



- ✘ “The Health Department or a testing agency certified by the Pennsylvania Department of Environmental Protection has certified, within the previous five years, that the building is in substantial compliance with applicable water quality requirements of the Board of Health, provided that in no event shall applicable water quality requirements be deemed to permit lead in water at an outlet such as a sink or water fountain that is in service at 10 ppb or more. Any water outlet determined to exceed any such water quality requirements shall be taken out of service within 24 hours of notification of the relevant test. The owner of the educational occupancy shall post the results of the most recent water quality testing at each educational occupancy to a generally available website within ten days of receipt of the results.”

The Board of Health regulation describes your responsibility for testing your water outlets. Results of the testing for each potable water outlet in your facility should be reported to the health department by email to [WfilterLeadTest11g@pltila.gov](mailto:WfilterLeadTest11g@pltila.gov). The submission of results should include the following information:

1. A cover letter that identifies the name, address, and contact information for your facility.
2. A laboratory report that shows the date of sampling, the name of the laboratory performing the analysis, and the lead result for each potable (drinkable) water outlet.
3. If any lead results are reported to be equal to or exceeding the action level of 10 parts per billion (ug/L), you must discontinue use of the outlet immediately (within 24 hours). Report your response action(s) associated with an outlet with an elevated lead level in the cover letter. Any outlet with an elevated lead level may be put back into service only after corrective action has been taken and a repeat lead test has shown the level to be less than 10 parts per billion(ug/L).

In addition to the requirements by the City of Philadelphia, the EPA recommends that schools implement programs for reducing lead in drinking water as part of the school’s overall plan for reducing environmental threats. Safe and healthy school environments foster healthy children and may improve students’ general performance.

Although drinking water often incorporates low levels of some contaminants as it flows in rivers and collects in aquifers, these materials usually are not detected at harmful levels. Public water suppliers must monitor their water to make sure it complies with science-based public health standards. The EPA sets these maximum allowable levels of contaminants in drinking water under The Safe Drinking Water Act (SDWA).

The health effects language mentioned in this report is not intended to catalog all possible health effects for the following drinking water contaminant. Rather, it is intended to inform consumers of some of the possible health effects associated with drinking water contaminants when the EPA rule and regulations was finalized. A medical doctor is to be consulted if further information is required.

#### *National Primary Drinking Water Regulations*

The U.S. Environmental Protection Agency (EPA) has established National Primary Drinking Water Regulations that set mandatory water quality standards for drinking water contaminants. These are enforceable standards called Maximum Contaminant Levels (MCL), which are established to protect the public against consumption of drinking water contaminants that present a risk to human health. An MCL is the maximum allowable amount of a contaminant in drinking water which is delivered to the consumer. MCLs are set as close to the health goals as possible, considering cost, benefits and the ability of public water systems to detect and remove contaminants using suitable treatment technologies. The EPA has set this level of protection based on the best available science to prevent potential health problems. The following paragraphs contain MCLs and brief health effects of those reported to be associated with the samples collected at this time.

- Lead, a metal found in natural deposits, is commonly used in household plumbing materials and water service lines. Most lead contamination occurs at some point in the water delivery system. Materials in the water delivery system may include service connections, pipes, brass fixtures, and solder. If subsequent samples yield elevated levels of lead action may require the replacement of water delivery parts with ‘non-lead’ parts. Homes built before 1986 are more likely to have lead pipes, fixtures and solder. However, new homes are also at risk: even legally “lead-free” plumbing may contain up to eight (8) percent lead. The most common problem is with brass or chrome-plated brass faucets and fixtures which can leach significant amounts of lead into the water, especially hot water.

There is no safe level of lead. Lead toxicity affects the nervous system, both in adults and children. Long-term exposure can result in decreased performance in cognitive ability and functions of the nervous system. Lead exposure also causes small increases in blood pressure, particularly in middle-aged and older people and can cause anemia. Exposure to high lead levels can severely damage the brain and kidneys in adults or children and ultimately cause death. Lead does not noticeably alter the color, taste, or odor of water. The effects of low-level toxicity of lead in water may not be obvious. There may be no symptoms or the symptoms may be mistaken as flu or other illness. Many domestic water treatment systems remove the majority of lead from drinking water.

The Action Level (AL) of Lead (Pb) in accordance with the City of Philadelphia Code “Action Level” is **10 micrograms per liter (µg/L), or 10 ppb** while the Environmental Protection Agency (EPA) drinking water standard is 15 micrograms per liter (µg/L). The Action Level is defined as the concentration of lead in water that may trigger requirements for corrosion control, source water treatment, lead service line replacement, and public education. Compliance with an action level is based on multiple samples.

### III. Sampling Results

The following tables outline the sample results for each outlet where water samples were collected during this project. All samples reported to be below the Action Level of 10 parts per billion and are listed in the table below.

Lead in Drinking Water						
Sample #	Location	Outlet Type	Draw	Sampling Method	CoP Action Level (AL)	Results (ppb)
01	Rm 101 - Low Sink First	S	First	ASTM D3559-08D Via AAS-GF	10ppb (parts per billion)	<1.00
02	Rm 101 - Low Sink Flush	S	Flush			<1.00
<b>03</b>	<b>Rm 108 - Low Sink First</b>	S	<b>First</b>			<b>1.40</b>
<b>04</b>	<b>Rm 108 - Low Sink Flush</b>	S	<b>Flush</b>			<b>2.20</b>
<b>05</b>	<b>Fountain O/S 207 First</b>	WF	<b>First</b>			<b>1.00</b>
06	Fountain O/S 207 Flush	WF	Flush			<1.00
07	Bottle Filler O/S 207 First	HS	First			<1.00
08	Fountain O/S Rm 204	WF	First			<1.00
09	Fountain O/S Rm 204	WF	Flush			<1.00
10	Bottle Filler O/S Rm 204	HS	First			<1.00
11	Fountain O/S Rm 306	WF	First			<1.00
12	Fountain O/S Rm 306	WF	Flush			<1.00
13	Bottle Filler O/S Rm 306	HS	First			<1.00
Fountain O/S Rm 103		Outlet out of service at time of sampling visit.				
Fountain O/S Rm 103 Bottle Filler		Outlet out of service at time of sampling visit.				
Fountain O/S Rm 105		Outlet out of service at time of sampling visit.				
Fountain Bottle Filler O/S Rm 105		Outlet out of service at time of sampling visit.				
<b>WF</b> = Water Fountain <b>S</b> = Sink Outlet <b>HS</b> = Hydration Station/Bottle Filler <b>ICP – MS</b> = Inductively coupled plasma mass spectrometry Results reported in <b>RED</b> are at or above the Action Level and should be <b>taken out of service immediately</b> . Results reported in <b>BOLD</b> are below the Action Level but not void of lead content and should be flushed daily.						

#### **IV. Summary of Results**

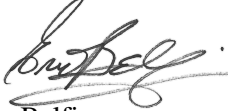
The laboratory data indicates that **all the results to be below the Action Level of 10 parts per billion and no further action is required.** However, since there is no “safe” level of lead in drinking water, Synertech Environmental recommends flushing of drinking water outlets in which lead was reported to be present at concentrations below 10ppb. The outlets where low concentrations of lead were reported include:

- Sink in Classroom 108
- Drinking Fountain outside Classroom 207

The water at these locations should be flushed for at least 30 seconds prior to drinking. The more time water has been sitting in the pipes, the more lead it is likely to contain. Anytime the water in a particular faucet has not been used for six hours or longer, "flush" your cold-water pipes by running the water until it becomes as cold as it will get.

*Synertech Environmental, LLC* is pleased to have had the opportunity to provide Universal Companies with our professional environmental services. If you have any questions or would like to discuss this matter further, please do not hesitate to call at 215-755-2305.

Prepared by:  
*Synertech Environmental, LLC*



Eric Belfi  
Industrial Hygiene Technician, Managing Partner

**Attachment #1**

**Laboratory Certificates of Analysis  
&  
Chain of Custody Forms**

CERTIFICATE OF ANALYSIS

Client: Synertech Environmental LLC  
228 Moore Street  
Philadelphia PA 19148


Report Date: 4/18/2024  
Report No.: 698828 - Lead Water  
Project: Universal Charter School: Alcorn  
Project No.: 704-003-01


Client: SYN177

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7748493 Client No.: 01	Location: Room 101 Low Sink * Sample acidified to pH <2.	Result(ppb): <1.00
Lab No.: 7748494 Client No.: 02	Location: Room 101 Low Sink * Sample acidified to pH <2.	Result(ppb): <1.00
Lab No.: 7748495 Client No.: 03	Location: Room 108 Low Sink * Sample acidified to pH <2.	Result(ppb): 1.40
Lab No.: 7748496 Client No.: 04	Location: Room 108 Low Sink * Sample acidified to pH <2.	Result(ppb): 2.20
Lab No.: 7748497 Client No.: 05	Location: Fountain Outside Room 207 * Sample acidified to pH <2.	Result(ppb): 1.00
Lab No.: 7748498 Client No.: 06	Location: Fountain Outside Room 207 * Sample acidified to pH <2.	Result(ppb): <1.00
Lab No.: 7748499 Client No.: 07	Location: Fountain Outside Room 207 Bottle Filler * Sample acidified to pH <2.	Result(ppb): <1.00
Lab No.: 7748500 Client No.: 08	Location: Fountain Outside Room 204 * Sample acidified to pH <2.	Result(ppb): <1.00
Lab No.: 7748501 Client No.: 09	Location: Fountain Outside Room 204 * Sample acidified to pH <2.	Result(ppb): <1.00
Lab No.: 7748502 Client No.: 10	Location: Fountain Outside Room 204 Bottle Filler * Sample acidified to pH <2.	Result(ppb): <1.00

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

Date Received: 4/12/2024  
Date Analyzed: 04/18/2024  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Synertech Environmental LLC  
228 Moore Street  
Philadelphia PA 19148

Report Date: 4/18/2024  
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Client: SYN177

LEAD WATER SAMPLE ANALYSIS SUMMARY

Lab No.: 7748503  
Client No.: 11

Location: Fountain Outside Room 306  
\* Sample acidified to pH <2.

Result(ppb): <1.00

Lab No.: 7748504  
Client No.: 12

Location: Fountain Outside Room 306  
\* Sample acidified to pH <2.


Result(ppb): <1.00


Lab No.: 7748505  
Client No.: 13

Location: Fountain Outside Room 306 Bottle Filler  
\* Sample acidified to pH <2.

Result(ppb): <1.00

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

Date Received: 4/12/2024  
Date Analyzed: 04/18/2024  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

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CERTIFICATE OF ANALYSIS

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Client: Synertech Environmental LLC  
228 Moore Street  
Philadelphia PA 19148

Report Date: 4/18/2024  
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Project No.: 704-003-01

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## Appendix to Analytical Report:

**Customer Contact:**

**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:** Shirley Clark

**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](http://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



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CERTIFICATE OF ANALYSIS

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**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](mailto: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.

