



ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

46555 Humboldt Drive
Novi, Michigan 48377
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August 14, 2018

Mathew Sam
Detroit Public Schools
1601 Farnsworth
Detroit, Michigan 48202

SUBMITTED VIA EMAIL TO: mathew.sam@detroitk12.org

**SUBJECT: Drinking Water Screening Report-DRAFT
 Bates Academy
 19701 Wyoming
 Detroit, Michigan**

Dear Mr. Sam:

ATC Group Services, LLC (ATC) is pleased to submit this Drinking Water Screening Report for the subject school. The drinking water samples collected from the school were submitted to Pace Analytical Services, LLC, for Michigan Department of Environmental Quality (MDEQ) Drinking Water Certified lead and copper analysis.

SCOPE OF WORK

At the request of the Detroit Public Schools (DPS), ATC collected drinking water samples as a general screening for copper and lead at the subject school. The water sampling conducted included the sampling of fixtures within teacher's lounges, kitchens, water fountains and pre-k classrooms. One (1) sample was collected at each outlet: a first draw (Primary) sample. The Primary samples were collected from outlets that had been inactive for a minimum of eight to eighteen hours. The fixture inventory locations including the sample locations are shown on the Fixture Inventory Locations Map included under Attachment A and fixture inventory photos including the sample location photos are included in a Fixture Inventory Photo Log under Attachment B.

The drinking water samples were collected in 125 milliliter, wide-mouth sample containers, containing nitric acid (preservative). Each sample container was labeled utilizing a unique coding system that identified: the type of drinking outlet sampled as well as the location.



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The samples were transported under chain of custody to Pace Analytical Services, LLC, located at 5560 Corporate Exchange Ct. SE Grand Rapids, MI for MDEQ drinking water certified lead and copper analysis, using analytical method EPA 200.8 rev 5.4.

FINDINGS

Analytical results indicate that four (4) of the samples analyzed were above the EPA recommended limits of 15 micrograms per liter (ug/L) for lead. None of the samples analyzed were above the EPA recommended limits of 1300 micrograms per liter (ug/L) for copper. The table below summarizes the analytical results for the samples submitted. The laboratory analytical reports and chain of custody are provided in Attachment C.

Table 1 – Water Testing Results (August 3, 2018)

Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
1-Hw-B-1	By Room 57, across from Stage door	Bubbler	47.5 ug/L	141 ug/L
1-HW-B-2	By Room 57, across from Stage door	Bubbler	32.5 ug/L	76.3 ug/L
1-Gym-DWF-3	Gym 1st on the right (should be #3)	Drinking water fountain	28.3 ug/L	120 ug/L
1-Gym-DWF-4	Gym 2nd on the right	Drinking water fountain	5.6 ug/L	3.8 ug/L
1-Café-DWF-5	In cafeteria (left)	Drinking water fountain	<1.0 ug/L	312 ug/L
1-Café-DWF-6	In cafeteria (right)	Drinking water fountain	<1.0 ug/L	192 ug/L
1-HW-B-7	Across from office	Bubbler	2.6 ug/L	29.1 ug/L
1-8-cf/B-8	Pre-K Room 8	classroom faucet w/bubbler	1.6 ug/L	91.5 ug/L
1-10-cf/B-9	Pre-K Room 10	classroom faucet w/bubbler	4.2 ug/L	888 ug/L
1-TL-TLF-11	Teacher's Lounge, next to counselor office	single faucet	4.4 ug/L	153 ug/L



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Sample Number	Location	Description	Total Lead (ug/l)	Total Copper (ug/l)
1-HW-B-13	located between boys restrooms and counselor room	Bubbler	2.9 ug/L	33.2 ug/L
1-HW-B-14	located across from the center (50)	Bubbler	1.4 ug/L	46.7 ug/L
1-HW-B-15	located across from main door, outside Cafeteria (left)	Bubbler	3.7 ug/L	171 ug/L
1-HW-B-16	located across from main door, outside Cafeteria (right)	Bubbler	4.6 ug/L	181 ug/L
1-K-KS-19	located in kitchen @ dish washing station (left)	kitchen faucet	<1.0 ug/L	179 ug/L
1-K-KS-20	located in kitchen @ dish washing station (right)	kitchen faucet	<1.0 ug/L	305 ug/L
1-K-DWF-21	Kitchen, next to hand wash station	drinking fountain	24.6 ug/L	11.3 ug/L

Key: NA - Not Analyzed

ug/L- micrograms per liter /parts per billion (ppb)

Analysis of samples in kitchen, hallway outside of room 57, and gym indicate that lead levels were above the MCL. See recommendations below.

RECOMMENDATIONS

For drinking water fixtures that exceed the MCL after the initial sampling, ATC recommends the following:

1. Implement a plan in accordance with MDEQ Guidance on Drinking Water Sampling for Lead and Copper, April, 2016 Version2; OR
2. Remove fixture from service.
3. Implement a flush plan for fixtures that exceed the MCL of the initial sample according to MDEQ Guidance and the EPA's 3T's for Reducing Lead in Drinking Water in Schools.



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LIMITATIONS

The sampling and analysis completed was: a preliminary screening for lead and copper only, to assess lead and copper concentrations (ug/L) at drinking water outlets in the school designated as high use by DPS, and may not be representative of all drinking water outlets within the school. If lead or copper concentrations were identified above their respective MCL's at any of the drinking water outlets tested, further review of the plumbing system, fixtures affected, and testing may be completed to assess the source of the elevated levels of lead and/or copper, as well as, any other response actions deemed necessary by DPS.

Future drinking water evaluation and sampling in accordance with the recommendations may be predicated on applicable guidelines by the MDEQ or EPA and will be determined prior to developing a sampling plan for the school.

Sincerely,

ATC Group Services, LLC

A handwritten signature in black ink that reads "Martin K. Gamble".

Martin K. Gamble
Senior Project Manager

A handwritten signature in black ink that reads "Robert C. Smith".

Robert C. Smith
Building Science Department Manager

Attachments

- Attachment A: Fixture Inventory Locations Map/Form
- Attachment B: Fixture Inventory Photo Log
- Attachment C: Laboratory Analytical Report