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BASE-LINE

MARCH-APRIL 1977



**INSTITUTE OF
PAPER CHEMISTRY**
Appleton, Wisconsin

**CONTINUOUS BASE-LINE STUDY (MODIFIED)
(MILL LINERBOARD DATA FOR
MARCH AND APRIL 1977)**

Project 2694-1

**Report Sixty-two
A Progress Report
to**

**FOURDRINIER KRAFT BOARD GROUP
of The
AMERICAN PAPER INSTITUTE**

June 29, 1977

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MARCH-APRIL, 1977

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Appleton, Wisconsin

CONTINUOUS BASE-LINE STUDY (MODIFIED)
(MILL LINERBOARD DATA FOR MARCH AND APRIL, 1977)

SUMMARY

PART I: SUMMARY OF MOISTURE CONTENT DATA
(JANUARY-APRIL, 1977)

Linerboard Grade Wt.		Moisture Content			
		January	February	March	April
26 Lb	Max. ^a	5.8	6.3	5.7	6.6
	Min. ^a	2.7	2.7	1.9	2.9
	Av. ^b	4.6 (16)	4.8 (16)	4.2 (14)	4.6 (19)
33 Lb	Max. ^a	6.0	6.3	6.1	6.5
	Min. ^a	2.4	2.5	2.8	2.1
	Av. ^b	4.6 (25)	4.8 (25)	4.7 (25)	4.8 (27)
38 Lb	Max. ^a	5.9	6.3	6.3	6.2
	Min. ^a	2.5	2.5	2.5	3.0
	Av. ^b	4.8 (20)	5.0 (24)	5.1 (21)	5.1 (21)
42 Lb	Max. ^a	6.7	6.8	6.9	6.9
	Min. ^a	2.9	2.7	2.6	2.6
	Av. ^b	5.2 (44)	5.2 (42)	5.2 (43)	5.2 (44)
69 Lb	Max. ^a	8.0	7.9	7.7	8.1
	Min. ^a	3.7	3.7	3.7	3.4
	Av. ^b	5.7 (31)	6.0 (32)	5.9 (30)	5.9 (33)
90 Lb	Max. ^a	7.2	7.1	7.8	7.5
	Min. ^a	3.9	4.0	3.3	3.3
	Av. ^b	6.1 (13)	6.0 (15)	5.8 (16)	5.7 (12)

^aCurrent machine average.^bCurrent FKBG average, number of machines is indicated in parentheses.

PART II: SUMMARY OF ADJUSTED BASIS WEIGHT DATA
(JANUARY-APRIL, 1977)

Linerboard Grade Wt.		Adjusted Basis Weight, lb/M ft ²			
		January	February	March	April
26 Lb	Max. ^a	27.5	27.1	28.7	27.7
	Min. ^a	26.1	25.8	26.2	25.9
	Av. ^b	26.7 (16)	26.5 (16)	26.9 (14)	26.6 (19)
33 Lb	Max. ^a	34.4	36.7	35.4	35.4
	Min. ^a	33.1	32.7	32.7	32.5
	Av. ^b	33.6 (25)	33.7 (25)	33.6 (25)	33.6 (27)
38 Lb	Max. ^a	42.1	39.6	39.7	40.1
	Min. ^a	37.9	37.9	37.4	37.3
	Av. ^b	38.8 (20)	38.6 (24)	38.6 (21)	38.6 (21)
42 Lb	Max. ^a	44.8	44.5	44.7	44.3
	Min. ^a	41.6	41.5	41.6	41.3
	Av. ^b	42.5 (44)	42.6 (42)	42.5 (43)	42.6 (44)
69 Lb	Max. ^a	71.0	70.3	70.6	71.1
	Min. ^a	68.1	68.4	68.1	68.0
	Av. ^b	69.7 (31)	69.6 (32)	69.5 (30)	69.6 (33)
90 Lb	Max. ^a	91.6	92.0	92.0	92.7
	Min. ^a	88.5	90.1	89.5	88.5
	Av. ^b	90.6 (13)	90.9 (15)	90.8 (16)	90.7 (12)

^aCurrent machine average.

^bCurrent FKBG average, number of machines is indicated in parentheses.

PART III: SUMMARY OF CALIPER DATA
(JANUARY-APRIL, 1977)

Linerboard Grade Wt.		Caliper, pt.			
		January	February	March	April
26 Lb	Max. ^a	8.5	8.9	9.0	8.9
	Min. ^a	7.2	7.0	7.1	7.2
	Av. ^b	7.9 (14)	8.0 (15)	7.9 (14)	8.0 (18)
33 Lb	Max. ^a	10.6	11.6	11.6	11.6
	Min. ^a	8.3	8.1	8.7	8.6
	Av. ^b	9.7 (24)	9.8 (24)	9.8 (24)	9.7 (26)
38 Lb	Max. ^a	12.8	12.1	12.3	11.5
	Min. ^a	9.9	10.2	10.1	10.1
	Av. ^b	11.0 (19)	10.8 (23)	10.9 (20)	10.8 (20)
42 Lb	Max. ^a	14.3	14.3	14.3	15.0
	Min. ^a	10.6	10.4	10.3	10.4
	Av. ^b	12.0 (43)	12.0 (42)	12.0 (42)	12.1 (43)
69 Lb	Max. ^a	22.0	23.1	21.5	21.9
	Min. ^a	17.7	18.1	18.0	18.0
	Av. ^b	19.6 (31)	19.8 (32)	19.5 (30)	19.7 (33)
90 Lb	Max. ^a	26.8	26.8	27.5	26.5
	Min. ^a	23.9	23.6	22.7	24.6
	Av. ^b	25.4 (13)	25.3 (15)	25.0 (16)	25.6 (12)

^aCurrent machine average.

^bCurrent FKBG average, number of machines is indicated in parentheses.

PART IV: SUMMARY OF BURSTING STRENGTH DATA
(JANUARY-APRIL, 1977)

Linerboard Grade Wt.		Bursting Strength, psig			
		January	February	March	April
26 Lb	Max. ^a	75	76	80	84
	Min. ^a	64	64	59	63
	Av. ^b	70 (16)	71 (16)	71 (14)	72 (19)
33 Lb	Max. ^a	99	97	104	104
	Min. ^a	78	79	79	79
	Av. ^b	86 (25)	86 (25)	86 (25)	87 (27)
38 Lb	Max. ^a	106	105	108	104
	Min. ^a	91	87	87	89
	Av. ^b	97 (20)	97 (24)	98 (21)	97 (21)
42 Lb	Max. ^a	119	115	116	117
	Min. ^a	97	96	97	100
	Av. ^b	105 (44)	105 (42)	105 (43)	106 (44)
69 Lb	Max. ^a	155	156	153	158
	Min. ^a	132	132	133	134
	Av. ^b	141 (31)	142 (32)	142 (30)	143 (33)
90 Lb	Max. ^a	181	185	191	177
	Min. ^a	160	161	161	162
	Av. ^b	170 (13)	173 (15)	172 (16)	169 (12)

^aCurrent machine average.

^bCurrent FKBG average, number of machines is indicated in parentheses.

INTRODUCTION

The continuous base-line study (modified) is a compilation of monthly averages of mill test data obtained routinely on six major grade weights of linerboard manufactured in the member mills of F.K.B.G. Mill data are included for moisture content, basis weight, caliper, and bursting strength tests made on the production of individual machines which produced at least 500 tons of one or more of the following six major grade weights during a given month: 26, 33, 38, 42, 69, and 90 lb. At the Institute, the as-reported basis weight, corresponding to the as-reported moisture content, is adjusted to a moisture content of 7.8%. Both the as-reported and the adjusted basis weight averages are included in the report. Note that the moisture content of the as-reported basis weight (not shown in tables) does not necessarily agree with the moisture content indicated in the report as measured at the reel. This is because some mills measure their basis weight at other than reel or standard conditions. The as-reported basis weight is included in the tables for reference only and should not be used for comparison purposes.

PRESENTATION OF DATA

For the six major grade weights of linerboard referred to earlier, mill test averages for moisture content, basis weight (reported and adjusted), caliper, and bursting strength are compiled in the following tables.

Table Number	Description
I - II	Mill Test Averages on 26-lb Linerboard
III - IV	Mill Test Averages on 33-lb Linerboard
V - VI	Mill Test averages on 38-lb Linerboard
VII - VIII	Mill Test Averages on 42-lb Linerboard
IX - X	Mill Test Averages on 69-lb Linerboard
XI - XII	Mill Test Averages on 90-lb Linerboard

TABLE I
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 26 LB FOURDRINIER KRAFT LINERBOARD

MARCH, 1977																				
MOISTURE CONTENT, PERCENT			BASIS WT., LB / M SQ FT			ADJ. BASIS WT., LB / M SQ FT			BURSTING STRENGTH, P S I G											
CODE	MACHINE DATA		MACHINE DATA		MACHINE DATA		MACHINE DATA		MACHINE DATA		MACHINE DATA									
	CUR. AV.	FAC. IND. *C	CUR. AV.	FAC. IND. *C	CUR. AV.	FAC. IND. *C	CUR. AV.	FAC. IND. *C	CUR. AV.	FAC. IND. *C										
A1	4.2	5.0	98.0	108.9	26.0	26.1	99.6	100.0	26.8	26.9	99.6	100.4	9.0	9.0	100.0	112.5	70	71	98.6	97.2
B1	1.9	0.4	475.0	42.2	27.0	25.3	106.7	103.8	28.7	27.3	105.1	107.5	8.4	8.2	102.4	105.0	67	65	103.1	93.0
C1	5.4	5.4	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6	7.5	7.5	7.9	7.9	70	70	74	74
E1	4.7	4.7	25.8	25.8	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	8.2	8.2	8.2	8.2	74	74	74	74
F1	6.5	5.0	98.0	108.9	26.0	26.1	99.6	100.0	26.8	26.9	99.6	100.4	9.0	9.0	100.0	112.5	70	71	98.6	97.2
H1	4.5	4.4	102.3	100.0	26.2	26.2	100.0	100.8	26.3	26.3	100.0	98.5	7.8	8.0	97.5	97.5	76	72	105.6	105.6
K1	3.2	3.5	91.4	71.1	26.1	26.7	97.8	100.4	26.2	27.0	97.0	98.1	7.8	7.9	98.7	97.5	78	75	104.0	108.3
M1	4.4	3.0	146.7	97.8	27.5	26.8	102.6	105.8	27.6	26.8	103.0	103.4	7.7	7.6	101.3	96.2	70	71	98.6	97.2
D1	5.7	5.4	105.6	126.7	25.6	25.5	100.4	98.5	26.2	26.2	100.0	98.1	8.1	7.7	105.2	101.2	65	67	97.0	90.3
P1	5.0	5.0	116.0	64.4	25.6	25.2	101.6	98.5	27.0	26.7	101.1	101.1	8.4	8.2	102.4	105.0	75	75	100.0	104.2
R1	2.9	2.5	116.0	64.4	25.6	25.2	101.6	98.5	27.0	26.7	101.1	101.1	8.4	8.2	102.4	105.0	75	75	100.0	104.2
U1	5.0	5.1	98.0	111.1	26.1	26.2	99.6	100.4	26.9	26.9	100.0	100.7	8.4	8.4	100.0	105.0	69	70	98.6	95.8
W1	4.3	4.0	107.5	95.6	25.6	25.3	101.2	98.5	26.6	26.3	101.1	99.6	7.6	7.8	97.4	95.0	80	79	101.3	111.1
V1	4.1	3.9	105.1	91.1	25.9	25.9	100.0	99.6	26.9	27.0	99.6	100.7	7.4	7.8	94.9	92.5	76	76	100.0	105.6
A2	4.9	5.1	102.0	115.6	25.5	25.8	98.8	98.1	26.2	26.0	100.8	98.1	7.2	7.7	93.5	90.0	59	70	84.3	81.9
G2	5.2	5.1	102.0	115.6	25.5	25.8	98.8	98.1	26.2	26.0	100.8	98.1	7.2	7.7	93.5	90.0	59	70	84.3	81.9
H2	6.0	6.0	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	26.4	8.5	8.5	7.7	7.7	71	71	78	78
J2	6.3	6.3	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	7.7	7.7	7.7	7.7	76	76	76	76
K2	4.0	4.0	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	7.3	7.3	7.3	7.3	76	76	76	76
L2	3.8	3.8	100.0	84.4	27.1	27.2	99.6	104.2	27.2	27.3	99.6	101.9	8.0	8.0	100.0	100.0	69	74	93.2	95.8
Q2	4.1	4.4	93.2	91.1	25.5	25.6	99.6	98.1	26.5	26.5	100.0	99.2	7.1	7.2	98.6	88.8	68	68	100.0	94.4
T2	5.5	5.5	25.8	25.8	25.8	25.8	25.8	25.8	26.4	26.4	26.4	26.4	8.5	8.5	7.5	7.5	75	75	75	75
U2	4.7	4.0	117.5	104.4	26.0	25.9	100.4	100.0	26.9	27.0	99.6	100.7	7.8	7.8	100.0	97.5	71	70	101.4	98.6
V2	5.3	5.3	27.1	27.1	27.1	27.1	27.1	27.1	27.2	27.2	27.2	27.2	8.5	8.5	66	66	66	66	66	66
W2	5.1	5.1	25.8	25.8	25.8	25.8	25.8	25.8	26.5	26.5	26.5	26.5	8.6	8.6	70	70	70	70	70	70
Y2	4.1	4.1	25.4	25.4	25.4	25.4	25.4	25.4	26.4	26.4	26.4	26.4	7.2	7.2	69	69	69	69	69	69
Z2	5.7	5.7	26.1	26.1	26.1	26.1	26.1	26.1	26.2	26.2	26.2	26.2	7.2	7.2	73	73	73	73	73	73
A3	5.9	5.9	25.9	25.9	25.9	25.9	25.9	25.9	26.0	26.0	26.0	26.0	7.2	7.2	73	73	73	73	73	73

FK8G DATA

CUR. AV.	4.2	26.1	26.8	71
CUM. AV.	4.5	26.0	26.7	72
IND. *D	93.3	100.4	100.4	98.6

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE II
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 26 LB FOURDRINIER KRAFT LINERBOARD
APRIL, 1977

MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT.,*A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I C				
MACHINE DATA		MACHINE DATA		MACHINE DATA		MACHINE DATA		MACHINE DATA		MACHINE DATA		MACHINE DATA		MACHINE DATA		MACHINE DATA				
CODE	CUR. AV.	FAC. #B	IND. #C	CUR. AV.	FAC. #B	IND. #C	CUR. AV.	FAC. #B	IND. #C	CUR. AV.	FAC. #B	IND. #C	CUR. AV.	FAC. #B	IND. #C	CUR. AV.	FAC. #B	IND. #C		
A1	4.5	4.3	104.6	102.3	26.7	26.3	101.5	102.7	27.7	27.3	101.5	103.7	8.9	8.2	108.5	112.6	63	66	95.4	87.5
B1		0.6			25.6				27.5				8.2				66			
C1		5.4			26.6				27.3				7.5				65			
E1	4.9	4.7	104.2	111.4	25.8	25.8	100.0	99.2	26.6	26.7	99.6	99.6	8.0	7.9	101.3	101.3	67	70	95.7	93.0
F1	6.6	6.5	101.5	150.0	26.0	26.2	99.2	100.0	26.1	26.2	99.6	97.8	7.9	8.2	96.3	100.0	84	74	113.5	116.7
H1	4.5	5.0	90.0	102.3	26.0	26.1	99.6	100.0	26.9	26.9	100.0	100.7	8.6	9.1	94.5	108.9	82	70	117.1	113.9
K1	4.8	4.4	109.1	109.1	25.9	26.2	98.8	99.6	26.0	26.3	98.8	97.4	8.0	8.0	100.0	101.3	69	72	95.8	95.8
N1	3.4	3.4	100.0	77.3	26.1	26.4	98.9	100.4	26.2	26.7	98.1	98.1	7.8	7.8	100.0	98.7	78	76	102.6	108.3
O1	4.1	3.2	128.1	93.2	26.8	26.9	98.6	103.1	26.9	27.0	99.6	100.7	7.3	7.6	96.0	92.4	69	71	97.2	95.8
P1	5.6	5.5	101.6	127.3	25.3	25.6	98.8	97.3	25.9	26.2	98.8	97.0	7.6	7.8	97.4	96.2	66	66	100.0	91.7
R1	4.8	5.0	96.0	109.1	25.6	25.6	100.0	98.5	26.4	26.4	100.0	98.9	8.2	7.8	105.1	103.8	74	72	102.8	102.8
U1	2.9	2.6	111.5	65.9	25.4	25.3	100.4	97.7	26.7	26.7	100.0	100.0	8.4	8.2	102.4	106.3	76	75	101.3	105.6
V1	4.3	5.1	84.3	97.7	26.0	26.2	99.2	100.0	27.0	26.9	100.4	101.1	8.5	8.4	101.2	107.6	71	70	101.4	98.6
W1	4.6	4.1	112.2	104.5	25.4	25.3	100.4	97.7	26.3	26.4	99.6	98.5	7.7	7.8	98.7	97.5	78	79	98.7	108.3
Y1	3.9	3.9	100.0	88.6	25.8	25.9	99.6	99.2	26.9	27.0	99.6	100.7	7.5	7.8	96.2	94.9	72	76	94.7	100.0
A2		4.9			26.0				26.8				8.1				70			
G2	4.9	5.1	96.1	111.4	25.3	25.7	98.4	97.3	26.1	25.9	100.8	97.8	7.8	7.7	101.3	98.7	68	69	98.6	94.4
H2		6.0			26.4				26.5				8.5				71			
J2		6.3			26.0				26.0				7.7				78			
K2		4.0			26.1				27.2				7.3				76			
L2	3.7	3.8	97.4	84.1	27.0	27.2	99.3	103.8	27.1	27.4	98.9	101.5	7.9	8.0	98.8	100.0	69	73	94.5	95.8
Q2	4.3	4.3	100.0	97.7	25.5	25.6	99.6	98.1	26.5	26.5	100.0	99.2	7.2	7.2	100.0	91.1	68	68	100.0	94.4
T2		5.5			25.8				26.4				8.5				75			
U2	4.6	4.0	115.0	104.5	26.1	25.9	100.8	100.4	27.0	27.0	100.0	101.1	7.9	7.8	101.3	100.0	70	70	100.0	97.2
V2		5.3			27.1				27.2				8.5				66			
W2	4.6	5.2	88.5	104.5	25.9	25.8	100.4	99.6	26.8	26.6	100.8	100.4	8.5	8.6	98.8	107.6	69	71	97.2	95.8
Y2		4.1			25.4				26.4				7.2				69			
Z2		5.7			26.1				26.2								69			
A3	5.9	5.9	100.0	134.1	26.1	25.9	100.8	100.4	26.2	26.0	100.8	98.1					69	73	94.5	95.8
FKBG DATA																				
CUR.																				
AV.	4.6				25.9				26.6				8.0				72			
CUM.																				
AV.	4.4				26.0				26.7				7.9				72			
IND.																				
#D 104.5					99.6				99.6				101.3				100.0			

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE III
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 33 L8 FOURDRINIER KRAFT LINERBOARD

MARCH, 1977																				
MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT		ADJ. BASIS WT.,*A LB / M SQ FT		CALIPER, PT		BURSTING STRENGTH, P S I G										
CODE	MACHINE DATA		IND. *C	MACHINE DATA		IND. *C	MACHINE DATA		PT	MACHINE DATA		IND. *C	MACHINE DATA		IND. *C					
	CUR. AV.	FAC. *B		CUR. AV.	FAC. *B		CUR. AV.	FAC. *B		CUR. AV.	FAC. *B		CUR. AV.	FAC. *B						
A1	5.2	4.6	113.0	34.4	33.7	102.1	105.2	35.4	34.9	101.4	105.7	11.6	10.7	108.4	117.2	79	81	97.5	91.9	
B1	2.8	1.9	147.4	60.9	31.2	31.5	99.0	95.4	32.9	33.6	97.9	98.2	10.7	10.2	104.9	108.1	84	83	101.2	97.7
C1	5.4				33.0				33.8				9.4				79			
E1	5.0				32.6				33.6				10.0				84			
F1	6.5				33.1				33.1				10.8				98			
H1	4.8	5.0	96.0	104.3	33.0	33.0	100.0	100.9	34.1	34.0	100.3	101.8	10.1	10.1	100.0	102.0	89	88	101.1	103.5
J1	6.0	5.7	105.3	130.4	33.4	32.6	102.4	102.1	34.1	33.4	102.1	101.8	9.6	9.6	100.0	97.0	90	86	104.6	104.6
K1	5.0	4.6	108.7	108.7	33.1	33.2	99.7	101.2	33.2	33.3	99.7	99.1	10.1	10.0	101.0	102.0	89	87	102.3	103.5
M1	3.3	3.7	89.2	71.7	33.9	33.6	100.9	103.7	34.0	34.0	100.0	101.5	9.7	10.0	97.0	98.0	87	89	97.8	101.2
N1	4.9	3.9	125.6	106.5	33.0	33.2	99.4	100.9	33.2	33.4	99.4	99.1	8.8	9.3	94.6	88.9	80	82	97.6	93.0
P1	5.8	5.4	107.4	126.1	32.3	32.6	99.1	98.8	33.0	33.4	98.8	98.5	10.0	9.8	102.0	101.0	79	78	101.3	91.9
Q1	3.4	2.8	121.4	73.9	31.6	31.4	100.6	96.6	33.1	33.2	99.7	98.8	8.7	9.2	94.6	87.9	87	88	98.9	101.2
R1	4.9	4.9	100.0	106.5	32.3	32.5	99.4	98.8	33.3	33.5	99.4	99.4	10.6	10.4	101.9	107.1	80	81	98.8	93.0
S1	6.1	5.8	105.2	132.6	33.7	33.2	101.5	103.0	34.2	33.4	102.4	102.1	9.9	10.4	95.2	100.0	97	88	110.2	112.8
U1	2.9	2.5	116.0	63.0	31.9	31.8	100.3	97.6	33.6	33.7	99.7	100.3	10.2	10.2	100.0	103.0	90	90	100.0	104.6
V1	6.1	5.9	103.4	132.6	33.0	33.0	100.0	100.9	33.6	33.7	99.7	100.3	10.1	10.4	97.1	102.0	84	82	102.4	97.7
W1	4.6	4.2	109.5	100.0	32.2	32.0	100.6	98.5	33.3	33.3	100.0	99.4	9.1	9.2	98.9	91.9	104	101	103.0	120.9
Y1	4.1	4.3	95.3	89.1	32.4	32.4	100.0	99.1	33.7	33.7	100.0	100.6	9.7	9.6	101.0	98.0	86	91	94.5	100.0
A2	5.2	5.3	98.1	113.0	32.6	32.9	99.1	99.7	33.5	33.8	99.1	100.0	10.1	10.2	99.0	102.0	84	82	102.4	97.7
E2	5.4				32.7				33.6				10.5				77			
G2	5.0	5.5	90.9	108.7	31.7	32.5	97.5	96.9	32.7	32.7	100.0	97.6	9.6	9.6	100.0	97.0	84	86	97.7	97.7
H2	5.5				33.0				33.2				10.0				88			
J2	6.2				32.7				32.7				9.7				101			
K2	4.9	4.7	104.2	106.5	33.0	32.7	100.9	100.9	34.0	33.8	100.6	101.5	8.7	9.4	92.6	87.9	96	92	104.3	111.6
L2	4.8	4.4	109.1	104.3	33.7	33.5	100.6	103.0	33.8	33.6	100.6	100.9	10.1	9.9	102.0	102.0	81	87	93.1	94.2
N2	5.4				33.0				33.8				9.3				80			
O2	3.8				33.0				34.4				10.1				82			
P2	4.1	4.3	95.3	89.1	31.8	32.3	98.4	97.2	33.1	33.5	98.8	98.8	9.8	9.9	99.0	99.0	88	85	103.5	102.3
Q2	5.1	4.8	106.2	110.9	32.6	32.5	100.3	99.7	33.5	33.5	100.0	100.0	9.2	9.4	97.9	92.9	80	82	97.6	93.0
R2	3.1	3.6	86.1	67.4	34.2	33.9	100.9	104.6	34.5	34.2	100.9	103.0	9.2	9.6	95.8	92.9	85	80	106.2	98.8
S2	5.2				32.6				33.7				9.6				88			
T2	5.1				32.2				33.2				9.8				92			
U2	4.9	4.4	111.4	106.5	32.7	32.7	100.0	100.0	33.7	33.8	99.7	100.6	10.0	10.0	100.0	101.0	86	86	100.0	100.0
V2	5.2	5.5	94.5	113.0	33.2	33.4	99.4	101.5	33.3	33.4	99.7	99.4	9.0	9.3	96.8	90.9	88	83	106.0	102.3
Y2	4.4				32.3				33.5				9.4				79			
Z2	5.9				33.2				33.3								77			
A3	5.9	5.8	101.7	128.3	32.9	33.0	99.7	100.6	33.0	33.1	99.7	98.5					86	89	96.6	100.0

FKBG DATA			
CUR.			
AV.	4.7		86
CUM.			
AV.	4.6		86
IND.			
*D 102.2			100.0

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE IV
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 33 LB FOURDRINIER KRAFT LINERBOARD
APRIL, 1977

MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT.,*A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G				
CODE	MACHINE DATA		IND. *C	MACHINE DATA		IND. *C	MACHINE DATA		IND. *C	MACHINE DATA		IND. *C	MACHINE DATA		IND. *C	MACHINE DATA		IND. *C		
	CUR. AV.	FACT. *B		CUR. AV.	FACT. *B		CUR. AV.	FACT. *B		CUR. AV.	FACT. *B		CUR. AV.	FACT. *B		CUR. AV.	FACT. *B		CUR. AV.	FACT. *B
A1	5.2	4.7	110.6	113.0	34.4	33.8	101.8	105.2	35.4	35.0	101.1	105.7	11.6	10.8	107.4	118.4	79	81	97.5	91.9
B1	2.1	2.0	105.0	45.6	31.5	31.5	100.0	96.3	33.5	33.5	100.0	100.0	10.4	10.2	102.0	106.1	85	83	102.4	98.8
C1	5.4	5.4			33.0	33.0			33.8				9.4				79			
E1	5.2	5.0	104.0	113.0	32.7	32.6	100.3	100.0	33.6	33.6	100.0	100.3	10.1	10.0	101.0	103.1	82	84	97.6	95.3
F1	6.5	6.5			33.0	33.0			33.0				10.1				96			
H1	5.0	5.0			33.0	33.0			34.0				10.1				89			
J1	5.8	5.8			32.6	32.6			33.4				9.6				86			
K1	4.8	4.6	104.3	104.3	33.1	33.2	99.7	101.2	33.2	33.2	100.0	99.1	10.0	10.0	100.0	102.0	93	88	105.7	108.1
N1	3.6	3.6			33.6	33.6			34.0				10.0				89			
O1	4.6	4.0	115.0	100.0	33.0	33.2	99.4	100.9	33.2	33.4	99.4	99.1	9.2	9.3	98.9	93.9	81	82	98.8	94.2
P1	5.6	5.5	101.8	121.7	32.1	32.4	99.1	98.2	32.9	33.2	99.1	98.2	9.5	9.9	96.0	96.9	82	79	103.8	95.3
Q1	3.5	2.8	125.0	76.1	31.7	31.4	101.0	96.9	33.2	33.2	100.0	99.1	8.6	9.0	95.6	87.8	97	88	110.2	112.8
R1	5.1	4.9	104.1	110.9	32.5	32.5	100.0	99.4	33.4	33.5	99.7	99.7	10.5	10.4	101.0	107.1	88	81	108.6	102.3
S1	5.6	5.9	94.9	121.7	33.6	33.3	100.9	102.8	33.9	33.4	101.5	101.2	10.2	10.3	99.0	104.1	92	89	103.4	107.0
U1	3.0	2.6	115.4	65.2	32.1	31.8	100.9	98.2	33.8	33.6	100.6	100.9	10.2	10.1	101.0	104.1	86	90	95.6	100.0
V1	5.6	6.0	93.3	121.7	33.0	33.0	100.0	100.9	33.8	33.6	100.6	100.9	10.6	10.4	101.9	108.2	82	82	100.0	95.3
W1	4.8	4.2	114.3	104.3	32.3	32.0	100.9	98.8	33.4	33.3	100.3	99.7	9.0	9.1	98.9	91.8	102	101	101.0	118.6
Y1	3.9	4.2	92.8	84.8	32.5	32.4	100.3	99.4	33.9	33.7	100.6	101.2	9.5	9.6	99.0	96.9	91	91	100.0	105.8
A2	5.0	5.3	94.3	108.7	32.6	32.8	99.4	99.7	33.6	33.7	99.7	100.3	10.4	10.3	101.0	106.1	80	82	97.6	93.0
E2	5.4	5.4			32.7	32.7			33.6				10.5				77			
G2	5.3	5.4	98.1	115.2	31.6	32.4	97.5	96.6	32.5	32.7	99.4	97.0	9.4	9.6	97.9	95.9	83	86	96.5	96.5
H2	5.5	5.5			33.0	33.0			33.2				10.0				88			
J2	6.5	6.3	103.2	141.3	32.8	32.7	100.3	100.3	32.9	32.7	100.6	98.2	9.0	9.7	92.8	91.8	104	102	102.0	120.9
K2	4.3	4.9	87.8	93.5	33.1	32.7	101.2	101.2	34.4	33.8	101.8	102.7	8.9	9.1	97.8	90.8	98	94	104.2	114.0
L2	4.7	4.4	106.8	102.2	33.8	33.5	100.9	103.4	33.9	33.6	100.9	101.2	9.7	10.0	97.0	95.0	83	86	96.5	96.5
N2	3.8	5.4	70.4	82.6	33.0	33.0	100.0	100.9	34.4	33.8	101.8	102.7	9.2	9.3	98.9	93.9	83	80	103.8	96.5
O2	5.3	5.3			115.2	33.7			103.0				9.8				87			
P2	4.2	4.2	100.0	91.3	31.8	32.2	98.8	97.2	33.0	33.4	98.8	98.5	9.6	9.9	97.0	98.0	85	85	100.0	98.8
Q2	5.6	4.8	116.7	121.7	32.7	32.5	100.6	100.0	33.5	33.5	100.0	100.0	9.2	9.3	98.9	93.9	80	82	97.6	93.0
R2	3.2	3.5	91.4	69.6	33.6	33.9	99.1	102.8	33.9	34.2	99.1	101.2	9.0	9.5	94.7	91.8	84	81	103.7	97.7
S2	5.2	5.2	100.0	113.0	32.4	32.6	98.8	98.1	33.3	33.7	98.8	99.4	9.4	9.6	97.9	95.9	84	88	95.4	97.7
T2	5.6	5.1	109.8	121.7	32.1	32.2	99.7	98.2	32.9	33.2	99.1	98.2	9.2	9.8	93.9	93.9	85	94	90.4	98.8
U2	4.8	4.5	106.7	104.3	32.7	32.7	100.0	100.0	33.8	33.8	100.0	100.9	9.9	10.0	99.0	101.0	84	85	98.8	97.7
V2	5.4	5.4			33.3	33.3			33.4				9.2				84			
Y2	4.1	4.1			32.3	32.3			33.6				9.4				80			
Z2	5.9	5.9			33.2	33.2			33.3								77			
Z3	6.0	5.8	103.4	130.4	32.9	33.0	99.7	100.6	33.0	33.1	99.7	98.5					84	88	95.4	97.7

FKBG DATA	
CUR.	
AV. 4.8	32.7
CUM.	33.6
AV. 4.6	32.7
IND.	33.5
*D 104.3	100.0
	99.0
	101.2

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE V
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 38 LB FOURDRINIER KRAFT LINERBOARD

MARCH, 1977																					
MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT.,*A LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I U					
CODE		MACHINE DATA		MACHINE DATA		MACHINE DATA		MACHINE DATA		MACHINE DATA		MACHINE DATA		MACHINE DATA		MACHINE DATA					
		CUR. AV.	FAC. #8	IND. #C	CUR. AV.	FAC. #8	IND. #C	CUR. AV.	FAC. #8	IND. #C	CUR. AV.	FAC. #8	IND. #C	CUR. AV.	FAC. #8	IND. #C	CUR. AV.	FAC. #8	IND. #C		
B1		5.4			41.0			42.1			12.8						92				
E1		5.0			37.7			38.8			11.3						93				
G1		2.5	2.3	108.7	50.0	37.6	37.3	100.8	99.2	39.7	39.5	100.5	102.6	11.1	10.2	108.8	100.9	102	99	103.0	105.2
H1		4.6			38.0			39.3			12.0						102				
I1		4.0			39.0			39.1			10.9						93				
K1		5.5	4.9	112.2	110.0	38.1	38.2	99.7	100.5	38.2	38.3	99.7	98.7	11.0	11.3	97.3	100.0	99	99	100.0	102.1
L1		4.7			37.8			39.1			11.2						97				
M1		3.2	3.4	94.1	64.0	39.1	39.1	100.0	103.2	39.2	39.4	99.5	101.3	10.8	11.3	95.6	98.2	107	105	101.9	110.3
N1		4.9	4.1	119.5	98.0	38.2	38.3	99.7	100.8	38.4	38.5	99.7	99.2	10.3	10.7	96.3	93.6	98	95	103.2	101.0
O1		4.7	4.9	95.9	94.0	37.2	37.4	99.5	98.2	38.5	38.6	99.7	92.5	11.3	11.4	99.1	102.7	94	92	102.2	96.9
S1		6.0	5.7	105.3	120.0	38.2	38.2	100.0	100.8	38.7	38.3	101.0	100.0	10.8	11.4	94.7	98.2	104	96	108.3	107.2
T1		5.0	5.0	100.0	100.0	39.2	39.1	100.2	103.4	39.3	39.2	100.2	101.6	10.5	10.8	97.2	95.4	101	96	105.2	104.1
U1		2.6			36.5			38.5			11.0						102				
V1		6.0	6.1	98.4	120.0	37.9	38.0	99.7	100.0	38.7	38.7	100.0	100.0	10.9	10.8	100.9	99.1	92	92	100.0	94.8
W1		4.7	4.4	106.8	94.0	37.1	36.9	100.5	97.9	38.4	38.3	100.3	99.2	10.4	10.4	100.0	94.5	108	108	100.0	111.3
X1		4.6	4.7	97.9	92.0	37.4	37.5	99.7	98.7	38.7	38.8	99.7	100.0	11.6	11.1	104.5	105.4	96	99	97.0	99.0
A2		5.5	5.3	103.8	110.0	37.6	37.6	100.0	99.2	38.5	38.6	99.7	99.5	12.3	11.3	108.8	111.8	93	92	101.1	95.9
E2		5.3			37.1			38.1			12.0						86				
G2		5.9	5.9	100.0	118.0	36.6	38.0	96.3	96.6	37.4	38.2	97.9	96.6	10.7	11.0	97.3	97.3	101	95	106.3	104.1
H2		5.6			38.0			38.1			11.8						100				
I2		6.4			38.3			38.9			10.8						96				
K2		5.4	5.4	92.6	100.0	37.7	37.8	99.7	99.5	38.8	38.7	100.2	100.2	10.1	10.7	94.4	91.8	98	102	96.1	101.0
L2		6.3	5.1	123.5	126.0	38.7	38.9	99.5	102.1	38.8	39.0	99.5	100.2	10.9	11.0	99.1	99.1	96	98	98.0	99.0
N2		5.7	5.4	105.6	114.0	37.7	38.2	98.7	99.5	38.6	39.2	98.5	99.7	10.7	10.5	101.9	97.3	87	90	96.7	89.7
P2		4.3	4.4	97.7	86.0	36.9	37.2	99.2	97.4	38.3	38.6	99.2	99.0	11.3	11.3	100.0	102.7	98	95	103.2	101.0
Q2		4.7	5.1	92.2	94.0	37.3	37.4	99.7	98.4	38.6	38.5	100.2	99.7	10.6	10.8	98.1	96.4	91	91	100.0	93.8
T2		4.7			36.8			38.1			10.7						104				
U2		5.1	4.8	106.2	102.0	37.9	37.7	100.5	100.0	39.0	38.9	100.2	100.8	11.3	11.4	99.1	102.7	97	97	100.0	100.0
V2		5.8	5.8	100.0	116.0	38.6	38.4	100.5	101.8	38.7	38.4	100.8	100.0	10.5	10.6	99.0	95.4	97	96	101.0	100.0
Y2		4.6			37.2			38.5			11.2						30				
A3		6.0	5.7	105.3	120.0	38.0	38.0	100.0	100.3	38.1	38.0	100.3	98.4					94	97	96.9	96.9
B3		5.7	5.6	101.8	114.0	37.7	37.4	100.8	99.5	38.6	38.3	100.8	99.7	11.4	11.0	103.6	103.6	97	96	101.0	100.0

FRBG DATA

CUR. AV.	5.1			37.8			38.6			10.9		98
CUM. AV.	5.0			37.9			38.7			11.0		97
IND. #D	102.0			99.7			99.7			99.1		101.0

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE VI
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 38 LB FOURDRINIER KRAFT LINERBOARD
APRIL, 1977

CODE	MOISTURE CONTENT, PERCENT			BASIS WT., LB / M SQ FT			ADJ. BASIS WT.,*A LB / M SQ FT			CALIPER, PT			BULKING STRENGTH, P S I G							
	MACHINE DATA			MACHINE DATA			MACHINE DATA			MACHINE DATA			MACHINE DATA							
	CUR. AV.	CUM. AV.	FAC.T. *B	IND. *C	CUM. AV.	FAC.T. *B	IND. *C	CUR. AV.	CUM. AV.	FAC.T. *B	IND. *C	CUR. AV.	CUM. AV.	FAC.T. *B	IND. *C					
R1	5.4				41.0			42.1			12.8				92					
E1	5.0				37.7			38.8			11.3				93					
G1	3.0	2.2	136.4	60.0	37.8	37.3	101.3	99.7	39.8	39.6	100.5	102.8	10.8	10.2	105.9	98.2	99	100	99.0	102.1
H1	4.6				38.0			39.3							12.0		102			
I1	4.1				39.1			39.2			11.2				90					
K1	5.0	4.9	102.0	100.0	38.2	38.2	100.0	100.8	38.3	38.3	100.0	99.0	11.1	11.3	98.2	100.9	96	99	97.0	99.0
L1	4.7				37.8			39.1			11.2				97					
M1	3.3				39.2			39.5			11.2				106					
N1	4.6	4.2	109.5	92.0	38.7	38.3	101.0	102.1	38.9	38.5	101.0	100.5	10.8	10.6	101.9	98.2	96	95	101.0	99.0
O1	5.0	4.9	102.0	100.0	37.2	37.4	99.5	98.2	38.3	38.6	99.2	99.0	11.5	11.4	100.9	104.5	95	92	103.3	97.9
R1	5.8	5.8	100.0	116.0	38.6	38.2	101.0	101.8	38.9	38.4	101.3	100.5	10.4	11.3	92.0	94.5	102	97	105.2	105.2
S1	4.9	5.0	98.0	98.0	38.9	39.2	99.2	102.6	39.0	39.3	99.2	100.8	10.1	10.6	95.3	91.8	101	96	105.2	104.1
T1	2.6				36.5			38.5			11.0				102					
U1	6.2	6.0	103.3	124.0	37.9	38.0	99.7	100.0	38.5	38.7	99.5	99.5	10.9	10.8	100.9	99.1	90	93	96.8	92.8
V1	4.7	4.4	106.8	94.0	37.1	36.9	100.5	97.9	38.4	38.3	100.3	99.2	10.4	10.4	100.0	94.5	104	108	96.3	107.2
W1	4.5	4.6	97.8	90.0	37.1	37.5	98.9	97.9	38.4	38.8	99.0	99.2	11.2	11.1	100.9	101.8	99	99	100.0	102.1
A2	5.1	5.3	96.2	102.0	37.6	37.5	100.3	99.2	38.7	38.5	100.5	100.0	11.5	11.4	100.9	104.5	90	93	96.8	92.8
F2	5.3				37.1			38.1			12.0				86					
G2	5.9	5.9	100.0	118.0	36.5	37.8	96.6	96.3	37.3	38.1	97.9	96.4	10.5	11.0	95.4	95.4	95	95	100.0	97.9
H2	5.7	5.6	101.8	114.0	38.0	38.0	100.0	100.3	38.1	38.1	100.0	98.4	11.0	11.8	93.2	100.0	95	100	95.0	97.9
I2	6.4				38.3			38.9			10.8				96					
K2	5.1	5.4	94.4	102.0	38.1	37.8	100.8	100.5	39.2	38.7	101.3	101.3	10.8	10.6	101.9	98.2	98	101	97.0	101.0
L2	5.0	5.2	96.2	100.0	40.0	38.9	102.8	105.5	40.1	39.0	102.8	103.6	11.1	11.0	100.9	100.9	93	98	94.9	95.9
M2	5.4	5.5	98.2	108.0	37.6	38.1	98.7	99.2	38.6	39.0	99.0	99.7	10.5	10.6	99.0	95.4	89	99	100.0	91.8
N2	4.4	4.4	100.0	88.0	36.9	37.2	99.2	97.4	38.3	38.6	99.2	99.0	11.1	11.3	98.2	100.9	96	95	101.0	99.0
O2	5.4	5.0	108.0	108.0	37.6	37.4	100.5	99.2	38.6	38.5	100.2	99.7	10.4	10.7	97.2	94.5	94	91	103.3	96.9
T2	4.7				36.8			38.1			10.7				104					
U2	4.9	4.8	102.1	98.0	37.7	37.8	99.7	99.5	38.9	39.0	99.7	100.5	11.4	11.4	100.0	103.6	96	97	59.0	99.0
V2	5.2	5.7	91.2	104.0	38.3	38.4	99.7	101.0	38.4	38.5	99.7	99.2	10.3	10.6	97.2	93.6	103	96	107.3	106.2
Y2	4.6				37.2			38.5			11.2				90					
A3	5.8	5.8	100.0	116.0	38.1	38.0	100.3	100.5	38.2	38.1	100.3	98.7	11.1	11.0	100.9	100.9	97	96	101.0	100.0
R3	5.9	5.6	105.4	118.0	37.8	37.5	100.8	99.7	38.6	38.4	100.5	99.7	11.1	11.0	100.9	100.9	100	96	104.2	103.1

FRBG DATA

CUR. AV.	5.1	37.9	38.6	10.8	96
CUM. AV.	5.0	37.9	38.7	11.0	97
IND. *D	102.0	100.0	99.7	98.2	99.0

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE VII
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 42 LB FOURDRINIER KRAFT LINERBOARD
MARCH, 1977

MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT., LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G				
CODE	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
	CUR. AV.	CUM. AV.	FACT. #8	IND. #C	CUR. AV.	CUM. AV.	FACT. #8	IND. #C	CUR. AV.	CUM. AV.	FACT. #8	IND. #C	CUR. AV.	CUM. AV.	FACT. #8	IND. #C	CUR. AV.	CUM. AV.	FACT. #8	IND. #C
A1	5.1	5.0	102.0	98.1	43.4	43.2	100.5	104.3	44.7	44.5	100.4	105.2	14.3	13.7	104.4	119.2	100	100	100.0	95.2
B1	5.6	5.6	100.0	107.7	41.5	41.5	100.0	99.8	42.5	42.5	100.0	100.0	13.3	13.3	100.0	110.8	103	104	99.0	98.1
D1	4.0	4.4	90.9	76.9	40.9	41.3	99.0	98.3	42.6	42.8	99.5	100.2	11.6	11.7	99.1	96.7	104	103	101.0	99.0
E1	5.1	5.1	100.0	98.1	41.5	41.3	100.5	99.8	42.7	42.5	100.5	100.5	12.2	12.3	99.2	101.7	101	101	100.0	96.2
G1	3.5	3.2	109.4	67.3	40.8	40.8	100.0	98.1	42.7	42.8	99.8	100.5	11.7	11.4	102.6	97.5	105	104	101.0	100.0
I1	5.1	4.6	110.9	98.1	42.2	42.8	98.6	101.4	42.3	42.9	98.6	99.5	11.8	11.8	100.0	98.3	103	103	100.0	98.1
J1	6.9	6.2	111.3	132.7	41.5	41.4	100.2	99.8	41.9	42.1	99.5	98.6	12.1	12.4	97.6	100.8	100	102	98.0	95.2
K1	5.1	5.1	100.0	98.1	42.1	42.1	100.0	101.2	42.2	42.2	100.0	99.3	12.5	12.6	99.2	104.2	106	106	100.0	101.0
L1	5.4	5.6	96.4	103.8	41.6	41.8	99.5	100.0	42.7	42.8	99.8	100.5	12.6	12.4	101.6	105.0	106	105	101.0	101.0
M1	5.7	5.0	101.8	109.6	42.8	42.8	100.0	102.9	43.4	42.9	101.2	102.1	12.0	12.1	99.2	100.0	108	108	100.0	102.8
N1	4.2	4.2	100.0	98.1	42.1	42.1	100.0	101.2	42.3	42.3	100.0	99.5	11.3	11.3	95.0	94.2	105	103	101.9	100.0
O1	4.8	3.6	133.3	92.3	40.8	40.3	101.2	98.1	42.1	42.2	99.8	99.0	10.5	11.3	92.9	87.5	108	106	101.9	102.8
Q1	5.0	5.0	100.0	96.2	41.2	41.2	100.0	99.0	42.4	42.5	99.8	99.8	12.4	12.6	98.4	103.3	102	101	101.0	97.1
S1	5.9	5.9	100.0	113.5	42.5	42.2	100.7	102.2	43.1	42.4	101.6	101.4	11.9	12.2	97.5	99.2	110	108	101.8	104.8
T1	5.1	5.1	100.0	98.1	42.2	42.4	99.5	101.4	42.3	42.5	99.5	99.5	11.2	11.6	96.6	93.3	106	104	101.9	101.0
U1	3.1	3.1	100.0	59.6	41.0	40.8	100.5	98.6	43.1	42.8	100.7	101.4	12.8	12.4	103.2	106.7	112	112	100.0	106.7
V1	6.6	6.6	100.0	126.9	42.0	42.0	100.0	101.0	42.5	42.5	100.0	100.0	11.7	11.6	100.9	97.5	106	104	101.9	101.0
W1	4.9	4.6	106.5	94.2	41.0	40.9	100.2	98.6	42.3	42.3	100.0	99.5	11.8	11.6	101.7	98.3	115	115	100.0	109.5
X1	6.3	5.9	106.8	121.2	41.5	41.4	100.2	99.8	42.2	42.2	100.0	99.3	11.6	11.6	100.0	96.7	106	103	102.9	101.0
Y1	4.4	5.1	86.3	84.6	41.1	41.5	99.0	98.8	42.6	42.7	99.8	100.2	12.5	12.2	102.4	104.2	105	106	99.0	100.0
Z1	4.4	4.0	110.0	84.6	42.1	42.1	100.0	101.2	42.3	42.3	100.0	99.5	10.3	10.9	94.5	85.8	105	103	101.9	100.0
A2	5.4	5.4	100.0	103.8	41.5	41.6	99.8	99.8	42.6	42.7	99.8	100.2	12.8	12.5	102.4	106.7	103	101	102.0	98.1
B2	4.7	4.8	97.9	90.4	41.3	41.6	99.3	99.3	42.7	42.9	95.5	100.5	11.8	11.8	100.0	98.3	108	109	99.1	102.8
C2	5.6	5.6	100.0	98.1	42.1	42.1	100.0	101.2	42.3	42.3	100.0	99.5	11.3	11.3	95.0	94.2	105	103	101.9	100.0
D2	5.8	6.2	93.5	111.5	41.6	41.8	99.5	100.0	42.5	42.5	100.0	100.0	12.1	12.4	97.6	100.8	102	106	96.2	97.1
E2	5.5	5.6	98.2	105.8	41.9	41.7	100.5	100.7	42.9	42.7	100.5	100.9	12.5	12.5	100.0	104.2	101	100	101.0	96.2
F2	2.6	3.6	72.2	50.0	40.6	41.0	99.0	97.6	42.9	42.9	100.0	100.9	12.0	12.2	98.4	100.0	109	108	100.9	103.8
G2	6.0	6.0	100.0	115.4	40.8	41.3	98.8	98.1	41.6	41.5	100.2	97.9	11.4	11.8	96.6	95.0	105	102	102.9	100.0
H2	5.6	5.5	101.8	107.7	41.8	42.0	99.5	100.5	41.9	42.1	99.5	98.6	11.7	12.6	92.8	97.5	109	104	104.8	103.8
I2	6.6	6.7	98.5	126.9	42.1	42.0	100.2	101.2	42.6	42.5	100.2	100.2	11.4	11.6	98.3	95.0	103	103	100.0	98.1
K2	5.5	5.8	94.8	105.8	41.4	41.6	99.5	99.5	42.4	42.5	99.8	99.8	11.3	11.5	98.3	94.2	106	106	100.0	101.0
L2	5.2	5.3	98.1	100.0	42.7	42.3	100.9	102.6	42.8	42.4	100.9	100.7	12.3	12.0	102.5	102.5	103	106	97.2	98.1
M2	6.1	5.9	103.4	117.3	41.6	41.5	100.2	100.0	42.3	42.4	99.8	99.5	11.5	11.4	100.9	95.8	97	100	97.0	92.4
N2	5.8	5.6	103.6	111.5	42.0	41.4	101.4	101.0	42.9	42.4	101.2	100.9	12.5	12.5	100.0	104.2	101	100	101.0	96.2
O2	4.6	4.5	102.2	88.5	40.8	41.1	99.3	98.1	42.2	42.6	99.1	99.3	12.1	12.4	97.6	100.8	106	104	101.9	101.0
P2	4.6	5.0	92.0	88.5	41.2	41.3	99.8	99.0	42.6	42.6	100.0	100.2	11.6	11.8	98.3	96.7	103	102	101.0	98.1
Q2	3.5	3.8	92.1	67.3	42.2	42.5	99.3	101.4	42.6	42.9	99.3	100.2	12.2	12.0	101.7	101.7	100	101	99.0	95.2
S2	5.6	5.5	101.8	107.7	41.7	41.4	100.7	100.2	42.7	42.5	100.5	100.5	12.0	11.8	101.7	100.0	105	103	101.9	100.0
T2	5.4	4.9	110.2	103.8	40.9	41.0	99.8	98.3	42.0	42.3	99.3	98.8	12.1	12.3	98.4	100.8	111	112	99.1	105.7
U2	5.0	5.1	98.0	96.2	41.6	41.7	99.8	100.0	42.8	43.0	99.5	100.7	12.8	12.4	103.2	106.7	105	105	100.0	100.0
V2	6.1	6.2	98.4	117.3	42.2	42.2	100.0	101.4	42.3	42.3	100.0	99.5	12.0	12.0	100.0	100.0	105	104	101.0	100.0
W2	5.1	4.9	104.1	98.1	41.0	41.2	99.5	98.6	42.2	42.5	99.3	99.3	13.1	12.0	109.2	109.2	116	116	100.0	110.5
Y2	5.4	5.4	100.0	98.1	42.1	42.1	100.0	101.0	42.1	42.1	100.0	99.0	11.9	11.9	100.0	104.2	101	100	101.0	96.2
A3	5.8	5.8	100.0	111.5	42.0	42.0	100.0	101.0	42.1	42.1	100.0	99.0	12.4	12.1	102.5	103.3	103	104	99.0	98.1
B3	6.1	5.8	105.2	117.3	41.6	41.3	100.7	100.0	42.3	42.2	100.2	99.5	12.4	12.1	102.5	103.3	106	104	101.9	101.0

FK8G DATA
CUR. AV. 5.2
CUM. AV. 5.2
IND. 5.2
=D 100.0

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE VIII
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 42 LB FOURDRINIER KRAFT LINERBOARD
APRIL, 1977

CODE	MOISTURE CONTENT, PERCENT			BASIS WT., LB / M SQ FT			ADJ. BASIS WT.,*# LB / M SQ FT			CALIPER, PT			BURSTING STRENGTH, P S I G		
	MACHINE DATA			MACHINE DATA			MACHINE DATA			MACHINE DATA			MACHINE DATA		
	CUR. AV.	CUM. AV.	FAC. IND.	CUR. AV.	CUM. AV.	FAC. IND.	CUR. AV.	CUM. AV.	FAC. IND.	CUR. AV.	CUM. AV.	FAC. IND.	CUR. AV.	CUM. AV.	FAC. IND.
A1	5.4	5.0	108.0	103.8	43.2	43.2	100.0	103.8	44.3	44.3	99.6	104.2	15.0	13.7	109.5
B1	5.5	5.6	98.2	105.8	41.5	41.5	100.0	99.8	42.5	42.5	100.0	100.0	13.2	13.3	99.2
D1	3.9	4.3	90.7	75.0	40.8	41.2	99.0	98.1	42.5	42.8	99.3	100.0	11.8	11.7	100.8
E1	5.5	5.1	107.8	105.8	41.7	41.3	101.0	100.2	42.7	42.5	100.5	100.5	12.6	12.4	101.6
G1	3.7	3.2	115.6	71.2	40.9	40.8	100.2	98.3	42.7	42.8	99.8	100.5	11.7	11.4	102.6
I1	5.4	4.7	114.9	103.8	42.0	42.7	98.4	101.0	42.1	42.8	98.4	99.0	12.1	11.8	102.5
J1	6.2	6.3	98.4	119.2	41.4	41.4	100.0	99.5	42.1	42.1	100.0	99.0	11.9	12.4	96.0
K1	5.1	5.1	100.0	98.1	42.2	42.2	100.2	101.4	42.3	42.2	100.2	99.5	12.4	12.6	98.4
L1	5.8	5.5	105.4	111.5	41.7	41.8	99.8	100.2	42.6	42.8	99.5	100.2	12.5	12.4	100.8
M1	6.1	5.6	108.9	117.3	42.7	42.8	99.8	102.6	43.1	43.0	100.2	101.4	12.2	12.1	100.8
N1	3.9	3.9	108.0	103.8	43.2	43.2	100.0	103.8	44.3	44.3	99.6	104.2	15.0	13.7	109.5
O1	5.0	4.5	111.1	96.2	42.1	42.1	100.0	101.2	42.3	42.3	100.0	99.5	11.7	11.8	99.2
Q1	4.6	3.6	127.8	88.5	40.8	40.4	101.0	98.1	42.2	42.2	100.0	99.3	11.1	11.2	99.1
R1	4.9	5.0	98.0	94.2	41.2	41.2	100.0	99.0	42.5	42.5	100.0	100.0	12.7	12.6	100.8
S1	5.9	5.9	100.0	113.5	42.6	42.3	100.7	102.4	43.0	42.4	101.4	101.2	11.9	12.2	97.5
T1	5.1	5.1	100.0	98.1	42.2	42.4	99.5	101.4	42.3	42.5	99.5	99.5	11.3	11.5	98.3
U1	3.2	3.1	103.2	61.5	40.8	40.8	100.0	98.1	42.8	42.8	100.0	100.7	12.6	12.4	101.6
V1	6.7	6.6	101.5	128.8	42.0	42.0	100.0	101.0	42.5	42.5	100.0	100.0	11.7	11.6	100.9
W1	4.9	4.6	106.5	94.2	41.0	40.9	100.2	98.6	42.3	42.3	100.0	99.5	11.8	11.6	101.7
X1	5.8	6.0	96.7	111.5	41.8	41.4	101.0	100.5	42.7	42.2	101.2	100.7	11.7	11.6	100.9
Y1	4.7	4.9	95.9	90.4	41.3	41.4	99.8	99.3	42.7	42.7	100.0	100.5	12.6	12.1	104.1
Z1	3.9	4.0	97.5	75.0	42.0	42.1	99.8	101.0	42.2	42.3	99.8	99.3	10.4	10.9	95.4
A2	5.2	5.4	96.3	100.0	41.5	41.6	99.8	99.8	42.7	42.6	100.2	100.5	12.6	12.6	100.0
B2	4.7	4.8	97.9	90.4	41.3	41.5	99.5	99.3	42.7	42.9	99.5	100.5	12.0	11.8	101.7
C2	5.8	5.6	103.6	111.5	41.9	41.9	100.0	100.7	42.8	42.9	99.8	100.7	11.7	11.5	101.7
D2	5.7	6.2	91.9	109.6	41.7	41.8	99.8	100.2	42.7	42.5	100.5	100.5	12.2	12.3	99.2
E2	5.3	5.6	94.6	101.9	42.2	41.7	101.2	101.4	43.3	42.7	101.4	101.9	13.0	12.5	104.0
F2	2.6	3.6	72.2	50.0	40.6	41.0	99.0	97.6	42.9	42.9	100.0	100.9	11.9	12.2	97.5
G2	5.5	6.0	91.7	105.8	40.3	41.2	97.8	96.9	41.3	41.5	99.5	97.2	11.6	11.7	99.1
H2	5.6	5.5	101.8	107.7	42.0	42.0	100.0	101.0	42.1	42.1	100.0	99.0	11.8	12.4	95.2
I2	6.9	6.7	103.0	132.7	41.9	42.0	99.8	100.7	42.3	42.5	99.5	99.5	11.5	11.6	99.1
K2	5.6	5.8	96.6	107.7	41.5	41.6	99.8	99.8	42.5	42.4	100.2	100.0	11.3	11.4	99.1
L2	4.9	5.4	90.7	94.2	42.9	42.4	101.2	103.1	43.0	42.4	101.4	101.2	12.1	12.1	100.0
M2	5.9	5.9	100.0	113.5	41.6	41.5	100.2	100.0	42.5	42.4	100.2	100.0	11.9	11.4	104.4
N2	5.5	5.6	98.2	103.8	41.8	41.5	100.7	100.5	42.8	42.5	100.7	100.7	13.0	12.5	104.0
P2	4.5	4.5	100.0	86.5	41.0	41.1	99.8	98.6	42.5	42.5	100.0	100.0	12.2	12.3	99.2
Q2	5.2	4.9	106.1	100.0	41.4	41.3	100.2	99.5	42.6	42.6	100.0	100.2	11.4	11.8	96.6
R2	3.0	3.8	78.9	57.7	42.3	42.5	99.5	101.7	42.7	42.9	99.5	100.5	11.8	12.0	98.3
S2	5.7	5.5	103.6	109.6	41.7	41.4	100.7	100.2	42.7	42.4	100.7	100.5	12.1	11.8	102.5
T2	5.4	4.9	110.2	103.8	41.0	41.0	100.0	98.6	42.1	42.3	99.5	99.0	12.0	12.3	97.6
U2	5.2	5.0	104.0	100.0	41.8	41.7	100.2	100.5	43.0	43.0	100.0	101.2	12.5	12.4	100.8
V2	5.5	6.2	88.7	105.8	42.2	42.2	100.0	101.4	42.3	42.3	100.0	99.5	11.7	12.0	97.5
X2	5.1	4.9	104.1	98.1	41.1	41.2	99.8	98.8	42.3	42.5	99.5	99.5	12.1	12.0	100.8
Y2	5.4	5.4			41.2	41.2			42.3	42.3			12.0		
Z2	5.9	5.8	101.7	113.5	42.0	42.0	100.0	101.0	42.1	42.1	100.0	99.0	10.2	10.3	99.0
A3	5.9	5.9	100.0	113.5	41.7	41.4	100.7	100.2	42.6	42.2	100.9	100.2	12.4	12.1	102.5
B3															

FRBG DATA

CUR.

AV. 5.2

CUM.

AV. 5.2

IND.

40 100.0

100.2

100.2

100.2

100.2

100.2

100.2

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE IX
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 69 LB FOURDRINIER KRAFT LINERBOARD

MARCH, 1977

CODE	MOISTURE CONTENT, PERCENT				BASIS WT., LB / M SQ FT				ADJ. BASIS WT., LB / M SQ FT				CALIPER, PT				BURSTING STRENGTH, P S I G			
	MACHINE DATA		IND.		MACHINE DATA		IND.		MACHINE DATA		IND.		MACHINE DATA		IND.		MACHINE DATA		IND.	
	CUR. AV.	FACT. #8	CUM. #8	AV. #8	CUR. AV.	FACT. #8	CUM. #8	AV. #8	CUR. AV.	FACT. #8	CUM. #8	AV. #8	CUR. AV.	FACT. #8	CUM. #8	AV. #8	CUR. AV.	FACT. #8	CUM. #8	AV. #8
D1	4.1	4.8	85.4	69.5	66.9	67.9	98.5	97.5	69.6	70.1	99.3	100.0	18.3	18.4	99.4	92.9	142	141	100.7	100.0
G1	5.8	5.6	103.6	98.3	68.1	68.2	99.8	99.3	69.6	69.8	99.7	100.0	18.5	18.7	98.9	93.9	140	140	100.0	98.6
I1	5.2	4.9	106.1	88.1	69.2	69.5	99.6	100.9	69.4	69.7	99.6	99.7	18.2	18.3	99.4	92.4	143	143	100.0	100.7
J1	7.6	7.2	105.6	128.8	68.4	68.8	99.4	99.7	68.5	69.2	99.0	98.4	20.3	21.2	95.8	103.0	135	135	100.0	95.1
K1	5.6	5.5	101.8	94.9	69.2	69.2	100.0	100.9	69.4	69.4	100.0	99.7	19.8	19.9	99.5	100.5	148	141	105.0	104.2
L1	7.1	7.2	98.6	120.3	68.6	68.7	99.8	100.0	69.1	69.1	100.0	99.3	20.6	19.8	104.0	104.6	142	144	98.6	100.0
M1	6.4	6.3	101.6	108.5	69.5	69.6	99.8	101.3	70.5	69.9	100.8	101.3	20.2	20.4	99.0	102.5	143	144	99.3	100.7
Q1	4.9	4.0	122.5	83.0	67.2	66.6	100.9	98.0	69.3	69.3	100.0	99.6	18.2	19.0	95.8	92.4	140	141	99.3	98.6
S1	6.0	6.0	100.0	101.7	69.4	69.4	100.0	101.2	70.4	69.7	101.0	101.1	20.3	19.9	102.0	103.0	146	148	98.6	102.8
T1	5.7	5.8	98.3	96.6	69.3	69.2	100.1	101.0	69.5	69.4	100.1	99.8	19.6	19.9	98.5	99.5	137	137	100.0	96.5
U1	3.7	3.7			67.4				70.4				20.5				147			
X1	7.2				69.1				69.6				19.7				142			
Y1	6.0				68.6				70.0				20.8				142			
Z1	5.3	5.2	101.9	89.8	69.0	69.1	99.8	100.6	69.3	69.4	99.8	99.6	18.3	18.6	98.4	92.9	140	140	100.0	98.6
B2	5.1	5.6	91.1	86.4	68.0	68.6	99.1	99.1	70.0	70.2	99.7	100.6	20.5	20.4	100.5	104.1	140	139	100.7	98.6
C2	5.4	5.7	94.7	91.5	68.8	69.0	99.7	100.3	70.6	70.6	100.0	101.4	19.4	19.6	99.0	98.5	142	144	98.6	100.0
D2	6.2	6.4	96.9	105.1	68.4	68.6	99.7	99.7	69.6	69.6	100.0	100.0	19.4	19.5	99.5	98.5	143	143	100.0	100.7
E2	6.5	6.5	100.0	110.2	69.2	69.1	100.1	100.9	70.2	70.1	100.1	100.9	21.4	21.2	100.9	108.6	139	139	100.0	97.9
F2	3.7	4.1	90.2	62.7	67.3	67.6	99.6	98.1	70.3	70.3	100.0	101.0	19.8	20.7	95.6	100.5	142	144	98.6	100.0
G2	6.0	6.4	93.8	101.7	67.4	67.9	99.3	98.2	68.7	68.2	100.7	98.7	18.0	19.3	93.3	91.4	151	150	107.8	106.3
H2	5.7	5.6	101.8	96.6	68.9	68.9	100.0	100.4	69.1	69.1	100.0	99.3	18.2	19.6	92.8	92.4	152	146	104.1	107.0
I2	7.7	8.0	96.2	130.5	69.1	69.2	99.8	100.7	69.2	69.0	100.3	99.4	19.9	19.5	102.0	101.0	141	142	99.3	99.3
K2	6.4	6.8	94.1	108.5	68.4	68.7	99.6	99.7	69.4	69.5	99.8	99.7	18.2	18.6	97.8	92.4	147	147	100.0	103.5
L2	6.2	6.4	96.9	105.1	70.0	69.5	100.7	102.0	70.2	69.7	100.7	100.9	19.6	19.7	99.5	99.5	137	138	99.3	96.5
M2	6.6	6.0	110.0	111.9	68.5	68.5	100.0	99.8	69.4	69.9	99.3	99.7	19.2	19.6	98.0	97.5	141	144	97.9	99.3
N2	7.1	6.0	118.3	120.3	67.6	68.1	99.3	98.5	68.1	69.4	98.1	97.8	19.5	19.0	102.6	99.0	133	133	100.0	93.7
O2	6.4	6.1	104.9	108.5	68.7	68.0	101.0	100.1	69.7	69.3	100.6	100.1	21.0	21.0	100.0	106.6	133	133	100.0	93.7
P2	5.1	5.4	94.4	86.4	67.2	67.9	99.0	98.0	69.1	69.7	99.1	99.3	19.0	20.0	95.0	96.4	139	139	100.0	97.9
R2	4.7	4.4	106.8	79.7	69.5	69.1	100.6	101.3	70.1	69.7	100.6	100.7	19.8	19.4	102.1	100.5	142	144	98.6	100.0
S2	6.6	6.5	101.5	111.9	68.9	68.6	100.4	100.4	69.8	69.5	100.4	100.3	21.5	20.9	102.9	109.1	139	136	102.2	97.9
V2	6.6	6.8	97.0	111.9	68.9	69.1	99.7	100.4	69.1	69.3	99.7	99.3	19.3	19.8	97.5	98.0	153	142	107.7	107.7
X2	5.3	5.5	96.4	89.8	67.6	67.9	99.6	98.5	69.4	69.5	99.8	99.7	19.2	19.5	98.5	97.5	152	150	101.3	107.0
B3	6.9	6.8	101.5	116.9	68.4	68.8	99.4	99.7	69.1	69.5	99.4	99.3	20.5	20.6	99.5	104.1	140	139	100.7	98.6

FRSG DATA

CUR.	5.9	68.5	69.5	19.5	142
CUM.	5.9	68.6	69.6	19.7	142
IND.	*D 100.0	99.8	99.8	99.0	100.0

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE X
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 69 LB FOURDRINIER KRAFT LINERBOARD
APRIL, 1977

CODE	MOISTURE CONTENT, PERCENT			BASIS WT., LB / M SQ FT			ADJ. BASIS WT.,*A LB / M SQ FT			CALIPER, PT			BURSTING STRENGTH, P S I G							
	MACHINE DATA			MACHINE DATA			MACHINE DATA			MACHINE DATA			MACHINE DATA							
	CUR. AV.	CUM. AV.	IND. *C	CUR. AV.	CUM. AV.	IND. *C	CUR. AV.	CUM. AV.	IND. *C	CUR. AV.	CUM. AV.	IND. *C	CUR. AV.	CUM. AV.	IND. *C					
D1	4.3	4.6	93.5	72.9	67.0	67.8	98.8	97.7	69.5	70.1	99.1	99.8	18.6	18.4	101.1	94.4	146	141	103.5	102.8
G1	5.9	5.6	105.4	100.0	68.1	68.1	100.0	99.3	69.5	69.8	99.6	99.8	18.9	18.6	101.6	95.9	141	140	100.7	99.3
I1	5.3	4.9	108.2	89.8	69.0	69.5	99.3	100.6	69.2	69.7	99.3	99.4	18.0	18.2	98.9	91.4	143	143	100.0	100.7
J1	6.8	7.2	94.4	115.2	68.5	68.7	99.7	99.8	69.3	69.1	100.3	99.6	19.3	21.1	91.5	98.0	140	135	103.7	98.6
K1	5.5	5.5	100.0	93.2	69.3	69.2	100.1	101.0	69.5	69.4	100.1	99.8	19.8	19.9	99.5	100.5	141	142	99.3	99.3
L1	7.2	7.2	100.0	122.0	68.6	68.6	100.0	100.0	69.1	69.1	100.0	99.3	20.5	20.0	102.5	104.1	145	144	100.7	102.1
M1	6.7	6.3	106.3	113.6	69.9	69.6	100.4	101.9	70.5	69.9	100.8	101.3	20.1	20.4	98.5	102.0	146	143	102.1	102.8
Q1	4.8	4.0	120.0	81.4	67.1	66.6	100.8	97.8	69.3	69.3	100.0	99.6	18.8	18.9	99.5	95.4	141	140	100.7	99.3
S1	6.0	6.0	100.0	101.7	69.8	69.4	100.6	101.7	70.4	69.9	100.7	101.1	20.0	20.0	100.0	101.5	144	147	98.0	101.4
T1	6.3	5.8	108.6	106.8	69.1	69.2	99.8	100.7	69.3	69.4	99.8	99.6	19.6	19.7	99.5	99.5	140	137	102.2	98.6
U1	3.4	3.7	91.9	57.6	67.8	67.4	100.6	98.8	71.1	70.4	101.0	102.2	19.5	20.5	95.1	99.0	149	147	101.4	104.9
X1	6.6	7.2	91.7	111.9	68.7	69.1	99.4	100.1	69.6	69.6	100.0	100.0	20.3	19.7	103.0	103.0	136	142	95.8	95.8
Y1	5.6	6.0	93.3	94.9	68.3	68.6	99.6	99.6	69.9	70.0	99.8	100.4	20.4	20.8	98.1	103.6	139	142	97.9	97.9
Z1	5.2	5.2	100.0	88.1	69.0	69.0	100.0	100.6	69.3	69.4	99.8	99.6	18.1	18.5	97.8	91.9	143	140	102.1	100.7
B2	5.3	5.6	94.6	89.8	68.2	68.6	99.4	99.4	70.0	70.2	99.7	100.6	20.4	20.4	100.0	103.6	138	140	98.6	97.2
C2	5.5	5.7	96.5	93.2	68.6	69.0	99.4	100.0	70.3	70.6	99.6	101.0	20.0	19.6	102.0	101.5	141	144	97.9	99.3
D2	6.3	6.4	98.4	106.8	68.5	68.6	99.8	99.8	69.6	69.6	100.0	100.0	19.6	19.4	101.0	99.5	142	143	99.3	100.0
E2	6.7	6.5	103.1	113.6	69.6	69.1	100.7	101.4	70.4	70.1	100.4	101.1	21.9	21.3	102.8	111.2	139	138	100.7	97.9
F2	4.0	4.0	100.0	67.8	67.5	67.5	100.0	98.4	70.3	70.3	100.0	101.0	19.8	20.6	96.1	100.5	142	143	99.3	100.0
G2	6.2	6.4	96.9	105.1	66.9	67.9	98.5	97.5	68.0	68.2	99.7	97.7	19.1	19.2	99.5	97.0	146	141	103.5	102.8
H2	5.7	5.6	101.8	96.6	68.8	68.9	99.8	100.3	69.0	69.1	99.8	99.1	18.2	19.4	93.8	92.4	154	146	105.5	108.4
I2	8.1	7.9	102.5	137.3	69.0	69.2	99.7	100.6	68.8	69.1	99.6	98.8	20.0	19.5	102.6	101.5	140	142	98.6	98.6
K2	6.7	6.8	98.5	113.6	68.4	68.7	99.6	99.7	69.2	69.4	99.7	99.4	18.1	18.6	97.3	91.9	147	147	100.0	103.5
L2	6.1	6.4	95.3	103.4	69.6	69.6	100.0	101.4	69.8	69.8	100.0	100.3	19.9	19.8	100.5	101.0	137	138	99.3	96.5
M2	5.6	6.0	93.3	94.9	68.4	68.5	99.8	99.7	70.0	69.9	100.1	100.6	19.2	19.6	98.0	97.5	144	144	100.0	101.4
N2	6.8	6.2	109.7	115.2	67.7	68.0	99.6	98.7	68.4	69.2	98.8	98.3	19.9	19.0	104.7	101.0	134	133	100.8	94.4
O2	6.3	6.1	103.3	106.8	68.6	68.1	100.7	100.0	69.7	69.3	100.6	100.1	21.4	21.0	101.9	108.6	134	133	100.8	94.4
P2	5.0	5.3	94.3	84.7	67.2	67.8	99.1	98.0	69.2	69.6	99.4	99.4	19.3	19.8	97.5	98.0	139	139	100.0	97.9
R2	4.5	4.4	102.3	76.3	69.7	69.2	101.6	101.6	70.3	69.8	100.7	101.0	19.4	19.5	99.5	98.5	150	144	104.2	105.6
S2	6.8	6.5	104.6	115.2	69.2	68.6	100.9	100.9	70.0	69.5	100.7	100.6	21.5	21.0	102.4	109.1	138	137	100.7	97.2
V2	6.7	6.7	100.0	113.6	69.0	69.1	99.8	100.6	69.2	69.3	99.8	99.4	19.8	19.7	100.5	100.5	151	143	105.6	106.3
X2	5.4	5.5	98.2	91.5	67.8	67.8	100.0	98.8	69.6	69.5	100.1	100.0	19.4	19.4	100.0	98.5	158	150	105.3	111.3
B3	6.9	6.8	101.5	116.9	68.8	68.8	100.0	100.3	69.5	69.5	100.0	99.8	20.2	20.6	98.0	102.5	140	136	101.4	98.6

FKBG DATA

CUR. AV.	5.9	68.5	69.6	19.7	143
CUM. AV.	5.9	68.6	69.6	19.7	142
IND. *D	100.0	99.8	100.0	100.0	100.7

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE XI
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 90 LB FOURDRINIER KRAFT LINERBOARD

MARCH, 1977

CODE	MOISTURE CONTENT, PERCENT			BASIS WT., LB / M SQ FT			ADJ. BASIS WT.,*A LB / M SQ FT			CALIPER, PT			BURSTING STRENGTH, P S I G							
	MACHINE DATA			MACHINE DATA			MACHINE DATA			MACHINE DATA			MACHINE DATA							
	CUR. AV.	CUM. FACT. #B	IND. #C	CUR. AV.	CUM. FACT. #B	IND. #C	CUR. AV.	CUM. FACT. #B	IND. #C	CUR. AV.	CUM. FACT. #B	IND. #C	CUR. AV.	CUM. FACT. #B	IND. #C					
G1	5.9	5.9	100.0	98.3	88.8	89.2	99.6	99.1	90.7	91.1	99.6	99.9	24.5	24.5	100.0	96.1	164	166	98.8	95.9
I1	5.1	4.8	106.2	85.0	90.1	90.6	99.4	100.6	90.4	90.9	99.4	99.6	23.6	24.3	97.1	92.5	167	171	97.7	97.7
L1	7.3	7.4	98.6	121.7	89.7	89.6	100.1	100.1	90.1	90.0	100.1	99.2	26.6	25.5	104.3	104.3	178	171	104.1	104.1
M1	6.6	6.4	103.1	110.0	90.5	90.9	99.6	101.0	91.8	91.2	100.6	101.1	27.5	27.0	101.8	107.8	173	172	100.6	101.2
Q1	4.6	3.9	117.9	76.7	87.4	86.7	100.8	97.5	90.5	90.4	100.1	99.7	25.2	25.8	97.7	98.8	161	161	100.0	94.2
T1	5.9	6.2	95.2	98.3	90.4	90.3	100.1	100.9	90.7	90.6	100.1	99.9	25.0	26.3	95.0	98.0	176	166	106.0	102.9
U1	3.3			55.0	87.7			97.9	92.0			101.3	25.3			99.2	180		105.3	
Z1	5.2			86.7	90.8			101.3	91.3			100.6	23.0			90.2	168		98.2	
C2	6.2					89.9			91.5				25.7				162			
D2	6.7	6.8	98.5	111.7	90.0	90.0	100.0	100.4	91.1	91.1	100.0	100.3	25.1	25.8	97.3	98.4	170	174	97.7	99.4
F2	3.8	4.1	92.7	63.3	87.9	88.2	99.6	98.1	91.7	91.7	100.0	101.0	26.7	26.4	101.1	104.7	172	178	96.6	100.6
H2	5.8	5.6	103.6	96.7	89.9	89.6	100.3	100.3	90.2	89.9	100.3	99.3	23.8	25.5	93.3	93.3	191	171	111.7	111.7
K2	7.0	7.0	100.0	116.7	89.6	89.8	99.8	100.0	90.4	90.5	99.9	99.6	24.3	24.4	99.6	95.3	181	178	101.7	105.8
M2	7.8	7.0	111.4	130.0	90.2	90.4	99.8	100.7	90.2	91.2	98.9	99.3	25.4	25.5	99.6	99.6	166	169	98.2	97.1
N2	6.7	7.3	91.8	111.7	88.4	87.9	100.6	98.7	89.5	88.4	101.2	98.6	22.7	24.6	92.3	89.0	162	164	98.8	94.7
O2	6.1				88.0				89.6				27.2				162			
P2	5.2	5.3	98.1	86.7	88.5	88.7	99.8	98.8	91.0	91.0	100.0	100.2	25.8	25.7	100.4	101.2	167	166	100.6	97.7
X2	5.5	5.4	101.8	91.7	88.4	88.7	99.7	98.7	90.6	91.0	99.6	99.8	26.0	26.1	99.6	102.0	173	178	97.2	101.2

FK8G DATA

CUR. AV.	5.8	89.3	90.8	25.0	172
CUM. AV.	6.0	89.6	90.8	25.5	171
IND. #D	96.7	99.7	100.0	98.0	100.6

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

TABLE XII
AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 90 LB FOURDRINIER KRAFT LINERBOARD
APRIL, 1977

CODE	MOISTURE CONTENT, PERCENT			BASIS WT., LB / M SQ FT			ADJ. BASIS WT.,*A LB / M SQ FT			CALIPER, PT			BURSTING STRENGTH, P S I G		
	MACHINE DATA			MACHINE DATA			MACHINE DATA			MACHINE DATA			MACHINE DATA		
	CUR. CUM. FACT. IND. *B	CUR. CUM. FACT. IND. *C	AV. *B	CUR. CUM. FACT. IND. *B	CUR. CUM. FACT. IND. *C	AV. *B	CUR. CUM. FACT. IND. *B	CUR. CUM. FACT. IND. *C	AV. *B	CUR. CUM. FACT. IND. *B	CUR. CUM. FACT. IND. *C	AV. *B	CUR. CUM. FACT. IND. *B	CUR. CUM. FACT. IND. *C	AV. *B
G1	3.9	5.8	67.2	65.0	89.0	89.1	99.9	99.3	92.7	91.0	101.9	102.1	24.6	24.6	100.0
I1	5.4	4.8	112.5	90.0	90.1	90.5	99.6	100.6	90.4	90.8	99.6	99.6	24.6	24.1	102.1
L1	7.5	7.4	101.4	125.0	89.6	89.6	100.0	100.0	89.9	90.0	99.9	99.0	26.5	25.7	103.1
M1	6.3	6.5	96.9	105.0	90.9	90.8	100.1	101.4	91.7	91.2	100.5	101.0	26.3	27.0	97.4
Q1	4.9	4.0	122.5	81.7	87.2	86.8	100.5	97.3	89.9	90.4	99.4	99.0	25.5	25.7	99.2
U1	6.1	6.2	98.4	101.7	90.2	90.3	99.9	100.7	90.5	90.6	99.9	99.7	25.3	25.1	96.9
Z1	3.3	3.3			87.7				92.0				25.3		
Z2	5.2	5.2			90.8				91.3				23.0		
C2	6.2	6.2			89.9				91.4				25.4		
D2	6.9	6.8	101.5	115.0	90.2	90.1	100.1	100.7	91.1	91.1	100.0	100.3	25.7	25.7	100.0
F2	3.3	4.1	80.5	55.0	87.3	88.2	99.0	97.4	91.6	91.8	99.8	100.9	26.4	26.5	99.6
H2	5.6	5.6			89.6				89.9				25.2		
K2	7.0	7.0	102.8	120.0	90.3	90.4	99.9	100.8	90.9	91.2	99.7	100.1	25.1	25.5	98.4
M2	7.2	7.0	102.8	120.0	90.3	90.4	99.9	100.8	90.9	91.2	99.7	100.1	25.1	25.5	98.4
N2	6.6	7.1	93.0	110.0	87.4	88.1	99.2	97.5	88.5	88.8	99.7	97.5	25.3	24.0	105.4
O2	6.1	6.1			88.0				89.6				27.2		
P2	4.9	5.3	92.4	81.7	88.1	88.6	99.4	98.3	90.8	90.9	99.9	100.0	26.0	25.7	101.2
X2	5.4	5.4	100.0	90.0	88.4	88.7	99.7	98.7	90.7	91.0	99.7	99.9	25.3	26.1	96.9

FRBG DATA

CUR.															
AV.	5.7														
CUM.															
AV.	6.0														
IND.															
*D	95.0														

NOTE- NOTES A, B, C, AND D, ARE GIVEN IN APPENDIX.

Data submitted by the participating mills relative to conditioning and testing environments are summarized in Table XIII. The procedures used in calculating adjusted basis weight, cumulative machine averages, machine factors, machine indexes, and F.K.B.G. indexes are described in the Appendix.

It should be explained that the number of machines for which data are compiled in each table for a specified month varies for these reasons: a machine must have (a) produced at least 500 tons of the pertinent grade weight during the specified month, or (b) produced 500 tons of the pertinent grade weight during any one or more of the 12 months prior to the specified month (so that a cumulative average is available), to be included in a given table.

TABLE XIII
DATA ON CONDITIONING AND TESTING ENVIRONMENTS
MARCH AND APRIL, 1977

Code	Conditioning Environment			Testing Environment	
	Are Quality Samples Conditioned Before Testing?	Time	Temp., °F	RH, %	Are Quality Samples Tested Under Controlled Conditions of Temperature & Humidity?
A1	No	--	--	--	Yes: 72 ± 3.5°F; 50 ± 2% RH
B1	No	--	--	--	No
C1	No data submitted for March and April				No
D1	No	--	--	--	Yes: 73 ± 4°F; 50 ± 10% RH
E1	No	--	--	--	
F1	Yes	20 min	--	--	Yes: 72 ± 2°F; 50 ± 2% RH
G1	No	--	--	--	Yes: 70 ± 2°F; 50 ± 5% RH
H1	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
I1	No	--	--	--	No
J1	No	--	--	--	No
K1	No	--	--	--	Yes: 73 ± 3°F; 50 ± 2% RH
L1	No	--	--	--	No
M1	No	--	--	--	Yes: 73 ± 3°F; 50 ± 2% RH
N1	Yes	15 min	--	--	Yes: 73 ± 3.5°F; 50 ± 2% RH
O1	No	--	--	--	Yes: 73 ± 3°F; 50 ± 2% RH
P1	Yes	10 min	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
Q1	No	--	--	--	No
R1	No	--	--	--	Yes: 73 ± 3°F; 50% RH
S1	No	--	--	--	Yes: 73 ± 3°F; 50 ± 2% RH
T1	No	--	--	--	Yes: 73 ± 5°F; 50 ± 5% RH
U1	No	--	--	--	No
V1	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
W1	No	--	--	--	No
X1	No	--	--	--	No
Y1	No	--	--	--	Yes: 73 ± 3.5°F; 50 ± 2% RH
Z1	No	--	--	--	Yes: 73 ± 3°F; 50 ± 2% RH
A2	No	--	--	--	No
B2	No	--	--	--	Yes: 73 ± 3.5°F; 50 ± 2% RH
C2	No	--	--	--	No
D2	No	--	--	--	No
E2	No	--	--	--	No
F2	No	--	--	--	No
G2	Yes	15 min	--	--	Yes: 73 ± 2°F; 50 ± 1% RH
H2	No	--	--	--	No
I2	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
J2	Yes	20 min	--	--	Yes: 72 ± 2°F; 50 ± 2% RH
K2	No	--	--	--	Yes: 72 ± 2°F; 50 ± 1% RH
L2	No	--	--	--	Yes: 70 ± 2°F; 50 ± 2% RH
M2	No	--	--	--	No
N2	No	--	--	--	No
O2	Yes	10 min	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
P2	No	--	--	--	No
Q2	No	--	--	--	No
R2	Yes	--	--	--	Yes: 70 ± 2°F; 50 ± 2% RH
S2	No	--	--	--	Yes: 73 ± 4°F; 50 ± 10% RH
T2	No	--	--	--	No
U2	No	--	--	--	No
V2	No	--	--	--	No
W2	No	--	--	--	Yes: 73 ± 3.5°F; 50 ± 2% RH
X2	No	--	--	--	No
Y2	No data submitted for March and April				
Z2	No data submitted for March and April				
A3	No	--	--	--	No
B3	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH

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— Gerald R. Kloth
Research Fellow
Container Division

APPENDIX

NOTES A, B, C, AND D, USED IN TABULATIONS OF MILL DATA

Notes A, B, C, and D, used in the tables of mill data are given below; these notes define the procedure used in calculating adjusted basis weight, machine factor, machine index, and F.K.B.G. index. It should be stressed that each formula is applicable only to a specific physical property of a specific grade weight of linerboard.

Note A: Adjusted basis weight (ABW) = reported weight (RBW) adjusted to moisture content of 7.8%:

$$ABW = RBW \left[\frac{(100 - \text{reported moisture content, \%})}{(100 - 7.8)} \right]$$

Note B: Machine factor (%) = $\left[\frac{\text{Current machine average}}{\text{Cumulative machine average}} \right] \cdot 100$ where

$$\text{Cumulative machine average} = \sum \frac{\text{CMA's}^a \text{ for previous 12 months excluding CMA for current month}}{12}$$

Note C: Machine index (%) = $\left[\frac{\text{Current machine average}}{\text{Cumulative F.K.B.G. average}} \right] \cdot 100$ where

$$\text{Cumulative F.K.B.G. average} = \sum \frac{\text{CFKBGA's}^b \text{ for previous 12 months excluding CFKBGA for current month}}{12}$$

Note D: F.K.B.G. index (%) = $\left[\frac{\text{Current F.K.B.G. average}}{\text{Cumulative F.K.B.G. average}} \right] \cdot 100$ where

$$\text{Current F.K.B.G. average} = \sum \frac{\text{CMA's}^a \text{ for current month for all machines}}{\text{Number of machines}}$$

^aCMA = current machine average for a specific physical property of a specific linerboard grade weight obtained during a given month on a specific machine.

^bCFKBGA = current F.K.B.G. average for a specific physical property of a specific linerboard grade weight obtained during a given month.