

ATC ASSOCIATES INC. - TEM ANALYSIS

LAB GROUP #: 5737 - 10/21/01

Lab Sample No. 61836

Filter Type MCE 35 mm

Operator WUP

Client Spl. No. 15

Filter Area 385 mm²

Instrument I.D. EM 10 CFX

Grid I.D. 471

Disk No. _____

Screen Magnification 16,400X

(GO) Area 0.01124 mm²

Comments _____

Acc. Voltage 80 kV

No. GO to be Analyzed 4

12.147 Struct. Corrod. to 70 s/mm²

GO. No.	Coord.	Structure No.	Structure Type				Length		I.D. of Structure				EDS (Nonasb. Elements)
			F	B	C	M	≥0.5 um < 5 um	≥ 5um	Chrys.	Amphibole	Nonasb.	Ambig./ND	
20	101	NSD											
21	101	-											
22	101	-											
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100	101	-											

Photo No. (from 1 in 5 asbestos-containing samples) Identify all structures using EDS Check diffraction for asbestos Store all unrepeat spectra

Struct. = ≥ 0.5um & > 5:1 Aspect Ratio

N= Not Observed (EDS spectrum or diffraction pattern)

✓ = Positive diffraction pattern properties conforming to laboratory identification criteria observed.
 For chrysotile: 0.73nm spacing for (020) reflections, 0.53nm spacing for the layer line repeat, streaking of (110) and (130) reflections.
 For amphiboles: 0.53nm layer line repeat, and approx. 1:5 ratio of non-twinned layer line spot spacing to layer line repeat distance (0.53nm).

✓ = EDS spectrum conforming to laboratory identification criteria observed.

F= Single Fiber (1-3 intersections = 1-3 fibers)

B= Bundle (>3 fibers <1 fiber diameter apart)

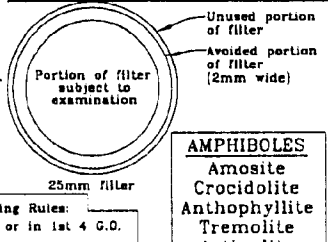
C= Cluster (>3 intersections)

M= Matrix

NSD= No Structures Detected

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Grid acceptance:
 <50% undissolved filter, overlapped or folded
 <10% particulate coverage >50% coverage
 at least 20 unfolded or overlapped grid squares
 <5% holes or opaque areas



Stopping Rules:
 >50 s/G.O. or in 1st 4 G.O.

Totals

	F	B	C	M	≥ 5um
Chrysotile					
Amphibole					
Ambiguous					
Non-asbestos					
Non-identified					

CONFIDENTIAL,

CITY_21MC100_003470290

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008