March 29, 2022

Ref: 21336.22

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

Re: Lead in Drinking Water Testing
DCF Regional School – Union Campus
1524 Terrill Road
Scotch Plains, NJ 07076
Project No. 21336.22

Dear Mr. Wybraniec,

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 Union County Campus located at 1524 Terrill Road, Scotch Plains, NJ (subject property). VHB performed the sampling on March 19, 2022. The purpose of the testing was to determine if lead may be present in potable water sources above the established regulatory limits in Client identified drinking water sources within the subject building.

METHODS

Samples of potable water were collected from each Client-identified 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.
- The laboratory accessioned the samples and added the necessary preservatives within the allowable timeframe.

www.vhb.com
vhb + Brinkerhoff
Joining Forces

Engineers | Scientists | Planners | Designers

1805 Atlantic Avenue
Manasquan, New Jersey 08736
P 732.223.2225

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 in drinking water 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). 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)
UN-01-FD	FD	Kitchen	Yes	<1.00	15
UN-02-FL	FL	Kitchen	Yes	NA	15
UN-03-FD	FD	Staff Kitchen	Yes	<1.00	15
UN-04-FL	FL	Staff Kitchen	Yes	NA	15
UN-05-FD	FD	Room 103	Yes	<1.00	15
UN-06-FL	FL	Room 103	Yes	NA	15
UN-07-FD	FD	Room 104	Yes	<1.00	15
UN-08-FL	FL	Room 104	Yes	NA	15
UN-09-FD	FD	Room 101	Yes	<1.00	15
UN-10-FL	FL	Room 101	Yes	NA	15
UN-11-FD	FD	Room 102	Yes	<1.00	15
UN-12-FL	FL	Room 102	Yes	NA	15
UN-13-FD	FD	Room 105	Yes	<1.00	15
UN-14-FL	FL	Room 105	Yes	NA	15
UN-15-FD	FD	Room 108	Yes	1.50	15
UN-16-FL	FL	Room 108	Yes	NA	15
UN-17-FD	FD	Room 106	Yes	<1.00	15
UN-18-FL	FL	Room 106	Yes	NA	15
UN-19-FD	FD	Room 109	Yes	<1.00	15
UN-20-FL	FL	Room 109	Yes	NA	15
UN-21-FD	FD	Room 110	Yes	1.20	15
UN-22-FL	FL	Room 110	Yes	NA	15
UN-23-FD	FD	Room 107	Yes	3.10	15
UN-24-FL	FL	Room 107	Yes	NA	15

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

Laboratory analysis results of the lead sampling indicate the concentrations were below the 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

iATL INTERNATIONAL
ASBESTOS TESTING LABORATORIES

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

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

Client: VHB973

Report Date: 3/25/2022
Report No.: 656422 - Lead Water
Project: Union County 1524 Terrill Rd
Project No.: 21336.22

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.:7390401 **Client No.:**UN-01-FD	**Location:**Kitchen * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7390402 **Client No.:**UN-02-FL	**Location:**Kitchen * Sample acidified to pH <2.	**Result(ppb):**Sample Not Analyzed
Lab No.:7390403 **Client No.:**UN-03-FD	**Location:**Staff Kitchen * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7390404 **Client No.:**UN-04-FL	**Location:**Staff Kitchen * Sample acidified to pH <2.	**Result(ppb):**Sample Not Analyzed
Lab No.:7390405 **Client No.:**UN-05-FD	**Location:**103 * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7390406 **Client No.:**UN-06-FL	**Location:**103 * Sample acidified to pH <2.	**Result(ppb):**Sample Not Analyzed
Lab No.:7390407 **Client No.:**UN-07-FD	**Location:**104 * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7390408 **Client No.:**UN-08-FL	**Location:**104 * Sample acidified to pH <2.	**Result(ppb):**Sample Not Analyzed
Lab No.:7390409 **Client No.:**UN-09-FD	**Location:**101 * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7390410 **Client No.:**UN-10-FL	**Location:**101 * Sample acidified to pH <2.	**Result(ppb):**Sample Not Analyzed

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

Date Received: 3/21/2022
Date Analyzed: 03/25/2022
Signature: Mark Stewart
Analyst: Mark Stewart

Approved By: Frank E. Ehrenfeld, III
Laboratory Director

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ASBESTOS TESTING LABORATORIES

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1805 Atlantic Avenue
Manasquan NJ 08736

Client: VHB973

Report Date: 3/25/2022
Report No.: 656422 - Lead Water
Project: Union County 1524 Terrill Rd
Project No.: 21336.22

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.:7390411 **Client No.:**UN-11-FD	**Location:**102 * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7390412 **Client No.:**UN-12-FL	**Location:**102 * Sample acidified to pH <2.	**Result(ppb):**Sample Not Analyzed
Lab No.:7390413 **Client No.:**UN-13-FD	**Location:**105 * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7390414 **Client No.:**UN-14-FL	**Location:**105 * Sample acidified to pH <2.	**Result(ppb):**Sample Not Analyzed
Lab No.:7390415 **Client No.:**UN-15-FD	**Location:**108 * Sample acidified to pH <2.	**Result(ppb):**1.50
Lab No.:7390416 **Client No.:**UN-16-FL	**Location:**108 * Sample acidified to pH <2.	**Result(ppb):**Sample Not Analyzed
Lab No.:7390417 **Client No.:**UN-17-FD	**Location:**106 * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7390418 **Client No.:**UN-18-FL	**Location:**106 * Sample acidified to pH <2.	**Result(ppb):**Sample Not Analyzed
Lab No.:7390419 **Client No.:**UN-19-FD	**Location:**109 * Sample acidified to pH <2.	**Result(ppb):**<1.00
Lab No.:7390420 **Client No.:**UN-20-FL	**Location:**109 * Sample acidified to pH <2.	**Result(ppb):**Sample Not Analyzed

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

Date Received: 3/21/2022
Date Analyzed: 03/25/2022
Signature: Mark Stewart
Analyst: Mark Stewart

Approved By: Frank E. Ehrenfeld, III
Laboratory Director

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1805 Atlantic Avenue
Manasquan NJ 08736

Client: VHB973

Report Date: 3/25/2022
Report No.: 656422 - Lead Water
Project: Union County 1524 Terrill Rd
Project No.: 21336.22

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.:7390421 **Location:**110 **Result(ppb):**1.20
Client No.:UN-21-FD * Sample acidified to pH <2.

Lab No.:7390422 **Location:**110 **Result(ppb):**Sample Not Analyzed
Client No.:UN-22-FL * Sample acidified to pH <2.

Lab No.:7390423 **Location:**107 **Result(ppb):**3.10
Client No.:UN-23-FD * Sample acidified to pH <2.

Lab No.:7390424 **Location:**107 **Result(ppb):**Sample Not Analyzed
Client No.:UN-24-FL * Sample acidified to pH <2.

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

Date Received: 3/21/2022
Date Analyzed: 03/25/2022
Signature: Mark Stewart
Analyst: Mark Stewart

Approved By: Frank E. Ehrenfeld, III
Laboratory Director

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Manasquan NJ 08736

Client: VHB973

Report Date: 3/25/2022
Report No.: 656422 - Lead Water
Project: Union County 1524 Terrill Rd
Project No.: 21336.22

Appendix to Analytical Report:

Customer Contact: Chris Glowacki
Analysis: AAS-GF - ASTM D3559-08D

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 OfficeManager: ?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 ir 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.

Information Pertinent to this Report:

Analysis by AAS Graphite Furnace:
- ASTM D3559-08D

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

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Client: VHB973

Report Date: 3/25/2022
Report No.: 656422 - Lead Water
Project: Union County 1524 Terrill Rd
Project No.: 21336.22

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.

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Phone: 877-428-4285/856-231-9449 • Fax: 856-231-9818

Chain of Custody

– Environmental Lead –

Contact Information

Client Company:	VHB	**Project Number:**	21336.22
Office Address:	1805 Atlantic Avenue	**Project Name:**	Union County 1524 Terrill Road Scotch Plains, NJ 07076
City, State, Zip:	Manasquan, NJ 08742	**Primary Contact:**	Chris Glowacki
Fax Number:		**Office Phone:**	7322232225
Email Address:	Thalter@vhb.com, CGlowacki@vhb.com	**Cell Phone:**	

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 NJ Lead in Drinking Water

Special Instructions:

FD=First Draw, FL=Flush, Flush samples only to be analyzed if exceedance of limits on First Draw Sample

Turnaround Time

Preliminary Results Requested Date: _____ (Specific date / time) ☐ Verbal ■ Email ☐ Fax

☐ 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):	R. Glw VHB	Date: 3/19/22	Time: 1555
Received (Name / iATL):		Date:	Time:
Sample Login (Name / iATL):		Date:	Time:
Analysis(Name(s) / iATL):	MS	Date: 3/25/22	Time: 21 2025
QA/QC Review (Name / iATL):	L 3/28/22	Date:	Time:
Archived / Released: _____ QA/QC InterLAB Use: _____		Date:	Time:

RECEIVED MAIL

iATL - By

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Phone: 877-428-4285/856-231-9449 • Fax: 856-231-9818

Sample Log

–Environmental Lead –

Client: 21336.22 Project: 3 Union Campus

Sampling Date/Time: 3/19/12 900 - 1000

Client Sample #	iATL #	Location/ Description	Flow Rate	Start / End	Sampling time (min)	Area (ft2) Volume (L)	Results ( )
UN-01-FD	7390401	Kitchen		3/19/12	900	250mL	
UN-02-FL	7390402	Kitchen			902		
UN-03-FD	7390403	Staff Kitchen			905		
UN-04-FL	7390404	Staff Kitchen			907		
UN-05-FD	7390405	103			910		
UN-06-FL	7390406	103			911		
UN-07-FD	7390407	104			913		
UN-08-FL	7390408	104			915		
UN-09-FD	7390409	101			917		
UN-10-FL	7390410	101			918		
UN-11-FD	7390411	102			921		
UN-12-FL	7390412	102			923		
UN-13-FD	7390413	105			926		
UN-14-FL	7390414	105			928		
UN-15-FD	7390415	108			930		

** = Insufficient Sample Provided to Perform QC Reanalysis (<200mg)*
*** = Insufficient Sample Provided to Analyze (<50mg) ***= Matrix / Substrate Interference Possible*
FB = Method Requires the submittal of blank(s). ML = Multi Layered Sample. May result in inconsistent results.
These **preliminary results** are issued by iATL to expedite procedures by clients based upon the above data. iATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NJDEP conditions apply.

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Phone: 877-428-4285/856-231-9449 • Fax: 856-231-9818

Sample Log

–Environmental Lead –

Client: 21336.22 Project: Union Camp

Sampling Date/Time: 3/19/22 900 - 1000

Client Sample #	iATL #	Location/ Description	Flow Rate	Start / End	Sampling time (min)	Area (ft2) Volume (L)	Results ( )
UN-16-FL	7390416	108		3/19/22	932	250L	
UN-17-FD	7390417	106			934		
UN-18-FL	7390418	106			935		
UN-19-FD	7390419	109			937		
UN-20-FL	7390420	109			939		
UN-21-FD	7390421	110			941		
UN-22-FL	7390422	110			943		
UN-23-FD	7390423	107			945		
UN-24-FL	7390424	107			947		
	Acidified MS						
	3/24/22 2140						

* = *Insufficient Sample Provided to Perform QC Reanalysis (<200mg)*
** = *Insufficient Sample Provided to Analyze (<50mg)* ***= *Matrix / Substrate Interference Possible*
FB = Method Requires the submittal of blank(s). ML = Multi Layered Sample. May result in inconsistent results.
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