98	41	36	38	416	328
134038	F-59	10/11/48	10/ 6/48	--	44.2	43.2	43.9	16.6	15.1	15.6	108	80	96	38	34	36	400	312
134039	F-60	10/11/48	10/ 8/48	--	44.0	43.0	43.5	15.5	13.9	14.6	110	86	100	36	33	34	352	288
134114	F-61	10/19/48	10/15/48	--	46.0	44.2	45.4	16.7	15.5	16.2	133	99	108	39	33	36	392	304
134211	F-62	10/28/48	10/22/48		44.6	43.0	44.0	16.4	14.8	15.6	115	85	100	40	32	36	392	320
134212	F-63	10/28/48	10/22/48		45.0	44.0	44.4	16.5	14.6	15.5	116	82	101	41	33	38	416	304
Current Mill Average:							43.7			15.6			100			36		
Cumulative Mill Average:							43.4			15.2			103			40		
Mill Factor, %							100.7			102.6			97.1			90.0		
Mill Index, %:							101.4			104.0			97.1			94.7		

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

TABLE IX

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

ch.	Basis Weight, lb.			Caliper, points			Bursting Strength, points			G. E. Puncture, units			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.	Max.	Min.	Av.
						Mill G--42-lb. Linerboard												
1	44.0	42.0	42.5	15.2	13.0	14.1	114	81	98	36	32	34	400	336	371[a]	432	320	397[a]
1	43.0	41.8	42.1	14.4	12.1	13.3	127	82	107	35	32	34	416	312	355	416	344	384[a]
1	44.0	43.0	43.4	15.0	13.2	14.3	126	76	107	38	32	35	448	312	375[a]	432	328	397[a]
1	44.2	42.0	42.9	14.5	12.9	13.9	134	85	112	39	33	36	400	328	371	448	352	400[a]
1	44.0	43.0	43.6	14.5	12.1	13.7	131	91	109	38	32	35	416	352	381[a]	448	336	400[a]
1	43.2	41.8	42.4	13.8	12.1	13.1	124	89	107	35	30	32	400	288	357[a]	440	352	395[a]
1	42.4	41.2	41.7	14.8	12.7	13.8	135	84	107	36	31	33	384	312	341[a]	432	352	390[a]
1	43.2	41.8	42.4	14.2	11.9	13.4	133	92	112	37	31	34	400	320	351	472	376	406[a]
1	44.0	42.0	43.2	14.5	12.4	13.3	131	97	116	36	32	34	392	336	365[a]	432	368	391[a]
1	44.2	42.0	43.0	14.0	12.1	13.1	141	97	113	37	31	35	424	320	366[a]	448	368	415[a]
			42.7			13.6			109			34			363			398
			42.9			14.9			106			38			378			411
			99.5			91.3			102.8			89.5			96.0			96.8
			99.1			90.7			105.8			89.5			94.3			95.7

gs for one or more specimens which tore beyond the 3/8-inch limit.

TABLE IX

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

File No.	Mill Code	Date Recd.	Date Made	Mch. No.	Basis Weight, lb. Max.	Basis Weight, lb. Min.	Basis Weight, lb. Av.	Caliper, points Max.	Caliper, points Min.	Caliper, points Av.	Bursting Strength, points Max.	Bursting Strength, points Min.	Bursting Strength, points Av.	G. E. Puncture, units Max.	G. E. Puncture, units Min.	G. E. Puncture, units Av.	Elme In Max.	Elme In Min.
									Mill G--42-lb. Linerboard									
133929	G-88	10/ 1/48	9/27/48	1	44.0	42.0	42.5	15.2	13.0	14.1	114	81	98	36	32	34	400	336
133930	G-89	10/ 1/48	9/27/48	1	43.0	41.8	42.1	14.4	12.1	13.3	127	82	107	35	32	34	416	312
133992	G-90	10/ 7/48	10/ 4/48	1	44.0	43.0	43.4	15.0	13.2	14.3	126	76	107	38	32	35	448	312
133993	G-91	10/ 7/48	10/ 4/48	1	44.2	42.0	42.9	14.5	12.9	13.9	134	85	112	39	33	36	400	328
134086	G-92	10/16/48	10/14/48	1	44.0	43.0	43.6	14.5	12.1	13.7	131	91	109	38	32	35	416	352
134087	G-93	10/16/48	10/14/48	1	43.2	41.8	42.4	13.8	12.1	13.1	124	89	107	35	30	32	400	288
134149	G-94	10/21/48	10/18/48	1	42.4	41.2	41.7	14.8	12.7	13.8	135	84	107	36	31	33	384	312
134150	G-95	10/21/48	10/19/48	1	43.2	41.8	42.4	14.2	11.9	13.4	133	92	112	37	31	34	400	320
134209	G-96	10/28/48	10/25/48	1	44.0	42.0	43.2	14.5	12.4	13.3	131	97	116	36	32	34	392	336
134210	G-97	10/28/48	10/25/48	1	44.2	42.0	43.0	14.0	12.1	13.1	141	97	113	37	31	35	424	320
Current Mill Average:							42.7			13.6			109			34		
Cumulative Mill Average:							42.9			14.9			106			38		
Mill Factor, %:							99.5			91.3			102.8			89.5		
Mill Index, %:							99.1			90.7			105.8			89.5		

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

TABLE X

ARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

1.	Basis Weight, lb.			Caliper, points			Bursting Strength, points			G. E. Puncture, units			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.	Max.	Min.	Av.
							Mill H--42-lb. Linerboard											
	43.6	42.0	42.7	16.5	14.0	15.5	130	94	111	38	30	33	448	344	407[a]	448	368	413[a]
	44.4	42.4	43.7	17.0	15.2	16.2	135	88	112	39	32	35	480	312	390[a]	544	400	441[a]
	44.0	41.0	42.8	17.1	14.5	15.7	129	85	102	36	31	34	440	336	391	440	352	396[a]
	44.4	42.6	43.2	16.0	14.4	15.4	120	82	106	38	31	35	424	344	391[a]	456	336	404[a]
	45.0	41.4	43.0	17.1	14.7	15.7	125	80	102	37	31	34	496	336	395[a]	456	384	408[a]
	43.6	42.0	42.8[b]	15.4	14.0	14.7	120	81	106	36	31	34	416	312	349[a]	464	352	406[a]
			43.0			15.5			106			34			387			411
			43.2			15.4			104			39			404			425
			99.5			100.6			101.9			87.2			95.8			96.7
			99.8			103.3			102.9			89.5			100.5			98.8

or one or more specimens which tore beyond the 3/8-inch limit.

of exposure to water.

TABLE X

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

File No.	Mill Code	Date Recd.	Date Made	Mch. No.	Basis Weight, lb. Max.	Min.	Av.	Caliper, points Max.	Min.	Av.	Bursting Strength, points Max.	Min.	Av.	G. E. Puncture, units Max.	Min.	Av.	Elmendorf Tearing Strength, g. In Max.	Min.
										Mill H--42-lb. Linerboard								
133948	H-73	10/ 2/48	9/27/48	2	43.6	42.0	42.7	15.5	14.0	15.5	130	94	111	38	30	33	448	344
133981	H-74	10/ 6/48	9/28/48	2	44.4	42.4	43.7	17.0	15.2	16.2	135	88	112	39	32	35	480	312
134042	H-75	10/11/48	10/ 6/48	2	44.0	41.0	42.8	17.1	14.5	15.7	129	85	102	36	31	34	440	336
134083	H-76	10/16/48	10/11/48	2	44.4	42.5	43.2	16.0	14.4	15.4	120	82	106	38	31	35	424	344
134129	H-77	10/20/48	10/12/48	2	45.0	41.4	43.0	17.1	14.7	15.7	125	80	102	37	31	34	496	336
134187	H-78	10/25/48	10/18/48	2	43.6	42.0	42.8[b]	15.4	14.0	14.7	120	81	106	36	31	34	416	312
Current Mill Average:							43.0			15.5			106			34		
Cumulative Mill Average:							43.2			15.4			104			39		
Mill Factor, %:							99.5			100.6			101.9			87.2		
Mill Index, %:							99.8			103.3			102.9			89.5		

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

[b] One of the specimens showed evidence of exposure to water.

TABLE XI

ARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

Mch. No.	Basis Weight, lb.			Caliper, points			Bursting Strength, points			G. E. Puncture, units			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.	Max.	Min.	Av.
						Mill J--42-lb. Linerboard												
1	42.0	40.0	41.3	15.5	14.0	14.8	129	96	108	30	26	28	408	288	343[a]	416	304	366[a]
--	43.6	42.0	42.5	15.9	13.0	14.4	134	91	113	32	28	30	368	272	330[a]	464	320	382[a]
--	43.6	40.0	42.3	15.0	13.5	14.4	118	84	101	30	27	29	368	264	305[a]	358	304	339[a]
--	44.0	42.0	43.2	16.2	14.3	15.1	110	73	94	31	25	30	376	256	317[a]	384	296	331[a]
1	43.0	40.2	41.8	15.2	12.7	14.2	125	84	101	28	22	25	432	256	311[a]	352	272	318[a]
1	43.0	42.0	42.3	16.0	14.9	15.5	108	80	97	28	25	27	336	272	301[a]	432	288	349[a]
1	44.0	42.0	43.0	16.1	14.4	15.2	113	70	93	31	28	29	416	280	338[a]	424	288	345[a]
1	44.0	42.8	43.7	15.2	13.6	14.6	123	86	105	33	27	30	440	288	337[a]	384	296	347[a]
			42.5			14.8			102			28			323			347
			42.8			14.6			105			34			349			378
			99.3			101.4			97.1			82.4			92.6			91.8
			98.6			98.7			99.0			73.7			83.9			83.4

ıgs for one or more specimens which tore beyond the 3/8-inch limit.

TABLE XI

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

File No.	Mill Code	Date Recd.	Date Made	Mch. No.	Basis Weight, lb. Max.	Basis Weight, lb. Min.	Basis Weight, lb. Av.	Caliper, points Max.	Caliper, points Min.	Caliper, points Av.	Bursting Strength, points Max.	Bursting Strength, points Min.	Bursting Strength, points Av.	G. E. Puncture, units Max.	G. E. Puncture, units Min.	G. E. Puncture, units Av.	Max.
Mill J--42-lb. Linerboard																	
133952	J-77	10/ 4/48	9/30/48	1	42.0	40.0	41.3	15.5	14.0	14.8	129	96	108	30	26	28	408
133953	J-78	10/ 4/48	10/ 1/48	--	43.6	42.0	42.5	15.9	13.0	14.4	134	91	113	32	28	30	368
134040	J-79	10/11/48	10/ 6/48	--	43.6	40.0	42.3	15.0	13.5	14.4	118	84	101	30	27	29	368
134041	J-80	10/11/48	10/ 7/48	--	44.0	42.0	43.2	16.2	14.3	15.1	110	73	94	31	25	30	376
134097	J-81	10/18/48	10/14/48	1	43.0	40.2	41.8	15.2	12.7	14.2	125	84	101	28	22	25	432
134098	J-82	10/18/48	10/15/48	1	43.0	42.0	42.3	16.0	14.9	15.5	108	80	97	28	25	27	336
134185	J 83	10/25/48	10/22/48	1	44.0	42.0	43.0	16.1	14.4	15.2	113	70	93	31	28	29	416
134186	J-84	10/25/48	10/23/48	1	44.0	42.8	43.7	15.2	13.6	14.6	123	86	105	33	27	30	440
Current Mill Average:							42.5			14.8			102			28	
Cumulative Mill Average:							42.8			14.6			105			34	
Mill Factor, %:							99.3			101.4			97.1			82.4	
Mill Index, %:							98.6			98.7			99.0			73.7	

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

NO PAGE #18 IN THE ORIGINAL TEXT

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 XIII, the atmospheric conditions used prior to and during the testing period varied considerably.

TABLE XIII

Mill Code	Preconditioning R.H., %	Preconditioning Temp., ° F.	Preconditioning Time, hr.	Conditioning R. H., %	Conditioning Temp., ° F.	Conditioning Time, hr.
A	No preconditioning			74-81	73-86	--
B	40-65	70-75	1/2	50	70	24
C	57-65	68-72	24-48	49-69	70-72	12-72
D	35-36	74-76	16-24	50-57	74-78	16-24
E	No preconditioning			38	79	--
F	No preconditioning			No conditioning		
G	No preconditioning			No conditioning		
H	No preconditioning			50	73	24
J	No preconditioning			31-72	70-88	--

A summary of the mill comparisons for the current period as compared with the previous period may be seen in Tables XIV and XV, respectively. The comparison for the various mills is given in Tables XVI to XXIV, inclusive, for the 42-lb. liner samples. A comparison of the special drum stock is given in Table XXV. In all the comparisons given in Tables XIV to XXV, inclusive, the Institute's test values have been used as the reference line.

A comparison of the test data in Tables XIV and XV indicates that in the majority of cases there is good agreement between the mill data and that of the Institute. As may be seen in Table XV, the maximum variation in the average basis weight between the results of the Institute and those of a given mill on corresponding samples is 3% for the current period. In regard to caliper for the current period, the results for all mills are lower than those for the Institute, with the exception of Mill B whose results are the same. None of the differences appear to be significantly large. It may be observed on reviewing the bursting strength results that the averages for Mills D, F, G, and J are lower than those for the Institute, whereas the averages for Mills A, C, and H are higher and those for Mills B and E are the same. Only Mills G and J exhibit a significant difference. With the exception of Mill E which is lower, the G. E. puncture results for all mills are higher than the reference values, Mills A, C, E, F, G, and H having the greatest variation. The tear results appear to vary more widely than any of the other tests. Mills E, F, and J have the greatest variation for both in and across machine direction tear. The variation encountered for Mill E is exceptionally large.

The data in Table XV also show the comparison of the average per cent differences between mill and Institute test results for the past three periods. It may be noted that the maximum variation in basis weight encountered during this time amounts to approximately 3%. The maximum average variation encountered in the basis weight results for the current period is commensurate with the variations for the preceding periods.

It may also be noted that the variation encountered in the tear, bursting strength and G. E. puncture values for each mill for the current period is approximately the same as for the previous period.

TABLE XIV

SUMMARY OF TEST RESULT COMPARISONS

Average Mill and Institute Results	Mills* A	B	C	D	E	F	G	H	J
No. Samples Compared	6	6	6	8	1	7	10	6	8
Basis Weight									
Institute	42.7	43.5	43.2	43.3	44.6	43.7	42.7	43.0	42.5
Mill	42.4	43.2	42.8	42.1	43.2	43.6	42.7	43.3	42.0
Av. difference**	-0.3	-0.3	-0.4	-1.2	-1.4	-0.1	0.0	+0.3	-0.5
Max. difference***	-0.9	-1.0	-1.1	-2.5	-1.4	-0.7	-0.7	+0.6	-1.6
Caliper									
Institute	14.5	15.0	14.5	15.7	13.8	15.6	13.6	15.5	14.8
Mill	14.2	15.0	14.2	15.0	13.2	14.9	13.0	15.0	14.6
Av. difference**	-0.3	0.0	-0.3	-0.7	-0.6	-0.7	-0.6	-0.5	-0.2
Max. difference***	-0.9	-0.4	-0.4	-0.9	-0.6	-1.0	-0.9	-0.8	-0.6
Bursting Strength									
Institute	105	106	104	103	96	100	109	106	102
Mill	107	106	107	102	96	96	103	107	97
Av. difference**	+2	0	+3	-1	0	-4	-6	+1	-5
Max. difference***	+5	-4	+6	-9	0	-7	-9	±6	-9
G. E. Puncture									
Institute	34	33	37	35	35	36	34	34	28
Mill	40	34	42	--	30	41	37	37	29
Av. difference**	+6	+1	+5	--	-5	+5	+3	+3	+1
Max. difference***	+8	±1	+6	--	-5	+6	+6	+4	+5
Tearing Strength, in									
Institute	376	370	367	385	412	351	363	387	323
Mill	364	359	384	339	297	376	387	381	272
Av. difference**	-12	-11	+17	-46	-115	+25	+24	-6	-51
Max. difference***	-41	-58	+57	-63	-115	+52	+53	-19	-96
Tearing Strength, across									
Institute	426	393	417	397	404	403	398	411	347
Mill	409	383	444	392	333	447	420	424	305
Av. difference**	-17	-10	+27	-5	-71	+44	+22	+13	-42
Max. difference***	-51	-40	+70	-33	-71	+102	+56	+31	-89

* Comparison based on averages involves 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 XV

SUMMARY OF TEST RESULTS--COMPARISON BY PERIODS

	Basis Weight	Caliper	Bursting Strength	G. E. Puncture	Tearing Strength, In	Tearing Strength, Across
Mill A						
Current period	-0.7	-2	+2	+18	-3	-4
15th period	-0.9	-7	-5	+22	+5	+5
14th period	-0.2	-1	-4	+21	+11	+7
Mill B						
Current period	-0.7	0	0	+ 3	-3	-3
15th period	-0.9	0	+1	+ 6	-9	-6
14th period	-1	+2	+3	0	-8	-8
Mill C						
Current period	-0.9	-2	+3	+14	+5	+6
15th period	-0.2	-1	+2	+19	+12	+13
14th period	-1	-1	+6	+13	+9	+15
Mill D						
Current period	-3	-4	-1	--	-12	-1
15th period	-4	-2	+1	--	-5	+4
14th period	+1	-0.7	0	--	-8	-2
Mill E						
Current period	-3	-4	0	-14	-28	-18
15th period	--	--	--	--	--	--
14th period	--	--	--	--	--	--
Mill F						
Current period	-0.2	-4	-4	+14	+7	+11
15th period	-0.2	-2	-5	+22	+10	+18
14th period	-0.2	-3	-1	+13	+12	+23
Mill G						
Current period	0	-4	-6	+9	+7	+6
15th period	-0.9	-4	-3	+14	+6	+4
14th period	-0.5	-2	-4	+5	+5	+2
Mill H						
Current period	+0.7	-3	+0.9	+9	-2	+3
15th period	-0.5	-1	-2	+6	-4	+0.7
14th period	+0.9	0	-1	0	-5	+0.7
Mill J						
Current period	-1	-1	-5	+4	-16	-12
15th period	-1	+1	-3	+7	+8	+ 9
14th period	-0.2	+0.7	-5	+10	+15	+20

TABLE XVI

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948

Institute Data versus Mill Data

Mill A--42-lb. Linerboard

Basis Weight, lb.			Caliper, points			Bursting Strength, points			G. E. Puncture, units			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.	IPC	Mill	Diff.
43.0	42.5	-0.5	16.2	15.3	-0.9	100	105	+5	35	41	+6	387	367	-20	431[a]	421	-10
42.4	42.8	+0.4	14.0	13.9	-0.1	105	107	+2	34	42	+8	401[a]	392	- 9	429[a]	430	+1
41.9	42.0	+0.1	14.0	13.8	-0.2	108	108	0	32	40	+8	361	383	+22	409[a]	427	+13
43.6	43.3	-0.3	14.2	14.1	-0.1	108	107	-1	36	43	+7	366	374	+ 8	444[a]	434	-10
42.8	42.0	-0.8	13.9	13.7	-0.2	103	106	+3	35	39	+4	370[a]	329	-41	420[a]	369	-51
42.6	41.7	-0.9	14.7	14.5	-0.2	106	106	0	34	37	+3	371[a]	337	-34	421[a]	373	-48
42.7	42.4	-0.3	14.5	14.2	-0.3	105	107	+2	34	40	+6	376	364	-12	426	409	-17

TABLE XVII

Mill B--42-lb. Linerboard

Basis Weight, lb.			Caliper, points			Bursting Strength, points			G. E. Puncture, units			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.	IPC	Mill	Diff.
42.7	42.5	·0.2	15.1	14.9	-0.2	107	106	-1	34	35	+1	368	343	-25	385[a]	385	0
43.2	42.7	-0.5	15.0	14.8	-0.2	106	105	-1	34	33	-1	374	391	+17	397[a]	380	-17
44.0	43.8	-0.2	14.9	15.1	+0.2	103	104	+1	32	33	+1	361[a]	363	+ 2	393[a]	389	- 4
42.8	42.7	-0.1	14.0	14.2	+0.2	109	105	-4	32	33	+1	352[a]	353	+ 1	373[a]	373	0
43.8	43.6	·0.2	15.0	15.0	0.0	112	108	-4	34	34	0	374[a]	371	- 3	401[a]	399	- 2
44.6	43.6	-1.0	16.3	15.9	-0.4	103	105	+2	35	34	-1	393[a]	335	-58	411[a]	371	-40
43.5	43.2	-0.3	15.0	15.0	0.0	106	106	0	33	34	+1	370	359	-11	393	383	-10

ıdings for one or more specimens which tore beyond the 3/8-inch limit.

ge" data are calculated from the totals of the individual readings.

[redacted]

TABLE XVI

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948

Institute Data versus Mill Data

File No.	Mill Code	Date Made	Mch. No.	Basis Weight, lb. IPC	Basis Weight, lb. Mill	Basis Weight, lb. Diff.	Caliper, points IPC	Caliper, points Mill	Caliper, points Diff.	Bursting Strength, points IPC	Bursting Strength, points Mill	Bursting Strength, points Diff.	G. E. Puncture, units IPC	G. E. Puncture, units Mill	G. E. Puncture, units Diff.	El… IPC	El… In Mil…
									Mill A--42-lb. Linerboard								
133950	A-72	9/28/48	2	43.0	42.5	-0.5	16.2	15.3	-0.9	100	105	+5	35	41	+6	387	36
133951	A-73	9/29/48	2	42.4	42.8	+0.4	14.0	13.9	-0.1	105	107	+2	34	42	+8	401[a]	39
134020	A-74	10/ 4/48	1	41.9	42.0	+0.1	14.0	13.8	-0.2	108	108	0	32	40	+8	361	38
134021	A-75	10/ 5/48	1	43.6	43.3	-0.3	14.2	14.1	-0.1	108	107	-1	36	43	+7	366	37
134157	A-76	10/18/48	2	42.8	42.0	-0.8	13.9	13.7	-0.2	103	106	+3	35	39	+4	370[a]	32
134158	A-77	10/19/48	2	42.6	41.7	-0.9	14.7	14.5	-0.2	106	106	0	34	37	+3	371[a]	33
Current Mill Average:				42.7	42.4	-0.3	14.5	14.2	-0.3	105	107	+2	34	40	+6	376	36

TABLE XVII

File No.	Mill Code	Date Made	Mch. No.	Basis Weight, lb. IPC	Basis Weight, lb. Mill	Basis Weight, lb. Diff.	Caliper, points IPC	Caliper, points Mill	Caliper, points Diff.	Bursting Strength, points IPC	Bursting Strength, points Mill	Bursting Strength, points Diff.	G. E. Puncture, units IPC	G. E. Puncture, units Mill	G. E. Puncture, units Diff.	El… IPC	El… In Mil…
									Mill B--42-lb. Linerboard								
134016	B-101	9/30/48	3	42.7	42.5	-0.2	15.1	14.9	-0.2	107	106	-1	34	35	+1	368	34
134017	B-102	10/ 1/48	3	43.2	42.7	-0.5	15.0	14.8	-0.2	106	105	-1	34	33	-1	374	39
134074	B-103	10/ 7/48	3	44.0	43.8	-0.2	14.9	15.1	+0.2	103	104	+1	32	33	+1	361[a]	36
134099	B-104	10/ 8/48	3	42.8	42.7	-0.1	14.0	14.2	+0.2	109	105	-4	32	33	+1	352[a]	35
134085	B-105	10/10/48	3	43.8	43.6	-0.2	15.0	15.0	0.0	112	108	-4	34	34	0	374[a]	37
134100	B-106	10/10/48	1	44.6	43.6	-1.0	16.3	15.9	-0.4	103	105	+2	35	34	-1	393[a]	33
Current Mill Average:				43.5	43.2	-0.3	15.0	15.0	0.0	106	106	0	33	34	+1	370	35

[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.

TABLE XVIII

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

Institute Data versus Mill Data

	Basis Weight, lb.			Caliper, points			Bursting Strength, points			G. E. Puncture, units			Elmendorf Tear, g./sheet In			Elmendorf Tear, g./sheet Across		
h.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.	IPC	Mill	Diff.
							Mill C--42-lb. Linerboard											
	43.6	43.5	-0.1	14.9	14.5	-0.4	112	112	0	39	45	+6	384	421	+37	433[a]	492	+59
	43.2	43.0	-0.2	14.4	14.2	-0.2	107	108	+1	42	45	+3	375[a]	432	+57	433[a]	503	+70
	42.4	41.9	-0.5	14.7	14.4	-0.3	96	102	+6	34	40	+6	352[a]	388	+36	395[a]	425	+30
	43.3	43.0	-0.3	14.5	14.2	-0.3	103	106	+3	35	41	+6	381[a]	362	-19	427[a]	435	+ 8
	42.9	42.6	0.3	14.6	14.4	-0.2	101	106	+5	33	39	+6	343	363	+20	388[a]	397	+ 9
	43.9	42.8	-1.1	13.7	13.4	-0.3	108	107	-1	37	42	+5	365[a]	340	-25	426[a]	415	-11
	43.2	42.8	-0.4	14.5	14.2	-0.3	104	107	+3	37	42	+5	367	384	+17	417	444	+27

readings for one or more specimens which tore beyond the 3/8-inch limit.

erage" data are calculated from the totals of the individual readings.

TABLE XVIII

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

Institute Data versus Mill Data

File No.	Mill Code	Data Made	Mch. No.	Basis Weight, lb. IPC	Basis Weight, lb. Mill	Basis Weight, lb. Diff.	Caliper, points IPC	Caliper, points Mill	Caliper, points Diff.	Bursting Strength, points IPC	Bursting Strength, points Mill	Bursting Strength, points Diff.	G. E. Puncture, units IPC	G. E. Puncture, units Mill	G. E. Puncture, units Diff.	Elmendc g./ In IPC	Elmendc g./ In Mill	I
								Mill C--42-lb. Linerboard										
133949	C-67	9/27/48	1	43.6	43.5	-0.1	14.9	14.5	-0.4	112	112	0	39	45	+6	384	421	-
134031	C-68	9/30/48	1	43.2	43.0	-0.2	14.4	14.2	-0.2	107	108	+1	42	45	+3	375[a]	432	-
134043	C-69	10/ 4/48	1	42.4	41.9	-0.5	14.7	14.4	-0.3	96	102	+6	34	40	+6	352[a]	388	-
134075	C-70	10/ 8/48	1	43.3	43.0	-0.3	14.5	14.2	-0.3	103	106	+3	35	41	+6	381[a]	362	-
134084	C-71	10/11/48	1	42.9	42.6	0.3	14.6	14.4	-0.2	101	106	+5	33	39	+6	343	363	-
134168	C-72	10/14/48	1	43.9	42.8	-1.1	13.7	13.4	-0.3	108	107	-1	37	42	+5	365[a]	340	-
Current Mill Average:				43.2	42.8	-0.4	14.5	14.2	-0.3	104	107	+3	37	42	+5	367	384	-

[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.

TABLE XIX

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

Institute Data versus Mill Data

Basis Weight, lb.			Caliper, points			Bursting Strength, points			G. E. Puncture, units			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.	IPC	Mill	Diff.
Mill D--42-lb. Linerboard																	
42.7	41.5	-1.2	15.3	14.8	-0.5	103	107	+4	33			395[a]	340	-55	389[a]	383	-6
43.6	41.1	-2.5	15.4	14.8	-0.5	107	110	+3	34			388	345	-43	402[a]	384	-18
42.2	41.4	-0.8	15.1	14.8	-0.3	105	102	-3	32			370[a]	310	-60	362	365	+3
43.4	41.5	-1.9	15.9	15.0	-0.9	102	99	-3	35			389[a]	343	-46	397[a]	384	-13
43.1	42.6	-0.5	15.6	14.8	-0.3	100	99	-1	35			383[a]	340	-43	391[a]	414	+23
43.4	42.5	-0.9	16.2	15.4	-0.8	100	98	-2	36			403[a]	370	-33	417[a]	425	+8
43.8	42.4	-1.4	15.7	14.9	-0.3	105	96	-9	36			360[a]	332	-28	395[a]	395	+1
44.5	43.5	-1.0	16.2	15.6	-0.6	103	100	-3	38			392	329	-63	420[a]	387	-33
43.3	42.1	-1.2	15.7	15.0	-0.7	103	102	-1	35			385	339	-46	397	392	-5

TABLE XX

Basis Weight, lb.			Caliper, points			Bursting Strength, points			G. E. Puncture, units			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.	IPC	Mill	Diff.
Mill E--42-lb. Linerboard																	
44.6	43.2	-1.4	13.8	13.2	-0.6	96	96	0	35	30	-5	412[a]	297	-115	404[a]	333	-71
44.6	43.2	-1.4	13.8	13.2	-0.6	96	96	0	35	30	-5	412	297	-115	404	333	-71

readings for one or more specimens which tore beyond the 3/8-inch limit.

:ries which should have been "F-6" had "E-6" in its place.

the sample; the mill data sheet gives the date of manufacture as October 20, 1948.

:rage" data are calculated from the totals of the individual readings.

TABLE XIX

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

Institute Data versus Mill Data

File No.	Mill Code	Date Made	Mch. No.	Basis Weight, lb. IPC	Basis Weight, lb. Mill	Basis Weight, lb. Diff	Caliper, points IPC	Caliper, points Mill	Caliper, points Diff.	Bursting Strength, points IPC	Bursting Strength, points Mill	Bursting Strength, points Diff.	G. E. Puncture, units IPC	G. E. Puncture, units Mill	G. E. Puncture, units Diff.	Elmendorf g./s In IPC	Elmendorf g./s In Mill	Elmendorf g./s In Dif
Mill D--42-lb. Linerboard																		
133931	D-42	9/26/48	4	42.7	41.5	-1.2	15.3	14.8	-0.5	103	107	+4	33			395[a]	340	-5
133932	D-43	9/28/48	4	43.6	41.1	-2.5	15.4	14.8	-0.5	107	110	+3	34			388	345	-4
134036	D-44	10/ 5/48	4	42.2	41.4	-0.8	15.1	14.8	-0.3	105	102	-3	32			370[a]	310	-6
134037	D-45	10/ 6/48	4	43.4	41.5	-1.9	15.9	15.0	-0.9	102	99	-3	35			389[a]	343	-4
134088	D-46[b]	10/13/48	4	43.1	42.6	-0.5	15.6	14.8	-0.3	100	99	-1	35			383[a]	340	-4
134130	D-47	10/15/48	4	43.4	42.5	-0.9	16.2	15.4	-0.8	100	98	-2	36			403[a]	370	-3
134183	D-48	10/21/48[c]	4	43.8	42.4	-1.4	15.7	14.9	-0.3	105	96	-9	36			360[a]	332	-2
134184	D-49	10/22/48	4	44.5	43.5	-1.0	16.2	15.6	-0.6	103	100	-3	38			392	329	-6
Current Mill Average:				43.3	42.1	-1.2	15.7	15.0	-0.7	103	102	-1	35			385	339	-4

TABLE XX

Mill E--42-lb. Linerboard

File No.	Mill Code	Date Made	Mch. No.	Basis Weight, lb. IPC	Basis Weight, lb. Mill	Basis Weight, lb. Diff	Caliper, points IPC	Caliper, points Mill	Caliper, points Diff.	Bursting Strength, points IPC	Bursting Strength, points Mill	Bursting Strength, points Diff.	G. E. Puncture, units IPC	G. E. Puncture, units Mill	G. E. Puncture, units Diff.	Elmendorf g./s In IPC	Elmendorf g./s In Mill	Elmendorf g./s In Dif
134244	E-44	10/ 26/48	1	44.6	43.2	-1.4	13.8	13.2	-0.6	96	96	0	35	30	-5	412[a]	297	-11
Current Mill Average:				44.6	43.2	-1.4	13.8	13.2	-0.6	96	96	0	35	30	-5	412	297	-11

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

[b] The specimen in the "F" series which should have been "F-6" had "E-6" in its place.

[c] This date was taken from the sample; the mill data sheet gives the date of manufacture as October 20, 1948.

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

TABLE XXI

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

Institute Data *versus* Mill Data

Basis Weight, lb. IPC	Basis Weight, lb. Mill	Basis Weight, lb. Diff.	Caliper, points IPC	Caliper, points Mill	Caliper, points Diff.	Bursting Strength, points IPC	Bursting Strength, points Mill	Bursting Strength, points Diff.	G. E. Puncture, units IPC	G. E. Puncture, units Mill	G. E. Puncture, units Diff.	Elmendorf Tear, g./sheet In IPC	Elmendorf Tear, g./sheet In Mill	Elmendorf Tear, g./sheet In Diff.	Elmendorf Tear, g./sheet Across IPC	Elmendorf Tear, g./sheet Across Mill	Elmendorf Tear, g./sheet Across Diff.
Mill F--42-lb. Linerboard																	
41.8	42.3	+0.5	15.5	14.7	-0.8	97	90	-7	37	43	+6	369	415	+46	421[a]	475	+54
43.2	42.8	-0.4	16.2	15.2	-1.0	98	99	+1	38	42	+4	355[a]	367	+12	421[a]	478	+57
43.9	44.1	+0.2	15.6	15.0	-0.6	96	93	-3	36	41	+5	344	396	+52	355[a]	457	+102
43.5	43.3	-0.2	14.6	14.0	-0.6	100	97	-3	34	37	+3	321	336	+15	371[a]	432	+61
45.4	44.7	-0.7	16.2	15.3	-0.9	108	103	-5	36	38	+2	346	368	+22	409[a]	442	+33
44.0	43.5	-0.5	15.6	14.8	-0.8	100	95	-5	36	40	+4	360[a]	361	+1	413[a]	406	-7
44.4	44.5	+0.1	15.5	15.0	-0.5	101	97	-4	38	44	+6	360[a]	389	+29	427[a]	442	+15
43.7	43.6	-0.1	15.6	14.9	-0.7	100	96	-4	36	41	+5	351	376	+25	403	447	+44

TABLE XXII

Basis Weight, lb. IPC	Basis Weight, lb. Mill	Basis Weight, lb. Diff.	Caliper, points IPC	Caliper, points Mill	Caliper, points Diff.	Bursting Strength, points IPC	Bursting Strength, points Mill	Bursting Strength, points Diff.	G. E. Puncture, units IPC	G. E. Puncture, units Mill	G. E. Puncture, units Diff.	Elmendorf Tear, g./sheet In IPC	Elmendorf Tear, g./sheet In Mill	Elmendorf Tear, g./sheet In Diff.	Elmendorf Tear, g./sheet Across IPC	Elmendorf Tear, g./sheet Across Mill	Elmendorf Tear, g./sheet Across Diff.
Mill G--42-lb. Linerboard																	
42.5	42.9	+0.4	14.1	13.8	-0.3	98	94	-4	34	39	+5	371[a]	400	+29	397[a]	429	+32
42.1	42.1	0.0	13.3	12.9	-0.4	107	101	-6	34	37	+3	355	381	+26	384[a]	412	+28
43.4	43.7	+0.3	14.3	13.8	-0.5	107	100	-7	35	41	+6	375[a]	428	+53	397[a]	453	+56
42.9	43.2	+0.3	13.9	13.4	-0.5	112	103	-9	36	38	+2	371	418	+47	400[a]	452	+52
43.6	43.2[b]	-0.4	13.7	12.9	-0.8	109	105	-4	35	36	+1	381[a]	395	+14	400[a]	419	+19
42.4	41.7	-0.7	13.1	12.4	-0.7	107	105	-2	32	36	+4	357[a]	382	+25	395[a]	430	+35
41.7	41.9	+0.2	13.8	12.9	-0.9	107	106	-1	33	36	+3	341[a]	360	+19	390[a]	399	+9
42.4	42.0	-0.4	13.4	12.9	-0.5	112	104	-8	34	37	+3	351	355	+4	406[a]	394	-12
43.2	42.9	-0.3	13.3	12.6	-0.7	116	109	-7	34	36	+2	365[a]	371	+6	391[a]	409	+18
43.0	43.3	+0.3	13.1	12.8	-0.3	113	107	-6	35	38	+3	366[a]	377	+11	415[a]	406	-9
42.7	42.7	0.0	13.6	13.0	-0.6	109	103	-6	34	37	+3	363	387	+24	398	420	+22

adings for one or more specimens which tore beyond the 3/8-inch limit.
minations, instead of 24.
ge" data are calculated from the totals of the individual readings.

TABLE XXI

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

Institute Data versus Mill Data

File No.	Mill Code	Date Made	Mch. No.	Basis Weight, lb. IPC	Mill	Diff.	Caliper, points IPC	Mill	Diff.	Bursting Strength, points IPC	Mill	Diff.	G. E. Puncture, units IPC	Mill	Diff.	Elmendor g./ In IPC	Mill	Di
										Mill F--42-lb. Linerboard								
134018	F-57	9/15/48	--	41.8	42.3	+0.5	15.5	14.7	-0.8	97	90	-7	37	43	+6	369	415	+4
134019	F-58	9/28/48	--	43.2	42.8	-0.4	16.2	15.2	-1.0	98	99	+1	38	42	+4	355[a]	367	+1
134038	F-59	10/ 6/48	--	43.9	44.1	+0.2	15.6	15.0	-0.6	96	93	-3	36	41	+5	344	396	+5
134039	F-60	10/ 8/48	--	43.5	43.3	-0.2	14.6	14.0	-0.6	100	97	-3	34	37	+3	321	336	+1
134114	F-61	10/15/48	--	45.4	44.7	-0.7	16.2	15.3	-0.9	108	103	-5	36	38	+2	346	368	+2
134211	F-62	10/22/48	--	44.0	43.5	-0.5	15.6	14.8	-0.8	100	95	-5	36	40	+4	360[a]	361	+
134212	F-63	10/22/48	--	44.4	44.5	+0.1	15.5	15.0	-0.5	101	97	-4	38	44	+6	360[a]	389	+2
Current Mill Average:				43.7	43.6	-0.1	15.6	14.9	-0.7	100	96	-4	36	41	+5	351	376	+2

TABLE XXII

File No.	Mill Code	Date Made	Mch. No.	Basis Weight, lb. IPC	Mill	Diff.	Caliper, points IPC	Mill	Diff.	Bursting Strength, points IPC	Mill	Diff.	G. E. Puncture, units IPC	Mill	Diff.	Elmendor g./ In IPC	Mill	Di
										Mill G--42-lb. Linerboard								
133929	G-88	9/27/48	1	42.5	42.9	+0.4	14.1	13.8	-0.3	98	94	-4	34	39	+5	371[a]	400	+2
133930	G-89	9/27/48	1	42.1	42.1	0.0	13.3	12.9	-0.4	107	101	-6	34	37	+3	355	381	+2
133992	G-90	10/ 4/48	1	43.4	43.7	+0.3	14.3	13.8	-0.5	107	100	-7	35	41	+6	375[a]	428	+5
133993	G-91	10/ 4/48	1	42.9	43.2	+0.3	13.9	13.4	-0.5	112	103	-9	36	38	+2	371	418	+4
134086	G-92	10/14/48	1	43.6	43.2[b]	-0.4	13.7	12.9	-0.8	109	105	-4	35	36	+1	381[a]	395	+1
134087	G-93	10/14/48	1	42.4	41.7	-0.7	13.1	12.4	-0.7	107	105	-2	32	36	+4	357[a]	382	+2
134149	G-94	10/18/48	1	41.7	41.9	+0.2	13.8	12.9	-0.9	107	106	-1	33	36	+3	341[a]	360	+1
134150	G-95	10/19/48	1	42.4	42.0	-0.4	13.4	12.9	-0.5	112	104	-8	34	37	+3	351	355	+
134209	G-96	10/25/48	1	43.2	42.9	-0.3	13.3	12.6	-0.7	116	109	-7	34	36	+2	365[a]	371	+
134210	G-97	10/25/48	1	43.0	43.3	+0.3	13.1	12.8	-0.3	113	107	-6	35	38	+3	366[a]	377	+1
Current Mill Average:				42.7	42.7	0.0	13.6	13.0	-0.6	109	103	-6	34	37	+3	363	387	+2

[a] This average includes the readings for one or more specimens which tore beyond the 3/8-inch limit.
[b] The average of only 23 determinations, instead of 24.

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

TABLE XXIII

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

Institute Data versus Mill Data

Mill H--42-lb. Linerboard

Basis Weight, lb.			Caliper, points			Bursting Strength, points			G. E. Puncture, units			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.	IPC	Mill	Diff.
42.7	42.6	-0.1	15.5	14.9	-0.6	111	105	-6	33	37	+4	407[a]	393	-14	413[a]	433	+20
43.7	43.4	-0.3	16.2	15.4	-0.8	112	110	-2	35	38	+3	390[a]	390	0	441[a]	434	- 7
42.8	43.4	+0.6	15.7	15.0	-0.7	102	106	+4	34	37	+3	391	386	- 5	396[a]	427	+31
43.2	43.5	+0.3	15.4	14.8	-0.6	106	104	-2	35	37	+2	391[a]	372	-19	404[a]	423	+19
43.0	43.5	+0.5	15.7	15.2	-0.5	102	108	+6	34	38	+4	395[a]	389	- 6	408[a]	431	+23
42.8[b]	43.3	+0.5	14.7	14.5	-0.2	106	108	+2	34	36	+2	349[a]	354	+ 5	406[a]	397	- 9
43.0	43.3	+0.3	15.5	15.0	-0.5	106	107	+1	34	37	+3	387	381	- 6	411	424	+13

TABLE XXIV

Mill J--42-lb. Linerboard

Basis Weight, lb.			Caliper, points			Bursting Strength, points			G. E. Puncture, units			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.	IPC	Mill	Diff.
41.3	41.2	-0.1	14.8	14.7	-0.1	108	104	-4	28	33	+5	343[a]	299	-44	366[a]	336	-30
42.5	42.4	-0.1	14.4	14.8	+0.4	113	106	-7	30	32	+2	330[a]	327	- 3	382[a]	372	-10
42.3	42.7	+0.4	14.4	14.0	-0.4	101	95	-6	29	30	+1	305[a]	307	+ 2	339[a]	332	- 7
43.2	43.1	-0.1	15.1	15.0	-0.1	94	93	-1	30	30	0	317[a]	273	-44	331[a]	301	-30
41.8	41.6	-0.2	14.2	14.3	+0.1	101	92	-9	25	26	+1	311[a]	215	-96	318[a]	249	-69
42.3	41.9	-0.4	15.5	14.9	-0.6	97	90	-7	27	26	-1	301[a]	219	-82	349[a]	260	-69
43.0	41.4	-1.6	15.2	14.9	-0.3	93	95	+2	29	25	-4	338[a]	278	-60	345[a]	297	-48
43.7	42.1	-1.6	14.6	14.1	-0.5	105	100	-5	30	28	-2	337[a]	255	-82	347[a]	294	-53
42.5	42.0	-0.5	14.8	14.6	-0.2	102	97	-5	28	29	+1	323	272	-51	347	305	-42

. readings for one or more specimens which tore beyond the 3/8-inch limit.

ed evidence of exposure to water.

erage" data are calculated from the totals of the individual readings.

[redacted]

TABLE XXIII

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

Institute Data versus Mill Data

File No.	Mill Code	Date Made	Mch. No.	Basis Weight, lb. IPC	Basis Weight, lb. Mill	Basis Weight, lb. Diff.	Caliper, points IPC	Caliper, points Mill	Caliper, points Diff.	Bursting Strength, points IPC	Bursting Strength, points Mill	Bursting Strength, points Diff.	G. E. Puncture, units IPC	G. E. Puncture, units Mill	G. E. Puncture, units Diff.	Elmendorf g./she In IPC	Elmendorf g./she In Mill	Elmendorf g./she In Diff.
								Mill H--42-lb. Linerboard										
133948	H-73	9/27/48	2	42.7	42.6	-0.1	15.5	14.9	-0.6	111	105	-6	33	37	+4	407[a]	393	-14
133981	H-74	9/28/48	2	43.7	43.4	-0.3	16.2	15.4	-0.8	112	110	-2	35	38	+3	390[a]	390	0
134042	H-75	10/ 6/48	2	42.8	43.4	+0.6	15.7	15.0	-0.7	102	106	+4	34	37	+3	391	386	- 5
134083	H-76	10/11/48	2	43.2	43.5	+0.3	15.4	14.8	-0.6	106	104	-2	35	37	+2	391[a]	372	-19
134129	H-77	10/12/48	2	43.0	43.5	+0.5	15.7	15.2	0.5	102	108	+6	34	38	+4	395[a]	389	- 6
134187	H-78	10/18/48	2	42.8[b]	43.3	+0.5	14.7	14.5	-0.2	105	108	+2	34	36	+2	349[a]	354	+ 5
Current Mill Average:				43.0	43.3	+0.3	15.5	15.0	-0.5	106	107	+1	34	37	+3	387	381	- 6

TABLE XXIV

File No.	Mill Code	Date Made	Mch. No.	Basis Weight, lb. IPC	Basis Weight, lb. Mill	Basis Weight, lb. Diff.	Caliper, points IPC	Caliper, points Mill	Caliper, points Diff.	Bursting Strength, points IPC	Bursting Strength, points Mill	Bursting Strength, points Diff.	G. E. Puncture, units IPC	G. E. Puncture, units Mill	G. E. Puncture, units Diff.	Elmendorf g./she In IPC	Elmendorf g./she In Mill	Elmendorf g./she In Diff.
								Mill J--42-lb. Linerboard										
133952	J-77	9/30/48	1	41.3	41.2	-0.1	14.8	14.7	-0.1	108	104	-4	28	33	+5	343[a]	299	-44
133953	J-78	10/ 1/48	--	42.5	42.4	-0.1	14.4	14.8	+0.4	113	106	-7	30	32	+2	330[a]	327	- 3
134040	J-79	10/ 5/48	--	42.3	42.7	+0.4	14.4	14.0	-0.4	101	95	-6	29	30	+1	305[a]	307	+ 2
134041	J-80	10/ 7/48	-	43.2	43.1	-0.1	15.1	15.0	-0.1	94	93	-1	30	30	0	317[a]	273	-44
134097	J-81	10/14/48	1	41.8	41.6	-0.2	14.2	14.3	+0.1	101	92	-9	25	26	+1	311[a]	215	-96
134098	J-82	10/15/48	1	42.3	41.9	-0.4	15.5	14.9	-0.6	97	90	-7	27	26	-1	301[a]	219	-82
134185	J-83	10/22/48	1	43.0	41.4	-1.6	15.2	14.9	-0.3	93	95	+2	29	25	-4	338[a]	278	-60
134186	J-84	10/23/48	1	43.7	42.1	-1.6	14.6	14.1	-0.5	105	100	-5	30	28	2	337[a]	255	-82
Current Mill Average:				42.5	42.0	-0.5	14.8	14.6	-0.2	102	97	-5	28	29	+1	323	272	-51

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

[b] One of the specimens showed evidence of exposure to water.

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

TABLE XXV

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

Institute Data versus Mill Data

Basis Weight, lb.			Caliper, points			Bursting Strength, points			G. E. Puncture, units			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.	IPC	Mill	Diff.
Mill E--44/46-lb. Drum Linerboard																	
47.9	47.8	-0.1	14.1	13.9	-0.2	98	98	0	38	41	+3	450	477	+27	431[a]	479	+48
48.1	48.0	-0.1	14.1	13.7	-0.4	92	94	+2	40	41	+1	447[a]	432	-15	439[a]	443	+ 4
47.0	46.8	-0.2	13.3	13.6	-0.2	100	102	+2	37	38	+1	423	417	- 6	425[a]	437	+12
49.0	47.6	-1.4	14.5	14	-0.5	90	97	+7	43	40	-3	455[a]	459	+ 4	462[a]	463	+ 1
48.0	47.6	-0.4	14.1	13.8	-0.3	95	98	+3	40	40	0	444	446	+ 2	439	456	+17

readings for one or more specimens which tore beyond the 3/8-inch limit.

rage" data are calculated from the totals of the individual readings.

TABLE XXV

SUMMARY OF INDIVIDUAL TEST LOTS--OCTOBER 1 THROUGH OCTOBER 31, 1948--continued

Institute Data versus Mill Data

File No.	Mill Code	Date Made	Mch. No.	Basis Weight, lb. IPC	Basis Weight, lb. Mill	Basis Weight, lb. Diff.	Caliper, points IPC	Caliper, points Mill	Caliper, points Diff.	Bursting Strength, points IPC	Bursting Strength, points Mill	Bursting Strength, points Diff.	G. E. Puncture, units IPC	G. E. Puncture, units Mill	G. E. Puncture, units Diff.	El[illegible] IPC	El[illegible] Mi[illegible]
									Mill E--44/46-lb. Drum Linerboard								
133933	E-40	9/29/48	1	47.9	47.8	-0.1	14.1	13.9	-0.2	98	98	0	38	41	+3	450	47
134032	E-41	10/ 6/48	1	48.1	48.0	-0.1	14.1	13.7	-0.4	92	94	+2	40	41	+1	447[a]	43
134063	E-42	10/12/48	1	47.0	46.8	-0.2	13.3	13.6	-0.2	100	102	+2	37	38	+1	423	41
134169	E-43	10/21/48	1	49.0	47.6	-1.4	14.5	14	-0.5	90	97	+7	43	40	-3	455[a]	45
Current Mill Average:				48.0	47.6	-0.4	14.1	13.8	-0.3	95	98	+3	40	40	0	444	44

[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.