

December 16, 2022

Attn: Andrew Jones
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Project Location: 305 Fire Monument Road, Hinkley, MN 55037

Client Project #:
Techtron Project #: 24652

Sampled by: Andrew Jones
Date Sampled: 12/15/2022
Date Samples Received Laboratory: 12/15/2022 2:19:00 PM

Analyzed by: Theresa Erpelding
Date Analyzed: 12/16/2022
Number of Samples Analyzed: 10


Test Report: Asbestos Bulk Materials Identification by PLM

Following are the results of material samples obtained for asbestos identification analysis. Samples were observed at 42X magnification and suspect fibers were isolated from the bulk samples for observation under polarized light microscopy. The fibers were then evaluated under polarized light microscopy for extinction angle, sign of elongation, and morphology. Dispersion staining was performed using Cargille dispersion oils to observe color changes of fibers at various orientations.

Analysis was performed according to EPA method 600/R-93/116. This method has a reporting limit to <1% asbestos, in volumetric concentrations. Bulk samples were checked for the following types of asbestiform minerals: chrysotile, amosite, crocidolite, anthophyllite, and tremolite-actinolite.

Laboratory is ISO/IEC 17025:2017 accredited.

All sample details and results are listed in the table below.



Theresa Erpelding
Laboratory Manager

Client Sample #	Lab Sample #	Sample Location	Material Description	Layers	Results
1	24652-1	Attic	Vermiculite		<1% Actinolite/Tremolite*
2	24652-2	Kitchen	Ceiling plaster	1. Plaster 2. Skim coat	1. NAFD 2. NAFD
3	24652-3	Kitchen	Wall plaster		NAFD
4	24652-4	Kitchen	Linoleum		NAFD
5	24652-5	Living room	Ceiling plaster	1. Plaster 2. Skim coat	1. NAFD 2. NAFD
6	24652-6	Living room	Wall plaster	1. Plaster 2. Skim coat	1. NAFD 2. NAFD
7	24652-7	Bedroom 1	Wall plaster	1. Plaster 2. Skim coat	1. NAFD 2. NAFD
8	24652-8	Bedroom 1	Ceiling plaster	1. Plaster 2. Skim coat	1. NAFD 2. NAFD
9	24652-9	Bedroom 2	Ceiling sheetrock	1. Plaster 2. Skim coat	1. NAFD 2. NAFD
10	24652-10	Kitchen	Matic from sample 4		NAFD

End of Report

NAFD = No Asbestos Fibers Detected

NAPS = Not Analyzed Positive Stop

*No asbestos was detected. However, due to the uncertainty with existing testing techniques for vermiculite insulation, the Environmental Protection Agency and Agency for Toxic Substances and Disease Registry strongly recommend that all vermiculite insulation be assumed to contain asbestos. Therefore, Techtron Engineering recommends that this material be assumed to contain asbestos in quantities less than one percent.

Reporting Limit: <1%. Some samples reported as NAFD may contain asbestos fibers in quantities below 1%. Detection limits are dependent upon the sample size, matrix, and any interferences that may be present in the sample. Point counting is recommended for samples that require more precise quantification when samples contain low volumes of asbestos fibers (i.e. 1-5%). Uncertainty data available in EPA 600 R-93 116. Results are based on field sampling information provided by the client and are only valid for samples tested. Samples are stored for 30 days unless other arrangements are made by the client. Samples received in good condition unless otherwise noted. This report shall not be reproduced except in full, without the written approval of Techtron Engineering. AIHA-LAP, LLC Lab #101106. PJLA ISO 17025 Accreditation No. 108481.