

February 14, 2022

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

For distribution

RE: **Lead in Drinking Water Sampling**  
**North Star Academy – Fairmount and Liberty Elementary School**  
108 S. 9<sup>th</sup> Street  
Newark, NJ 07102  
EL Project # 21-0013

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, EL collected drinking water samples throughout the aforementioned school and returned for confirmatory inspections in October 2021.

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

Several old, out-of-service drinking water outlets were identified that had lead concentrations in exceedance of 15 µg/l. At EL's recommendation, North Star permanently disconnected these out-of-service receptacles as they were not in use.

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 were out-of-service former drinking



water fountains. While the identified concentrations do not *require* remedial action, EL recommended that “DO NOT DRINK – SAFE FOR HANDWASHING ONLY” signage be added to applicable locations as a precautionary measure and that out-of-service former drinking water fountains be permanently disconnected.

Sample ID	Purpose	First Draw Result in µg/l (ppb)	Recommended Action
B-S1	Handwashing	27.9	Handwashing Only Signage Added
B-S3	Handwashing	1,760	Handwashing Only Signage Added
B-KS-4	Handwashing	30.5	Handwashing Only Signage Added
B-S4	Handwashing	24.8	Handwashing Only Signage Added
B-S5	Handwashing	111	Handwashing Only Signage Added
BB-B-S2	Handwashing	15.1	Handwashing Only Signage Added
BB-B-S3	Handwashing	20.1	Handwashing Only Signage Added
UN8-B-S1	Handwashing	2,630	Handwashing Only Signage Added
UN45-1-S1	Handwashing	35.6	Handwashing Only Signage Added
R103-1-S1	Handwashing	22	Handwashing Only Signage Added
R108-1-S1	Handwashing	176	Handwashing Only Signage Added
R110-1-S1	Handwashing	16.6	Handwashing Only Signage Added
R111-1-S1	Handwashing	18.2	Handwashing Only Signage Added
R112-1-F1	Out of Service Drinking Water Fountain	18.9	Permanently Disconnected
R115-1-S1	Handwashing	37.4	Handwashing Only Signage Added
R205-2-S1	Handwashing	42.3	Handwashing Only Signage Added
R204-2-S1	Handwashing	59	Handwashing Only Signage Added
R208-2-S1	Handwashing	165	Handwashing Only Signage Added
R209-2-S1	Handwashing	16.2	Handwashing Only Signage Added
R210-2-F1	Out of Service Drinking Water Fountain	38.9	Permanently Disconnected



R211-2-S1	Handwashing	22.2	Handwashing Only Signage Added
R216-2-S1	Handwashing	16.2	Handwashing Only Signage Added
R212-2-S3	Handwashing	82.9	Handwashing Only Signage Added
R212-WF-1	Out of Service Drinking Water Fountain	26.5	Permanently Disconnected
R213-2-WF-1	Out of Service Drinking Water Fountain	31.4	Permanently Disconnected
R215-2-F1	Out of Service Drinking Water Fountain	15.7	Permanently Disconnected
R214-2-S1	Handwashing	39.5	Handwashing Only Signage Added
R306-3-S1	Handwashing	49.9	Handwashing Only Signage Added
R305-3-S1	Handwashing	167	Handwashing Only Signage Added
R304-3-S1	Handwashing	176	Handwashing Only Signage Added
R303-3-S1	Handwashing	83.9	Handwashing Only Signage Added
R308-3-S1	Handwashing	93.6	Handwashing Only Signage Added
R302-3-S1	Handwashing	80.3	Handwashing Only Signage Added
R301-3-S1	Handwashing	155	Handwashing Only Signage Added
R309-3-S1	Handwashing	26.9	Handwashing Only Signage Added
R319-3-S1	Handwashing	25.3	Handwashing Only Signage Added
R319-3-F1	Out of Service Drinking Water Fountain	44.7	Permanently Disconnected
R311-3-S1	Handwashing	46.8	Handwashing Only Signage Added
R317-3-S1	Handwashing	26.6	Handwashing Only Signage Added
R312-3-S3	Handwashing	47.8	Handwashing Only Signage Added
R315-3-S1	Handwashing	44.2	Handwashing Only Signage Added

### 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 Downtown Middle 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](mailto: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](http://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

# SGS Dayton, NJ

Job Number:	JD28977					
Account:	Environmental Logic LLC.					
Project:	Uncommon Schools, Newark, NJ					
Project Number:	21-0013					
Address:	108 9th Street					
					Legend:	Exceed
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	B-S1	B-S2	B-S3	B-KS-1
Lab Sample ID:			JD28977-1	JD28977-2	JD28977-3	JD28977-4
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	27.9	7.13	1760	1.96
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	B-KS-2	B-KS-3	B-KS-4	B-KS-5
Lab Sample ID:			JD28977-5	JD28977-6	JD28977-7	JD28977-8
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	<0.50	5.47	30.5	5.87
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	B-S4	B-S5	BB-B-S1	BB-B-S2
Lab Sample ID:			JD28977-9	JD28977-10	JD28977-11	JD28977-12
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	24.8	111	7.28	15.1
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	BB-B-S3	C-WF-1	GB-B-S1	GB-B-S2
Lab Sample ID:			JD28977-13	JD28977-14	JD28977-15	JD28977-16
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	20.1	1.43	12.2	10.4
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	GB-B-S3	UN8-B-S1	UN45-1-S1	WF-1-B1
Lab Sample ID:			JD28977-17	JD28977-18	JD28977-19	JD28977-20
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	3.5	2630	35.6	<0.50
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	WF-1-1	R105-1-S1	R105-1-WC1	R103-1-S1
Lab Sample ID:			JD28977-21	JD28977-22	JD28977-23	JD28977-24
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	<0.50	10.7	<0.50	22
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	BB-1-S1	BB-1-S2	UN49-1-S1	UN49-1-WC1
Lab Sample ID:			JD28977-25	JD28977-26	JD28977-27	JD28977-28
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	2.63	<0.50	0.624	<0.50

Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	GB-1-S1	GB-1-S2	R102-1-S1	R108-1-S1
Lab Sample ID:			JD28977-29	JD28977-30	JD28977-31	JD28977-32
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	7.22	3.98	13.9	176
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	HCB-1-S1	R110-1-S1	R111-1-S1	UN65-1-S1
Lab Sample ID:			JD28977-33	JD28977-34	JD28977-35	JD28977-36
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	1.35	16.6	18.2	8.55
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	UN68-1-S1	R116-1-S1	R116-1-F1	R112-1-F1
Lab Sample ID:			JD28977-37	JD28977-38	JD28977-39	JD28977-40
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	4.22	7.25	10.8	18.9
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R112-1-S1	R115-1-S1	R113-1-S1	R206-2-S1
Lab Sample ID:			JD28977-41	JD28977-42	JD28977-43	JD28977-44
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	4.66	37.4	12.7	3.86
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R207-2-S1	R205-2-S1	UN69-2-S1	2-WF-1
Lab Sample ID:			JD28977-45	JD28977-46	JD28977-47	JD28977-48
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	2.38	42.3	1	3.3
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R204-2-S1	BB-2-S1	BB-2-S2	R203-2-S1
Lab Sample ID:			JD28977-49	JD28977-50	JD28977-51	JD28977-52
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	59	<0.50	<0.50	10.7
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	GB-2-S1	GB-2-S2	R208-2-S1	R202-2-S1
Lab Sample ID:			JD28977-53	JD28977-54	JD28977-55	JD28977-56
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	1.51	0.783	165	8.91
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R201-2-S1	R209-2-S1	R219-2-S1	R219-2-F1
Lab Sample ID:			JD28977-57	JD28977-58	JD28977-59	JD28977-60
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	5.98	16.2	8.28	0.596

Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R210-2-S1	R210-2-F1	R211-2-S1	UN79-2-F1
Lab Sample ID:			JD28977-61	JD28977-62	JD28977-63	JD28977-64
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	9.2	38.9	22.2	8.95
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	UN79-2-S1	UN79-2-WC1	R216-2-S1	R216-2-S2
Lab Sample ID:			JD28977-65	JD28977-66	JD28977-67	JD28977-68
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	2.54	<0.50	16.2	11.4
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R212-2-S1	R212-2-S2	R212-2-S3	R212-2-S4
Lab Sample ID:			JD28977-69	JD28977-70	JD28977-71	JD28977-72
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	9.93	7.58	82.9	9.89
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R212-2-S5	R212-WF-1	R213-2-S1	R213-2-S2
Lab Sample ID:			JD28977-73	JD28977-74	JD28977-75	JD28977-76
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	8.32	26.5	3.59	7.97
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R213-2-WF-1	R215-2-S1	R215-2-F1	R214-2-S1
Lab Sample ID:			JD28977-77	JD28977-78	JD28977-79	JD28977-80
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	31.4	5.06	15.7	39.5
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R306-3-S1	R307-3-S1	R305-3-S1	R304-3-S1
Lab Sample ID:			JD28977-81	JD28977-82	JD28977-83	JD28977-84
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	49.9	3.33	167	176
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	3-WF1	UN85-3-S1	BB-3-S1	BB-3-S2
Lab Sample ID:			JD28977-85	JD28977-86	JD28977-87	JD28977-88
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	0.601	2	1.22	2.11
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R303-3-S1	GB-3-S1	GB-3-S2	R308-3-S1
Lab Sample ID:			JD28977-89	JD28977-90	JD28977-91	JD28977-92
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	83.9	1.05	0.966	93.6

Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R302-3-S1	R301-3-S1	R309-3-S1	R319-3-S1
Lab Sample ID:			JD28977-93	JD28977-94	JD28977-95	JD28977-96
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	80.3	155	26.9	25.3
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R319-3-F1	R310-3-F1	R310-3-S1	R311-3-S1
Lab Sample ID:			JD28977-97	JD28977-98	JD28977-99	JD28977-100
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	44.7	4.39	3.9	46.8
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R317-3-S1	R316-3-S1	R312-3-S3	R312-3-WC
Lab Sample ID:			JD28977-101	JD28977-102	JD28977-103	JD28977-104
Date Sampled:			7/23/2021	7/23/2021	7/23/2021	7/23/2021
Matrix:			Drinking Water	Drinking Water	Drinking Water	Drinking Water
<b>Metals Analysis</b>						
Lead	ug/l	15	26.6	9.43	47.8	<0.50
Client Sample ID:		NJ Drinking Water Standards (NJAC 7:10 9/18)	R315-3-S1	R314-3-S1		
Lab Sample ID:			JD28977-105	JD28977-106		
Date Sampled:			7/23/2021	7/23/2021		
Matrix:			Drinking Water	Drinking Water		
<b>Metals Analysis</b>						
Lead	ug/l	15	44.2	12.2		
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.						
41 results exceeded regulatory criteria.						