

ATC ASSOCIATES INC. - TEM ANALYSIS

LAB GROUP #: 5515 - 09/17/01

Lab Sample No. 59046

Filter Type MCE 25 mm

Operator RP

Client Spl. No. 030

Filter Area 385 mm²

Instrument I.D. EM 10 CRX

Grid I.D. 406 405

Disk No. _____

Screen Magnification 16,400X

(GO) Area 0.01124 mm²

Comments _____

Acc. Voltage 80 kV

No. GO to be Analyzed 0(0.000 Struct. Corrsd. to 70 g/mm².)

GO.		Structure No.	Structure Type				Length		I.D. of Structure				N or ✓	EDS (Nonasb. Elements)
No.	Coord.		F	B	C	M	≥0.5 μm < 5 μm	≥ 5μm	Chrys.	Amphibole	Nonasb.	Ambig./ND		
1	E4	1				✓	✓		✓					
2	J3	NSD												
3	Q3	"												
4	X2	"												
5	V2	"												
6	V2	"												
7	P1	"												
8	Z3	2				✓	✓							
9	J2	NSD												
10	Q2	"												

Photo No. (from 1 in 5 asbestos- Identify all structures using EDS Check diffraction for asbestos Store all unreported spectra containing samples) structures up to 70s/mm (1st 4)

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. 3.5 ratio of non-winned 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)

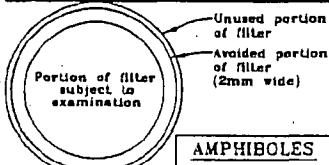
B= Bundle (>3 fibers <1 fiber diameter apart)

C= Cluster (>3 intersections)

M= Matrix

NSD= No Structures Detected

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Grid acceptance: structures up to 70s/mm (1st 4)
<50% undissolved filter, overlapped or folded
<10% particulate coverage >50% coverage
at least 20 unfolded or overlapped grid squares
<5% holes or opaque areas

25mm filter

Stopping Rules:
>30 s/G.O. or in 1st 4 G.O.

AMPHIBOLES
 Amosite
 Crocidolite
 Anthophyllite
 Tremolite
 Actinolite

Totals

	F	B	C	M	≥ 5um
Chrysotile				2	
Amphibole					
Ambiguous					
Non-asbestos					
Non-identified					