

**RJR**  
**SECRET**

ADDRESSEE ONLY

No. 471 By scs

March 1, 1988

TO: Product Acceptance Committee  
FROM: F. M. Lockamy  
RE: Confidence Intervals About Quality Audit Data

T. L. Hickman has developed confidence intervals around the Quality Audit data collected for the January CPT for SP-1. This reasonably approximates the degree of accuracy of estimating the product performance on a weekly basis when we begin production and QA begins routine monitoring. These confidence intervals represent a 95% confidence that we know the product mean within the bounds shown.

Loaded Substrate

% Nicotine	± 0.01%
Total Sugar	± 0.13%
Moisture	± 0.17%
PH	± 0.03
B-3	± 1.46%

Filled Capsules

Weight	± 0.001 gm
PD	± 0.30 mm H <sub>2</sub> O

Poly Filters

Weight	± 0.006 gm
Size	± 0.01 mm
PD	± 3.0 mm H <sub>2</sub> O

GF Rods

Weight	± 0.003 gm
Size	± 0.02 mm

51491 9407

Tobacco Plugs

Weight	± 0.006 gm
Size	± 0.02 mm
PD	± 1.7 mm H <sub>2</sub> O

M.E.P.'s

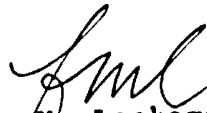
Weight	± 0.001 gm
Size	± 0.01 mm

Finished Products

Weight	± 0.001 gm
Size	± 0.01 mm
PD	± 0.6 mm H <sub>2</sub> O
Bypass	± 1.7 %
WTPM	± 0.5 mg
Glyc	± 0.5 mg
Nic	± 0.015 ug
CO	± 0.2 mg

This data should be used in determining the level of certainty desired that product entering the distribution system is meeting the specifications. If the PAC feels that our confidence needs boosted beyond what is shown, this can be done.

Please let me know if you have any questions.

  
F. M. Lockamy

FML:scs

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