

June 1, 2024

Ref: 21689.18

Mr. Joseph Lenahan
Operations Manager
Office of Education
New Jersey Department of Children and Families
PO Box 710
Trenton, NJ 08625



Re: Lead and Copper in Drinking Water Testing
DCF Regional School – Cape May Campus
131 Crest Haven Road
Cape May Court House, NJ 08210

Dear Mr. Lenahan,

Vanasse Hangen Brustlin Inc. (VHB) was retained to perform drinking water testing at the New Jersey Department of Children and Families (DCF) Regional School's Cape May Campus located 131 Crest Haven Road, Cape May Court House, New Jersey (subject property). VHB performed the sampling on May 14, 2024. The purpose of the testing was to determine if lead or copper may be present above the established regulatory limits in Client-identified drinking water sources within the subject building.

METHODS

Samples of potable water were collected from each location where water may be used for drinking or food preparation. Sampling protocol included the following:

- Samples were collected on a Saturday when the school was not occupied.
- The sample locations were flushed for several minutes by the Client the day prior to collecting the samples.
- The Client was instructed to not use water from the sampling locations during the overnight period or morning prior to collecting the samples.
- Samples were collected at the Client-identified sampling locations starting with the location nearest to the water service point of entry to the building.
- Each sampling location was inspected for evidence that the water had been used that day prior to collecting the first draw samples (i.e. dripping faucet, water residue in basin).
- Each location was checked to verify whether water treatment (filter/bubbler) was or was not in use.
- Two (2) samples were collected at each location. The first sample is a first-draw sample collected from the tap after the overnight resting period. The second is a flush sample collected after running water for 30 seconds.
- Samples were collected in 250 mL bottles.
- Bottles were labeled, and chain-of-custody completed for each sample.
- Samples were dropped off at the laboratory.

1805 Atlantic Avenue

Engineers | Scientists | Planners | Designers

Manasquan, New Jersey 08736

P 732.223.2225



- The laboratory accessioned the samples and added the necessary preservatives within the allowable timeframe.

Samples were delivered under chain-of-custody to IATL International, Inc., 9000 Commerce Parkway Suite B, Mt. Laurel, New Jersey 08054. IATL is a New Jersey Department of Environmental Protection (NJDEP) Certified Drinking Water Laboratory.

The regulatory limits for lead and copper are established by the United States Environmental Protection Agency (EPA) under the Safe Drinking Water Act – Lead and Copper Rule (LCR). The LCR established an action level of 0.015 mg/L (15 ppb) for lead and 1.3 mg/L (1300 ppb) for copper. The New Jersey Department of Education (NJDOE) and New Jersey Department of Health (NJDOH) have adopted these limits as well.

RESULTS

TABLE 1					
SUMMARY OF LABORATORY ANALYSIS RESULTS – LEAD (Pb)					
Sample ID	FD/FL	Location	Treatment in Use	Result (PPB)	MCL (PPB)
CM-01-FD	FD	Kitchen	Yes	<1.00	15
CM-01-FL	FL	Kitchen	Yes	NA	15
CM-02-FD	FD	Teacher’s Lounge	Yes	<1.00	15
CM-02-FL	FL	Teacher’s Lounge	Yes	NA	15
CM-03-FD	FD	Room 111	Yes	<1.00	15
CM-03-FL	FL	Room 111	Yes	NA	15
CM-04-FD	FD	Room 112	Yes	<1.00	15
CM-04-FL	FL	Room 112	Yes	NA	15
CM-05-FD	FD	Room 106	Yes	<1.00	15
CM-05-FL	FL	Room 106	Yes	NA	15
CM-06-FD	FD	Room 107	Yes	<1.00	15
CM-06-FL	FL	Room 107	Yes	NA	15
CM-07-FD	FD	Room 110	Yes	<1.00	15
CM-07-FL	FL	Room 110	Yes	NA	15
CM-08-FD	FD	Room 108	Yes	<1.00	15
CM-08-FL	FL	Room 108	Yes	NA	15

MCL – Maximum Contaminant Level; NA – Not Analyzed; FD – First Draw; FL – Flush



TABLE 2 SUMMARY OF LABORATORY ANALYSIS RESULTS – COPPER (Cu)					
Sample ID	FD/FL	Location	Treatment in Use	Result (PPB)	MCL (PPB)
CM-01-FD	FD	Kitchen	Yes	<100	1300
CM-01-FL	FL	Kitchen	Yes	NA	15
CM-02-FD	FD	Teacher’s Lounge	Yes	<100	1300
CM-02-FL	FL	Teacher’s Lounge	Yes	NA	15
CM-03-FD	FD	Room 111	Yes	<100	1300
CM-03-FL	FL	Room 111	Yes	NA	15
CM-04-FD	FD	Room 112	Yes	<100	1300
CM-04-FL	FL	Room 112	Yes	NA	15
CM-05-FD	FD	Room 106	Yes	<100	1300
CM-05-FL	FL	Room 106	Yes	NA	15
CM-06-FD	FD	Room 107	Yes	<100	1300
CM-06-FL	FL	Room 107	Yes	NA	15
CM-07-FD	FD	Room 110	Yes	<100	1300
CM-07-FL	FL	Room 110	Yes	NA	15
CM-08-FD	FD	Room 108	Yes	<100	1300
CM-08-FL	FL	Room 108	Yes	NA	15

MCL – Maximum Contaminant Level; NA – Not Analyzed; FD – First Draw; FL – Flush

Laboratory analysis results of the lead and copper sampling indicate the concentrations were below the laboratory regulatory limits for lead at each test location. Flush samples were not analyzed because there were no exceedances reported in the first draw results. Certificates of laboratory analysis are presented in **Appendix I**.

LIMITATIONS

Results should not be considered to reflect conditions at other tap locations in the facility. The findings in this report are reflective of the conditions at the time of the VHB inspections. The findings and recommendations are valid as of the date of the report. The conclusions are limited based on the site conditions at the time of our inspection and the enclosed analytical results. Please do not hesitate to contact the undersigned at 732-223-2225 if you have questions and/or comments or require additional information.

Respectfully submitted,

VANASSE HANGEN BRUSTLIN, INC.

Christopher Glowacki, CIH, CIEC
 Senior Project Manager

APPENDIX I

LABORATORY CERTIFICATES OF ANALYSIS

CERTIFICATE OF ANALYSIS

Client: Vanasse Hangen Brustlin, Inc.
1805 Atlantic Avenue
Manasquan NJ 08736

Report Date: 5/21/2024
Report No.: 699929 - Lead Water
Project: DCF Cape May- Drinking Water
Project No.: 21689.18

Client: VHB973

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7755483 **Location:** Kitchen **Result(ppb):** <1.00
Client No.: CM-01-FD * Sample acidified to pH <2.

Lab No.: 7755484 **Location:** Teacher's Lounge **Result(ppb):** <1.00
Client No.: CM-02-FD * Sample acidified to pH <2.

Lab No.: 7755485 **Location:** Room 111 **Result(ppb):** <1.00
Client No.: CM-03-FD * Sample acidified to pH <2.

Lab No.: 7755486 **Location:** Room 112 **Result(ppb):** <1.00
Client No.: CM-04-FD * Sample acidified to pH <2.


Lab No.: 7755487 **Location:** Room 106 **Result(ppb):** <1.00
Client No.: CM-05-FD * Sample acidified to pH <2.

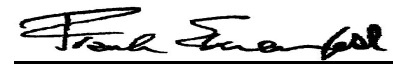
Lab No.: 7755488 **Location:** Room 107 **Result(ppb):** <1.00
Client No.: CM-06-FD * Sample acidified to pH <2.

Lab No.: 7755489 **Location:** Room 110 **Result(ppb):** <1.00
Client No.: CM-07-FD * Sample acidified to pH <2.

Lab No.: 7755490 **Location:** Room 108 **Result(ppb):** <1.00
Client No.: CM-08-FD * Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 5/15/2024
Date Analyzed: 05/21/2024
Signature: 
Analyst: Chad Shaffer

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Vanasse Hangen Brustlin, Inc.
1805 Atlantic Avenue
Manasquan NJ 08736

Report Date: 5/21/2024
Report No.: 699929 - Lead Water
Project: DCF Cape May- Drinking Water
Project No.: 21689.18

Client: VHB973

Appendix to Analytical Report:

Customer Contact: Chris Glowacki
Analysis: AAS-GF - ASTM D3559-15D

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com
iATL Office Manager: wchampion@iatl.com
iATL Account Representative: Kelly Klippel
Sample Login Notes: See Batch Sheet Attached
Sample Matrix: Water
Exceptions Noted: See Following Pages

General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

Information Pertinent to this Report:

Analysis by AAS Graphite Furnace:

- ASTM D3559-15D

Certification:

- NYS-DOH No. 11021

- NJDEP No. 03863

Note: These methods are analytically equivalent to iATL's accredited method;

- USEPA 40CFR 141.11B

- USEPA 200.9 Pb, AAS-GF, RL <2 ppb/sample

- USEPA SW 846-7421 - Pb(AAS-GF, RL <2 ppb/sample)

Regulatory limit for lead in drinking water is 15.0 parts per billion as cited in EPA 40 CFR 141.11 National Primary Drinking Water Regulations, Subpart B: Maximum contaminant levels for inorganic chemicals.

All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Sample results are not corrected for contamination by field or analytical blanks.

PPB = Parts per billion. 1 µg/L = 1 ppb MDL = 0.24 PPB Reporting Limit (RL) = 1.0 PPB

CERTIFICATE OF ANALYSIS

Client: Vanasse Hangen Brustlin, Inc.
1805 Atlantic Avenue
Manasquan NJ 08736

Report Date: 5/21/2024
Report No.: 699929 - Lead Water
Project: DCF Cape May- Drinking Water
Project No.: 21689.18

Client: VHB973

Disclaimers / Qualifiers:

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at customerservice@iatl.com.

Matrix spiking is performed on each client batch to determine if interferences could impact results. When spike recoveries fall out of acceptable range matrix interference is suspected and samples are diluted until acceptable spike recovery can be achieved. Reporting limits will increase by the same degree as the dilution required.

Note: Sample dilution required due to matrix interference.

Water Sample Turbidity greater than 1.0 NTU does not meet Federal and NJ State Primary & Secondary Drinking Water Standards.

* ASTM D3559 (D) calls for the addition of acid at the time of sampling. Unless so noted on the chain of custody by the client iATL acidifies samples to a pH of <2 at least 24 hours prior to analysis.

CERTIFICATE OF ANALYSIS

Client: Vanasse Hangen Brustlin, Inc.
1805 Atlantic Avenue
Manasquan NJ 08736

Report Date: 5/21/2024
Report No.: 699929 - Copper Water
Project: DCF Cape May- Drinking Water
Project No.: 21689.18

Client: VHB973

COPPER WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7755483 **Location:** Kitchen **Result(ppb):** <100
Client No.: CM-01-FD * Sample acidified to pH <2.

Lab No.: 7755484 **Location:** Teacher's Lounge **Result(ppb):** <100
Client No.: CM-02-FD * Sample acidified to pH <2.

Lab No.: 7755485 **Location:** Room 111 **Result(ppb):** <100
Client No.: CM-03-FD * Sample acidified to pH <2.

Lab No.: 7755486 **Location:** Room 112 **Result(ppb):** <100
Client No.: CM-04-FD * Sample acidified to pH <2.


Lab No.: 7755487 **Location:** Room 106 **Result(ppb):** <100
Client No.: CM-05-FD * Sample acidified to pH <2.


Lab No.: 7755488 **Location:** Room 107 **Result(ppb):** <100
Client No.: CM-06-FD * Sample acidified to pH <2.

Lab No.: 7755489 **Location:** Room 110 **Result(ppb):** <100
Client No.: CM-07-FD * Sample acidified to pH <2.

Lab No.: 7755490 **Location:** Room 108 **Result(ppb):** <100
Client No.: CM-08-FD * Sample acidified to pH <2.

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 5/15/2024
Date Analyzed: 05/21/2024
Signature: 
Analyst: Chad Shaffer

Approved By: 
Frank E. Ehrenfeld, III
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1805 Atlantic Avenue
Manasquan NJ 08736

Report Date: 5/21/2024
Report No.: 699929 - Copper Water
Project: DCF Cape May- Drinking Water
Project No.: 21689.18

Client: VHB973

Appendix to Analytical Report:

Customer Contact: Chris Glowacki
Analysis: AAS-FL- ASTM D1688-17(A)

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

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iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

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Information Pertinent to this Report:

Analysis by AAS Graphite Furnace:

- ASTM D1688-17(A)

Accreditations:

- NYS-DOH No. 11021

- NJDEP No. 03863

Note: These methods are analytically equivalent to iATL's accredited method;

- USEPA 200.9 Cu, AAS-FL, RL <100 ppb/sample

Regulatory limit for copper in drinking water is 1300 parts per billion (or 1.3 ppm) as cited in EPA 40 CFR 141.11 National Primary Drinking Water Regulations, Subpart B: Maximum contaminant levels for inorganic chemicals.

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Sample results are not corrected for contamination by field or analytical blanks.

PPB = Parts per billion. 1 µg/L = 1 ppb MDL = 20 PPB Reporting Limit (RL) <100 PPB

Disclaimers / Qualifiers:

CERTIFICATE OF ANALYSIS

Client: Vanasse Hangen Brustlin, Inc.
1805 Atlantic Avenue
Manasquan NJ 08736

Report Date: 5/21/2024
Report No.: 699929 - Copper Water
Project: DCF Cape May- Drinking Water
Project No.: 21689.18

Client: VHB973

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Note: Sample dilution required due to matrix interference.

Water Sample Turbidity greater than 1.0 NTU does not meet Federal and NJ State Primary & Secondary Drinking Water Standards.

* ASTM D1668-17(A) calls for the addition of acid at the time of sampling. Unless so noted on the chain of custody by the client iATL acidifies samples to a pH of <2 at least 24 hours prior to analysis.

Chain of Custody

– Environmental Lead –

Contact Information	
Client Company: <u>VAB</u>	Project Number: <u>21689.18</u>
Office Address: <u>1805 Atlantic Ave</u>	Project Name: <u>Det Cape May Drinking Water</u>
City, State, Zip: <u>Marlton, NJ 08053</u>	Primary Contact: <u>Chris Glowacki, John Russo</u>
Fax Number: _____	Office Phone: _____
Email Address: <u>Cglowacki@vab.com, jruss@vab.com</u>	Cell Phone: <u>732-233-1185</u>

iATL is accredited by the National Lead Laboratory Accreditation Program (NLLAP) to perform analytical testing of environmental samples for lead (Pb). The accreditation is through AIHA-LAP, LLC and several other nationally recognized state programs.

Matrix/Method:

- Paint by AAS: ASTM D3335-85a, 2009
- Wipe/Dust by AAS: SW 846: 3050B: 700B, 2010
- Air by AAS: NIOSH 7082, 1994
- Soil by AAS: EPA SW.846 (Soil)
- Water by AAS-GF: ASTM D3559-03D, US EPA 200.9
- Other Metals (Cd, Zn, Cr) by AAS
- Toxicity Characteristic Leaching Procedure (TCLP) by AAS: US EPA 1311
- Other _____

Special Instructions:

Lead & Copper Drinking Water - Child Care

Turnaround Time

Preliminary Results Requested Date: Standard Verbal Email Fax

Specific date / time

10 Day 5 Day 3 Day 2 Day 1 Day* 12 Hour** 6 Hour** RUSH**

* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping***

Chain of Custody

Relinquished (Name/Organization): <u>John Russo/VAB</u>	Date: <u>5/14/24</u>	Time: <u>10:15</u>	RECEIVED
Received (Name / iATL): _____	Date: _____	Time: _____	
Sample Login (Name / iATL): _____	Date: _____	Time: _____	
Analysis(Name(s) / iATL): <u>12/21/24</u>	Date: _____	Time: <u>MAY 15 2024</u>	
QA/QC Review (Name / iATL): _____	Date: _____	Time: _____	
Archived / Released: _____ QA/QC InterLAB Use: _____	Date: _____	Time: _____	

IATL - BY R2

