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INTER-OFFICE CORRESPONDENCE

Richmond, Virginia

To: R. Cox

Date: September 25, 1992

From: B. Hoskin

Subject: Increased Mentholated Tobacco Dust in RCB - Final Results

Objective:

1. Evaluate increased mentholated dust in RCB.
2. Isolate the process points where the largest menthol loss occurs.

Introduction: The inventory for Class 6 and 6X mentholated dust is high. The need exists to increase the current 15% mentholated dust level to 20% to lower inventory. A trial was set up to evaluate 15% mentholated dust and 20% mentholated dust levels incorporated into the production blend.

Materials and Methods

Three RCB trials were produced at the BL Plant. The blend of production dust for these was as follows:

1. Control:	Class 3	53.2%
	CTDL	6.0%
	Class 5	18.7%
	Class 4M	1.5%
	Class 6	21.0%
2. Test 2 (15% Class 6):		
	Class 3	53.2%
	CTDL	6.0%
	Class 5	18.7%
	Class 4M	1.5%
	*Class 6	21.0%

(provided by W. Thomas)

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3. Test 3 (20% Class 6):

Class 3	53.2%
Class 5	18.7%
Class 4M	1.5%
*Class 6	27.0%

(provided by W. Thomas)

* Virginia Slims Menthol ripper shorts (test typical Class 6 scenario)

Samples of dust were collected at several sites to determine where the menthol was lost. The following list of samples were collected for each trial and submitted for menthol content:

1. PM 80 boxes - top
2. PM 80 boxes - bottom
3. Mentholated winnowers
4. Production dust blend - before dryer
5. Production dust blend - after dryer
6. Slurry after refiners
7. Sheet

Results and Discussion

Menthol analyses showed that the 20% Test did have more menthol in the blend. The menthol content for the Control and Test 2 were the closest to the theoretical, and dropped considerably before the production dust dryer, whereas Test 3 did not. By the time the production dusts were dried, all three were quite close in menthol content. (Table 1 and Graph 1).

These products were subjectively evaluated in 100% handmade and 24% machine-made cigarettes. No differences were detected between the Control and Test 2. However, differences were found between the Control and Test 3. Apparently, the final menthol content is not the only factor affecting the subjectives of this sheet.

Conclusion

Due to the subjective differences, we do not recommend increasing the mentholated tobacco dust level to 20% in RCB.

Most of the menthol % range is lost during the drying of the production dust.

B.L.B. Hoskin

BLBH:lgk

Attachment

cc: L. Jennings
M. Rankin
J. Swain
W. Thomas
V. Willis

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TABLE 1

% MENTHOL

Samples/Trial	Control	Test 2	Test 3
Winnower/N=2	0.000	0.020	0.020
Rippers Top N=6	0.290	0.350	0.290
Rippers Bottom N=6	0.360	0.410	0.370
Production Dust Before Dryer/N=4	0.040	0.080	0.310*
Production Dust After Dryer/N=4	0.030	0.030	0.060
Slurry/N=4	0.005	0.003	0.005
Sheet/N=2	0.014^	0.009^	0.013^

* Number is theoretically questionable compared to the other two trials.

^ Three grab samples of sheet were combined for one composite sample and analyzed in duplicate.

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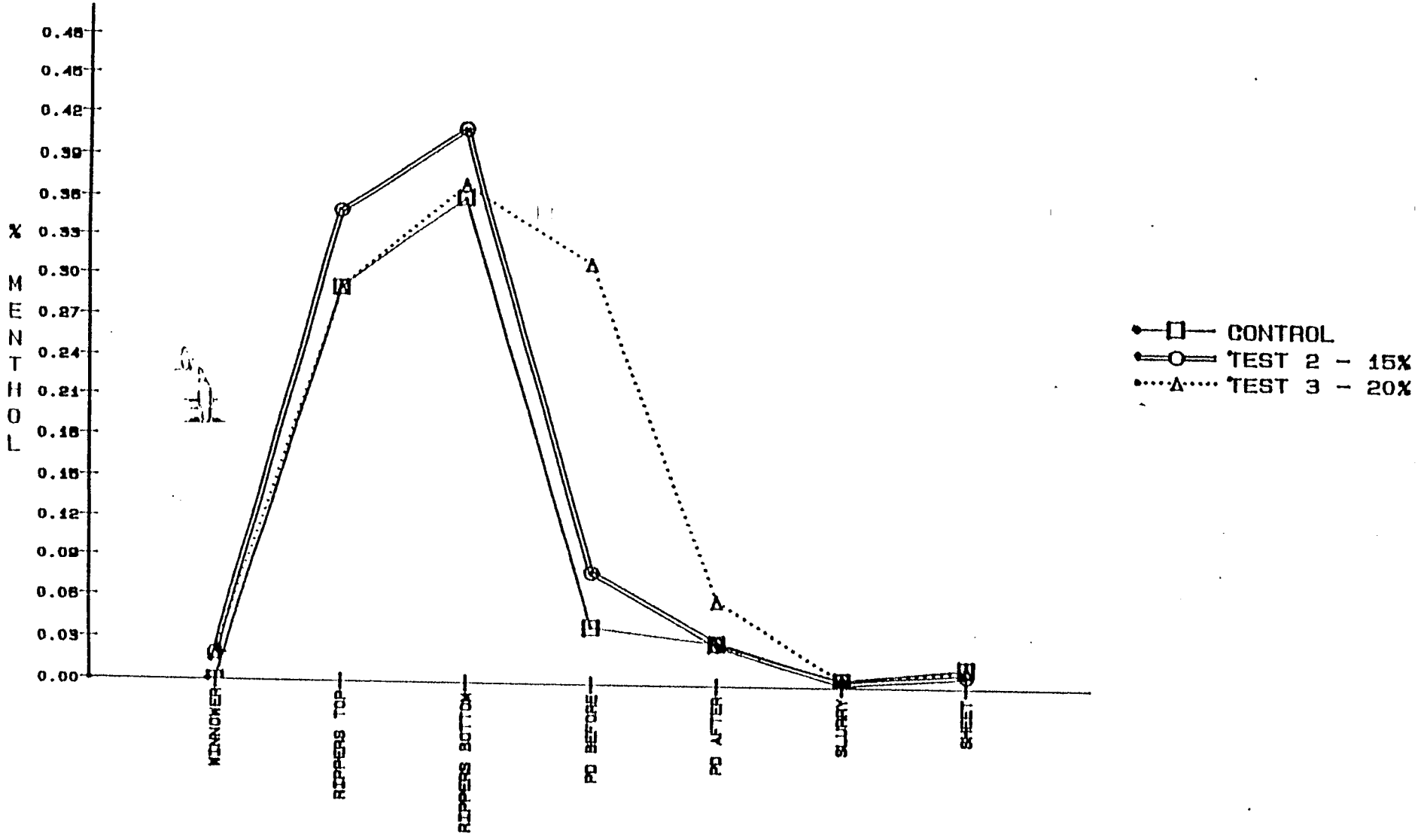
MENTHOL DUST THROUGH THE RCB PROCESS



Attachment II

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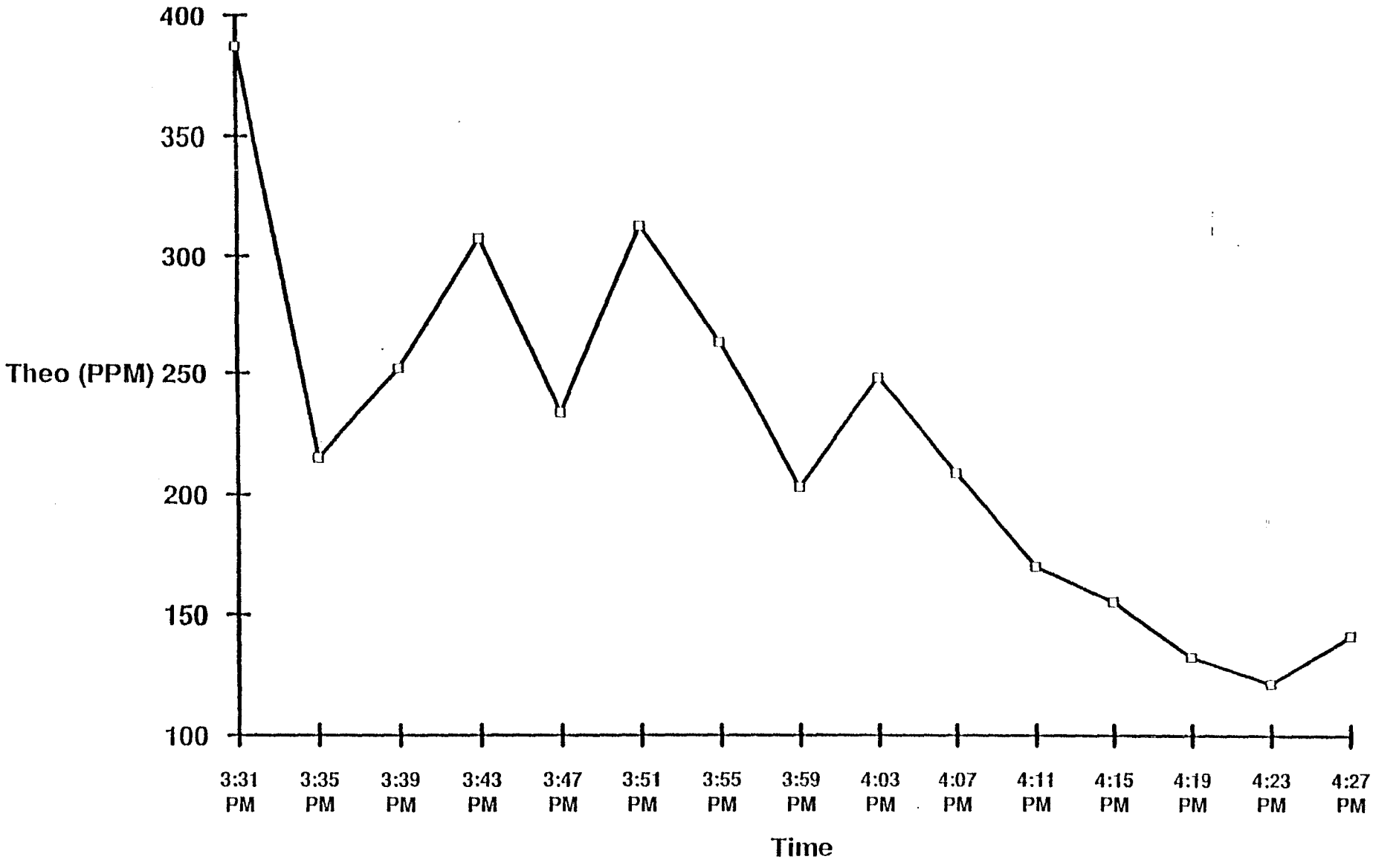
BL Plant - During Mixing (Dust at 95% < 60 Mesh)



BL P n f el i g (Dust at 95% < 60 Ms

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Attachment III

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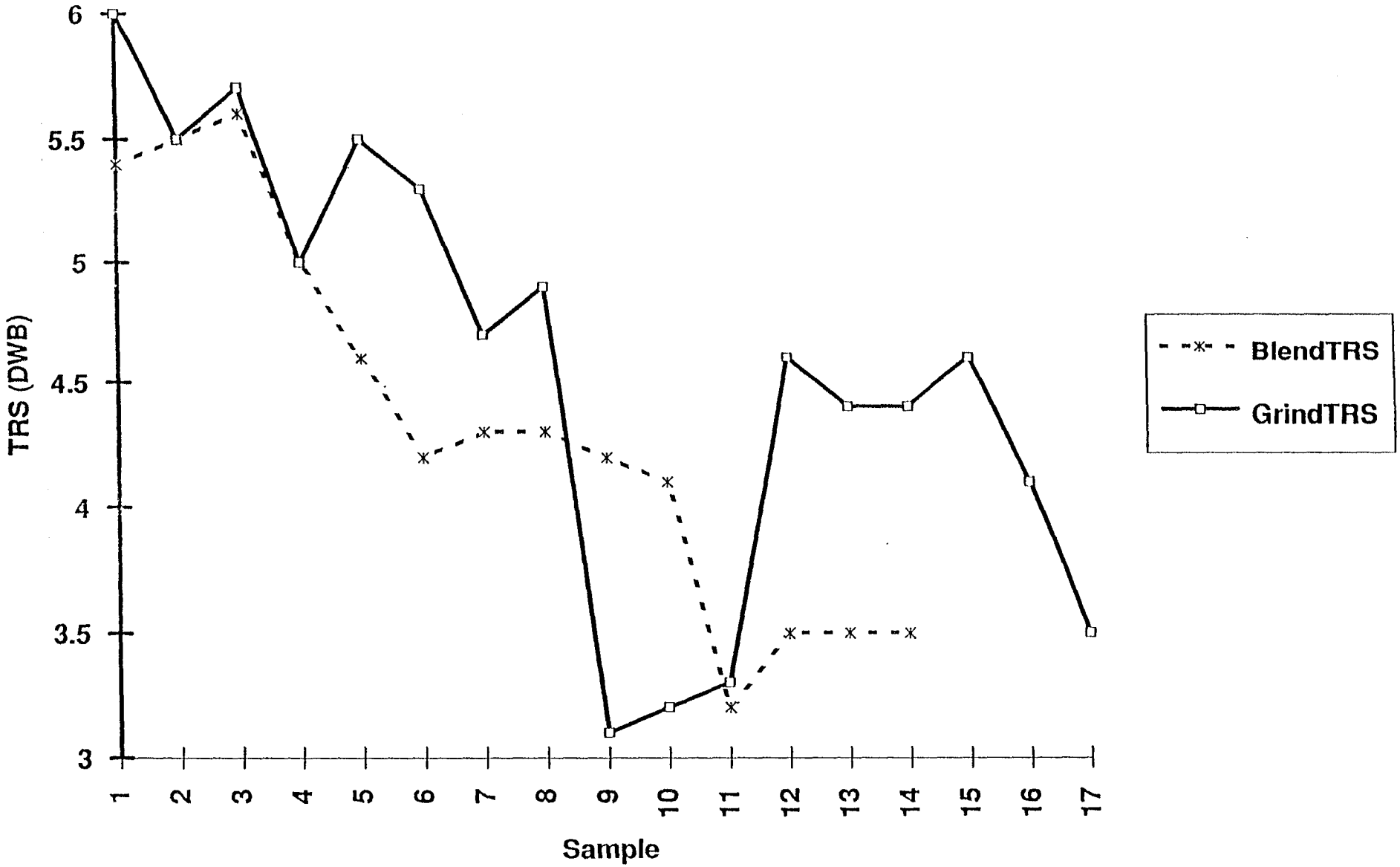
Venezuelan Vertimix Mixing Test



Attachment III.a

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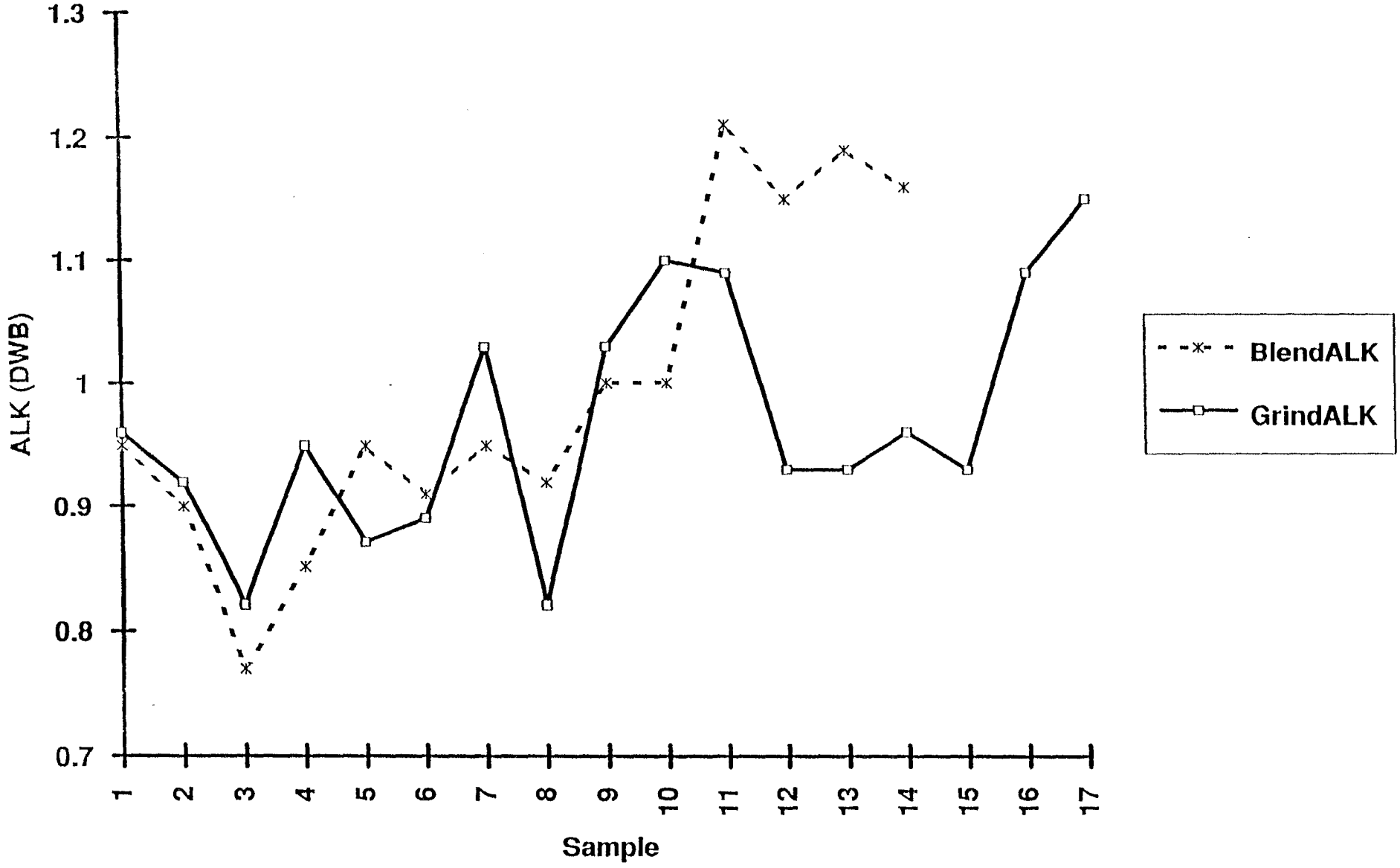
Venezuelan Vertimix Mixing Test



Attachment 11b

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Venezuelan Vertimix Mixing Test