

## Lead Testing in School Drinking Water



#### Location:

Spencerport Central School District
Bernabi Elementary School
Munn Elementary School
Cosgrove Middle School
Spencerport High School
Spencerport, New York 14559

#### Prepared for:

Spencerport Central School District 71 Lyell Ave Spencerport, NY 14559

LaBella Project No. 2203006

September 17, 2021

#### **Table of Contents**

		Page No.			
l.	Background	1			
II.	Project Description	1			
III.	Sampling Procedures and Summary of Results	2			
IV.	Response and Recommendations	7			
V.	Reporting and Record Keeping	8			
Appei	ndix A – Detailed Results Spreadsheet				
Appendix B – Laboratory Analytical Reports					
Appei	Appendix C – Licenses and Certifications				

#### I. BACKGROUND

Under Subpart 67-4 of the New York Codes, Rules and Regulations, Title X, "all school districts and boards of cooperative educational services are required to test potable water for lead contamination, and to develop and implement a lead remediation plan, where applicable."

The Subpart 67-4 testing requirement was first promulgated under emergency legislation in 2016, and was subsequently signed into permanent law. The regulation requires that testing be performed again in 2020, and every five years thereafter. Due to the COVID-19 Pandemic, NYSDOH has granted an extension for this testing until June 30, 2021.

Lead is a toxic metal that can be harmful to human health when ingested. Young children, especially those 6 years and younger, are at particular risk for lead exposure because they have frequent hand-to-mouth activity and absorb lead more easily than do adults. Children's nervous systems are still undergoing development and thus are more susceptible to the effects of toxicants. Therefore, emphasis may be placed on assessment of lead exposure in schools and early childhood education facilities, where concentrations of a vulnerable population are regularly congregated.

Lead can be introduced into potable water by being present in the source water or, more commonly, by interaction of the water with fixtures and plumbing materials containing lead. Common sources of lead in potable water include solder, fluxes, pipes and pipe fittings, fixtures, and sediments. It is possible that different water outlets in a given building could have dissimilar concentrations of lead. It is also possible that, due to temporal fluctuations in water chemistry and physical conditions that may affect the integrity of the plumbing and the water being conveyed, the result obtained from a test at a given time may differ from the result obtained from a test at another time, even if the sampling procedures are identical.

#### II. PROJECT DESCRIPTION

Due to COVID-19 restrictions imposed by New York State in March of 2020, the Spencerport Central School District adopted a "hybrid" teaching model which led to only partial capacity of student/teacher populations at their schools on a given day. As part of this model, all fixtures are still active, including drinking fountains which are used to fill disposable cups.

After a brief pause in sampling during the winter of 2020/2021 due to a rise in COVID concerns, sampling by LaBella Associates and district staff resumed in February 2021 when COVID cases began to subside. Results in this report address sampling completed on September 2, 2021 following the districts remediation measures.

In accordance with sections 1370-a and 1110, Subpart 67-4 of Title 10 (Health) of the Official Compilation of Codes, Rules and Regulations of the State of New York and US EPA Guidelines, LaBella Associates performed sampling of potable water for lead contaminants for the Spencerport Central School District. Sampling was conducted on September 2, 2021 at the following locations:

- Bernabi Elementary School 1 Bernabi Rd, Spencerport, NY 14559
- Munn Elementary School 2333 Manitou Rd, Spencerport, NY 14559
- Cosgrove Middle School 2749 Spencerport Rd, Spencerport, NY 14559
- Spencerport High School 2707 Spencerport Rd, Spencerport, NY 14559

#### III. SAMPLING PROCEDURES AND SUMMARY OF RESULTS

Plumbing drawings of the facility were reviewed, and LaBella Associates conducted a site walkthrough with district maintenance personnel to identify potable outlets required for testing. These outlets included drinking fountains, bottle fillers, kitchen sinks, classroom sinks, bubblers, and medical office sinks. Outlets categorically excluded from testing may include showers, science room sinks, art room sinks, janitor's sinks, restroom sinks, and mechanical room outlets. Typically, excluded outlets are capable of being isolated by custodial staff, or are accompanied by warning signs to prohibit consumption.

In all locations, LaBella staff conducted sampling of target outlets prior to the facility opening and before any water was used. The water conditions were reported to be representative of normal consumption patterns (given current occupancy rates) with building occupancy controlled during stagnation and sampling periods.

In accordance with Subpart 67-4 requirements, sampling was limited to "first-draw" samples. A volume of the first 250 mL of water was taken from each cold water outlet in the inventory.

The samples were then promptly packaged and shipped to a NYS Department of Health Environmental Laboratory Approval Program (ELAP) accredited laboratory. Samples were analyzed utilizing EPA environmental analysis method 200.9 Rev 2.2 for lead in potable water. Results of the laboratory analyses, field testing and the visual on-site inspection were compiled and summarized. \*Note: The totals summarized below include only the samples collected on September 2, 2021, and not the initial samples collected.

Bernabi Elementary School Sampling Summary for September 2, 2021				
	Total Number	Total number of outlets	Total number of	
Building	of Tested	at or below EPA action	outlets above EPA	
	Outlets	level (15ppb)	action level (15ppb)	
Elementary School	5	5	0	

Munn Elementary School Sampling Summary for September 2, 2021				
	Total Number	Total number of outlets	Total number of	
Building	of Tested	at or below EPA action	outlets above EPA	
	Outlets	level (15ppb)	action level (15ppb)	
Elementary School	7	0	7	

Cosgrove Middle School Sampling Summary for September 2, 2021					
	Total Number	Total number of outlets	Total number of		
Building	of Tested	at or below EPA action	outlets above EPA		
	Outlets	level (15ppb)	action level (15ppb)		
Secondary School	1	1	0		

Spencerport High School Sampling Summary for September 2, 2021					
	Total Number	Total number of outlets	Total number of		
Building	of Tested	at or below EPA action	outlets above EPA		
	Outlets	level (15ppb)	action level (15ppb)		
Secondary School	2	0	2		

<sup>\*</sup>Note: While the main office tap was called out for resampling, the new fixture had not been installed as of the date of testing and could not be sampled.

Based on laboratory analyses of the samples collected, the following outlets were determined to exceed the NYS Action level of 15 parts per billion (ppb) or equivalent 15 micrograms per liter ( $\mu$ g/L). However, the following table does not include all of the outlets sampled during this inspection; for a full list of outlets sampled see Appendix A immediately following this report.

Munn Elementary School Samples Exceeding 15 ug/L (ppb) Reporting Threshold			
Sample ID	Sample Description	Outlet Type	Result (µg/L)
MU-01-MR-IN-E2B-B	Bubbler in Music Room E2B	Bubbler	28.8
MU-01-CR-IN-E8-B	Bubbler In Classroom E8	Bubbler	21.5
MU-01-CR-IN-E16-B	Bubbler In Classroom E16	Bubbler	28.9
MU-01-CR-IN-W33-B	Bubbler In Classroom W33	Bubbler	39.7
MU-01-CR-IN-W31-B	Bubbler In Classroom W31	Bubbler	27.5
MU-01-HA-BY-W29-B	Bubbler In Classroom W29	Bubbler	29.5
MU-01-SE-IN-T202-B	Bubbler In Room T202	Bubbler	236

Spencerport High School Samples Exceeding 15 ug/L (ppb) Reporting Threshold			
Sample ID	Sample Description	Outlet Type	Result (µg/L)
SHS-02-CR-IN-234-T2	Tap 2 in Classroom 234	Тар	20.5
SHS-01-RM-IN- BOOST-T	Tap in Booster Room	Тар	24.1

#### IV. Response and Recommendations

According to section Subpart 67-4.4 "Response" of the regulation, school districts shall prohibit the use of all outlets which exceed the 15 ppb action level. The outlet shall remain out of service until a lead remediation plan is implemented to reduce the level of lead, <u>and</u> resampling indicates lead

levels at or below the action level. While the outlet is out of service, the district must supply an appropriate amount of potable water for drinking or cooking to building occupants.

LaBella would provide the following recommendations for outlets in exceedance of the action level:

- Follow up testing This may include an additional first draw sample, or second draw sample
  to further investigate and evaluate the condition of the plumbing system upstream of the
  affected outlets. Sample results may provide some insight on trends, issues with certain
  portions of the plumbing system, or links to specific outlets types and models.
- Remedial Measures The school district may elect to commence remediation of affected outlets with or without additional testing. Temporary remediation could include isolating outlets and providing alternate sources of potable drinking or cooking water. Permanent remediation could include replacing outlets, permanently isolating outlets, adding water filtration, or renovations to the plumbing system.

#### V. Reporting and Record Keeping

In accordance with Subpart 67-4 the district shall:

- Report the test results to the local health department as soon as practicable, but no more than 1 business day after the school received the laboratory report.
- Notify all staff and all persons in parental relation to children or students of the test results, in writing, as soon as practicable, but no more than 10 business days after the school received the laboratory report.
- The school shall make available, on the school's website, the results of all lead testing performed and lead remediation plans implemented pursuant to this Subpart, as soon as practicable, but no more than 6 weeks after the school received the laboratory reports.
- As soon as practicable, but no more than 10 business days after the school received the laboratory reports, the school shall report data relating to test results to the Department, local health department, and State Education Department, through the Department's designated statewide electronic reporting system.
- The school shall retain all records of test results, lead remediation plans, determinations that a building is lead-free, and waiver requests, for ten years following the creation of such documentation. Copies of such documentation shall be immediately provided to the Department, local health department, or State Education Department, upon request.

# **Appendix A**Detailed Results Spreadsheet

	Bernabi/Taylor/Spencerpor	t MS/Spencerport HS 9.2.2021 Retes	is .	1
Location	Identification Code	Description	Time Sampled	Results (ug/L)
Spencerport HS	SHS-02-CR-IN-234-T2	Tap 2 in Classroom 234	509	20.5
Spencerport HS	SHS-01-RM-IN- BOOST-T	Tap in Booster Room	512	24.1
Cosgrove Middle	SMS-01-RM-IN-KI- PF2	Right Handed Pot Filler in Kitchen	522	<5.00
Bernabi	BE-01-HA-BY-E43-DF	Drinking fountain close to the boiler room	529	<5.00
Bernabi	BE-01-CR-IN-E205-B	Bubbler in classroom 205	531	11.2
Bernabi	BE-01-CR-IN-E206-B	Bubbler in classroom 206	532	15
Bernabi	BE-01-HA-BY-W13-DF	Drinking fountain in hallway by room W13	534	<5.00
Bernabi	BE-01-CR-IN-W100-B	Bubbler in classroom 100	536	<5.00
Munn	MU-01-MR-IN-E2B-B	Bubbler in Music Room E2B	558	28.8
Munn	MU-01-CR-IN-E8-B	Bubbler In Classroom E8	557	21.5
Munn	MU-01-CR-IN-E16-B	Bubbler In Classroom E16	556	28.9
Munn	MU-01-CR-IN-W33-B	Bubbler In Classroom W33	550	39.7
Munn	MU-01-CR-IN-W31-B	Bubbler In Classroom W31	551	27.5
Munn	MU-01-HA-BY-W29-B	Bubbler In Classroom W29	553	29.5
Munn	MU-01-SE-IN-T202-B	Bubbler In Room T202	554	236

# Appendix B Laboratory Analytical Results

# **SLGi**

#### **Analysis Report**

### Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117 804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer: Labella Associates (1126)

Address: 300 State Street

Rochester, NY 14614-1098

Attn:

Project: Spencerport CSD LIDW Retesting

Location: Spencerport CSD

Number: 2203006

Order #: 437035

 Matrix
 Drinking Water

 Received
 09/08/21

 Reported
 09/10/21

PO Number:

Sample ID	Cust. Sample ID	Location					
Parameter		Method	Result	RL*	Units	Analysis Date	Analyst
437035-001	SHS-02-CR-IN-234-T	Tap 2 In Classroom 234					
Metals Ana	alysis						
Lead		EPA 200.9 Rev 2.2	20.5	5.00	μg/L	09/09/21	MY
437035-002	SHS-01-RM-IN-BOO	Tap In Booster Room					
Metals Ana	alysis						
Lead		EPA 200.9 Rev 2.2	24.1	5.00	μg/L	09/09/21	MY
437035-003	SMS-01-RM-IN-KI-PF	Right Handed Pot Filler					
Metals Ana	alysis						
Lead		EPA 200.9 Rev 2.2	<5.00	5.00	μg/L	09/09/21	MY
437035-004	BE-01-HA-BY-E43-D	Drinking Fountain Close					
Metals Ana	alysis						
Lead		EPA 200.9 Rev 2.2	<5.00	5.00	μg/L	09/09/21	MY
437035-005	BE-01-CR-IN-E205-B	Bubbler In Classroom 205					
Metals Ana	alysis						
Lead		EPA 200.9 Rev 2.2	11.2	5.00	μg/L	09/09/21	MY
437035-006	BE-01-CR-IN-E206-B	Bubbler In Classroom 206					
Metals Ana	alysis				_		
Lead		EPA 200.9 Rev 2.2	15.0	5.00	μg/L	09/09/21	MY
437035-007	BE-01-HA-BY-W13-D	Drinking Fountain In Hall					
Metals Ana	alysis						
Lead		EPA 200.9 Rev 2.2	<5.00	5.00	μg/L	09/09/21	MY
437035-008	BE-01-CR-IN-W100-B	Bubbler In Classroom 100					
Metals Ana	alysis						
Lead		EPA 200.9 Rev 2.2	<5.00	5.00	μg/L	09/09/21	MY
437035-009	MU-01-MR-IN-E2B-B	Bubbler In Music Room E2B					
Metals Ana	alysis	EDA 000 0 D 0 0		5.00	/1	00/00/04	NA)/
Lead		EPA 200.9 Rev 2.2	28.8	5.00	μg/L	09/09/21	MY
437035-010	MU-01-CR-IN-E8-B	Bubbler In Classroom E8					
Metals Ana	aiysis	EDA 200 0 Dov 2 2	04.5	F 00	/1	00/00/24	MV
Lead		EPA 200.9 Rev 2.2	21.5	5.00	μg/L	09/09/21	MY
437035-011	MU-01-CR-IN-E16-B	Bubbler In Classroom E16					
Metals Ana	aiysis	EDA 200 0 Boy 2 2	20.0	E 00	/!	00/00/04	MY
Lead		EPA 200.9 Rev 2.2	28.9	5.00	μg/L	09/09/21	IVI T

All internal QC parameters were met. Unusual sample conditions, if any, are described. Surrogate Spike results designated with "D" indicate that the analyte was diluted out. "MI" indicates matrix interference. Concentration and \*Reporting Limit (RL) based on areas provided by client. Values are reported to three significant figures. Solid PPM = mg/kg | PPB =  $\mu g/kg$  and Water PPM = mg/L | PPB =  $\mu g/L$ . The test results reported relate only to the samples submitted.

## SLG!"

#### **Analysis Report**

### Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117 804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

**Customer:** Labella Associates (1126)

Address: 300 State Street

Rochester, NY 14614-1098

Attn:

Project: Spencerport CSD LIDW Retesting

Location: Spencerport CSD

Number: 2203006

Order #: 437035

Matrix Drinking Water

**Received** 09/08/21 **Reported** 09/10/21

PO Number:

Sample ID	Cust. Sample ID	Location	_	_			
Parameter		Method	Result	RL*	Units	Analysis Date	Analyst
437035-012	MU-01-CR-IN-W33-B	Bubbler In Classroom W33					
Metals Ana	alysis						
Lead		EPA 200.9 Rev 2.2	39.7	5.00	μg/L	09/09/21	MY
437035-013	MU-01-CR-IN-W31-B	Bubbler In Classroom W31					
Metals Ana	alysis						
Lead		EPA 200.9 Rev 2.2	27.5	5.00	μg/L	09/09/21	MY
437035-014	MU-01-HA-BY-W290	Bubbler In Classroom W29					
Metals Ana	alysis						
Lead		EPA 200.9 Rev 2.2	29.5	5.00	μg/L	09/09/21	MY
437035-015	MU-01-SE-IN-T202-B	Bubbler In Room T202					
Metals Ana	alysis						
Lead		EPA 200.9 Rev 2.2	236	100	μg/L	09/09/21	MY
437035-09/10/2	21 04:57 PM						

Reviewed By: **Jennifer Lee**Manager

#### **EPA Regulatory Limits**

 $\begin{array}{ccc} \text{Parameter} & \text{Reg. Limit} & \text{Unit} \\ \text{Lead} & 15.0 & \mu\text{g/L} \end{array}$ 

#### **State Certifications**

Method	Parameter	New York	Virginia
EPA 200.9 Rev 2.2	Lead	ELAP Certified	VELAP Certified

State	Certificate Number
New York	ELAP 63556
Virginia	VELAP 11259

# Appendix C Laboratory Certification



**ANDREW M. CUOMO**Governor

**HOWARD A. ZUCKER, M.D., J.D.**Commissioner

**LISA J. PINO, M.A., J.D.**Executive Deputy Commissioner

March 31, 2021

ELAP ID 11413 SCHNEIDER LABORATORIES GLOBAL, INC MR. FAYEZ ABOUZAKI 2512 WEST CARY STREET RICHMOND, VA 23220-5117 ifaszewski@slabinc.com

**Certified Mail & Email** 

Dear Mr. Abouzaki,

The review of your laboratory's renewal application through the New York State (NYS) Department of Health's Environmental Laboratory Approval Program (ELAP) for a certificate of approval will require the evaluation of additional information, and therefore has not been completed. Please note that Article 4, Section 401, and Subsection 2 of the State Administrative Procedure Act states:

"When a licensee has made timely and sufficient application for a renewal of a license or a new license with the reference to any activity of a continuing nature, the existing license does not expire until the application has been finally determined by the agency ..."

The 2020-2021 NYS ELAP certificate of approval issued to your laboratory remains in effect, without regard to the expiration date of April 1, 2021, printed on the certificate. A copy of this letter may be provided to any person inquiring as to the status of your certificate.

If you have any questions, please contact ELAP at the New York State Department of Health, Wadsworth Center, Empire State Plaza, Albany, NY 12237; by phone at (518) 485-5570; or by email at elap@health.ny.gov.

Sincerely,

Victoria A. Pretti

Director and QA Officer

cc. L. McNaughton

## NEW YORK STATE DEPARTMENT OF HEALTH WADSWORTH CENTER



Expires 12:01 AM April 01, 2021 Issued April 01, 2020

#### CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. FAYEZ ABOUZAKI SCHNEIDER LABORATORIES GLOBAL, INC 2512 WEST CARY STREET RICHMOND, VA 23220-5117 NY Lab Id No: 11413

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2003) for the category ENVIRONMENTAL ANALYSES POTABLE WATER

All approved analytes are listed below:

Metals I

Lead, Total

EPA 200.9 Rev. 2.2



Serial No.: 61370

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.

