

Table 1
Asbestos Sampling Results
148 Goodhue Road
Derry, New Hampshire

Sample Description	Sample Number	Asbestos Type	Non-Asbestos Components (percent)
Pink Fiberglass Insulation (Kitchen)	1	None Detected	Cellulose Fiber: 8 Fibrous Glass: 90 Binder/Filler: 2
Yellow Fiberglass (Kitchen)	2	None Detected	Cellulose Fiber: 1 Fibrous Glass: 98 Binder/Filler: 1
Black Tar Paper (Front Porch Roof)	3	None Detected	Cellulose Fiber: 95 Binder/Filler: 5
Black Tar Paper (Back of Building; under Top Roof Shingles)	4	None Detected	Cellulose Fiber: 95 Binder/Filler: 5
Top Roof Shingle (Back of Building)	5	None Detected	Cellulose Fiber: 65 Binder/Filler: 35
White Ceiling Material (Front Porch)	6	None Detected	Cellulose Fiber: 98 Binder/Filler: 2
Water Pipe Insulation (Crawl Space) Layer 1 (Yellow)	7	None Detected	Cellulose Fiber: 2 Fibrous Glass: 97 Binder/Filler: 1
Water Pipe Insulation (Crawl Space) Layer 2 (White Paper Cover)	7	None Detected	Cellulose Fiber: 93 Fibrous Glass: 5 Binder/Filler: 2
Black Tar Paper (Back of Building; under Second Roof Shingles)	8	None Detected	Cellulose Fiber: 95 Binder/Filler: 5
White Caulking Material around Windows	9	None Detected	Cellulose Fiber: 1 Binder/Filler: 99
Black Tar Paper under Siding Material	10	None Detected	Cellulose Fiber: 97 Binder/Filler: 3
Siding Material	11	Chrysotile (35%)	Cellulose Fiber: 1 Binder/Filler: 64
Reddish Shingle (Front Right Corner)	12	None Detected	Cellulose Fiber: 65 Binder/Filler: 35
White Wallboard (Small Back Room - Left Side) Layer 1 (Wallboard)	13	None Detected	Cellulose Fiber: 10 Binder/Filler: 90
White Wallboard (Small Back Room - Left Side) Layer 2 (Joint Compound)	13	None Detected	Cellulose Fiber: 1 Binder/Filler: 99
Linoleum (Red Brick Pattern) Layer 1 (Linoleum)	14	None Detected	Cellulose Fiber: 5 Binder/Filler: 95
Linoleum (Red Brick Pattern) Layer 2 (Brown Paper Backing)	14	None Detected	Cellulose Fiber: 98 Binder/Filler: 2
Roof Shingle (Second Roof)	15	None Detected	Cellulose Fiber: 65 Binder/Filler: 35
Black Tar Paper under Red Shingles	16	None Detected	Cellulose Fiber: 99 Binder/Filler: 1
White Ceiling Material (Kitchen)	17	None Detected	Cellulose Fiber: 3 Fibrous Glass: 1 Binder/Filler: 96



John Kubiczki
Hydro-GeoChemical Solutions, LLC
P.O. Box 33
Barrington NH 03825

Project Reference:
Laboratory Batch #: 1722183
Date Samples Received: 08/28/2017
Date Samples Analyzed: 08/31/2017
Date of Final Report: 08/31/2017

SAMPLE IDENTIFICATION:

Seventeen (17) samples from Condemned Building; 148 Goodhue Road project were submitted by John Kubiczki on 08/28/2017

This bulk sample(s) was delivered to Optimum Analytical Consulting, LLC (Optimum) located in Salem, New Hampshire for asbestos content determination.

ANALYTICAL METHOD:

Analytical procedures were performed in accordance with the U.S. Environmental Protection Agency (EPA) Recommended Method for the Determination of Asbestos in Bulk Samples by Polarized Light Microscopy and Dispersion Staining (PLM/DS)(EPA-600/M4-82-020, EPA-600/ R-93-116). This report relates only to those samples analyzed, and may not be indicative of other similar appearing materials existing at this, or other sites. Quantification of asbestos content was determined by Calibrated Visual Estimation. Optimum is not responsible for sample collection activities or analytical method limitations. The laboratory is not responsible for the accuracy of results when requested to physically separate and analyze layered samples.

In any given material, fibers with a small diameter (<0.25µm) may not be detected by the PLM method. Floor tile and other resinously bound material may yield a false negative if the asbestos fibers are too small to be resolved using PLM. Additional analytical methods may be required. Optimum recommends using Transmission Electron Microscopy (TEM) for a more definitive analysis.

Optimum will retain all samples for a minimum of three months. Further analysis or return of samples must be requested within this three month period to guarantee their availability. This report may not be reproduced except in full, without the written approval of Optimum Analytical and Consulting, LLC.

Use of the NVLAP and AIHA Logo in no way constitutes or implies product certification, approval, or endorsement by the National Institute of Standards and Technology or the American Industrial Hygiene Association.

Detection Limit <1%, Reporting Limits: CVES = 1%, 400 Point Count = .25%, 1000 Point Count = 0.1%; Present or Absent are observations made during a qualitative analysis.

This report is considered preliminary until signed by both the Laboratory Analyst and Laboratory Director or Supervisor. If you have any questions regarding this report, please do not hesitate to contact us.

Jamie L. Noel
Laboratory Director

Kristina Scaviola
Laboratory Supervisor



CLIENT: Hydro-GeoChemical Solutions, LLC
ADDRESS: P.O. Box 33
CITY / STATE / ZIP: Barrington NH 03825
CONTACT: John Kubiczki
DESCRIPTION: PLM Analysis
LOCATION: Condemned Building; 148 Goodhue Road

ORDER #: 1722183
PROJECT #:
DATE COLLECTED: 08/28/2017
COLLECTED BY: John Kubiczki
DATE RECEIVED: 08/28/2017
ANALYSIS DATE: 08/31/2017
REPORT DATE: 08/31/2017
ANALYST: Jamie Noel

REPORT OF ANALYSIS

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type (%)	Non-Asbestos Components (%)
1722183-001 1	Kitchen Pink Fiberglass, Black/Pink	LAYER 1 100%	None Detected	Cellulose Fiber 8% Fibrous Glass 90% Binder/Filler 2%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1722183-002 2	Kitchen Yellow Fiberglass,	LAYER 1 100%	None Detected	Cellulose Fiber 1% Fibrous Glass 98% Binder/Filler 1%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1722183-003 3	Front Porch Tar Paper - Exposed no Shingle, Black	LAYER 1 100%	None Detected	Cellulose Fiber 95% Binder/Filler 5%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1722183-004 4	Top Roof Tar Paper Under Roofing Shingles, Black	LAYER 1 100%	None Detected	Cellulose Fiber 95% Binder/Filler 5%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1722183-005 5	Top Roof Roof Shingles, Black	LAYER 1 100%	None Detected	Cellulose Fiber 65% Binder/Filler 35%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1722183-006 6	Front Porch White Ceiling Material, Brown/White	LAYER 1 100%	None Detected	Cellulose Fiber 98% Binder/Filler 2%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1722183-007 7	Crawl Space LAYER 1 Pipe Insulation - Water Pipes, Yellow	LAYER 1 100%	None Detected	Cellulose Fiber 2% Fibrous Glass 97% Binder/Filler 1%
	LAYER 2 White Paper Cover,	LAYER 2 100%	None Detected	Cellulose Fiber 93% Fibrous Glass 5% Binder/Filler 2%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%



OPTIMUM

Analytical and Consulting, LLC

85 Stiles Road, Suite 201, Salem, NH 03079 Phone: (603)-458-5247

BULK SAMPLE ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY

PLM (EPA-600/M4-82-020, EPA-600/ R-93-116) NVLAP Lab Code: 101433-0

CLIENT: Hydro-GeoChemical Solutions, LLC
ADDRESS: P.O. Box 33
CITY / STATE / ZIP: Barrington NH 03825
CONTACT: John Kubiczki
DESCRIPTION: PLM Analysis
LOCATION: Condemned Building; 148 Goodhue Road

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ANALYST: Jamie Noel

REPORT OF ANALYSIS

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type (%)	Non-Asbestos Components (%)
1722183-008 8	2nd Roof			
	Tar Paper Beneath, Black	LAYER 1 100%	None Detected	Cellulose Fiber 95% Binder/Filler 5%
	Total % Asbestos: No Asbestos Detected		Total % Non-Asbestos: 100.0%	
1722183-009 9	Around Windows			
	White Caulking, White/Gray	LAYER 1 100%	None Detected	Cellulose Fiber 1% Binder/Filler 99%
	Total % Asbestos: No Asbestos Detected		Total % Non-Asbestos: 100.0%	
1722183-010 10	Under Siding			
	Tar Paper, Black	LAYER 1 100%	None Detected	Cellulose Fiber 97% Binder/Filler 3%
	Total % Asbestos: No Asbestos Detected		Total % Non-Asbestos: 100.0%	
1722183-011 11	Siding			
	Siding Material, Gray	LAYER 1 100%	Chrysotile 35%	Cellulose Fiber 1% Binder/Filler 64%
	Total % Asbestos: 35.0%		Total % Non-Asbestos: 65.0%	
1722183-012 12	Front Corner			
	Reddish Shingle, Black	LAYER 1 100%	None Detected	Cellulose Fiber 65% Binder/Filler 35%
	Total % Asbestos: No Asbestos Detected		Total % Non-Asbestos: 100.0%	
1722183-013 13	Left Side-Small Room			
	LAYER 1 Wallboard, White/Brown	LAYER 1 100%	None Detected	Cellulose Fiber 10% Binder/Filler 90%
	LAYER 2 Joint Compound, White	LAYER 2 100%	None Detected	Cellulose Fiber 1% Binder/Filler 99%
	Total % Asbestos: No Asbestos Detected		Total % Non-Asbestos: 100.0%	
1722183-014 14	LAYER 1 Linoleum, Red	LAYER 1 100%	None Detected	Cellulose Fiber 5% Binder/Filler 95%
	LAYER 2 Brown Paper Backing,	LAYER 2 100%	None Detected	Cellulose Fiber 98% Binder/Filler 2%
	Total % Asbestos: No Asbestos Detected		Total % Non-Asbestos: 100.0%	



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ANALYST: Jamie Noel

REPORT OF ANALYSIS

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Asbestos Type (%)	Non-Asbestos Components (%)
1722183-015 15	2nd Roof Roof Shingle, Black	LAYER 1 100%	None Detected	Cellulose Fiber 65% Binder/Filler 35%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1722183-016 16	Under Red Shingles Tar Paper, Black	LAYER 1 100%	None Detected	Cellulose Fiber 99% Binder/Filler 1%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%
1722183-017 17	Kitchen White Ceiling Material,	LAYER 1 100%	None Detected	Cellulose Fiber 3% Fibrous Glass 1% Binder/Filler 96%
Total % Asbestos:			No Asbestos Detected	Total % Non-Asbestos: 100.0%

**Analyst
Signatory:**
Jamie Noel





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BULK SAMPLE ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY

PLM (EPA-600/M4-82-020, EPA-600/ R-93-116) NVLAP Lab Code: 101433-0

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1722183

85 Stiles Road, Suite 201
 Salem, NH 03079
 603-458-5247

OPTIMUM ANALYTICAL AND CONSULTING, LLC

Chain of Custody

Page 1 of 2

Analysis and TAT:	4-6 Hour	24 Hour	48 Hour	Standard (3-5 day)	Standard (6-10 Day)	Comments (please indicate other test specific information here):
PLM				X		
PCM						
Mold	Not Available					
Lead	Not Available					
TEM (air or bulk)	Not Available					
Sampler: J. Kubiczki	Location Samples Collected: 148 Goodhue Road			Positive Stop Analysis	yes	No
Project Manager: J. Kubiczki	Email: john.k@hydro-geochemical-solutions.com			Phone Number:	603.502.5181	
Project Information: Condemned Building - being demo				Company Name and Address: Hydro-GeoChemical Solutions P.O. Box 33 Barrington, NH 03825		
Sample Number	Description and location					Time and Temperature at collection:
1	Pink Fiberglass (Kitchen)					
2	Yellow Fiberglass (Kitchen)					
3	Tar paper (Front porch) - Exposed (no shingles)					
4	Tar paper underlying Roofing shingles (top roof)					
5	Roofing shingles (top roof)					
6	White Ceiling Material (Front Porch)					
7	Pipe Insulation (Crawl Space) - Water Pipes					
8	Tar paper beneath 2 nd Roof					
9	White Caulking around Windows					
10	Tar paper under siding					
11	Siding material					
12	Reddish Shingles (Front Corner)					
13	White wallboard (left side; small room)					
14	Linoleum (red brick pattern)					
15	Roof Shingle (2 nd Roof)					

The EPA Requires that layered samples be separated; Please indicate if a sample is to be analyzed as a composite. NY State requires positive friable samples to be point counted; Negative NOB samples require additional TEM analysis to be confirmed Negative.

Relinquished by: John Kubiczki Date: 8/28/17 Time: 12:00

Received by: [Signature] Date: 8/28/17 Time: 12:00

