

# Dr. Edythe B. Austermuhl Superintendent

## BERLIN TOWNSHIP SCHOOL DISTRICT

(856) 767-9480 Fax (856) 767-8235 225 Grove Avenue West Berlin, NJ 08091

Megan Stoddart Dina Bottley

Business Administrator Curriculum Coordinator

Kristin Braidwood Thomas Cunningham Charles Pfluger, C.E.F.M.
Supervisor of Special Services Technology Coordinator Supervisor Buildings and Grounds

March 9, 2022

#### Dear Parents and Staff,

Our school system is committed to protecting student, teacher, and staff health. To protect our community and be in compliance with the Department of Education regulations, the Berlin Township School District tested our schools' drinking water for lead.

In accordance with the Department of Education regulations, the John F. Kennedy and Dwight D. Eisenhower Schools will implement immediate remedial measures for any drinking water outlet with a result greater than the action level of 15  $\mu$ g/l (parts per billion [ppb]). This includes turning off the outlet unless it is determined the location must remain on for non-drinking purposes. In these cases, a "DO NOT DRINK – SAFE FOR HANDWASHING ONLY" sign will be posted.

## **Testing Results**

Following instructions given in technical guidance developed by the New Jersey Department of Environmental Protection, we completed a plumbing profile for each of the buildings within the Berlin Township School District. Through this effort, we identified and tested all drinking water and food preparation outlets. Of the 68 samples taken, all but 4 tested below the lead action level established by the US Environmental Protection Agency for lead in drinking water (15 µg/l [ppb]).

The table below identifies the drinking water outlets that tested above the 15  $\mu$ g/l for lead, the actual lead level, and what temporary remedial action the Berlin Township School District has taken to reduce the levels of lead at these locations.

Sample Location	First Draw Result	Remedial Action
	in μg/l (ppb)	
JFK Classroom 12	36.0	Disabled bubbler. Posted signage "DO NOT
ID # JFK-DW-64-12		DRINK- SAFE FOR HANDWASHING
		ONLY". Additional testing to follow.
JFK Classroom 5	17.6	Disabled bubbler. Posted signage "DO NOT
ID # JFK-DW-64-5		DRINK- SAFE FOR HANDWASHING
		ONLY". Additional testing to follow.
DDE Classroom 8	22.4	Disabled bubbler. Posted signage "DO NOT
ID # DDE-DW-68-8		DRINK- SAFE FOR HANDWASHING
		ONLY". Additional testing to follow.
DDE Classroom 29	35.5	Posted signage "DO NOT DRINK- SAFE
ID # DDE-S-72-29		FOR HANDWASHING ONLY". Additional
		testing to follow.

### Health Effects of Lead

High levels of lead in drinking water can cause health problems. Lead is most dangerous for pregnant women, infants, and children under 6 years of age. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. Exposure to high levels of lead during pregnancy contributes to low birth weight and developmental delays in infants. In young children, lead exposure can lower IQ levels, affect hearing, reduce attention span, and hurt school performance. At *very* high levels, lead can even cause brain damage. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults.

## How Lead Enters our Water

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like groundwater, rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and in building plumbing. These materials include lead-based solder used to join copper pipe, brass, and chrome-plated brass faucets. In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials. However, even the lead in plumbing materials meeting these new requirements is subject to corrosion. When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into the drinking water. This means the first water drawn from the tap in the morning *may* contain fairly high levels of lead.

### Lead in Drinking Water

Lead in drinking water, although rarely the sole cause of lead poisoning can significantly increase a person's total lead exposure, particularly the exposure of children under the age of 6. EPA estimates that drinking water can make up 20% or more of a person's total exposure to lead.

#### For More Information

A copy of the test results is available in our central office for inspection by the public, including students, teachers, other school personnel, and parents, and can be viewed between the hours of 8:30 a.m. and 4:00 p.m. and are also available on our website at www.btwpschools.org. For more information about water quality in our schools, contact Chuck Pfluger, Supervisor of Buildings & Grounds at 856-767-9480 extension 1123.

For more information on reducing lead exposure around your home and the health effects of lead, visit EPA's Web site at **www.epa.gov/lead**, call the National Lead Information Center at 800-424-LEAD, or contact your health care provider.

If you are concerned about lead exposure at this facility or in your home, you may want to ask your health care providers about testing children to determine levels of lead in their blood.

Sincerely,

Edythe B. Austermuhl, Ed. D. Superintendent of Schools



#### CERTIFICATE OF ANALYSIS

Client: Berlin Township School District

225 Grove Ave.

West Berlin NJ 08091

Client: BER001

Lab No.:7375545

Report Date: 3/7/2022

Report No.: 654495 - Lead Water

Project: Lead in Water Testing

Result(ppb):3.40

Project No.:

## LEAD WATER SAMPLE ANALYSIS SUMMARY

Client No.:K1 \* Sample acidified to pH <2. Lab No.:7375546 Client No.: K2 \* Sample acidified to pH <2. Lab No.:7375547 **Location:** Client No.: K3 \* Sample acidified to pH <2. Lab No.:7375548 **Location:** Client No.: K4 \* Sample acidified to pH <2. Lab No.:7375549 **Location:** Client No.: K5 \* Sample acidified to pH <2. Lab No.:7375550 Location: Result(ppb):2.20 Client No.: K6 \* Sample acidified to pH <2. Lab No.:7375551 Location: **Result(ppb):**<1.00 \* Sample acidified to pH <2. Client No.:K7 Lab No.:7375552 Location: Result(ppb):2.50 Client No.: K8 \* Sample acidified to pH <2. Lab No.:7375553 Location: Result(ppb): 1.60 Client No.: K9 \* Sample acidified to pH <2.

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

\* Sample acidified to pH <2.

Location:

**Location:** 

Date Received:

Lab No.:7375554

Client No.:K10

2/28/2022

Date Analyzed:

03/04/2022

Signature:

Analyst: Mark Stewart

Dated: 3/7/2022 3:43:05

Approved By:

Frank E. Ehrenfeld, III

Laboratory Director

Result(ppb): 1.80



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Berlin Township School District

225 Grove Ave.

West Berlin NJ 08091

Client: BER001

Report Date: 3/7/2022

Report No.: 654495 - Lead Water Project: Lead in Water Testing

Project No.:

## LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.:7375555 **Location:** Result(ppb):5.10

Client No.: K11 \* Sample acidified to pH <2.

**Lab No.:**7375556

\* Sample acidified to pH <2. Client No.:K12

Lab No.:7375557 **Location:** 

Client No.: K13 \* Sample acidified to pH <2.

Lab No.:7375558 **Location:** 

Client No.:K14 \* Sample acidified to pH <2.

Lab No.:7375559 **Location:** 

Client No.: K15 \* Sample acidified to pH <2.

Lab No.:7375560 Location: Result(ppb):3.70

Client No.: K16 \* Sample acidified to pH <2.

Lab No.:7375561 Location: Result(ppb):2.50

\* Sample acidified to pH <2. Client No.:K17

Lab No.:7375562 Location: Result(ppb):7.30 Client No.: K18 \* Sample acidified to pH <2.

Lab No.:7375563 Location: Result(ppb):5.10

Client No.: K19 \* Sample acidified to pH <2.

Lab No.:7375564 **Location:** Result(ppb):5.60

Client No.:K20 \* Sample acidified to pH <2.

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

2/28/2022 Date Received:

03/04/2022 Date Analyzed:

Signature:

Mark Stewart Analyst:

Approved By:

Frank E. Ehrenfeld, III

Laboratory Director



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Berlin Township School District

225 Grove Ave.

West Berlin NJ 08091

Client: BER001

Report Date: 3/7/2022

Report No.: 654495 - Lead Water Project: Lead in Water Testing

Project No.:

## LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.:7375565 Result(ppb):9.10 **Location:** 

Client No.: K21 \* Sample acidified to pH <2.

**Lab No.:**7375566

\* Sample acidified to pH <2. Client No.: K22

Lab No.:7375567 **Location:** 

Client No.: K23 \* Sample acidified to pH <2.

Lab No.:7375568 **Location:** 

Client No.:K24 \* Sample acidified to pH <2.

Lab No.:7375569 **Location:** 

Client No.: K25 \* Sample acidified to pH <2.

Lab No.:7375570 Location: Result(ppb):1.10

Client No.: K26 \* Sample acidified to pH <2.

Lab No.:7375571 **Location:** Result(ppb):2.50

\* Sample acidified to pH <2. Client No.:K27

Lab No.:7375572 Location: Result(ppb):4.60

Client No.: K28 \* Sample acidified to pH <2.

Lab No.:7375573 Location: Result(ppb):3.50

Client No.: K29 \* Sample acidified to pH <2.

Lab No.:7375574 **Location:** Result(ppb):2.20

Client No.:K30 \* Sample acidified to pH <2.

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

2/28/2022 Date Received:

03/04/2022 Date Analyzed:

Signature:

Mark Stewart Analyst:

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Dated: 3/7/2022 3:43:05 Page 3 of 10



#### CERTIFICATE OF ANALYSIS

Client: Berlin Township School District

225 Grove Ave.

West Berlin NJ 08091

Client: BER001

Report Date: 3/7/2022

Report No.: 654495 - Lead Water

Project: Lead in Water Testing

Result(ppb):<1.00

Project No.:

# LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.:7375575 **Result(ppb):**<1.00 **Location:** 

Client No.: K31 \* Sample acidified to pH <2.

**Lab No.:**7375576

\* Sample acidified to pH <2. Client No.:K32

Lab No.:7375577 **Location:** 

Client No.: K33 \* Sample acidified to pH <2.

Lab No.:7375578 **Location:** 

Client No.:K34 \* Sample acidified to pH <2.

Lab No.:7375579 **Location:** 

Client No.: K35 \* Sample acidified to pH <2.

Lab No.:7375580 Location: **Result(ppb):**<1.00

Client No.: K36 \* Sample acidified to pH <2.

Lab No.:7375581 **Location: Result(ppb):**<1.00

\* Sample acidified to pH <2. Client No.:E1

Lab No.:7375582 Location: **Result(ppb):**<1.00

Client No.: E2 \* Sample acidified to pH <2.

Lab No.:7375583 Location: **Result(ppb):**<1.00

Client No.: E3 \* Sample acidified to pH <2.

Lab No.:7375584 **Location:** 

Client No.:E4 \* Sample acidified to pH <2.

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

2/28/2022 Approved By:

Date Received: 03/04/2022 Date Analyzed:

Mark Stewart

Analyst:

Frank E. Ehrenfeld, III Signature: Laboratory Director

Dated: 3/7/2022 3:43:05 Page 4 of 10



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Berlin Township School District

225 Grove Ave.

West Berlin NJ 08091

Client: BER001

Report Date: 3/7/2022

Report No.: 654495 - Lead Water

Project: Lead in Water Testing

Project No.:

## LEAD WATER SAMPLE ANALYSIS SUMMARY

**Lab No.:**7375585 **Location: Result(ppb):**<1.00

Client No.: E5 \* Sample acidified to pH <2.

Lab No.:7375586 Location: Result(ppb):1.90

Client No.: E6 \* Sample acidified to pH <2.

Lab No.:7375587 Location: Result(ppb):1.10

Client No.: E7 \* Sample acidified to pH <2.

Lab No.:7375588 Location: Result(ppb):1.50

Client No.: E8 \* Sample acidified to pH <2.

Lab No.:7375589 Location: Result(ppb):22.4

Client No.:E9 \* Sample acidified to pH <2.

Lab No.:7375590 Location: Result(ppb):13.5

Client No.:E10 \* Sample acidified to pH <2.

Lab No.:7375591 Location: Result(ppb):13.8

Client No.:E11 \* Sample acidified to pH <2.

Lab No.:7375592 Location: Result(ppb):3.70

**Client No.:**E12 \* Sample acidified to pH <2.

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

Date Received: 2/28/2022

Date Analyzed: 03/04/2022

Signature: MANK SCHWELL

Analyst: Mark Stewart

Dated: 3/7/2022 3:43:05

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Page 5 of 10



#### CERTIFICATE OF ANALYSIS

Client: Berlin Township School District

225 Grove Ave.

West Berlin NJ 08091

Client: BER001

Report Date: 3/7/2022

Report No.: 654495 - Lead Water Project: Lead in Water Testing

Project No.:

## LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.:7375593 **Location:** Result(ppb): 7.30

Client No.: E13 \* Sample acidified to pH <2.

Lab No.:7375594

\* Sample acidified to pH <2. Client No.:E14

Lab No.:7375595 **Location:** 

Client No.: E16 \* Sample acidified to pH <2.

Lab No.:7375596 **Location:** 

Client No.: E17 \* Sample acidified to pH <2.

Lab No.:7375597 **Location:** 

Client No.: E18 \* Sample acidified to pH <2.

Lab No.:7375598 Location: Result(ppb):4.80

Client No.: E20 \* Sample acidified to pH <2.

Lab No.:7375599 Location: Result(ppb):2.30

\* Sample acidified to pH <2. Client No.:E21

Lab No.:7375600 Location: Result(ppb):5.90

Client No.: E22 \* Sample acidified to pH <2.

Lab No.:7375601 Location: Result(ppb):2.40

Client No.: E23 \* Sample acidified to pH <2.

Lab No.:7375602 **Location:** Result(ppb):3.60

Client No.: E24 \* Sample acidified to pH <2.

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

2/28/2022 Date Received:

03/07/2022 Date Analyzed:

Signature: Analyst:

Chad Shaffer

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Dated: 3/7/2022 3:43:05 Page 6 of 10



#### CERTIFICATE OF ANALYSIS

Client: Berlin Township School District

225 Grove Ave.

West Berlin NJ 08091

Client: BER001

Report Date: 3/7/2022

Report No.: 654495 - Lead Water Project: Lead in Water Testing

Project No.:

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.:7375603 **Location:** Result(ppb): 12.8

Client No.: E25 \* Sample acidified to pH <2.

Lab No.:7375604

\* Sample acidified to pH <2. Client No.: E26

Lab No.:7375605 **Location:** 

Client No.: E27 \* Sample acidified to pH <2.

Lab No.:7375606 **Location:** 

Client No.: E28 \* Sample acidified to pH <2.

Lab No.:7375607 **Location:** 

Client No.: E29 \* Sample acidified to pH <2.

Lab No.:7375608 Location: **Result(ppb):**<1.00

Client No.: E30 \* Sample acidified to pH <2.

Lab No.:7375609 **Location:** Result(ppb):35.5

\* Sample acidified to pH <2. Client No.:E32

**Lab No.:**7375610 Location: **Result(ppb):**<1.00

Client No.: E33 \* Sample acidified to pH <2.

Lab No.:7375611 Location: **Result(ppb):**<1.00

Client No.: E34 \* Sample acidified to pH <2.

Lab No.:7375612 **Location:** Result(ppb):<1.00

Client No.: E35 \* Sample acidified to pH <2.

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

2/28/2022 Date Received:

03/07/2022 Date Analyzed:

Signature: Chad Shaffer Analyst:

Dated: 3/7/2022 3:43:05

Page 7 of 10

Approved By:

Frank E. Ehrenfeld, III

Laboratory Director



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Berlin Township School District

225 Grove Ave.

West Berlin NJ 08091

Client: BER001

Report Date: 3/7/2022

Report No.: 654495 - Lead Water

Project: Lead in Water Testing

Project No.:

# LEAD WATER SAMPLE ANALYSIS SUMMARY

**Lab No.:**7375613 **Location: Result(ppb):**<1.00

Client No.:Blank \* Sample acidified to pH <2.

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

Date Received:

2/28/2022

Date Analyzed:

03/07/2022

Signature: Analyst:

Chad Shaffer

Thorn Dire

Approved By:

Frank E. Ehrenfeld, III

Laboratory Director

Dated: 3/7/2022 3:43:05 Page 8 of 10



Email: customerservice@iatl.com

#### **CERTIFICATE OF ANALYSIS**

Client: Berlin Township School District Report Date: 3/7/2022

225 Grove Ave. Report No.: 654495 - Lead Water West Berlin NJ 08091 Project: Lead in Water Testing

Project No.:

Client: BER001

# Appendix to Analytical Report:

**Customer Contact:** Chuck Pfluger **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.

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 D3559-08D

- 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  $\mu$ g/L = 1 ppb MDL = 0.24 PPB Reporting Limit (RL) = 1.0 PPB

Dated: 3/7/2022 3:43:05 Page 9 of 10



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: Berlin Township School District Report Date: 3/7/2022

225 Grove Ave. Report No.: 654495 - Lead Water West Berlin NJ 08091 Project: Lead in Water Testing

Client: BER001 Project No.:

# 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.

Dated: 3/7/2022 3:43:05 Page 10 of 10