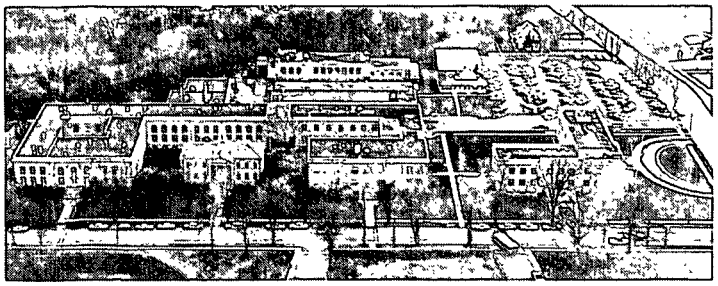
2694-2
#50

BASE-LINE



THE INSTITUTE OF PAPER CHEMISTRY, APPLETON, WISCONSIN

CONTINUOUS BASE-LINE STUDY (MODIFIED)
(MILL CORRUGATING MEDIUM DATA FOR OCTOBER, NOVEMBER, DECEMBER, 1982)

Project 2694-2

Report Fifty

A Progress Report

to

FOURDRINIER KRAFT BOARD GROUP

OF THE

AMERICAN PAPER INSTITUTE

March 1, 1983

THE INSTITUTE OF PAPER CHEMISTRY
Post Office Box 1039
Appleton, Wisconsin 54912
Phone: 414/734-9251

March 1, 1983

Project 2694-2

Dear Sir:

We are enclosing a copy of the following report to the Fourdrinier Kraft Board Group of the American Paper Institute:

Report Fifty, Project 2694-2, a progress report entitled,"Continuous Baseline Study of Mill Corrugating Medium; Data for August, September, October, 1982" dated March 1, 1983

The code identities for paper machines in your company from which data were submitted for evaluation are given on the inside of the front cover of this report.

Sincerely,

Roger H Van Eperen

Roger H. Van Eperen
Manager, Materials Testing Laboratory
Paper Materials & Systems Division

RHV/sb
Enclosure

NONPARTICIPANT IN THIS REPORT

BASE-LINE
4th QUARTER, 1982

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

CONTINUOUS BASE-LINE STUDY (MODIFIED)
(MILL CORRUGATING MEDIUM DATA FOR OCTOBER, NOVEMBER, DECEMBER, 1982)

Project 2694-2

Report Fifty

A Progress Report

to

FOURDRINIER KRAFT BOARD GROUP

OF THE

AMERICAN PAPER INSTITUTE

March 1, 1983

TABLE OF CONTENTS

SUMMARY OF 26-LB CORRUGATING MEDIUM DATA
(SEPTEMBER-DECEMBER, 1982)

Test		September		October		November		December	
		Total	Recycled	Total	Recycled	Total	Recycled	Total	Recycled
Moisture content, %	Max.[a]	9.4	7.3	9.4	7.1	9.6	7.2	9.5	7.3
	Min.[a]	3.5	3.5	3.6	3.6	3.5	3.5	3.6	3.6
	Av.[b]	6.5(27)	5.7(12)	6.4(28)	5.7(13)	6.5(28)	5.9(13)	6.6(26)	5.8(12)
Adj. basis weight, lb/M ft^2	Max.[a]	27.0	27.0	27.1	27.1	27.2	27.2	28.6	28.6
	Min.[a]	25.4	26.2	25.4	26.3	25.7	26.3	25.4	26.3
	Av.[b]	26.4(27)	26.6(12)	26.4(28)	26.6(13)	26.4(28)	26.6(13)	26.4(26)	26.8(12)
Caliper, pt.	Max.[a]	12.4	11.4	10.9	10.9	11.4	11.4	11.7	11.7
	Min.[a]	7.9	7.9	8.0	8.0	8.0	8.0	8.0	8.0
	Av.[b]	9.6(26)	9.4(11)	9.5(27)	9.4(12)	9.5(27)	9.4(12)	9.6(25)	9.5(11)
Concora, lb	Max.[a]	74.0	68.7	68.9	68.9	71.0	69.0	69.2	69.2
	Min.[a]	50.5	50.5	51.0	51.0	53.2	53.7	52.5	52.5
	Av.[b]	61.4(27)	60.3(12)	60.9(28)	59.8(13)	61.3(28)	60.1(13)	61.2(26)	60.8(12)

[a]Current machine average.
[b]Current F.K.B.G. 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 26-lb corrugating medium manufactured in the member mills of F.K.B.G. Mill data are included for moisture content, basis weight, caliper, and Concora made on the production of individual machines which produced at least 500 tons of this grade weight during a given month.

PRESENTATION OF DATA

For the 26-lb grade weight of corrugating medium referred to earlier, data on conditioning and testing environments, mill test averages for moisture content, adjusted basis weight, caliper, and Concora results are compiled in the following tables.

Table Number	Description
I-II-III	Mill Test Averages on 26-Lb Corrugating Medium
IV	Data on Conditioning and Testing Environments

The procedure used in calculating 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 26-lb corrugating medium during the specified month, or (b) produced 500 tons of 26-lb corrugating medium during <u>any one or more</u> of the 12 months prior to the specified month (so that a cumulative average is available), to be included in a given table.

TABLE I

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 26 LB. CORRUGATING MEDIUM

OCTOBER, 1982

CODE *E	MOISTURE CONTENT, PERCENT MACHINE DATA CUR. AV.	CUM. AV.	FACT. *B	IND. *C	ADJ. BASIS WT., *A LB./M SQ. FT. MACHINE DATA CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CALIPER, PT. MACHINE DATA CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CONCORA TEST LB. MACHINE DATA CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1(R)	5.5	5.4	101.8	83.3	26.5	26.4	100.4	100.4	9.2	9.4	97.9	95.8	55.0	56.0	98.2	90.0
B1	7.4	7.5	98.7	112.1	26.3	26.3	100.0	99.6	10.4	10.4	100.0	108.3	60.8	60.8	100.0	99.5
C1(R)	5.7	5.7	100.0	86.4	26.5	26.4	100.4	100.4	9.5	9.5	100.0	99.0	63.0	64.7	97.4	103.1
H1	9.4	9.2	102.2	142.4	25.4	25.3	100.4	96.2	9.6	9.5	101.0	100.0	65.6	65.0	100.9	107.4
L1(R)	7.1	7.0	101.4	107.6	26.3	26.2	100.4	99.6					60.5	63.0	96.0	99.0
N1	5.5	5.6	98.2	83.3	25.9	26.0	99.6	98.1	9.9	9.9	100.0	103.1	63.0	64.1	98.3	103.1
O1	7.6	6.6	115.2	115.2	26.3	26.3	100.0	99.6	8.8	8.8	100.0	91.7	60.4	61.2	98.7	98.8
R1		7.1				26.3				10.6				58.0		
V1	7.4	7.2	102.8	112.1	26.2	26.3	99.6	99.2	8.8	9.0	97.8	91.7	63.2	60.4	104.6	103.4
X1	7.5	7.1	105.6	113.6	26.6	26.3	101.1	100.8	10.3	10.7	96.3	107.3	58.0	58.4	99.3	94.9
Z1(R)	3.9	4.2	92.8	59.1	27.0	26.9	100.4	102.3	9.6	9.5	101.0	100.0	59.3	59.4	99.8	97.0
A2(R)	6.5	6.6	98.5	98.5	26.5	26.3	100.8	100.4	10.0	9.7	103.1	104.2	60.3	60.9	99.0	98.7
B2(R)	6.0	6.0	100.0	90.9	26.8	26.6	100.8	101.5	9.0	9.0	100.0	93.8	51.0	51.2	99.6	83.5
D2	6.5	7.4	87.8	98.5	26.6	26.2	101.5	100.8	9.1	8.9	102.2	94.8	68.0	67.4	100.9	111.3
E2	6.3	7.3	86.3	95.4	26.2	26.2	100.0	99.2	8.8	8.8	100.0	91.7	66.0	64.7	102.0	108.0
F2(R)	6.2	6.4	96.9	93.9	26.5	26.6	99.6	100.4	9.0	9.0	100.0	93.8	63.0	61.3	102.8	103.1
N2		7.0				26.2				9.2				62.0		
T2		7.4				26.1				10.5				57.2		
U2(R)	4.3	5.0	86.0	65.2	26.9	27.1	99.3	101.9	9.0	9.0	100.0	93.8	53.0	52.2	101.5	86.7
V2	5.8	5.6	103.6	87.9	26.6	26.4	100.8	100.8	9.9	10.2	97.0	103.1	61.0	62.1	98.2	99.8
W2	5.7	5.6	101.8	86.4	26.3	26.4	99.6	99.6	8.8	9.1	96.7	91.7	63.3	64.1	98.8	103.6
X2(R)	3.6	3.6	100.0	54.5	27.1	27.2	99.6	102.6	8.0	7.9	101.3	83.3	60.8	61.4	99.0	99.5
Y2	8.2	8.2	100.0	124.2	26.1	26.1	100.0	98.9	8.9	9.0	98.9	92.7	61.0	61.5	99.2	99.8
B3		6.9				26.1				8.7				68.5		
C3	8.1	8.2	98.8	122.7	26.1	26.4	98.9	98.9	10.5	10.2	102.9	109.4	61.8	63.2	97.8	101.1
I3(R)	4.9	5.2	94.2	74.2	26.7	26.8	99.6	101.1	9.1	9.8	92.8	94.8	60.6	60.0	101.0	99.2
K3	7.1	7.1	100.0	107.6	27.1	26.0	104.2	102.6	10.1	9.8	103.1	105.2	58.0	58.4	99.3	94.9
L3	6.5	6.8	95.6	98.5	26.2	26.8	97.8	99.2	9.8	10.2	96.1	102.1	62.4	64.0	97.5	102.1
P3(R)	7.1	7.0	101.4	107.6	26.4	26.2	100.8	100.0	9.1	9.6	94.8	94.8	68.9	69.2	99.6	112.8
S3	6.8	6.8	100.0	103.0	26.0	26.3	98.8	98.5	9.6	9.8	98.0	100.0	56.0	57.1	98.1	91.6
D4(R)	6.5	6.5	100.0	98.5	26.5	26.3	100.8	100.4	9.8	9.6	102.1	102.1	60.3	61.0	98.8	98.7
E4		7.4				26.5				9.2				55.6		
K4		6.2				26.8				10.0				59.1		
H4(R)	7.1	7.0	101.4	107.6	26.3	26.4	99.6	99.6	10.9	11.0	99.1	113.5	61.8	61.8	100.0	101.1

FKBG DATA

	TOTAL	RECYCLED	TOTAL	RECYCLED	TOTAL	RECYCLED	TOTAL	RECYCLED
CUR. AV	6.4	5.7	26.4	26.6	9.5	9.4	60.9	59.8
CUM. AV	6.6	5.6	26.4	26.6	9.6	9.2	61.1	60.0
IND. *D	97.0	101.8	100.0	100.0	99.0	102.2	99.7	99.7

(*)-- NOTES A, B, C, D, AND E, ARE GIVEN IN APPENDIX.

TABLE II

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 26 LB. CORRUGATING MEDIUM

NOVEMBER, 1982

CODE *E	MOISTURE CONTENT, PERCENT CUR. AV.	MACHINE DATA CUM. AV.	FACT. *B	IND. *C	ADJ. BASIS WT.,*A LB./M SQ. FT. CUR. AV.	MACHINE DATA CUM. AV.	FACT. *B	IND. *C	CALIPER, PT. CUR. AV.	MACHINE DATA CUM. AV.	FACT. *B	IND. *C	CONCORA TEST LB. CUR. AV.	MACHINE DATA CUM. AV.	FACT. *B	IND. *C
A1(R)	5.5	5.4	101.8	83.3	26.3	26.4	99.6	99.6	9.0	9.3	96.8	93.8	57.0	55.7	102.3	93.3
B1	7.3	7.5	97.3	110.6	26.2	26.3	99.6	99.2	10.3	10.4	99.0	107.3	60.7	60.7	100.0	95.3
C1(R)	6.0	5.7	105.3	90.9	26.4	26.4	100.0	100.0	9.5	9.5	100.0	99.0	63.7	64.7	98.4	104.2
H1	9.6	9.2	104.3	145.4	25.7	25.4	101.2	97.3	9.7	9.6	101.0	101.0	64.4	65.2	98.8	105.4
L1(R)	7.1	7.0	101.4	107.6	26.4	26.2	100.8	100.0					60.5	62.8	96.3	99.0
N1	5.6	5.6	100.0	84.8	25.9	26.0	99.6	98.1	10.0	9.9	101.0	104.2	62.0	64.1	96.7	101.5
O1	7.5	6.7	111.9	113.9	26.3	26.3	100.0	99.6	8.7	8.8	98.9	90.6	61.4	61.0	100.6	100.5
R1		7.2				26.3				10.6				58.0		
V1	7.4	7.2	102.8	112.1	27.2	26.3	103.4	103.0	8.9	9.0	98.9	92.7	63.5	60.7	104.6	103.9
X1	7.3	7.1	102.8	110.6	26.2	26.3	99.6	99.2	10.3	10.6	97.2	107.3	58.0	58.7	98.8	94.9
Z1(R)	5.2	4.2	123.8	78.8	26.6	26.9	98.9	100.8	9.3	9.6	96.9	96.9	58.3	59.4	98.1	95.4
A2(R)	6.5	6.6	98.5	98.5	26.5	26.3	100.8	100.4	10.1	9.8	103.1	105.2	59.9	60.8	98.5	98.0
B2(R)	6.0	6.0	100.0	90.9	26.7	26.6	100.4	101.1	9.0	9.0	100.0	93.8	53.2	51.2	103.9	87.1
D2	6.6	7.3	90.4	100.0	26.6	26.2	101.5	100.8	9.4	8.9	105.6	97.9	71.0	67.6	105.0	116.2
E2		7.2				26.2				8.8				64.8		
F2(R)	6.3	6.4	98.4	95.4	26.5	26.6	99.6	100.4	9.0	9.0	100.0	93.8	62.0	61.5	100.8	101.5
N2		7.0				26.2				9.2				62.0		
T2		7.4				26.1				10.5				57.1		
U2(R)	4.4	4.9	89.8	66.7	27.2	27.0	100.7	103.0	9.0	9.0	100.0	93.8	53.7	52.0	103.3	87.9
V2	6.2	5.6	110.7	93.9	26.3	26.4	99.6	99.6	9.9	10.2	97.0	103.1	61.0	61.9	98.5	99.8
W2	5.7	5.6	101.8	86.4	26.2	26.3	99.6	99.2	8.9	9.1	97.8	92.7	62.5	63.9	97.8	102.3
X2(R)	3.5	3.6	97.2	53.0	27.1	27.1	100.0	102.6	8.0	7.9	101.3	83.3	61.0	61.4	99.3	99.8
Y2	8.2	8.2	100.0	124.2	26.1	26.1	100.0	98.9	9.2	9.1	101.1	95.8	61.0	61.4	99.3	99.8
B3	7.4	6.9	107.2	112.1	26.1	26.1	100.0	98.9	9.2	8.7	105.7	95.8	67.0	69.1	97.0	109.6
C3	7.7	8.2	93.9	116.7	26.2	26.3	99.6	99.2	10.5	10.3	101.9	109.4	61.9	63.1	98.1	101.3
I3(R)	5.3	5.2	101.9	80.3	26.8	26.8	100.0	101.5	10.1	9.7	104.1	105.2	59.0	60.1	98.2	96.6
K3	7.2	7.1	101.4	109.1	26.2	26.1	100.4	99.2	10.0	9.9	101.0	104.2	58.0	58.4	99.3	94.9
L3	6.4	6.8	94.1	97.0	26.3	26.7	98.5	99.6	9.9	10.2	97.0	103.1	66.0	63.8	103.4	108.0
P3(R)	7.0	7.0	100.0	106.1	26.4	26.2	100.8	100.0	9.1	9.5	95.8	94.8	69.0	69.1	99.8	112.9
S3	6.7	6.9	97.1	101.5	26.1	26.2	99.6	98.9	9.7	9.8	99.0	101.0	57.0	57.0	100.0	93.3
D4(R)	6.5	6.5	100.0	98.5	26.4	26.4	100.0	100.0	9.7	9.6	101.0	101.0	60.7	60.8	99.8	99.3
E4		7.4				26.5				9.3				55.6		
K4		6.2				26.8				10.2				59.0		
M4(R)	7.2	7.0	102.8	109.1	26.3	26.4	99.6	99.6	11.4	11.0	103.6	118.8	62.8	61.9	101.4	102.8

FKBG DATA

	TOTAL	RECYCLED	TOTAL	RECYCLED	TOTAL	RECYCLED	TOTAL	RECYCLED
CUR. AV	6.5	5.9	26.4	26.6	9.5	9.4	61.3	60.1
CUM. AV	6.6	5.6	26.4	26.6	9.6	9.2	61.1	59.9
IND. *D	98.5	105.4	100.0	100.0	99.0	102.2	100.3	100.3

(*)-- NOTES A, B, C, D, AND E, ARE GIVEN IN APPENDIX.

TABLE III

AVERAGES OF ROUTINE MILL QUALITY CONTROL DATA FOR 26 LB. CORRUGATING MEDIUM

DECEMBER, 1982

CODE *E	MOISTURE CONTENT, PERCENT				ADJ. BASIS WT.,*A LB./M SQ. FT.				CALIPER, FT.				CONCORA TEST LB.			
	MACHINE DATA				MACHINE DATA				MACHINE DATA				MACHINE DATA			
	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C	CUR. AV.	CUM. AV.	FACT. *B	IND. *C
A1		5.4				26.3				9.2				55.7		
B1	7.3	7.5	97.3	112.3	26.2	26.3	99.6	99.2	10.3	10.4	99.0	107.3	60.7	60.7	100.0	99.3
C1(R)	5.8	5.7	101.8	89.2	26.5	26.4	100.4	100.4	9.5	9.5	100.0	99.0	63.5	64.8	98.0	103.9
H1	9.5	9.2	103.3	146.2	25.4	25.4	100.0	96.2	9.8	9.6	102.1	102.1	64.0	65.2	98.2	104.7
L1(R)	7.3	7.1	102.8	112.3	26.3	26.2	100.4	99.6					62.0	62.5	99.2	101.5
N1	5.7	5.6	101.8	87.7	26.0	26.0	100.0	98.9	9.7	9.9	98.0	101.0	62.0	63.9	97.0	101.5
O1	7.5	6.8	110.3	115.4	26.3	26.3	100.0	99.6	8.7	8.8	98.9	90.6	62.3	61.0	102.1	102.0
R1		7.2				26.3				10.6				58.0		
V1	7.3	7.2	101.4	112.3	26.5	26.4	100.4	100.4	8.8	8.9	98.9	91.7	60.5	61.0	99.2	99.0
X1	7.6	7.2	105.6	116.9	26.2	26.3	99.6	99.2	10.3	10.6	97.2	107.3	56.0	58.5	95.7	91.6
Z1(R)	4.3	4.3	100.0	66.2	26.9	26.9	100.0	101.9	9.6	9.5	101.0	100.0	60.4	59.2	102.0	98.8
A2(R)	6.5	6.5	100.0	100.0	26.5	26.3	100.8	100.4	10.1	9.9	102.0	105.2	60.8	60.7	100.2	99.5
B2(R)	6.0	6.0	100.0	92.3	28.6	26.6	107.5	108.3	9.0	9.0	100.0	93.8	52.5	51.2	102.5	85.9
D2	6.9	7.2	95.8	106.2	26.4	26.3	100.4	100.0	9.3	9.0	103.3	96.9	68.0	67.9	100.1	111.3
E2		7.2				26.2				8.9				65.2		
F2(R)	6.3	6.3	100.0	96.9	26.5	26.6	99.6	100.4	9.1	9.0	101.1	94.8	62.0	61.6	100.6	101.5
N2		7.0				26.2				9.2				62.0		
T2		7.5				26.1				10.5				57.1		
U2(R)	4.5	4.7	95.7	69.2	27.0	27.1	99.6	102.3	9.0	9.0	100.0	93.8	55.8	51.9	107.5	91.3
V2	6.1	5.6	108.9	93.8	26.4	26.4	100.0	100.0	10.0	10.2	98.0	104.2	61.0	61.8	98.7	99.8
W2	5.5	5.6	98.2	84.6	26.6	26.3	101.1	100.8	8.6	9.0	95.6	89.6	63.3	63.6	99.5	103.6
X2(R)	3.6	3.6	100.0	55.4	27.1	27.2	99.6	102.6	8.0	7.9	101.3	83.3	60.0	61.4	97.7	98.2
Y2	8.2	8.2	100.0	126.2	26.1	26.1	100.0	98.9	9.1	9.1	100.0	94.8	60.0	61.2	98.0	98.2
B3		7.0				26.1				8.8				68.9		
C3	8.6	8.2	104.9	132.3	25.8	26.3	98.1	97.7	10.1	10.3	98.0	105.2	63.3	63.0	100.5	103.6
I3(R)	5.4	5.2	103.8	83.1	26.8	26.8	100.0	101.5	9.8	9.7	101.0	102.1	60.1	59.9	100.3	98.4
K3	7.3	7.1	102.8	112.3	26.1	26.1	100.0	98.9	10.1	9.9	102.0	105.2	57.0	58.3	97.8	93.3
L3	6.4	6.8	94.1	98.5	26.2	26.7	98.1	99.2	9.3	10.1	92.1	96.9	66.0	64.0	103.1	108.0
P3(R)	6.9	7.0	98.6	106.2	26.3	26.2	100.4	99.6	9.2	9.4	97.9	95.8	69.2	69.1	100.1	113.2
S3	6.5	6.8	95.6	100.0	26.4	26.2	100.8	100.0	10.2	9.8	104.1	106.2	57.0	57.0	100.0	93.3
D4(R)	6.5	6.5	100.0	100.0	26.5	26.4	100.4	100.4	9.7	9.6	101.0	101.0	60.9	60.6	100.5	99.7
E4		7.4				26.5								55.8		
K4		6.2				26.9				10.4				58.1		
M4(R)	7.2	7.0	102.8	110.8	26.3	26.4	99.6	99.6	11.7	11.0	106.4	121.9	61.8	62.0	99.7	101.1

FKBG DATA

	TOTAL	RECYCLED	TOTAL	RECYCLED	TOTAL	RECYCLED	TOTAL	RECYCLED
CUR. AV	6.6	5.8	26.4	26.8	9.6	9.5	61.2	60.8
CUM. AV	6.5	5.6	26.4	26.6	9.6	9.3	61.1	59.9
IND. *D	101.5	103.6	100.0	100.8	100.0	102.2	100.2	101.5

(*)-- NOTES A, B, C, D, AND E, ARE GIVEN IN APPENDIX.

TABLE IV

DATA ON CONDITIONING AND TESTING ENVIRONMENTS

OCTOBER, NOVEMBER, DECEMBER, 1982

Code	Conditioning Environment: Are Quality Samples Conditioned Before Testing?	Procedure: Time	Procedure: Temp., °F	Procedure: RH, %	Testing Environment: Are Quality Samples Tested Under Controlled Conditions of Temperature & Humidity?
A1	Yes	20 min	--	--	Yes: 72 ± 3.5°F; 50 ± 2% RH
B1	No	--	--	--	Yes: 70 ± 2°F; 50 ± 2% RH
C1	No	--	--	--	Yes: 72 ± 2°F; 50 ± 3% RH
H1	No	--	--	--	No
L1	No	--	--	--	Yes: 72 ± 2°F; 50 ± 5% RH
N1	No	--	--	--	No
O1	Yes	20 min	--	--	Yes: 72 ± 2°F; 50 ± 2% RH
R1	No data submitted for this quarter				
V1	No	--	--	--	No
X1	No	--	--	--	No
Z1	No	--	--	--	No
A2	No	--	--	--	Yes: 72 ± 4°F; 50 ± 5% RH
B2	No	--	--	--	Yes: 73 ± 3°F; 50 ± 2% RH
D2	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
E2	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
F2	No	--	--	--	No
N2	No data submitted for this quarter				
T2	No data submitted for this quarter				
U2	No	--	--	--	Yes: 73 ± 3°F; 50 ± 2% RH
V2	No	--	--	--	Yes: 73 ± 1°F; 50 ± 2% RH
W2	No	--	--	--	No
X2	No	--	--	--	Yes: 73 ± 2°F; 50 ± 5% RH
Y2	No	--	--	--	Yes: 70 ± 2°F; 50 ± 10% RH
B3	No	--	--	--	Yes: 73 ± 2°F; 50 ± 2% RH
C3	No	--	--	--	Yes: 72 ± 3°F; 50 ± 2% RH
I3	No	--	--	--	No
K3	No	--	--	--	No
L3	No	--	--	--	Yes
P3	No	--	--	--	Yes: 72 ± 1°F; 50 ± 1% RH
S3	No	--	--	--	No
D4	No	--	--	--	Yes: 72 ± 4°F; 50 ± 5% RH
E4	No data submitted for this quarter				
K4	No data submitted for this quarter				
M4	No	--	--	--	Yes: 70 ± 2°F; 50 ± 2% RH

THE INSTITUTE OF PAPER CHEMISTRY

Roger H. Van Eperen

Roger H. Van Eperen
Research Fellow
Paper Materials & Systems Division

Approved by

Clyde H. Sprague

Clyde H. Sprague
Director
Paper Materials & Systems Division

APPENDIX

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

Notes A, B, C, D, and E, 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 corrugating medium.

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

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

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

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

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

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

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

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

Note E: (R) - Indicates a medium manufactured from recylced fibers.

---

[a]CMA = current machine average for a specific physical property of 26-lb corrugating medium obtained during a given month on a specific machine.

[b]CFKBGA = current F.K.B.G. average for a specific physical property of 26-lb corrugating medium obtained during a given month.