

## CERTIFICATE OF ANALYSIS

**Client:** Ambler Borough  
122 E Butler Ave  
Ambler PA 19002

**Report Date:** 11/14/2010  
**Project:** D.E.P.  
**Project No.:** Asb. Samp. Dis. System

### TEM WATER SAMPLE ANALYSIS SUMMARY

<u>Lab No.</u>	<u>Client No.</u>	<u>Location</u>	<u>Total Asbestos Concentration</u>	<u>Asbestos Concentration Fibers &gt; 10 Microns</u>	<u>Asbestos Types</u>
4138503	AC-1	Sampled-11-8-10 8:55AM Analyzed-11-14-10 Davis&MarieRd;Potable	<0.08 Million Fibers/Liter	<0.08 Million Fibers/Liter	None Detected
4138504	AC-2	Sampled-11-8-10 10:50AM Analyzed-11-14-10 Madison&HartanftAve;Potable	<0.09 Million Fibers/Liter	<0.09 Million Fibers/Liter	None Detected
4138505	AC-3	Sampled-11-8-10 1:30AM Analyzed-11-14-10 Toland&MilitaHillRd;Potable	0.09 Million Fibers/Liter	<0.09 Million Fibers/Liter	Chrysotile
4138506	AC-4	Sampled-11-8-10 9:30AM Analyzed-11-14-10 Batleson&AldrinDr;Potable	<0.09 Million Fibers/Liter	<0.09 Million Fibers/Liter	None Detected

NJ DEP 03863

NVLAP Lab Code 101165-0

NYS-DOH No. 11021

**Methodology:** EPA Method For Determining Asbestos In Drinking Water (EPA 600/4-83-043) and EPA Method 100.1 and 100.2  
NYSDOH Method For Waterborne Asbestos (ELAP 198.2)

*IATL assumes that all sampling methods and data upon which these results are based have been accurately supplied by the client. Samples are not blank corrected. This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government*

Minimum detection limit dependant upon turbidity of sample and volume filtered. National Primary Drinking Water Regulations under EPA's Safe Drinking Water Act dictates maximum contaminant levels for asbestos at 7.0 million fibers per liter. EPA and NYS-DOH regulations require segregation of overall fiber concentration, total asbestos concentration and asbestos concentration of fibers > 10 microns in length.

**Analysis Performed By:** J. Silcox

**Approved By:**



**Date:** 11/14/2010

Frank E. Ehrenfeld, III  
Laboratory Director

## Transmission Electron Microscopy - Sample Data

Client: Ambler Borough  
122 E Butler Ave  
Ambler PA 19002

Report Date: 11/14/2010  
Project: D.E.P.  
Project No.: Asb.Samp.Dis.System

IATL No.: 4138503  
Client Sample No.: AC-1

Description/ Location: Sampled-11-8-10 8:55AM  
Analyzed-11-14-10  
Davis&MarieRd;Potable

Volume Filtered: 150.0 Milliliters  
Filter Type: MCE  
Filter Size: 962 mm<sup>2</sup>  
Pore Size: 0.10 µm

### ANALYSIS RESULTS:

Grid Openings: 6  
Opening Area: 0.013 mm<sup>2</sup>  
Area Analyzed: 0.078 mm<sup>2</sup>  
Detection Limit: 0.080 Million Fibers/Liter  
Sensitivity: 12.8 Fibers/mm<sup>2</sup>

### ASBESTOS FIBERS:

> 0.5 Microns: None Detected  
Concentration: <0.08 Million Fibers/Liter  
> 10 Microns: None Detected  
Concentration: <0.08 Million Fibers/Liter  
Types Identified: None Detected  
Type 2:  
Type 3:

NON-ASBESTOS FIBERS: None Detected  
Concentration: <0.08 Million Fibers/Liter  
Types Identified: None Detected  
Type 2:  
Type 3:  
Type 4:

Micrograph Number:  
X-Ray Spectrum Number:

Methodology: EPA Method For Determining Asbestos In Drinking Water (EPA 600/4-83-043) and EPA Method 100.1 and 100.2.  
NYSDOH Method For Waterborne Asbestos (ELAP 198.2)

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IATL No.: 4138504  
Client Sample No.: AC-2

Description/ Location: Sampled-11-8-10 10:50AM  
Analyzed-11-14-10  
Madison&HartanftAve;Potable

Volume Filtered: 100.0 Milliliters  
Filter Type: MCE  
Filter Size: 962 mm<sup>2</sup>  
Pore Size: 0.10 µm

### ANALYSIS RESULTS:

Grid Openings: 8  
Opening Area: 0.013 mm<sup>2</sup>  
Area Analyzed: 0.104 mm<sup>2</sup>  
Detection Limit: 0.090 Million Fibers/Liter  
Sensitivity: 9.6 Fibers/mm<sup>2</sup>

### ASBESTOS FIBERS:

> 0.5 Microns: None Detected  
Concentration: <0.09 Million Fibers/Liter  
> 10 Microns: None Detected  
Concentration: <0.09 Million Fibers/Liter  
Types Identified: None Detected  
Type 2:  
Type 3:

### NON-ASBESTOS FIBERS:

19  
Concentration: 0.19 Million Fibers/Liter  
Types Identified: Iron  
Type 2:  
Type 3:  
Type 4:

Micrograph Number:  
X-Ray Spectrum Number:

Methodology: EPA Method For Determining Asbestos In Drinking Water (EPA 600/4-83-043) and EPA Method 100.1 and 100.2.  
NYSDOH Method For Waterborne Asbestos (ELAP 198.2)

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Project No.: Asb.Samp.Dis.System

IATL No.: 4138505

Client Sample No.: AC-3

Description/ Location: Sampled-11-8-10 1:30AM  
Analyzed-11-14-10  
Toland&MiliteHillRd;Potable

Volume Filtered: 200.0 Milliliters  
Filter Type: MCE  
Filter Size: 962 mm<sup>2</sup>  
Pore Size: 0.10 µm

### ANALYSIS RESULTS:

Grid Openings: 4  
Opening Area: 0.013 mm<sup>2</sup>  
Area Analyzed: 0.052 mm<sup>2</sup>  
Detection Limit: 0.090 Million Fibers/Liter  
Sensitivity: 19.2 Fibers/mm<sup>2</sup>

### ASBESTOS FIBERS:

> 0.5 Microns: 1  
Concentration: 0.09 Million Fibers/Liter  
> 10 Microns: None Detected  
Concentration: <0.09 Million Fibers/Liter  
Types Identified: Chrysotile  
Type 2:  
Type 3:

### NON-ASBESTOS FIBERS:

1  
Concentration: 0.09 Million Fibers/Liter  
Types Identified: Iron  
Type 2:  
Type 3:  
Type 4:

Micrograph Number:  
X-Ray Spectrum Number: 2:00:26

Methodology: EPA Method For Determining Asbestos In Drinking Water (EPA 600/4-83-043) and EPA Method 100.1 and 100.2  
NYSDOH Method For Waterborne Asbestos (ELAP 198.2)

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Project: D.E.P.  
Project No.: Asb.Samp.Dis.System

IATL No.: 4138506  
Client Sample No.: AC-4

Description/ Location: Sampled-11-8-10 9:30AM  
Analyzed-11-14-10  
Batleson&AldrinDr.Potable

Volume Filtered: 200.0 Milliliters  
Filter Type: MCE  
Filter Size: 962 mm<sup>2</sup>  
Pore Size: 0.10 µm

### ANALYSIS RESULTS:

Grid Openings: 4  
Opening Area: 0.013 mm<sup>2</sup>  
Area Analyzed: 0.052 mm<sup>2</sup>  
Detection Limit: 0.090 Million Fibers/Liter  
Sensitivity: 19.2 Fibers/mm<sup>2</sup>

### ASBESTOS FIBERS:

> 0.5 Microns: None Detected  
Concentration: <0.09 Million Fibers/Liter  
> 10 Microns: None Detected  
Concentration: <0.09 Million Fibers/Liter  
Types Identified: None Detected  
Type 2:  
Type 3:

NON-ASBESTOS FIBERS: None Detected  
Concentration: <0.09 Million Fibers/Liter  
Types Identified: None Detected  
Type 2:  
Type 3:  
Type 4:

Micrograph Number:  
X-Ray Spectrum Number:

Methodology: EPA Method For Determining Asbestos In Drinking Water (EPA 600/4-83-043) and EPA Method 100.1 and 100.2,  
NYSDOH Method For Waterborne Asbestos (ELAP 198.2)

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