

COPY

PLAINTIFF'S EXHIBIT

WH-1099

11 November 1992

Ms. Jennifer Wagner
Richard F. Scruggs, P.A.
734 Delmas Avenue
Pascagoula, MS 39568-1425

Re: Asbestos Board Tests
MVA Project No. 0393

Dear Ms. Wagner:

MVA, Inc. has completed the analysis of three (3) bulk materials used in the asbestos board tests conducted last month. The results are given in the enclosed report.

If you have questions, please do not hesitate to call.

Sincerely,

Maureen C. Bottrell
Research Scientist

James R. Millette, Ph.D.
Executive Director

MCB/JRM/aw

Enclosure

MVA0393.RPT1111

Report of Results: MVA0393

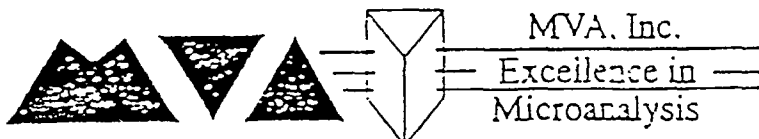
Asbestos Board Tests
PLM Analyses of Bulk Samples

Prepared by:

MVA, Inc.
5500 Oakbrook Parkway, Suite 200
Norcross, GA 30093

11 November 1992

MVA0393 RPT1111



5500 Oakbrook Parkway #200
Norcross, Georgia 30093
404-662-8509

Summary of Results

Sample Identification

<u>Field No.</u>	<u>MVA No.</u>	<u>Description</u>
1	C4502	Refer Rite Asbestos Board
2	C4503	Micarta/Marinite
3	C4504	Transite Board

Analysis and Results

The three samples were analyzed for asbestos using standard techniques of polarized light microscopy (PLM) and dispersion staining.

Sample 1 (MVA0393-C4502) is a material containing chrysotile asbestos with a layer of metal.

Sample 2 (MVA0393-C4503) is a multi-layered material which can be summarized as:

Layer A	-	No Asbestos
Layer B	-	Chrysotile
Layer C	-	Amosite
Layer D	-	Chrysotile
Layer E	-	No Asbestos

Sample 3 (MVA0393-C4504) is a gray consolidated material containing chrysotile.

The individual constituent analysis sheets are attached..

MVA, Inc.
PLM Constituent Analysis

Date: 11/09/92

MVA#: 0393

Location: not provided

Sample I.D.#: C4502

Client Sample I.D.#: 1

Examination using the stereomicroscope: C4502 is a gray consolidated material with a layer of metal.

<u>CONSTITUENT</u>	<u>%</u>	<u>CONSTITUENT</u>	<u>%</u>	<u>CONSTITUENT</u>	<u>%</u>
Fibers:		Pigment:		Fillers:	
Cotton	---	Binders:		Diatoms	---
Fiberglass		Kaolinite	---	Iron Chromite	---
Filament	---	Montmorillonite	---	Iron Oxide	---
Wool	---	Gypsum	---	Limestone	~ 30%
Mineral Wool	---	Anhydrite	---	Magnetite	---
Hair	---	Portland Cement	---	Mica	---
Paper/Wood		Lime (hydrated)	---	Perlite	---
Chem. Proc.	---	Precipitated		Synthetic Foam	---
Mech. Proc.	---	Carbonate	---	Pumice	---
Synthetic	---	Starch	---	Quartz	---
				Talc	---
				Vermiculite	---
				Opaque	~ 5%
				Other	~ 25%

Asbestos Minerals

Chrysotile	~ 40%	Anthophyllite	---	Tremolite/	
Amosite	---	Crocidolite	---	Actinolite	---

Comments: The metal was not included in the analysis.

Analyst: Maureen C. Bottrell

MVA, Inc.
PLM Constituent Analysis

Date: 11/09/92

MVA#: 0393

Location: not provided

Sample I.D.#: C4503B

Client Sample I.D.#: 2

Examination using the stereomicroscope: C4503 is a multi-layered material composed of A) a tan consolidated material, B) a gray consolidated material, C) a white powdery material, D) a gray consolidated material, and E) a tan consolidated material.

<u>CONSTITUENT</u>	<u>%</u>	<u>CONSTITUENT</u>	<u>%</u>	<u>CONSTITUENT</u>	<u>%</u>
Fibers:		Pigment:		Fillers:	
Cotton	---	Binders:		Diatoms	---
Fiberglass	---	Kaolinite	---	Iron Chromite	---
Filament	---	Montmorillonite	---	Iron Oxide	---
Wool	---	Gypsum	---	Limestone	---
Mineral Wool	---	Anhydrite	---	Magnetite	---
Hair	---	Portland Cement	---	Mica	---
Paper/Wood		Lime (hydrated)	---	Perlite	---
Chem. Proc.	~ 24%	Precipitated		Synthetic Foam	---
Mech. Proc.	---	Carbonate	---	Pumice	---
Synthetic	---	Starch	---	Quartz	---
		Other	~ 50%	Talc	---
				Vermiculite	---
				Opaque	~ 2%

Asbestos Minerals

Chrysotile	~ 24%	Anthophyllite	---	Tremolite/	
Amosite	---	Crocidolite	---	Actinolite	---

Comments: No asbestos was detected in the "A" and "E" layers and they were not included in the analysis. Please see sheet labeled C4503C and C4503D for the analyses of the "C" and "D" layers.

Analyst: Maureen C. Bottrell

MVA, Inc.
PLM Constituent Analysis

Date: 11/09/92

MVA#: 0393

Location: not provided

Sample I.D.#: C4503C

Client Sample I.D.#: 2

Examination using the stereomicroscope: C4503 is a multi-layered material composed of A) a tan consolidated material, B) a gray consolidated material, C) a white powdery material, D) a gray consolidated material, and E) a tan consolidated material.

<u>CONSTITUENT</u>	<u>%</u>	<u>CONSTITUENT</u>	<u>%</u>	<u>CONSTITUENT</u>	<u>%</u>
Fibers:		Pigment:		Fillers:	
Cotton	---	Binders:		Diatoms	---
Fiberglass		Kaolinite	---	Iron Chromite	---
Filament	---	Montmorillonite	---	Iron Oxide	---
Wool	---	Gypsum	---	Limestone	~ 20%
Mineral Wool	---	Anhydrite	---	Magnetite	---
Hair	---	Portland Cement	---	Mica	---
Paper/Wood		Lime (hydrated)	---	Perlite	---
Chem. Proc.	---	Precipitated		Synthetic Foam	---
Mech. Proc.	---	Carbonate	---	Pumice	---
Synthetic	---	Starch	---	Quartz	~ 1%
		Other*	~ 44%	Talc	---
				Vermiculite	---

Asbestos Minerals

Chrysotile	---	Anthophyllite	---	Tremolite/	
Amosite	~ 35%	Crocidolite	---	Actinolite	---

Comments: No asbestos was detected in the "A" and "E" layers and they were not included in the analysis. Please see sheet labeled C4503D and C4503B for the analyses of the "D" and "B" layers. *Binder is consistent with calcium silicate binders.

Analyst: Maureen C. Bottrell

MVA, Inc.
PLM Constituent Analysis

Date: 11/09/92

MVA#: 0393

Location: not provided

Sample I.D.#: C4503D

Client Sample I.D.#: 2

Examination using the stereomicroscope: C4503 is a multi-layered material composed of A) a tan consolidated material, B) a gray consolidated material, C) a white powdery material, D) a gray consolidated material, and E) a tan consolidated material.

<u>CONSTITUENT</u>	<u>%</u>	<u>CONSTITUENT</u>	<u>%</u>	<u>CONSTITUENT</u>	<u>%</u>
Fibers:		Pigment:		Fillers:	
Cotton	---	Binders:		Diatoms	---
Fiberglass		Kaolinite	---	Iron Chromite	---
Filament	---	Montmorillonite	---	Iron Oxide	---
Wool	---	Gypsum	---	Limestone	---
Mineral Wool	---	Anhydrite	---	Magnetite	---
Hair	---	Portland Cement	---	Mica	---
Paper/Wood		Lime (hydrated)	---	Perlite	---
Chem. Proc.	~ 24%	Precipitated		Synthetic Foam	---
Mech. Proc.	---	Carbonate	---	Pumice	---
Synthetic	---	Starch	---	Quartz	---
		Other	~ 50%	Talc	---
				Vermiculite	---
				Opaque	~ 2%

Asbestos Minerals

Chrysotile	~ 24%	Anthophyllite	---	Tremolite/	
Amosite	---	Crocidolite	---	Actinolite	---

Comments: No asbestos was detected in the "A" and "E" layers and they were not included in the analysis. Please see sheet labeled C4503C and C4503B for the analyses of the "C" and "B" layers.

Analyst: Maureen C. Bottrell

MVA, Inc.
PLM Constituent Analysis

Date: 11/09/92

MVA#: 0393

Location: not provided

Sample I.D.#: C4504

Client Sample I.D.#: 3

Examination using the stereomicroscope: C4504 is a gray consolidated material.

<u>CONSTITUENT</u>	<u>%</u>	<u>CONSTITUENT</u>	<u>%</u>	<u>CONSTITUENT</u>	<u>%</u>
Fibers:		Pigment:		Fillers:	
Cotton	---	Binders:		Diatoms	---
Fiberglass		Kaolinite	---	Iron Chromite	---
Filament	---	Montmorillonite	---	Iron Oxide	---
Wool	---	Gypsum	---	Limestone	~ 67%
Mineral Wool	---	Anhydrite	---	Magnetite	---
Hair	---	Portland Cement	---	Mica	---
Paper/Wood		Lime (hydrated)	---	Perlite	---
Chem. Proc.	---	Precipitated		Synthetic Foam	---
Mech. Proc.	---	Carbonate	---	Pumice	---
Synthetic	---	Starch	---	Quartz	< 1%
				Talc	---
				Vermiculite	---
				Opaques	~ 3%

Asbestos Minerals

Chrysotile	~ 30%	Anthophyllite	---	Tremolite/	
Amosite	---	Crocidolite	---	Actinolite	---

Comments:

Analyst: Maureen C. Bottrell