

FILE NAME: Colgate (COL)

DATE: 1974 Jan 30

DOC#: COL018

DOCUMENT DESCRIPTION: Project Cost Record - Talc Analysis & Cover Letter

COLGATE-PALMOLIVE COMPANY

A Delaware Corporation

RESEARCH AND DEVELOPMENT DEPARTMENT

909 River Road • Piscataway, New Jersey 08854

January 28, 1974

Dr. Ian Stewart
McCrone Associates
2820 South Michigan Avenue
Chicago, Illinois 60616

Dear Dr. Stewart:

Enclosed are three samples of talc which we want analyzed for chrysotile and tremolite. I have discussed these with you by telephone and I want transmission electron microscopy and electron diffraction analysis done.

Charges for this work should carry our purchase order No. 614953.

If I can be of any assistance please contact me: (201) 463-1212 ext. 379.

Sincerely,

J. P. Simko, Jr.

J. P. Simko, Jr.
Research Associate

JPS:jk

P. S. Dr. Schneiber of our company has not received promised literature.

MA 3805/1ms

PROJECT COST RECORD

PROJECT TITLE: Talc analysis PROJECT NO.: MA 3805
 SPONSOR: COLGATE-PALMOLIVE COMPANY DATE RECEIVED: 1 30 74
 ADDRESS: R&D Department P.O. NO.: 614953
909 River Road COMMITMENTS: \$ 2-300/sam
Piscataway, New Jersey 08854
 Contact: J. P. Simko, Jr. Telephone No. (201) 463 1212 X 379

SUMMARY OF PROBLEM:

Lab Notebook References:

No. pp. Initials
 No. pp. Initials
 No. pp. Initials
 Photomicrographic record no.

Sample disposal:
 returned
 filed (where)
 discarded

DIRECT COSTS

Individual time (Exclusive of oper. time on inst. below)				Travel				Charge Summary	
Date	Name	Hours	Charge	Date	Traveler	Destination	Cost		
								Individuals	\$
								Instrument	
								Travel	
								Outside	
								Other	
Instrument time				Outside Services				Total Charge	
	Date	Hours	Charge		Date	Company	Cost	\$	
SEM				Photo					OK for billing
TEM				Photo					Project Ldr <u> </u>
XRD				Materials					Group Ldr <u> </u>
EMP				Supplies					
IMP									
ESCA									

PROJECT LEADER IMS TOTAL CHARGE \$ 750
 ROUGH DRAFT BILLED TO CLIENT \$ 750
 REPORT RECEIVED INVOICE NO. (S) 7468

Colgate - Palmoline

Sample 516 .01 to .001%

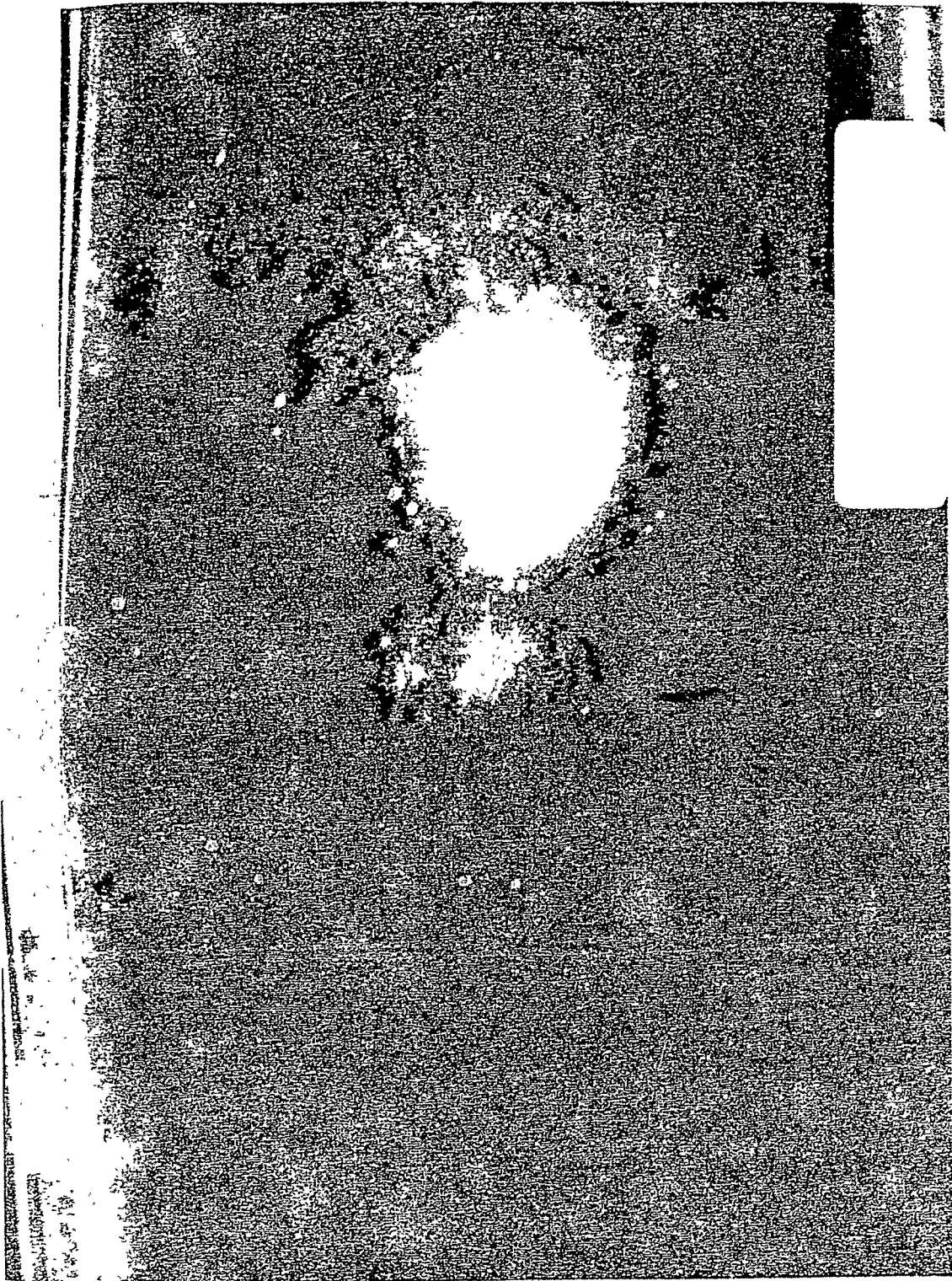
actual estimate .005% Chrysotile

Cashmere Bouquet - no amphiboles

N.C. Royal 4.001% Chrysotile

probably .0005%

All samples show ~~high~~ high levels of
materials other than talc.



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McCrone2-00370

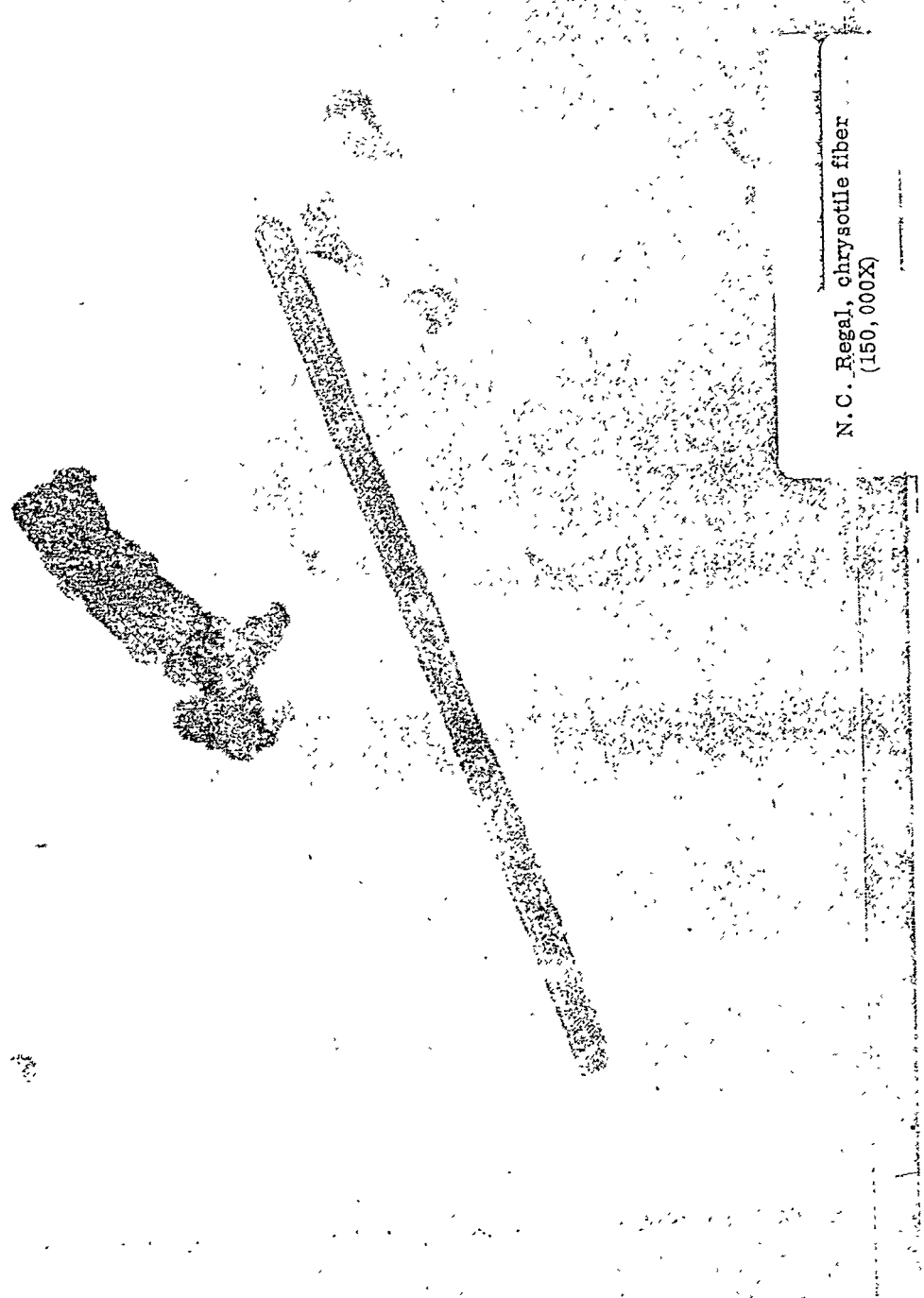


Cashmere Bouquet
Chrysotile fibers (51,000X).

Walter C. McCrone Associates, Inc.

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McCrone2-00371



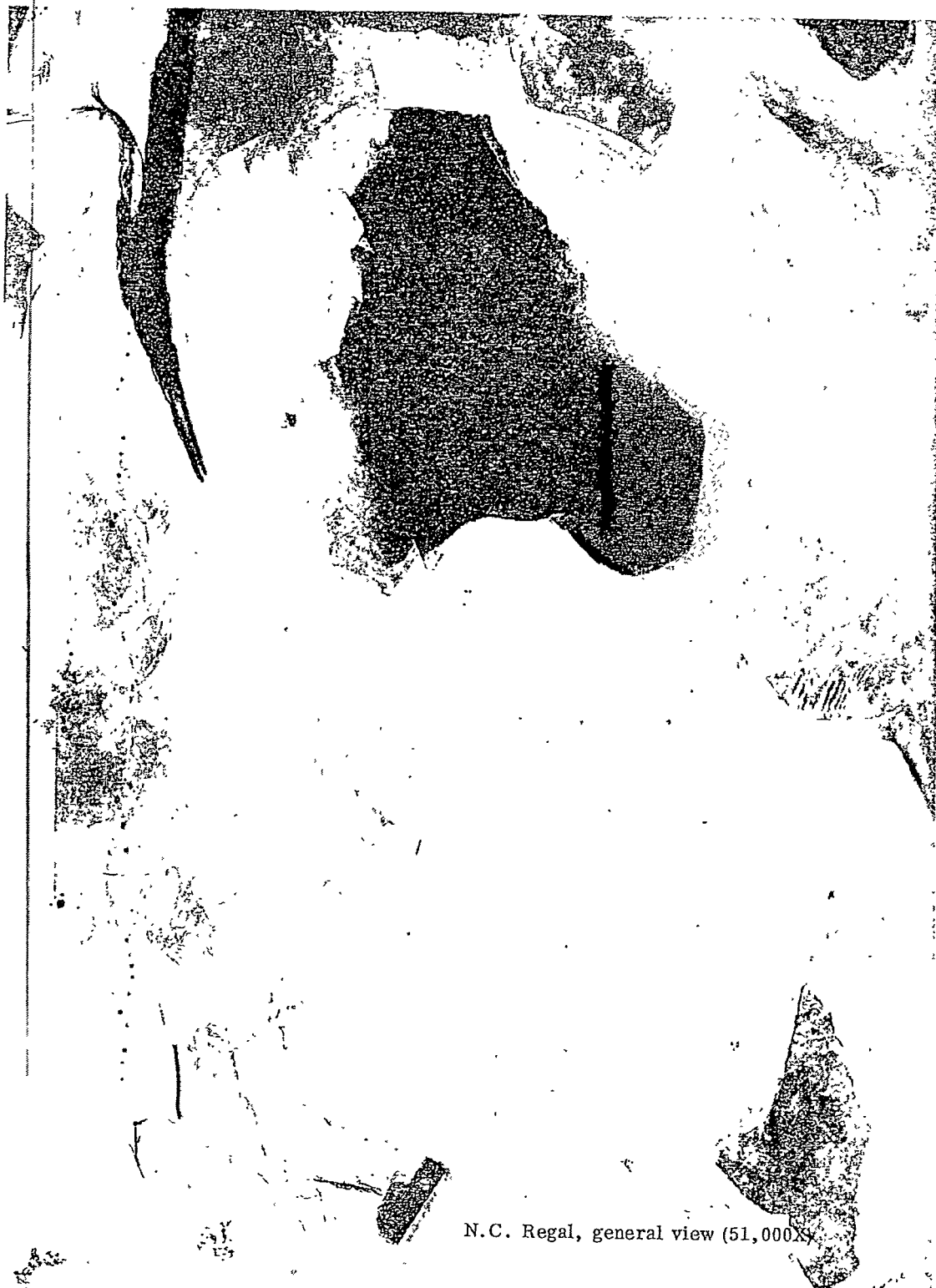
A high-magnification micrograph showing two distinct chrysotile fibers. One fiber is long, thin, and oriented diagonally from the upper left towards the lower right. The second fiber is shorter, thicker, and more irregular in shape, located to the left of the first fiber. The background is a light, grainy texture.

N.C. Regal, chrysotile fiber
(150,000X)

Walter C. McCrone Associates, Inc.

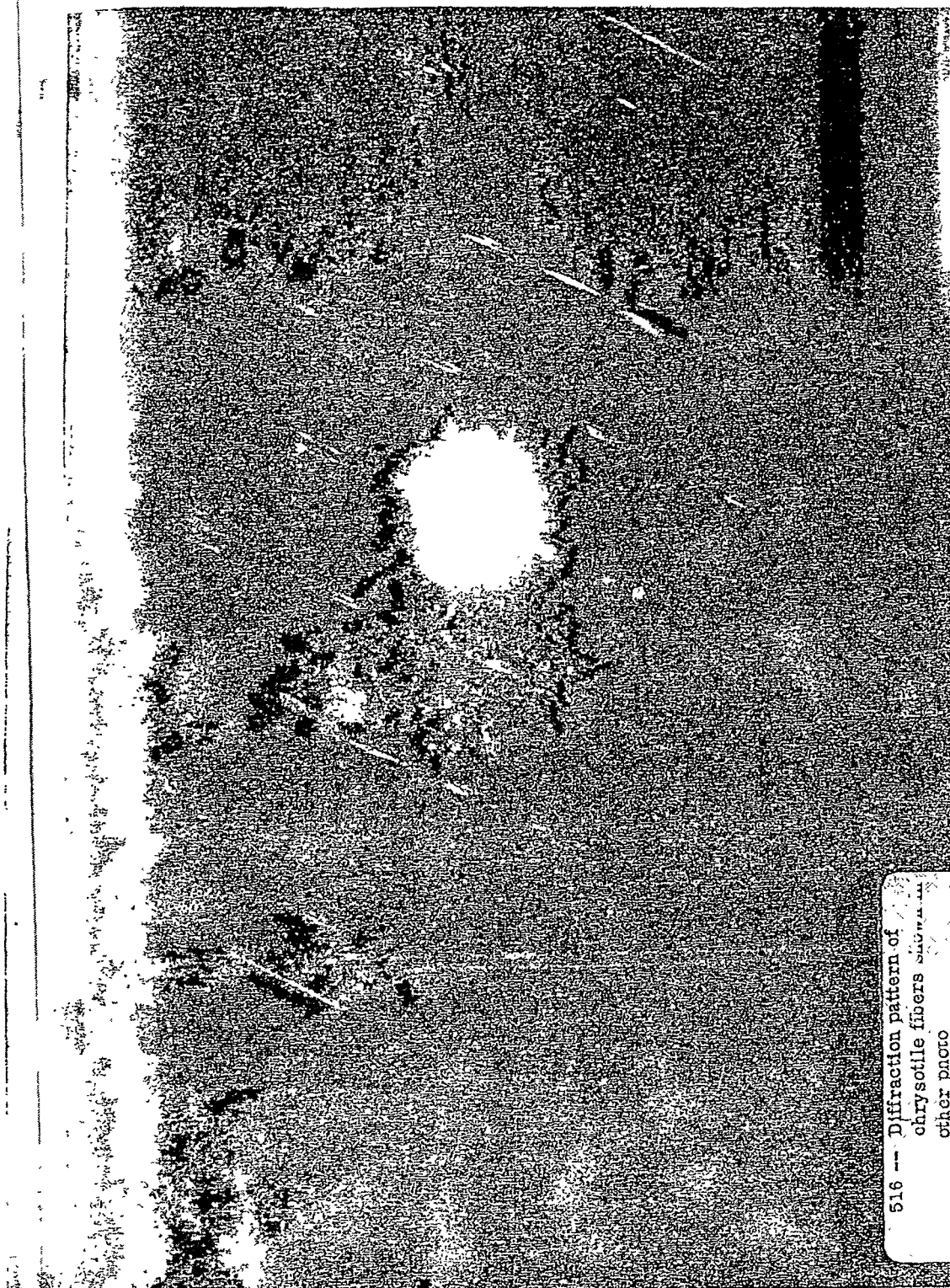
CONFIDENTIAL

McCrone2-00372



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

Walter C. McCrone Associates, Inc.

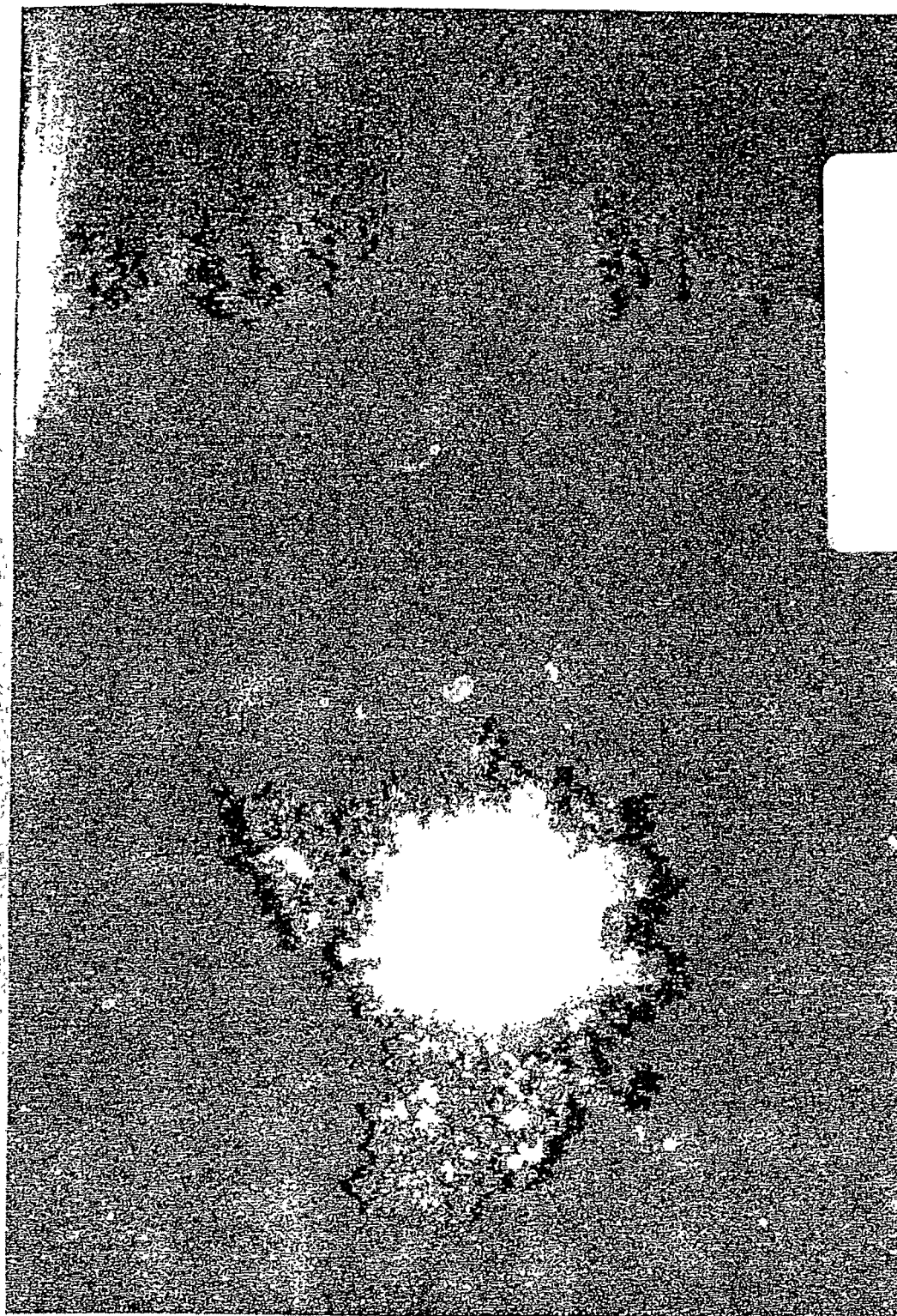


516 -- Diffraction pattern of
chrysotile fibers shown in
other photo

Walter C. McCrone

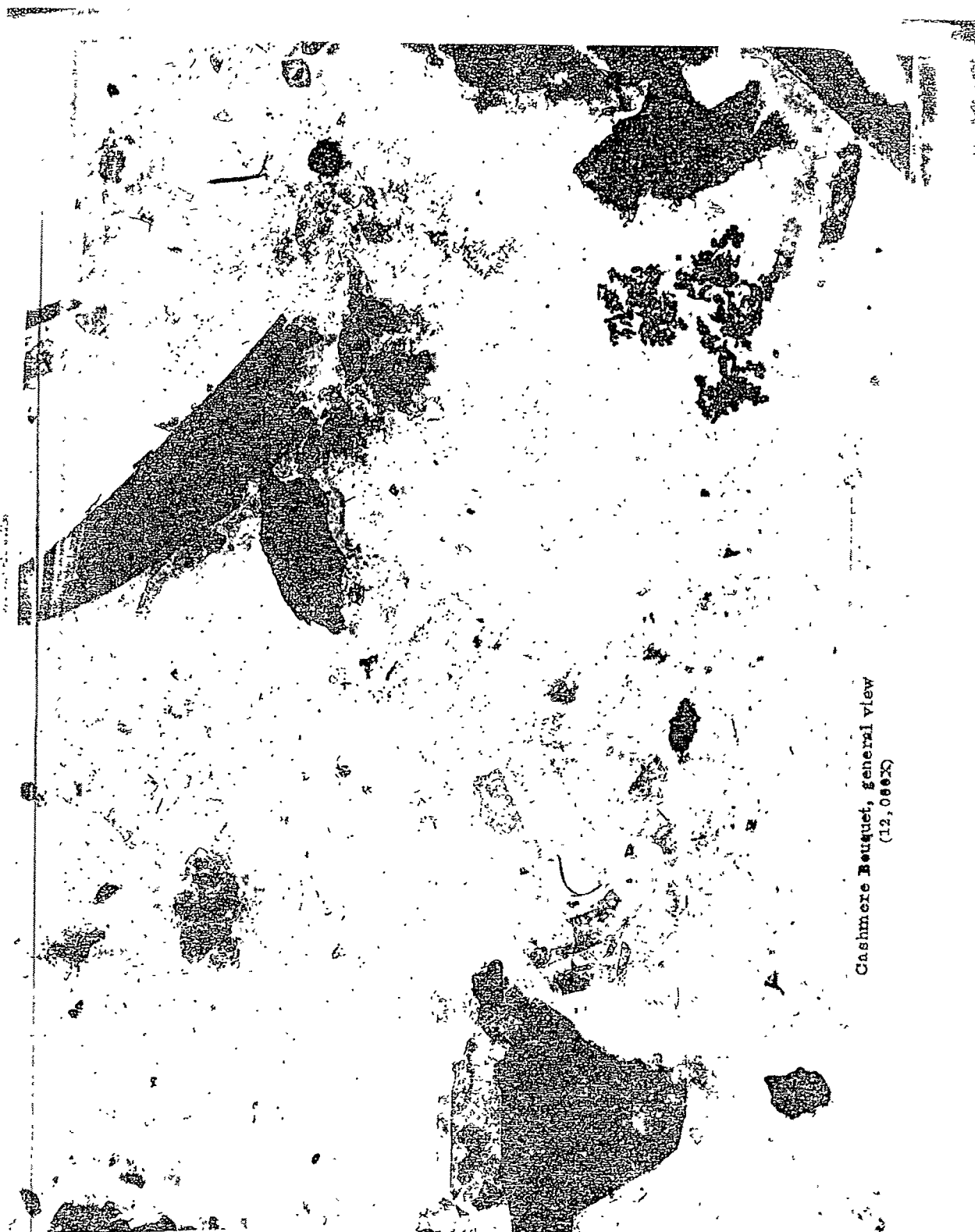
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McCrone2-00374



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McCrone2-00375



Walter C. McCrone Associates, Inc.

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McCrone2-00376



516-Chrysotile fibers (51,000X)

Walter C. McCrone Associates, Inc.

Company: Wigwag Palm LLC Jan 23rd 1997
Contact: Joseph Simko Via: Phone Visit Letter
Title: Phone: (201) 463-1212 Ex
Address:

Zip Code:

Referral: Repeat client , MRI student , Yellow pages , Newsletter , Ads
Lecture* , Other*

* (cite)

Problem: Asbestos in tile. (chrysotile or Tremolite)

T.E.M. 2 or 3 samples

Action:

Proposed Work:

FOLLOW UP: Contact (if different) Date:

REASON FOR PROJECT DELAY OR CANCELLATION:

MX 3805/IMS

Project Title

Cost estimate \$200 - 300 per sample

Project leader

Rough Draft

Report Received

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McCrone2-00378

\$750.

Review

IMS

R2M

DAB

JSM

5 February 1974

NB

FE

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. 3908

McCRONE 0170

10 December 1974

Dr. J. P. Simko, Jr.
Golgate-Palmolive Company
909 River Road
Piscataway, New Jersey 08864

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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McCrone2-00403

Dr. J. P. Simko

Page two

in the talc mine. Samples F and G showed no amphiboles but did show larger plates of talc than Sample A, which sample F also showing high amounts of organic contamination. Thank you for consulting McCrone Associates. If there are any questions concerning this report or the data contained herein, please feel free to contact me.

Very truly yours,

Gene R. Grieger
Senior Research Physicist

GRG:mk
enclosures
ref:MA4426

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McCrone2-00404

COLGATE-PALMOLIVE COMPANY

A Delaware Corporation

RESEARCH AND DEVELOPMENT DEPARTMENT

909 River Road • Piscataway, New Jersey 08854

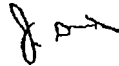
March 10, 1976

Dr. Ian Stewart
McCrone Associates
2820 South Michigan Avenue
Chicago, IL 60616

Dear Ian:

Enclosed is a single talc sample coded CB MS No. 1. Please run TEM-SAED studies. Determine all asbestos minerals especially amphibole. Please expedite this sample. I will phone you a purchase order No. to cover costs.

Sincerely,



J. P. Simko, Jr.

JPS:ls

Enclosure



file
walter c. mccrone associates, inc.

CONSULTING. ULTRAMICROANALYSIS • MICROSCOPY • SMALL PARTICLE PROBLEMS • SOLID-STATE CHEMISTRY

6 August 1976

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

Dear Mr. Simko:

This letter records the results of our analysis of a sample of talc designated as Lot 7-18-19.

In our first examination of this talc we found a single fiber of chrysotile. The SAED pattern was extremely weak and does not show up on the print; however, under a 10X magnifier on the negative we were positively able to confirm the fact that this is chrysotile. This would put the relative percentage of chrysotile at approximately 1-2 ppm. Upon request, we subsequently re-examined this material and in our second and third examinations of the same material, taking different samples and different lots from the sample, we did not find any further examples of chrysotile, thus the chrysotile observed in our first examination may well have been contamination from the atmosphere or some other source.

In our third examination we did find one particle of antigorite, which is also a serpentine but is not classified as an asbestos mineral. Electron micrographs of the chrysotile fiber and the antigorite particle are also included with this report.

We did find a high percentage of talc shards, blocky talc and fibrous talc in this sample and I would estimate that between 20 and 35% was non-platy talc.

We are also including some SAED patterns which we feel may help in your future examination of these minerals. Enclosed is a standard talc electron diffraction pattern and a standard chrysotile diffraction pattern, both taken at 200 kV.

Thank you for consulting McCrone Associates and if you should have any questions concerning these results, please contact us.

Yours sincerely,

Gene R. Grieger
Senior Research Physicist

GRG:fe
ref: 5500

2820 SOUTH MICHIGAN AVENUE • CHICAGO, ILLINOIS 60616 • 312/842-7100 • CABLE: CHEMICRONE

QE-CPC00004090

COLGATE-PALMOLIVE COMPANY

A Division of Colgate-Palmolive Company

RESEARCH AND DEVELOPMENT DEPARTMENT

989 River Road • Piscataway, New Jersey 08854

November 1, 1976

Mr. Gene Grägar
McCrone Associates
8820 South Michigan Avenue
Chicago, IL 60616

Dear Gene,

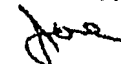
Enclosed are three talc samples for TEM-EDS analysis for
asbestiform minerals. Please do sample 4915 first and as soon
as possible. The other two are important but of lower priority.
Two are finished product talcs, both different, and one is a
raw material as follows:

4915	Finished Product
68-130	" "
Mag	Raw material talc

I will phone purchase orders. Only 4915 may go on our blanket
purchase order.

Many thanks.

Sincerely,



J. P. Sisko, Jr.

JPS:ls

Enclosure

4- 577-3

McCRONE 0028

COL 00504

DATE 9-23-77 RPA 00701 SUBJECT X-ray C.P. India Tooth Powder 6851- 19

(2741) Samples of C.P. India Tooth Powder labelled control and complaint were examined by X-ray diffraction of their water insoluble components.

Results

Control Sample
contained Calcite and Aragonite and $\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$

Complaint Sample
Contained Calcite and Aragonite

Richard Turse
September 23, 1977

9-23-77 RPA 62130 Asbestos in Talc

A complaint sample of Cashmere Bouquet talc (Brenntag) was examined by X-ray to see if it contained any asbestos.

Results

No peak was seen at 10.5° indicating no presence of brucite but a peak was seen at 10.75° indicating possible presence of Brontophyllite.

Richard Turse
September 23, 1977

(2974) The complete X-ray diffraction pattern was run on this sample using the spinner and it was compared to a 1976 Cashmere Bouquet finished product, lot 0316 CX.

The patterns were very similar and differed only in some intensities of the lines.

SIGNED Richard Turse
DATE September 29, 1977

WITNESSED Ronald Benz
DATE 13 December 1978



Walter C. McCrone Associates, Inc.

CONSULTING: ULTRAMICROANALYSIS • MICROSCOPY • SMALL PARTICLE PROBLEMS • SOLID-STATE CHEMISTRY

18 November 1976

Dr. J. P. Sisko
Colgate Palmolive
909 River Road
Piscataway, New Jersey 08854

Dear Dr. Sisko:

Using transmission electron microscopy and selected area diffraction we have examined a sample of talc designated as 4915. In this talc we found one fiber of tremolite approximately 2 micrometers by 1/2 micrometer. Using selected area diffraction and zone analysis to give the angles between spots we positively identified this as tremolite. We examined a further preparation from this sample and found no other tremolite. This particular fiber would not represent more than a few parts per million, less than 5 parts per million of asbestiform minerals and certainly may well just be stray contamination.

Thank you for consulting McCrone Associates. If there are any further questions concerning this report or the data contained therein please feel free to contact me.

Very truly yours,

Gene H. Grieger
Senior Research Physicist

GRG:jd
Ref. MA 5500

2830 SOUTH MICHIGAN AVENUE • CHICAGO, ILLINOIS 60616 • 812/842-7100 • CABLE: CHEMCORNE

McCRONE 0036

COL 00512



walter c. mcrone associates, inc.

CONSULTING: ULTRAMICROANALYSIS • MICROSCOPY • SMALL PARTICLE PROBLEMS • SOLID-STATE CHEMISTRY

16 November 1977

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

Dear Dr. Simko:

This letter confirms the telephoned results of our microscopical examination of your two samples, French Talc - Lot 5854 - 11/3 and Talc 1615-Lab #4811 - 11/3.

You had noted in your letter of November 7 that both samples contain particles which show the right microscopical dispersion staining colors for tremolite but the wrong morphology. We have identified these particles as apatite.

We also found a small amount of tremolite in Talc 1615 but none in the French talc. This is consistent with your XRD results. The other minerals identified are noted on the enclosed laboratory report sheets. If you have any questions please let me know.

With best wishes,

Sincerely,

Lucy B. McCrone
Senior Research Scientist

LBM:fe
encl.
ref: 5500

Date 9 NOVEMBER 1977

Client COLGATE-PALMOLIVE COMPANY

MA Project 5500

Sample Description Talc 1615, LAB #4811, 11/3

X-RAY DIFFRACTION

Serpentine Content _____

Amphibole Content _____

Comments _____

LIGHT MICROSCOPY

Serpentine Content none detected

Amphibole Content tremolite detected

Comments A small amount of tremolite is present, mainly as relatively equiaxed prismatic fragments - a few of these would be called fibers by OSHA. Other minerals present besides talc are apatite, a little quartz and dolomite.

Lucy B. McCrone

walter c. mcCrone associates, inc.



walter c. mccrone associates, inc.

CONSULTING: ULTRAMICROANALYSIS • MICROSCOPY • SMALL PARTICLE PROBLEMS • SOLID-STATE CHEMISTRY

16 March 1981

Mr. Lou Murino
Cyprus Industrial Minerals
555 South Flower Street
Los Angeles, California 90071

Dear Mr. Murino:

I have completed my asbestos analysis of a sample of Cyprus Monoblend Talc Lot #110865, submitted with K. Lehman's letter of 13 January 1981.

The sample was analyzed with the transmission electron microscope (TEM) and electron diffraction. The sample contained chrysotile asbestos at a level less than 0.1% by weight. The chrysotile was identified by its electron diffraction pattern.

Thank you for consulting McCrone Associates. Please contact us if you have any questions.

Sincerely,

Richard M. Ellis, Jr.
Research Microscopist

RME:fe
Ref: 5500
cc: Vern Alltus - Cyprus Industrial, NJ



walter c. mocrone associates, inc.

CONSULTING: ULTRAMICROANALYSIS • MICROSCOPY • SMALL PARTICLE PROBLEMS • SOLID-STATE CHEMISTRY

26 August 1981

Ms. Maral M. Kazazian
Cyprus Industrial Minerals Company
Talc Division
555 South Flower Street
Los Angeles, California 90071

Dear Ms. Kazazian:

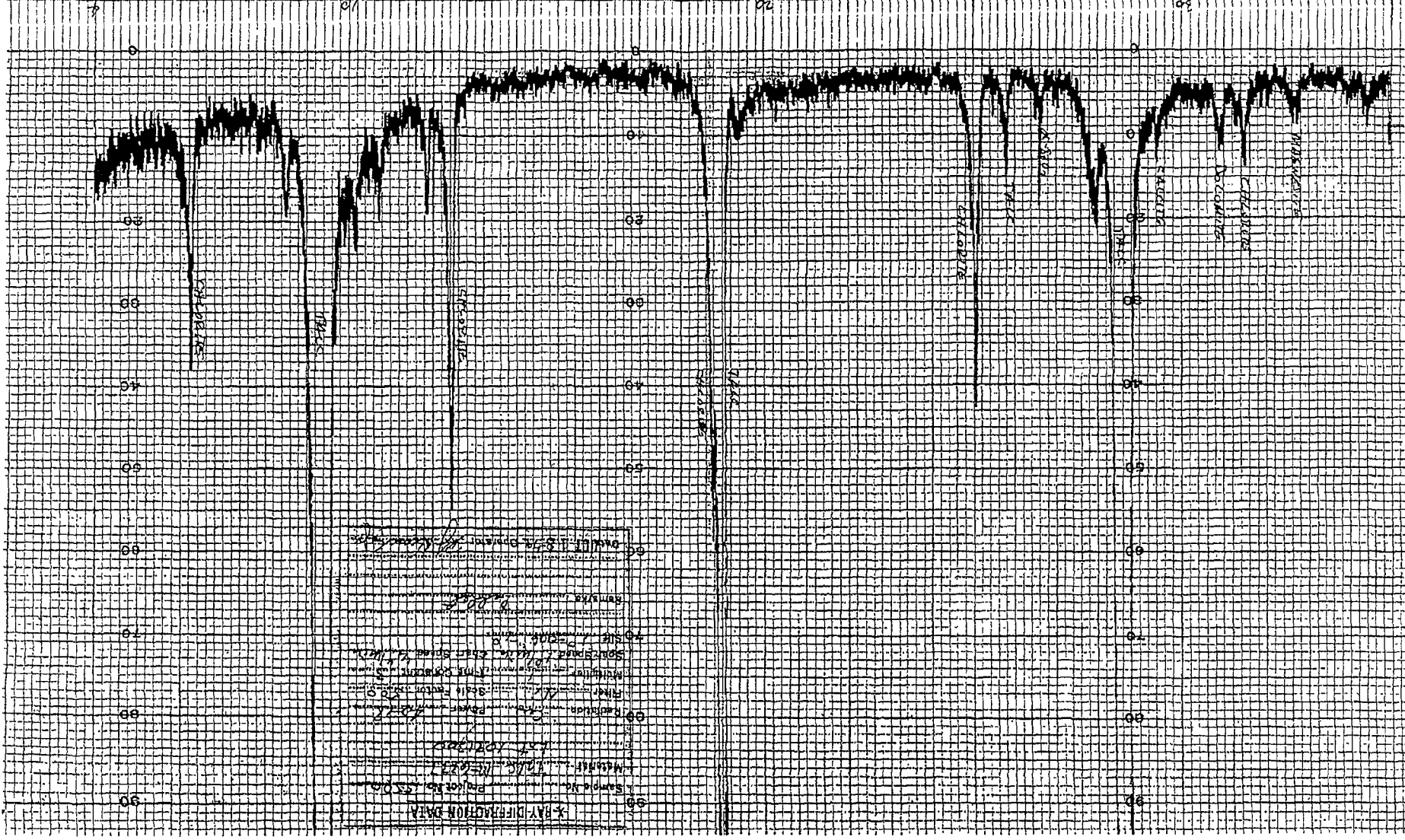
In response to your letter of 30 July 1981, I have enclosed the diffraction pattern of the monoblend talc sample #110865. The diffraction pattern is of a chrysotile single fiber taken at 200 kV. The sample contained a very small amount of chrysotile and may have been a contaminant. The very small size of the single fibers (~340 Å diameter) make it difficult or impossible to get a diffraction pattern using less than 200 kV. You had mentioned that you were using low kV. I feel that this could be the problem with seeing the pattern.

Please contact me if you have any questions.

Sincerely,

Richard M. Ellis, Jr.
Research Microscopist

RME:fe
Encl.
Ref: 5500





walter c. mcrone associates, inc.

CONSULTING: ULTRAMICROANALYSIS • MICROSCOPY • SMALL PARTICLE PROBLEMS • SOLID-STATE CHEMISTRY

26 July 1983

Ms. Grace

Mr. G. Roach
Colgate-Palmolive Company
300 Park Avenue
New York, New York 10022

Ms.
Dear Mr. Roach:

I have completed my asbestos analysis of a talc sample labeled RCH1004G, Lot #12873 and submitted under purchase order 096142.

The sample was examined with the transmission electron microscope and selected area electron diffraction. The sample was found to contain a very low level of chrysotile asbestos, probably less than 0.1% by weight. Because of the low amount, a second sample was prepared and examined to preclude the possibility of contamination. It too contained chrysotile. Two photomicrographs of chrysotile fibers are enclosed.

Thank you for consulting McCrone Associates. Please contact me if you have any questions regarding this analysis.

Sincerely,

Richard M. Ellis, Jr.
Research Microscopist

RME:Es
Encl.
Ref: 12917

3820 SOUTH MICHIGAN AVENUE • CHICAGO, ILLINOIS 60616 • 312/848-7100 • CABLE CHEMICRONE

McCRONE 0215

COL 00690



walter c. mcCrone associates, inc.

CONSULTING: ULTRAMICROANALYSIS • MICROSCOPY • SMALL PARTICLE PROBLEMS • SOLID-STATE CHEMISTRY

27 October 1983

Dr. J. P. Simko, Jr.
Colgate-Palmolive Company
R&D Department
909 River Road
Piscataway, New Jersey 08854

Dear Dr. Simko:

This letter concerns the asbestos analysis of three talc samples labelled 12873, 13080 and 13081. Sample 12877 was found broken when the sample box was opened and could not be analyzed.

The samples were analyzed by transmission electron microscopy. Chrysotile asbestos was detected in all three samples. The examination was not done quantitatively so no amount of asbestos can be determined.

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

Sincerely,

Deborah P. Palenik
Mgr., Electron Optics Group

DPP:fe
Ref: 5500



COLGATE-PALMOLIVE COMPANY

W. R. R. R. R.
P. O. Box 100, N.Y. 10021

Research and Development Division

JAN 27 1984

January 24, 1984

Ms. Deborah Palanik
McCrone Associates
2820 South Michigan Avenue
Chicago, IL 60616

Dear Ms. Palanik:

Enclosed are 6 samples of talc for analysis for asbestos by TEM and BAM. The three coded 0613XX, 1815XX and 2713XX are finished products and contain 1% magnesium, carbonate, 1% zinc stearate and perfume as additives. The remaining three 809073, A113031 and A122831 are raw material talc with no additives.

Please analyze these as soon as possible.

A purchase order to cover costs will follow. If there are any questions, my telephone number is (201) 878-7566.

Thank you.

Sincerely yours,

J. P. Binko, Jr.

Dr. J. P. Binko, Jr.
Sr. Section Head
Analytical Department

JPS:meb

cc: E. A. Minger
W. Schubert

020420
840202008

11871
DPP

CS1276

McCRONE 0223

COL 00698



walter c. mcrone associates, inc.

CONSULTING: ULTRAMICROANALYSIS • MICROSCOPY • SMALL PARTICLE PROBLEMS • SOLID-STATE CHEMISTRY

27 April 1984

Dr. J. P. Sisko, Jr.
Sr. Section Head, Analytical
Department
Colgate-Palmolive Company
909 River Road
Parsippany, New Jersey 08854

Dear Dr. Sisko:

This report concerns the asbestos analysis by TEM of six talc samples submitted under your P.O. 634617. Chrysotile asbestos was detected in samples 0613EX, 2713EX and 1813AX. No asbestos was detected in samples 89073, AL22831 and AL13031. Since this technique is not quantitative, no asbestos concentration can be assigned.

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

Sincerely,

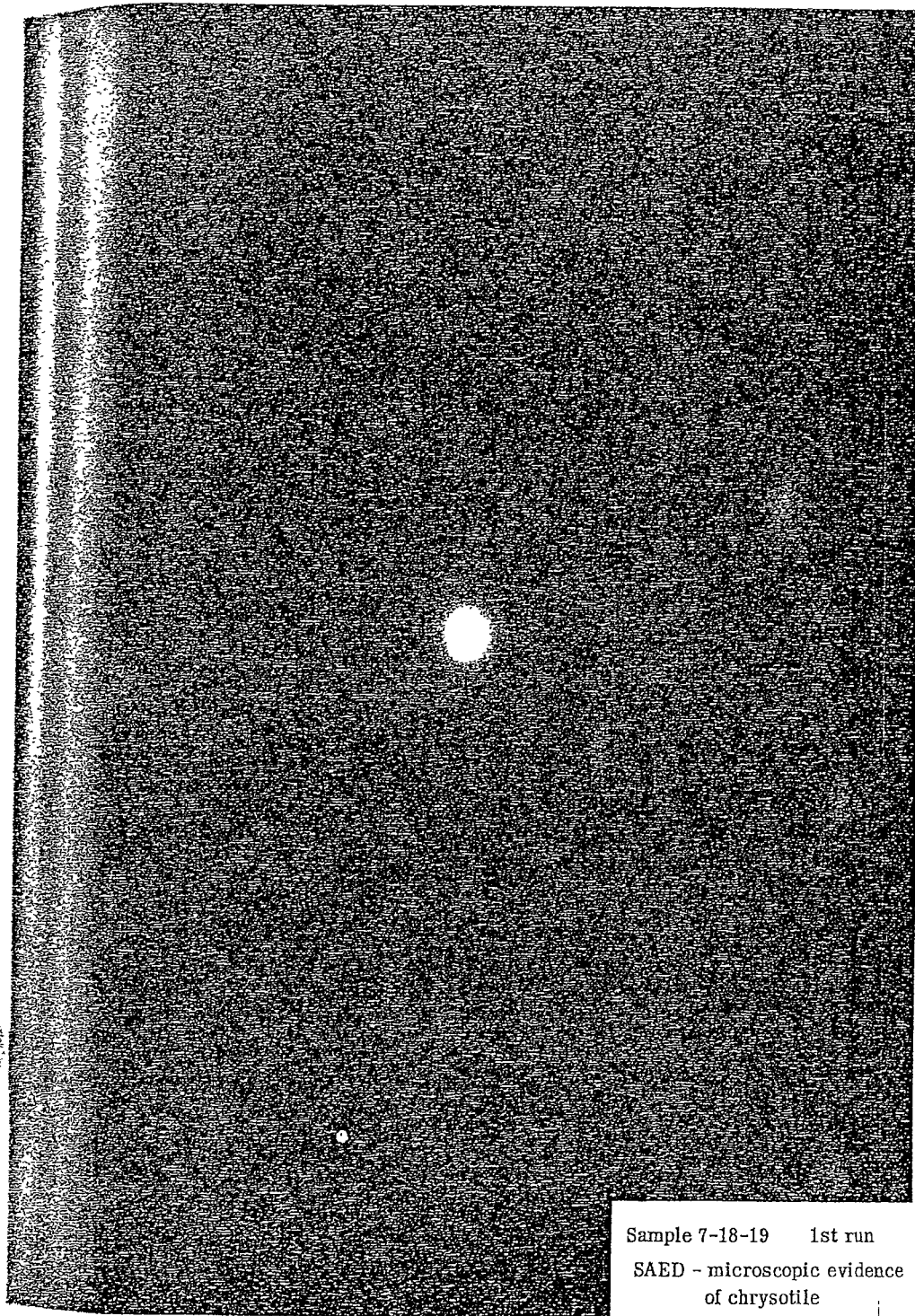
Deborah P. Palenik
Electron Microscopist

DPP:fa
Ref: 11871

2800 SOUTH MICHIGAN AVENUE • CHICAGO, ILLINOIS 60619 • 312/742-7100 • CABLE CHENBORNE

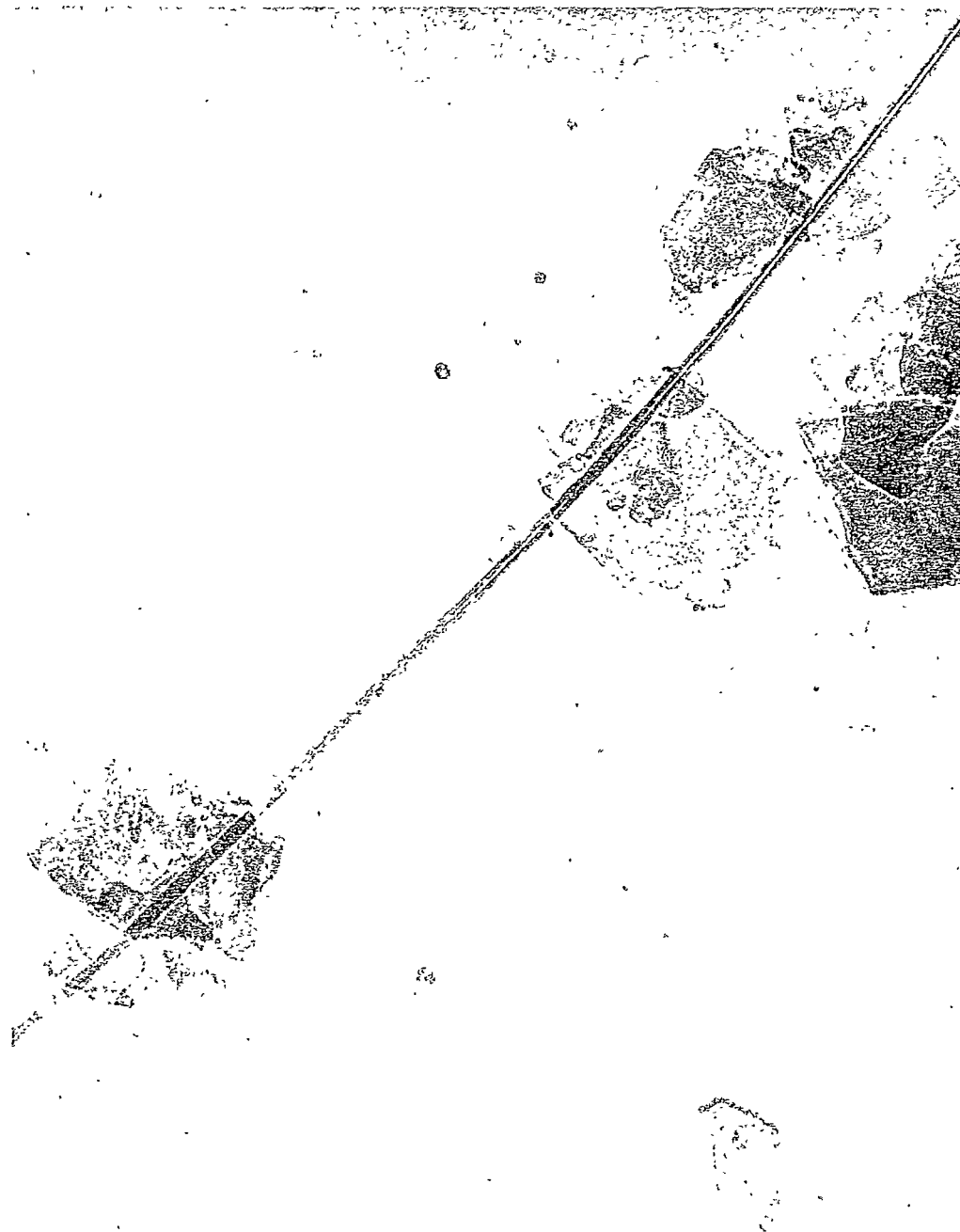
McCRONE 0221

COL 00696



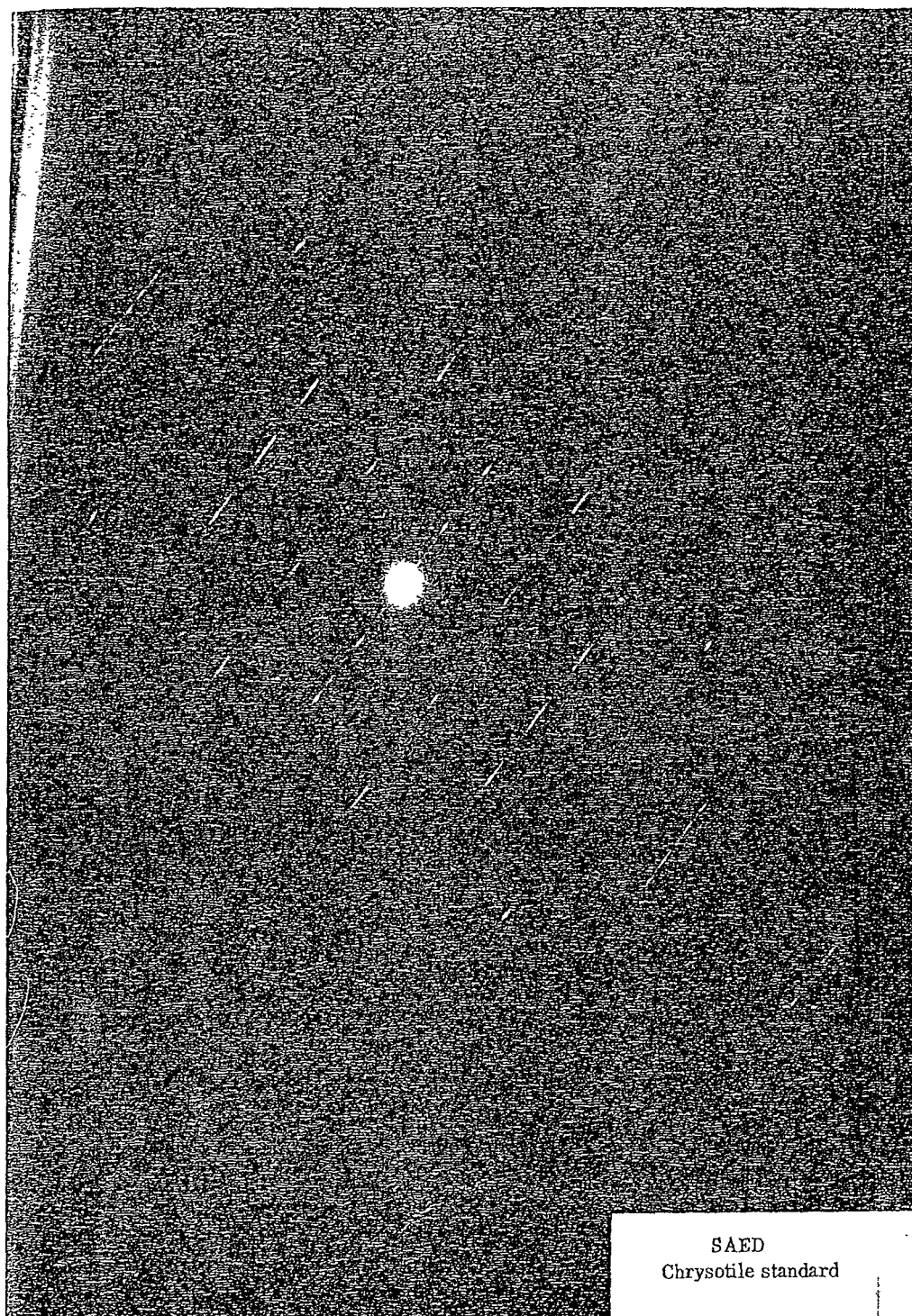
Sample 7-18-19 1st run
SAED - microscopic evidence
of chrysotile

walter c. mcCrone associates, inc.



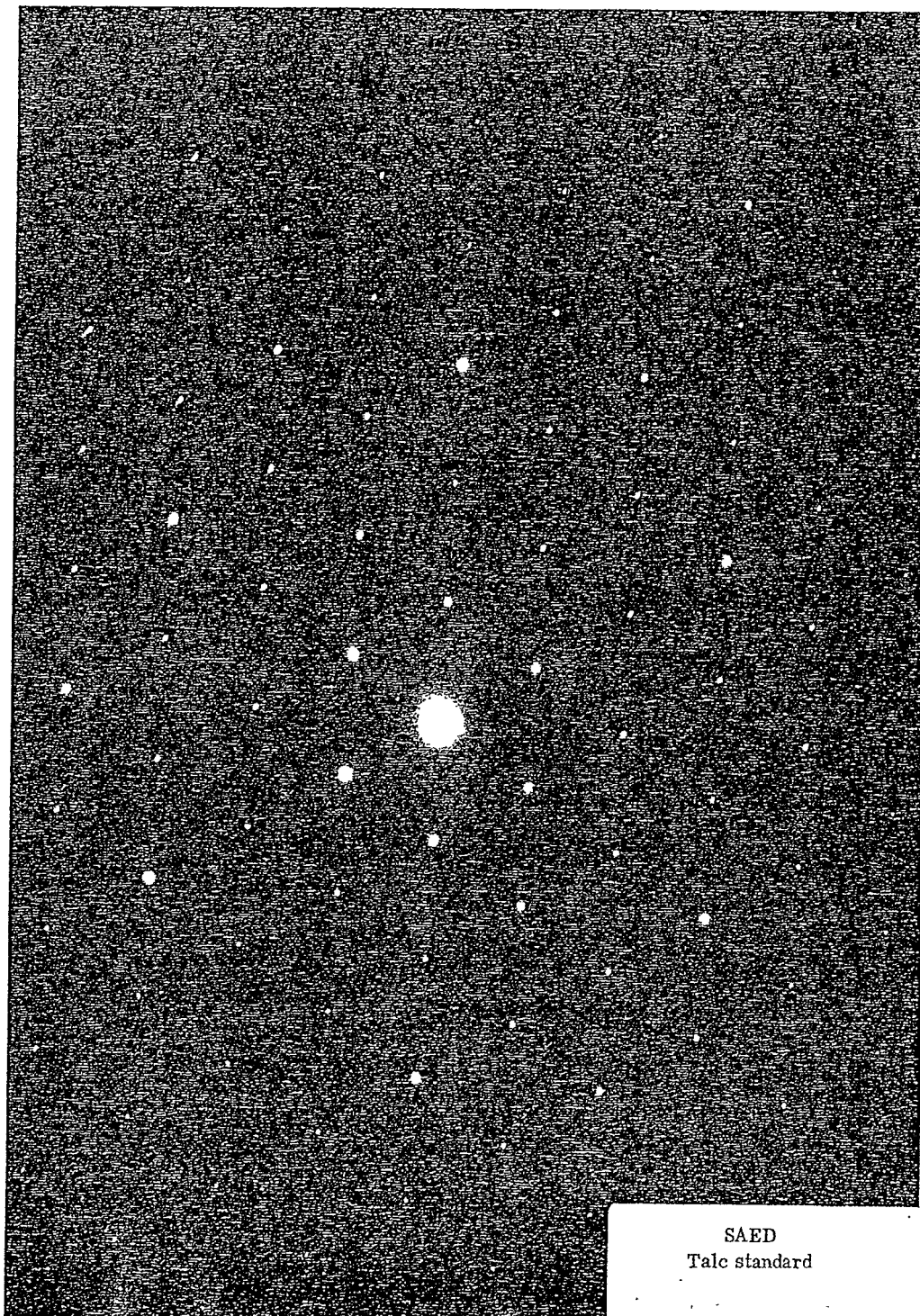
Sample 7-18-19 1st run
(50,000X)

walter c. mcCrone associates, inc.



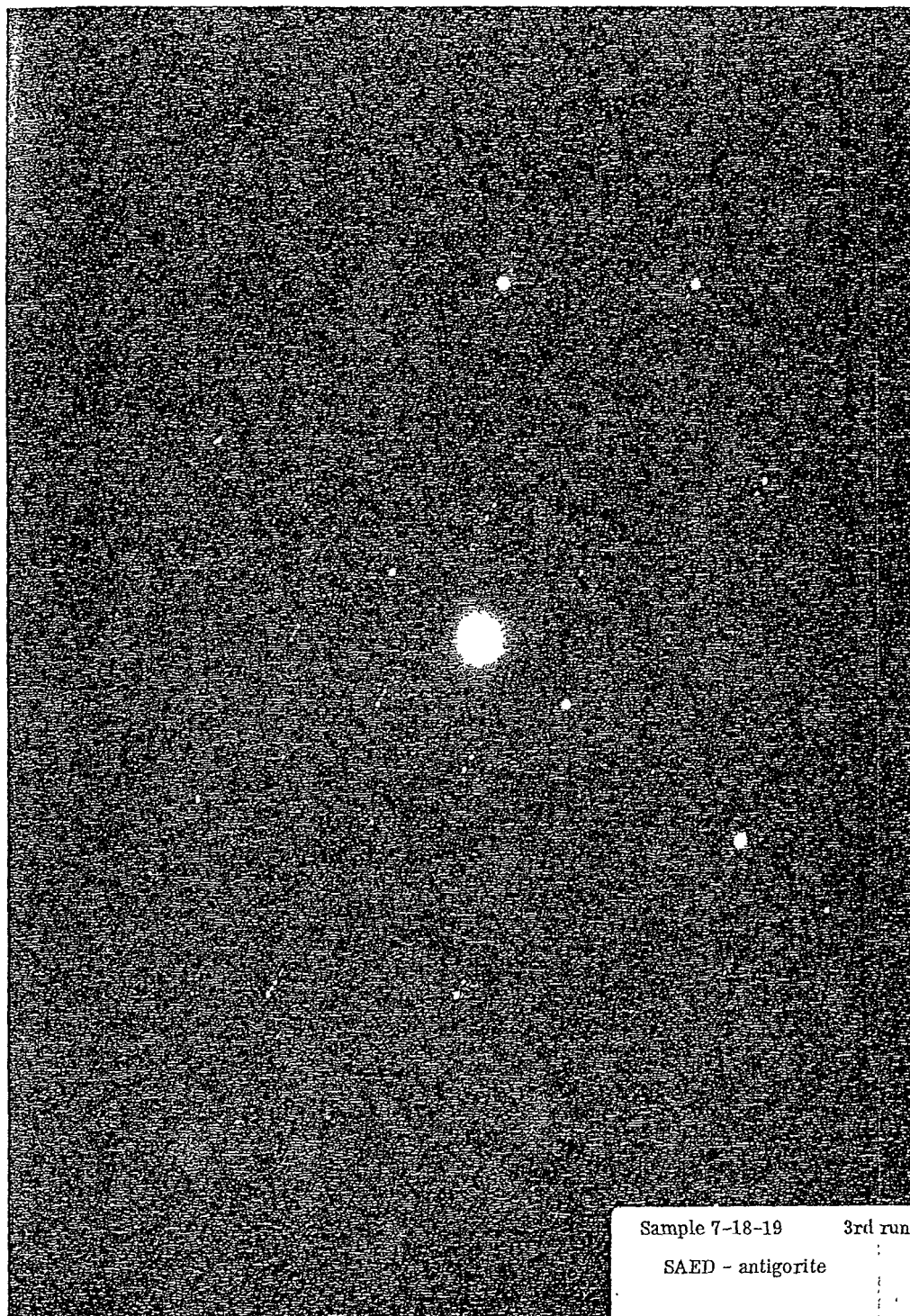
SAED
Chrysotile standard

walter c. mc crone associates, inc.



SAED
Talc standard

walter c. mc crone associates, inc.

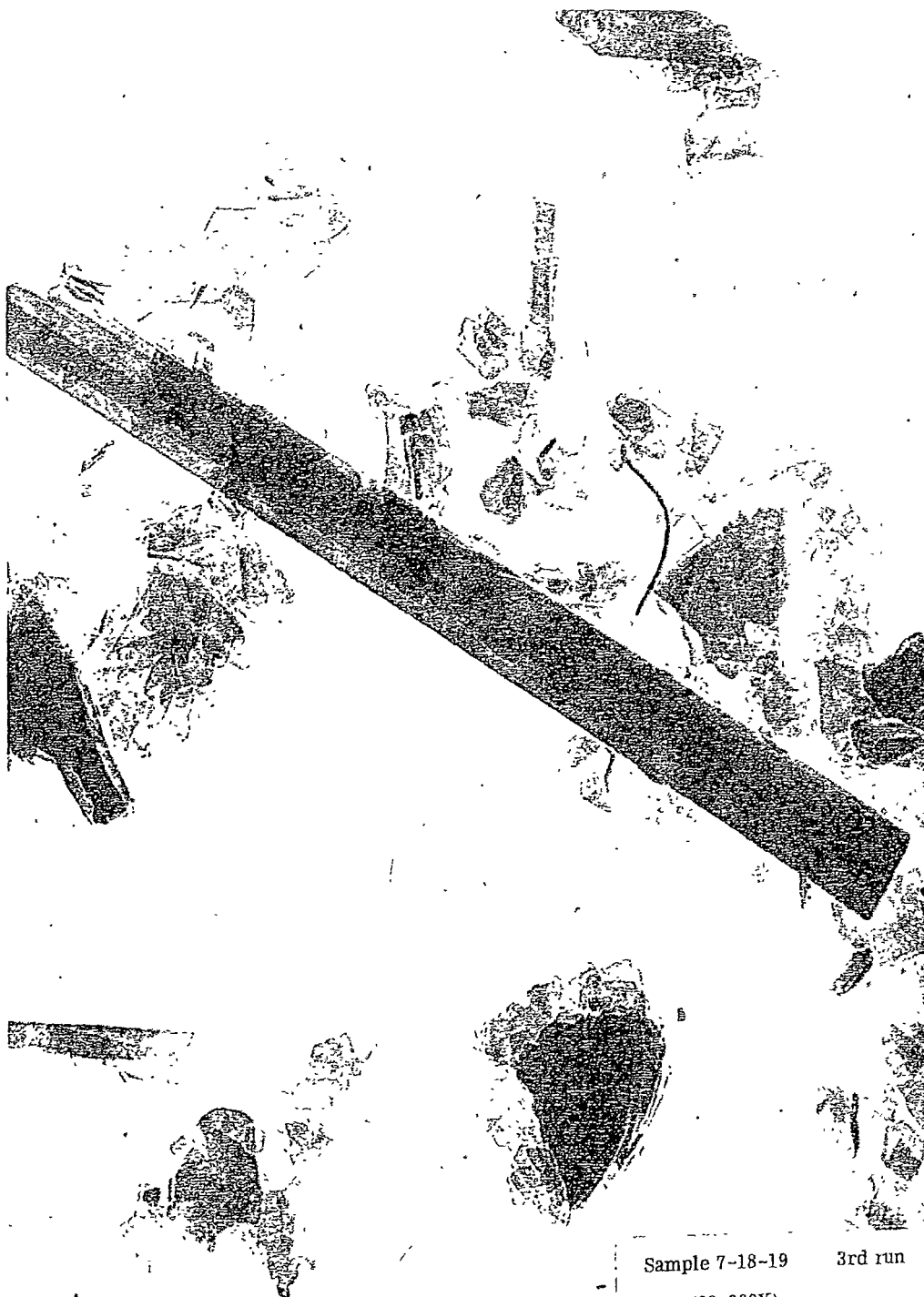


Sample 7-18-19 3rd run
SAED - antigorite

walter c. mc crone associates, inc.

CONFIDENTIAL

McCrone2-00426



Sample 7-18-19
(30,000X)

3rd run

walter c. mc crone associates, inc.

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McCrone2-00427