

May 16, 2022

Beatriz M. Figueroa
Director, Real Estate and Facilities
Uncommon Schools

For distribution

RE: **Lead in Drinking Water Sampling**
North Star Academy – Vailsburg Elementary and Middle School
24 Hazelwood Avenue
Newark, NJ 07106
EL Project # 21-0015

To Whom it May Concern:

North Star Academy Schools are committed to protecting student, teacher, and staff health. To protect the North Star community and be in compliance with the Department of Education regulations, North Star Academy retained Environmental Logic, LLC (EL) to test the school's drinking water for lead.

Results of our Testing

Following instructions given in technical guidance developed by the New Jersey Department of Environmental Protection, a plumbing profile for each of the buildings within the North Star Academy system was prepared. Through this effort, we identified and tested all drinking water and food preparation outlets. The US Environmental Protection Agency has established a lead in drinking water action level of 15 µg/l [ppb]. On July 23, 2021 and on February 17, 2022, EL collected drinking water samples throughout the aforementioned school.

No lead concentrations exceeding 15 µg/l [ppb] were identified in drinking water outlets or food preparation sinks.

Additionally, EL collected samples from water sources that are not designed for drinking following prior lead in drinking water monitoring events.

The table below identifies water outlets that tested above the 15 µg/l for lead. All of these faucets are designed for handwashing/building systems purposes or not functional and, while the identified concentrations do not *require* remedial action, EL recommends that “DO NOT DRINK – SAFE FOR HANDWASHING ONLY” signage be added to these locations as a precautionary measure.



Sample Location	Sample ID	Purpose	First Draw Result in µg/l (ppb)	Recommended Action
Ground Floor Girls Bathroom Sink	GB-GF-S5	Handwashing	18.4	Add handwashing only signage
First Floor Girls Bathroom Sink	R113-1-S1	Handwashing	22.5	Add handwashing only signage
Exterior	1-ES1	Exterior hose spigot	1,470	None needed
Second Floor Girls Bathroom Sink	GB-2-S4	Handwashing	44.8	Add handwashing only signage
Room 216	R216-2-S1	Handwashing	95.2	Add handwashing only signage
Room 216	R216-2-F1	Not functioning fountain – extremely low water pressure	60.3	Not usable – disconnect
Room 214	R214-2-F1	Not functioning fountain – extremely low water pressure	1,780	Not usable – disconnect
Room 214	R214-2-S1	Handwashing	122	Add handwashing only signage
Room 209	R209-2-F1	Not functioning fountain– extremely low water pressure	39.2	Not usable – disconnect

During sampling of the second floor water fountains during the July 2021 sampling event, it was determined that the second floor water fountains 2-WF-1 and 2-WF-4 had been shut off and stagnant for an extended period of time as part of Covid protocols and the water was discolored. The sample results from this July 2021 event are therefore not representative of first draw water quality. On February 17, 2022, the first draw samples were recollected from these fountains (as they were returned to use), and all results were compliant.

Several nonfunctioning water fountains were identified, specifically in Rooms 216, 214, and 209. These fountains have extremely low water pressure and are effectively unusable. While these fountains are not in use, EL recommends the permanent disconnection or lock out of water supply lines to these unused fountains.

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 at the school central office for inspection by the public, including students, teachers, other school personnel, and parents. The results are also available on the North Star Academy website at <https://northstar.uncommonschoools.org/lead-results/>. For more information about water quality in the North Star Academy schools, contact Beatriz Figueroa, Director, Real Estate and Facilities at Beatriz.Figueroa@uncommonschoools.org.

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,



Michael B. Adams
Senior Project Manager

Enclosures: Full Analytical Data Table



Job Number: JD29018 and L2210923						
Account: Environmental Logic LLC.						
Project: Uncommon Schools, Newark, NJ						
Project Number: 21-0015						
Address: 24 Hazelwood Avenue						
						Legend: Exceed
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	G-FS-1	G-FB-1	G-FT-1	GB-G-S1
Lab Sample ID:			JD29018-1	JD29018-2	JD29018-3	JD29018-4
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	<0.50	<0.50	<0.50	2.38
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	GB-G-S2	GB-G-S3	GB-G-S4	BB-G-S1
Lab Sample ID:			JD29018-5	JD29018-6	JD29018-7	JD29018-8
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	0.807	0.666	2.76	2.07
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	BB-G-S2	BB-G-S3	BB-G-S4	BB-GF-S1
Lab Sample ID:			JD29018-9	JD29018-10	JD29018-11	JD29018-12
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	4.78	2.09	2.69	1.06
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	BB-GF-S2	BB-GF-S3	BB-GF-S4	BB-GF-S5
Lab Sample ID:			JD29018-13	JD29018-14	JD29018-15	JD29018-16
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	1.36	6.63	7.85	1.82
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	GB-GF-S1	GB-GF-S2	GB-GF-S3	GB-GF-S4
Lab Sample ID:			JD29018-17	JD29018-18	JD29018-19	JD29018-20
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	1.62	5.89	6.87	6.1
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	GB-GF-S5	CWL-GF-1	F-GF-1	GF-S1
Lab Sample ID:			JD29018-21	JD29018-22	JD29018-23	JD29018-24
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	18.4	<0.50	0.778	0.879
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R122-1-S1	R122-1-F1	R121-1-CWK1	R121-1-S1
Lab Sample ID:			JD29018-25	JD29018-26	JD29018-27	JD29018-28
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	2.91	0.852	<0.50	1.33
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R119-1-S1	R119-1-F1	R120-1-S1	R120-1-F1
Lab Sample ID:			JD29018-29	JD29018-30	JD29018-31	JD29018-32
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	2.3	4.43	8.94	2.62

Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R117-1-S1	R117-1-F1	GB-1-S2	GB-1-S3
Lab Sample ID:			JD29018-33	JD29018-34	JD29018-35	JD29018-36
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	0.622	6.67	11.1	1.15
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	GB-1-S4	GB-1-S5	R116-1-S1	R116-1-S2
Lab Sample ID:			JD29018-37	JD29018-38	JD29018-39	JD29018-40
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	4.77	2.09	1.47	8.97
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R116-1-S3	1-WF1	1-WF2	R115-1-F1
Lab Sample ID:			JD29018-41	JD29018-42	JD29018-43	JD29018-44
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	5.97	3.47	2.81	4.26
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R115-1-S1	R114-1-S1	R113-1-F1	R113-1-S1
Lab Sample ID:			JD29018-45	JD29018-46	JD29018-47	JD29018-48
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	2.78	3.82	4.7	22.5
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R111-1-F1	R111-1-S1	BB-1-S1	BB-1-S2
Lab Sample ID:			JD29018-49	JD29018-50	JD29018-51	JD29018-52
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	1.49	0.901	9.02	3.82
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	BB-1-S3	BB-1-S4	BB-1-S5	R109-1-S1
Lab Sample ID:			JD29018-53	JD29018-54	JD29018-55	JD29018-56
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	6.18	1.28	1.72	3.8
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R109-1-F1	R108-1-S1	R108-1-F1	1-WF3
Lab Sample ID:			JD29018-57	JD29018-58	JD29018-59	JD29018-60
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	1.14	1.31	2.8	<0.50
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R106-1-F1	R106-1-S1	R105-1-F1	R105-1-S1
Lab Sample ID:			JD29018-61	JD29018-62	JD29018-63	JD29018-64
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	3.39	0.849	3.23	<0.50
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R104-1-S1	R104-1-F1	R103-1-F1	R103-1-S1
Lab Sample ID:			JD29018-65	JD29018-66	JD29018-67	JD29018-68
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	2.23	4.44	2.8	1.85

Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R102-1-F1	R102-1-S1	1-ES1	R222-2-F1
Lab Sample ID:			JD29018-69	JD29018-70	JD29018-71	JD29018-72
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	5.07	3.06	1470	1.47
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R222-2-S1	R219-2-S1	R219-2-F1	R220-2-S1
Lab Sample ID:			JD29018-73	JD29018-74	JD29018-75	JD29018-76
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	10.5	0.977	3.29	2.2
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R220-2-F1	GB-2-S1	GB-2-S2	GB-2-S3
Lab Sample ID:			JD29018-77	JD29018-78	JD29018-79	JD29018-80
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	1.57	0.814	4.3	2.05
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	GB-2-S4	GB-2-S5	GB-2-S6	2-WF-1
Lab Sample ID:			JD29018-81	JD29018-82	JD29018-83	JD29018-84
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	44.8	4.91	7.42	189
2-WF-1 collected 7/23/2021 was stagnant, not first draw. Accurate first draw Sample recollected 2/17/2022 and compliant.						
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	2-WF-2	R216-2-S1	R216-2-F1	R215-2-F1
Lab Sample ID:			JD29018-85	JD29018-86	JD29018-87	JD29018-88
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	14.3	95.2	60.3	7.37
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R215-2-S1	R214-2-F1	R214-2-S1	R213-2-S1
Lab Sample ID:			JD29018-89	JD29018-90	JD29018-91	JD29018-92
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	3.77	1780	122	9.68
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R213-2-F1	R212D-2-CWL1	R212D-2-S1	BB-2-S1
Lab Sample ID:			JD29018-93	JD29018-94	JD29018-95	JD29018-96
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	5.2	<0.50	0.863	1.58
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	BB-2-S2	BB-2-S3	BB-2-S4	BB-2-S5
Lab Sample ID:			JD29018-97	JD29018-98	JD29018-99	JD29018-100
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	1.26	5.47	1.83	1.26
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	BB-2-S6	R208-2-S1	R208-2-F1	R209-2-S1
Lab Sample ID:			JD29018-101	JD29018-102	JD29018-103	JD29018-104
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	1.54	0.874	2.14	0.991

Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R209-2-F1	2-WF-3	2-WF-4	R206-2-S1
Lab Sample ID:			JD29018-105	JD29018-106	JD29018-107	JD29018-108
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	39.2	12.5	71.2	1.5
2-WF-4 collected 7/23/2021 was stagnant, not first draw. Accurate first draw Sample recollected 2/17/2022 and compliant.						
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R206-2-F1	R204-2-S1	R204-2-F1	R205-2-S1
Lab Sample ID:			JD29018-109	JD29018-110	JD29018-111	JD29018-112
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	4.77	1.79	2.71	3.41
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R205-2-F1	R202-2-S1	R202-2-F1	R203-2-S1
Lab Sample ID:			JD29018-113	JD29018-114	JD29018-115	JD29018-116
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	4.41	2.3	3.92	1.04
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R203-2-F1	KS-GF-1	R217-2-F1	R217-2-S1
Lab Sample ID:			JD29018-117	JD29018-118	JD29018-121	JD29018-122
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	6.94	3.69	11	3.24
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R211-2-S1	R211-2-F1		
Lab Sample ID:			JD29018-123	JD29018-124		
Date Sampled:			7/23/2021	7/23/2021		
Matrix:			Drinking Water	Drinking Water		
Metals Analysis						
Lead	ug/l	15	5.7	2.21		
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	2-WF-1	2-WF-2	2-WF-3	2-WF-4
Lab Sample ID:			L2210923-01	L2210923-02	L2210923-03	L2210923-04
Date Sampled:			2/17/2022	2/17/2022	2/17/2022	2/17/2022
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
Metals Analysis						
Lead	ug/l	15	2.1	4.1	3.3	0.9 J
Regulatory limits listed in this document have been obtained from the latest version of the regulations cited and are used for advisory purposes only. SGS assumes no responsibility for errors in regulatory documents or changes to criteria detailed in later versions of the referenced regulation. It is the responsibility of the user to verify these limits before using or reporting any data.						
11 results exceeded regulatory criteria.						