FILE NAME: Colgate (COL)

DATE: 1974

DOC#: COL007

DOCUMENT DESCRIPTION: Internal Report RE Analysis of Talc Samples

Review

$750.

IMS
RZM
DAB
JSM
NJD
FE

5 February 1974

Mr. J. P. Simko, Jr.
Colgate-Palmolive Company
R and D Department
909 River Road
Piscataway, NJ 08854

Dear Mr. Simko:

We have finished our analysis of your samples designated 516, Cashmere Bouquet, and N. C. Regal.

In none of the samples did we detect tremolite; however, chrysotile was detected in all of them. We, of course, cannot give a definite value for the amount present but we have made rough estimates, accurate within an order of magnitude, so that you might make a comparison. Sample 516 contains ~ 0.001 to 0.01% chrysotile, Cashmere Bouquet < 0.0005%, and N. C. Regal ~ 0.0001 to 0.001%. In general the samples show a high level of materials other than talc. Representative photomicrographs are included with this report.

Thank you for consulting McCrone Associates. If you have any questions please do not hesitate to call.

Yours sincerely,

Richard Shimps
Research Technician

Enclosures
RS:smg
Ref. 3805

Collected Palmdale

Sample 516 .01 to .001%

actual estimate .005% Chrysotile

Cashmere Bouquet – 010 amphiboles

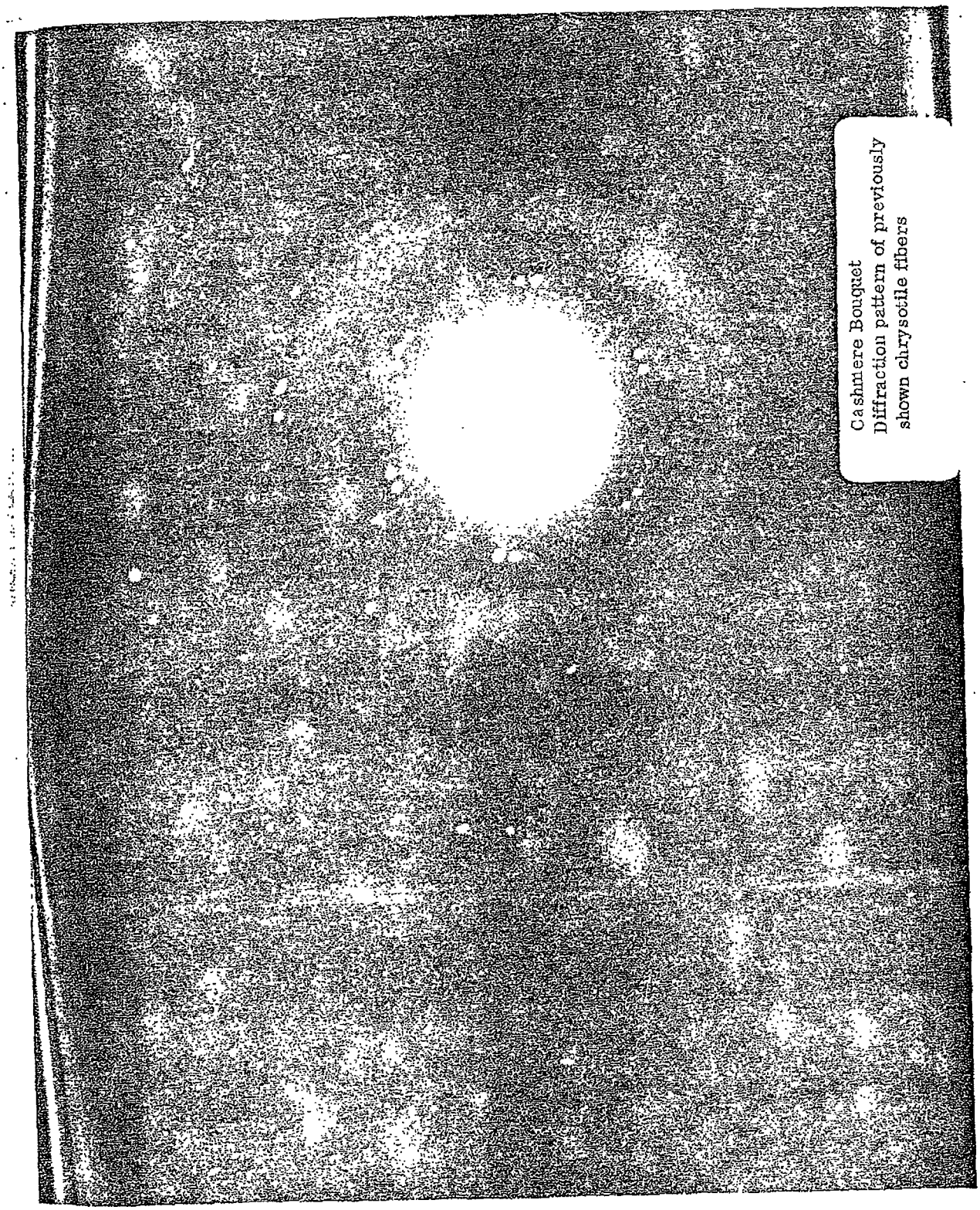
N.C. Royal <.001% Chrysotile

probably .0005%

All samples show high level of

materials other than talc.

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Cashmere Bouquet
Diffraction pattern of previously shown chrysotile fibers

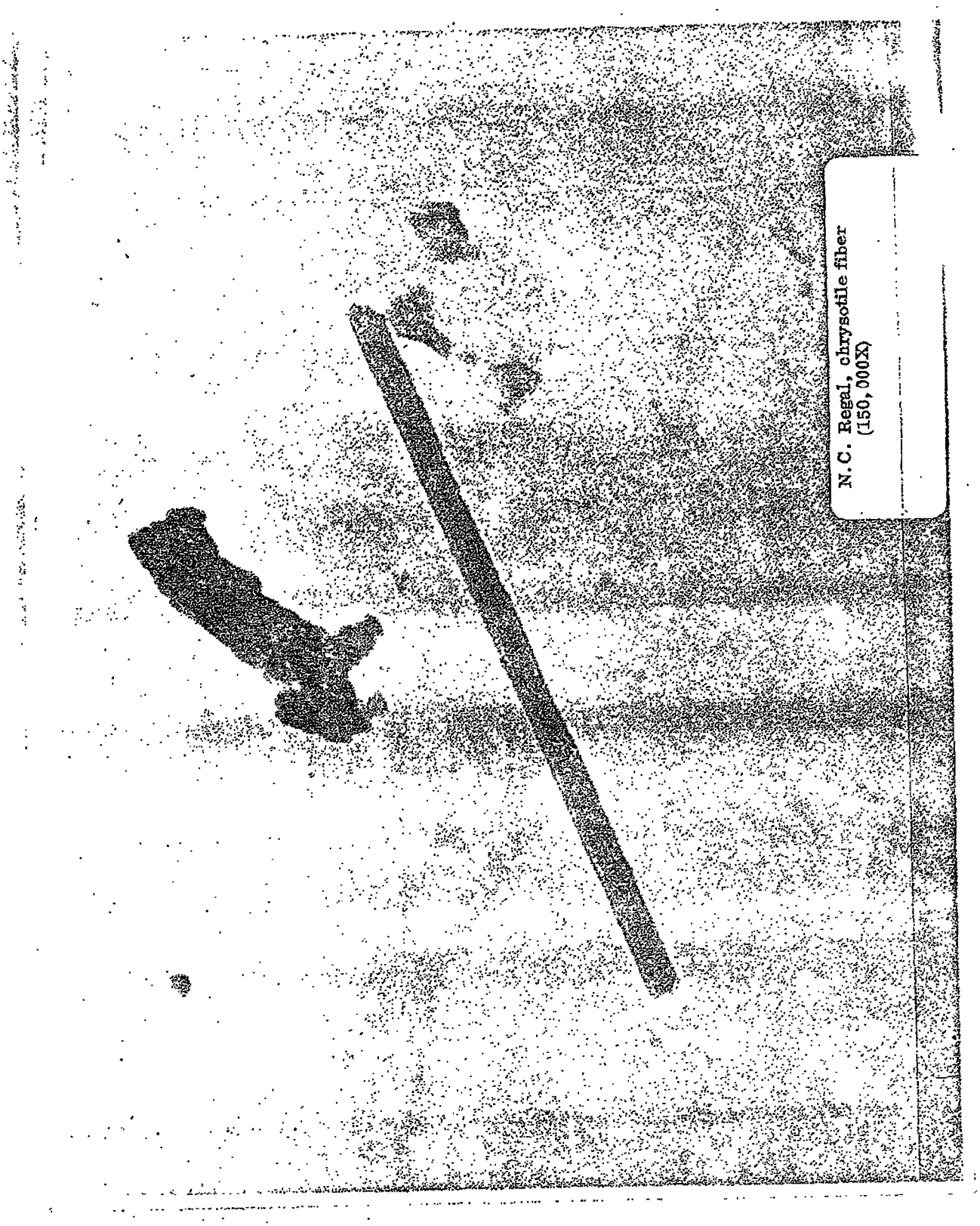
Walter C. McCrone Associates, Inc.

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Cashmere Bouquet
Chrysotile fibers (51,000X)

Walter C. McCrone Associates, Inc.



Walter C. McCrone Associates, Inc.



N.C. Regal, general view (51,000X)

10 December 1974

Dr. J. F. Simko, Jr.
Colgate-Palmolive Company
909 River Road
Piscataway, New Jersey 08854

Dear Dr. Simko:

Using the electron microscope we have analyzed three samples of talc identified as Samples A, F and S.

Sample A contained two fibers of amphibole which we believe to be tremolite. Also in sample A there were indications of talc ribbons and talc shards. By talc ribbons we mean thin plates of talc which have a greater than three to one axial ratio and therefore appear, just as ribbons appear, to be long thin flat plates of talc which are much greater in one dimension than in the second dimension. There was also some indication of an organic film present.

In sample F, we found large plates of talc. In general sample F showed larger plates of talc than did sample A. There was also an extremely heavy organic film but no evidence of talc ribbons or talc fibers. These organic contaminants are soluble in isopropanol and bubble up when struck by the electron beam. It was extremely difficult to analyze this talc because of the high concentration of organic material on the surface of the grid.

Sample S showed some talc shards, which may be described as thin bundles of talc ribbons, which are extremely small. These ribbons are frequently rolled and therefore might be confused for chrysotile bundles but they obviously are not, since they show bends and contours which, ordinarily, chrysotile does not show. There were also some talc ribbons and other silicates present which were long and fibrous, and frequently broken or bent at sharp angles.

In conclusion, then, the only asbestiform minerals that we found were in sample A and were two amphibole fibers. This is a rather low number when you consider the area we looked at. However, it may be indicative of trace amounts of amphiboles

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