



November 9, 2018

Mr. Bernie Bowers
Operations Supervisor
Wyandotte Public Schools
639 Oak Street
Wyandotte, Michigan 48192
Bowers@wy.k12.mi.us

RE: **AEG Project #AE180812**
Lead Drinking Water Sampling
Roosevelt High School

Dear Mr. Bowers:

Pursuant to the request of Wyandotte Public Schools, Arch Environmental Group, Inc. (AEG) collected fourteen (14) representative first draw drinking water lead samples on October 13, 2018, at Roosevelt High School.

General Information about Lead

There is no federal law requiring testing of drinking water in schools and childcare facilities, except for those that have and/or operate their own public water system and therefore are subject to comply with the Safe Drinking Water Act (SDWA). Drinking water programs are conducted on a voluntary basis.

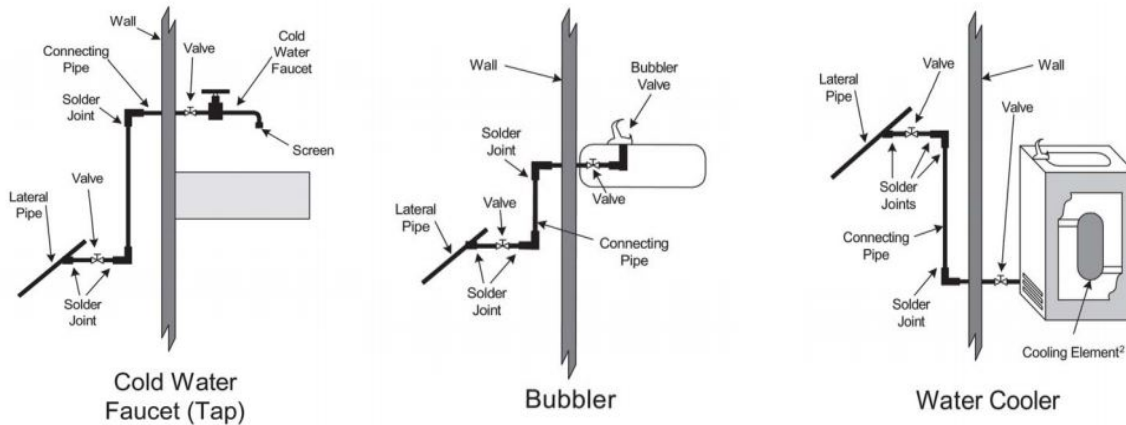
Lead enters drinking water:

- 1. Through Corrosion*
Most lead gets into drinking water after the water leaves the local well or treatment plant and comes into contact with plumbing materials containing lead. These include lead pipe and lead solder (commonly used until 1986) as well as faucets, valves, and other components made of brass. The physical/chemical interaction that occurs between the water and plumbing is referred to as corrosion. The extent to which corrosion occurs contributes to the amount of lead that can be released into the drinking water.
- 2. Faucet Aerators*
Many taps that are used to provide water for human consumption have an aerator as part of the faucet assembly. Screens are not intended to remove contaminants in the water but may trap sediment or debris as water passes through the faucet. Lead bearing sediment may end up in drinking water from physical corrosion of leaded solder and can build up in the aerator over time.
- 3. Galvanized Piping*
Additionally, galvanized pipes are old iron pipes that were installed in many homes built before the 1960s. Over many years, old corrosion scales build up inside the walls of galvanized pipes. These pipes can cause discolored water and pressure issues. Galvanized pipes can also release lead in water if you have or ever have had a lead service pipe.
- 4. Brass Pipes, Faucets Fittings and Valves*
Brass devices passing the test can contribute to lead levels at the tap.

Action Levels

The Lead and Copper Rule (LCR) is a treatment technique rule. Instead of setting a maximum contaminant level (MCL) for lead or copper, the rule requires public water systems to take certain actions to minimize lead and copper in drinking water. The Action Level for lead is 15 ug/L (15 ppb). Beginning January 1, 2025, the action level for lead in the State of Michigan will be lowered to 12 ug/L (12 ppb). In August 2016, the MDEQ recommended school districts use the contaminate level goal of 5 ug/L (5 ppb). For this sampling event, the District shall utilize 15 ug/L (ppb) as the Action Level.

Common Drinking Water Outlets



Collection Procedures

All water samples were collected utilizing 250 milliliters (mL) sample bottles as recommended in the August 1, 2016, Version 3.0 "MDEQ Guidance on Drinking Water Sampling for Lead and Copper at Schools and Daycares on Community Water Supplies".

First Draw Sampling:

AEG collected first draw samples. A first draw is the water that is the first to come out of the tap after the period of 8-24 hours of inactivity.

Locations below Action Level

- Roosevelt-01: In Hallway, Right of Room B-106, Bubblers.
- Roosevelt-02: In Hallway, Right of Room B-123, Left Water Cooler.
- Roosevelt-03: In Hallway, Right of Room B-123, Bottle Fill on Left Water Cooler.
- Roosevelt-04: In Hallway, Right of Room B-123, Right Water Cooler.
- Roosevelt-05: In Hallway, Right of Room B-112, Bubblers.
- Roosevelt-06: In Hallway, Right of Room B-212, Bubblers.
- Roosevelt-07: In Hallway, Across from Room B-211, Left Water Cooler.
- Roosevelt-08: In Hallway, Across from Room B-211, Bottle Fill on Left Water Cooler.
- Roosevelt-09: In Hallway, Right of Room B-206, Bubblers.
- Roosevelt-10: In Hallway, Left of Room A-240, Water Cooler.
- Roosevelt-11: In Hallway, Left of Room A-240, Bottle Fill.
- Roosevelt-12: In Hallway, Left of Room A-219, Water Cooler.
- Roosevelt-13: In Hallway, Left of Room A-219, Bottle Fill.
- Roosevelt-14: In Hallway, Right of Room A-113, Water Cooler.

If you have any questions regarding the report, please feel free to contact the cleanWATER team at (248) 426-0165 [office].

Sincerely,

Arch Environmental Group, Inc.
Environmental Services



Alec Staber

Attachments: Results Table
 Analytical Results & Chain of Custody



**Wyandotte Public Schools
Lead Drinking Water Analysis
Project Number: AE180812**

Roosevelt High School							
Date of Sampling: 10/13/2018							
Sampler: Lindsey Eveleth							
Sample #	Location	Type ¹	Time Collected	Lead EPA Action Level (ug/L)	Lead Results (ug/L)	Aerator Present Y/N	Notes
Roosevelt-01	In Hallway, Right of Room B-106, Bubbler	B	12:29 PM	15	3	N	First Draw
Roosevelt-02	In Hallway, Right of Room B-123, Left Water Cooler	BT	12:33 PM	15	ND ³	N	First Draw. Water cooler was reviewed against the EPA Fact Sheet to determine that it is not lead lined.
Roosevelt-03	In Hallway, Right of Room B-123, Bottle Fill on Left Water Cooler	BT	12:34 PM	15	ND	N	First Draw
Roosevelt-04	In Hallway, Right of Room B-123, Right Water Cooler	WC	12:35 PM	15	ND	N	First Draw. Water cooler was reviewed against the EPA Fact Sheet to determine that it is not lead lined.
Roosevelt-05	In Hallway, Right of Room B-112, Bubbler	B	12:37 PM	15	1	N	First Draw
Roosevelt-06	In Hallway, Right of Room B-212, Bubbler	B	12:42 PM	15	6	N	First Draw
Roosevelt-07	In Hallway, Across from Room B-211, Left Water Cooler	BT	12:45 PM	15	ND	N	First Draw. Water cooler was reviewed against the EPA Fact Sheet to determine that it is not lead lined.
Roosevelt-08	In Hallway, Across from Room B-211, Bottle Fill on Left Water Cooler	BT	12:46 PM	15	1	N	First Draw
Roosevelt-09	In Hallway, Right of Room B-206, Bubbler	B	12:48 PM	15	3	N	First Draw
Roosevelt-10	In Hallway, Left of Room A-240, Water Cooler	BT	12:50 PM	15	ND	N	First Draw. Water cooler was reviewed against the EPA Fact Sheet to determine that it is not lead lined.

1) Type: B = Bubbler, BT = Bottle Fill/Cooler, WC = Water Cooler, C = Combination Sink, F = Faucet, KF = Kitchen Faucet, I = Ice Machine, KK = Kitchen Kettle, PC = Plumed Coffee
 2) <https://www.epa.gov/your-drinking-water/table-regulated-drinking-water-contaminants>
 3) ND = Non Detected at Reported Detection Limit of 1 ug/L
 4) NT = Not Tested



**Wyandotte Public Schools
Lead Drinking Water Analysis
Project Number: AE180812**

Roosevelt High School							
Date of Sampling: 10/13/2018							
Sampler: Lindsey Eveleth							
Sample #	Location	Type ¹	Time Collected	Lead EPA Action Level (ug/L)	Lead Results (ug/L)	Aerator Present Y/N	Notes
Roosevelt-11	In Hallway, Left of Room A-240, Bottle Fill	BT	12:52 PM	15	ND	N	First Draw
Roosevelt-12	In Hallway, Left of Room A-219, Water Cooler	BT	12:57 PM	15	ND	N	First Draw. Water cooler was reviewed against the EPA Fact Sheet to determine that it is not a lead lined.
Roosevelt-13	In Hallway, Left of Room A-219, Bottle Fill	BT	12:59 PM	15	ND	N	First Draw
Roosevelt-14	In Hallway, Right of Room A-113, Water Cooler	BT	1:03 PM	15	ND	N	First Draw. Water cooler was reviewed against the EPA Fact Sheet to determine that it is not a lead lined.

1) Type: B = Bubbler, BT = Bottle Fill/Cooler, WC = Water Cooler, C = Combination Sink, F = Faucet, KF = Kitchen Faucet, I = Ice Machine, KK = Kitchen Kettle, PC = Plumed Coffee
 2) <https://www.epa.gov/your-drinking-water/table-regulated-drinking-water-contaminants>
 3) ND = Non Detected at Reported Detection Limit of 1 ug/L
 4) NT = Not Tested

October 22, 2018

Arch Environmental Group
37720 Interchange Dr.
Farmington Hills, MI 48335

Subject: Roosevelt High School IFD
AE180812-WPS

Dear Ms. Koloski :

Thank you for making Brighton Analytical, L.L.C. your laboratory of choice. Attached are the results for the samples submitted on 10/15/2018 for the above mentioned project. NELAP/TNI Accredited Analysis and MDEQ Drinking Water Certified Analysis will be identified in their respective reporting formats. Hard copies can be supplied at your request for a fee of \$20.00 per copy.

The invoice for this project will be emailed separately. If you have any questions concerning the data or invoice, please don't hesitate to contact our office. We welcome your comments and suggestions to improve our quality systems. Please reference Brighton Analytical, L.L.C. Project ID 53462 when calling or emailing. We thank you for this opportunity to partner with you on this project and hope to work with you again in the future.

Sincerely,
Brighton Analytical, L.L.C.



Brighton Analytical LLC
 2105 Pless Drive
 Brighton, Michigan 48114
 Phone: (810)229-7575 (810)229-8650
 e-mail: bai-brighton@sbcglobal.net
 MDNRE Certified #9404
 NELAC Accredited #176507

Sample Date/Time: 10/13/2018 12:29
 Submit Date/Time: 10/15/2018 12:40
 Report Date: 10/22/2018

Arch Environmental Group
 37720 Interchange Dr.
 Farmington Hills, MI 48335

BA Project # **53462**
 BA Sample ID **CI05086**

Project Name: **Roosevelt High School IFD**
 Project Number: **AE180812-WPS**
 Sample ID: **Roosevelt HS-01 Bubblers R of B106**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Lead (Drinking Water)	3	ug/L	1	15	EPA 200.8 rev5.4	19:36	10/18/2018

RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.

Analysis not specifically identified as drinking water are for non-regulatory compliance purposes.

Released by 

Date 10/22/2018



Brighton Analytical LLC
 2105 Pless Drive
 Brighton, Michigan 48114
 Phone: (810)229-7575 (810)229-8650
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 NELAC Accredited #176507

Sample Date/Time: 10/13/2018 12:33
 Submit Date/Time: 10/15/2018 12:40
 Report Date: 10/22/2018

Arch Environmental Group
 37720 Interchange Dr.
 Farmington Hills, MI 48335

BA Project # **53462**
 BA Sample ID **CI05087**

Project Name: **Roosevelt High School IFD**
 Project Number: **AE180812-WPS**
 Sample ID: **Roosevelt HS-02 L WaterCooler B123**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
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Drinking Water Metal Analysis

Total Lead (Drinking Water)	Not detected	ug/L	1	15	EPA 200.8 rev5.4	19:39	10/18/2018
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RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.

Analysis not specifically identified as drinking water are for non-regulatory compliance purposes.

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Date 10/22/2018



Brighton Analytical LLC
 2105 Pless Drive
 Brighton, Michigan 48114
 Phone: (810)229-7575 (810)229-8650
 e-mail: bai-brighton@sbcglobal.net
 MDNRE Certified #9404
 NELAC Accredited #176507

Sample Date/Time: 10/13/2018 12:34
 Submit Date/Time: 10/15/2018 12:40
 Report Date: 10/22/2018

Arch Environmental Group
 37720 Interchange Dr.
 Farmington Hills, MI 48335

BA Project # **53462**
 BA Sample ID **CI05088**

Project Name: **Roosevelt High School IFD**
 Project Number: **AE180812-WPS**
 Sample ID: **Roosevelt HS-03 BottleFill Rm B123**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Lead (Drinking Water)	Not detected	ug/L	1	15	EPA 200.8 rev5.4	19:42	10/18/2018

RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.

Analysis not specifically identified as drinking water are for non-regulatory compliance purposes.

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Date 10/22/2018



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 2105 Pless Drive
 Brighton, Michigan 48114
 Phone: (810)229-7575 (810)229-8650
 e-mail: bai-brighton@sbcglobal.net
 MDNRE Certified #9404
 NELAC Accredited #176507

Sample Date/Time: 10/13/2018 12:35
 Submit Date/Time: 10/15/2018 12:40
 Report Date: 10/22/2018

Arch Environmental Group
 37720 Interchange Dr.
 Farmington Hills, MI 48335

BA Project # **53462**
 BA Sample ID **CI05089**

Project Name: **Roosevelt High School IFD**
 Project Number: **AE180812-WPS**
 Sample ID: **Roosevelt HS-04 R WaterCoolerRmB123**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
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Drinking Water Metal Analysis

Total Lead (Drinking Water)	Not detected	ug/L	1	15	EPA 200.8 rev5.4	19:45	10/18/2018
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RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.

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Date 10/22/2018



Brighton Analytical LLC
 2105 Pless Drive
 Brighton, Michigan 48114
 Phone: (810)229-7575 (810)229-8650
 e-mail: bai-brighton@sbcglobal.net
 MDNRE Certified #9404
 NELAC Accredited #176507

Sample Date/Time: 10/13/2018 12:37
 Submit Date/Time: 10/15/2018 12:40
 Report Date: 10/22/2018

Arch Environmental Group
 37720 Interchange Dr.
 Farmington Hills, MI 48335

BA Project # **53462**
 BA Sample ID **CI05090**

Project Name: **Roosevelt High School IFD**
 Project Number: **AE180812-WPS**
 Sample ID: **Roosevelt HS-05 Bubblers by B112**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
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Drinking Water Metal Analysis

Total Lead (Drinking Water)	1	ug/L	1	15	EPA 200.8 rev5.4	19:48	10/18/2018
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RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

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Brighton Analytical LLC
 2105 Pless Drive
 Brighton, Michigan 48114
 Phone: (810)229-7575 (810)229-8650
 e-mail: bai-brighton@sbcglobal.net
 MDNRE Certified #9404
 NELAC Accredited #176507

Sample Date/Time: 10/13/2018 12:42
 Submit Date/Time: 10/15/2018 12:40
 Report Date: 10/22/2018

Arch Environmental Group
 37720 Interchange Dr.
 Farmington Hills, MI 48335

BA Project # **53462**
 BA Sample ID **CI05091**

Project Name: **Roosevelt High School IFD**
 Project Number: **AE180812-WPS**
 Sample ID: **Roosevelt HS-06 Bubblers by Rm B212**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Lead (Drinking Water)	6	ug/L	1	15	EPA 200.8 rev5.4	20:14	10/18/2018

RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.

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Brighton Analytical LLC
 2105 Pless Drive
 Brighton, Michigan 48114
 Phone: (810)229-7575 (810)229-8650
 e-mail: bai-brighton@sbcglobal.net
 MDNRE Certified #9404
 NELAC Accredited #176507

Sample Date/Time: 10/13/2018 12:45
 Submit Date/Time: 10/15/2018 12:40
 Report Date: 10/22/2018

Arch Environmental Group
 37720 Interchange Dr.
 Farmington Hills, MI 48335

BA Project # **53462**
 BA Sample ID **CI05092**

Project Name: **Roosevelt High School IFD**
 Project Number: **AE180812-WPS**
 Sample ID: **Roosevelt HS-07Acs B211 L WaterCool**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
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Drinking Water Metal Analysis

Total Lead (Drinking Water)	Not detected	ug/L	1	15	EPA 200.8 rev5.4	20:17	10/18/2018
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RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.

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Brighton Analytical LLC
 2105 Pless Drive
 Brighton, Michigan 48114
 Phone: (810)229-7575 (810)229-8650
 e-mail: bai-brighton@sbcglobal.net
 MDNRE Certified #9404
 NELAC Accredited #176507

Sample Date/Time: 10/13/2018 12:46
 Submit Date/Time: 10/15/2018 12:40
 Report Date: 10/22/2018

Arch Environmental Group
 37720 Interchange Dr.
 Farmington Hills, MI 48335

BA Project # **53462**
 BA Sample ID **CI05093**

Project Name: **Roosevelt High School IFD**
 Project Number: **AE180812-WPS**
 Sample ID: **Roosevelt HS-08 Acs B211 BottleFill**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
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Drinking Water Metal Analysis

Total Lead (Drinking Water)	1	ug/L	1	15	EPA 200.8 rev5.4	20:20	10/18/2018
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RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.

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Brighton Analytical LLC
 2105 Pless Drive
 Brighton, Michigan 48114
 Phone: (810)229-7575 (810)229-8650
 e-mail: bai-brighton@sbcglobal.net
 MDNRE Certified #9404
 NELAC Accredited #176507

Sample Date/Time: 10/13/2018 12:48
 Submit Date/Time: 10/15/2018 12:40
 Report Date: 10/22/2018

Arch Environmental Group
 37720 Interchange Dr.
 Farmington Hills, MI 48335

BA Project # **53462**
 BA Sample ID **CI05094**

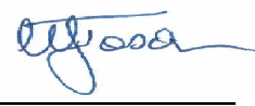
Project Name: **Roosevelt High School IFD**
 Project Number: **AE180812-WPS**
 Sample ID: **Roosevelt HS-09 Bubblers by B-206**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Lead (Drinking Water)	3	ug/L	1	15	EPA 200.8 rev5.4	20:23	10/18/2018

RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.

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Date 10/22/2018



Brighton Analytical LLC
 2105 Pless Drive
 Brighton, Michigan 48114
 Phone: (810)229-7575 (810)229-8650
 e-mail: bai-brighton@sbcglobal.net
 MDNRE Certified #9404
 NELAC Accredited #176507

Sample Date/Time: 10/13/2018 12:50
 Submit Date/Time: 10/15/2018 12:40
 Report Date: 10/22/2018

Arch Environmental Group
 37720 Interchange Dr.
 Farmington Hills, MI 48335

BA Project # **53462**
 BA Sample ID **CI05095**

Project Name: **Roosevelt High School IFD**
 Project Number: **AE180812-WPS**
 Sample ID: **Roosevelt HS-10 WaterCooler by A240**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
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Drinking Water Metal Analysis

Total Lead (Drinking Water)	Not detected	ug/L	1	15	EPA 200.8 rev5.4	20:26	10/18/2018
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RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.

Analysis not specifically identified as drinking water are for non-regulatory compliance purposes.

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Date 10/22/2018



Brighton Analytical LLC
 2105 Pless Drive
 Brighton, Michigan 48114
 Phone: (810)229-7575 (810)229-8650
 e-mail: bai-brighton@sbcglobal.net
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Sample Date/Time: 10/13/2018 12:52
 Submit Date/Time: 10/15/2018 12:40
 Report Date: 10/22/2018

Arch Environmental Group
 37720 Interchange Dr.
 Farmington Hills, MI 48335

BA Project # **53462**
 BA Sample ID **CI05096**

Project Name: **Roosevelt High School IFD**
 Project Number: **AE180812-WPS**
 Sample ID: **Roosevelt HS-11 BottleFill by A-240**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Lead (Drinking Water)	Not detected	ug/L	1	15	EPA 200.8 rev5.4	20:29	10/18/2018

RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.

Analysis not specifically identified as drinking water are for non-regulatory compliance purposes.

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Date 10/22/2018



Brighton Analytical LLC
 2105 Pless Drive
 Brighton, Michigan 48114
 Phone: (810)229-7575 (810)229-8650
 e-mail: bai-brighton@sbcglobal.net
 MDNRE Certified #9404
 NELAC Accredited #176507

Sample Date/Time: 10/13/2018 12:57
 Submit Date/Time: 10/15/2018 12:40
 Report Date: 10/22/2018

Arch Environmental Group
 37720 Interchange Dr.
 Farmington Hills, MI 48335

BA Project # **53462**
 BA Sample ID **CI05097**

Project Name: **Roosevelt High School IFD**
 Project Number: **AE180812-WPS**
 Sample ID: **Roosevelt HS-12 WaterCooler by A219**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
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Drinking Water Metal Analysis

Total Lead (Drinking Water)	Not detected	ug/L	1	15	EPA 200.8 rev5.4	20:32	10/18/2018
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RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.

Analysis not specifically identified as drinking water are for non-regulatory compliance purposes.

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Date 10/22/2018



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 Brighton, Michigan 48114
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 e-mail: bai-brighton@sbcglobal.net
 MDNRE Certified #9404
 NELAC Accredited #176507

Sample Date/Time: 10/13/2018 12:59
 Submit Date/Time: 10/15/2018 12:40
 Report Date: 10/22/2018

Arch Environmental Group
 37720 Interchange Dr.
 Farmington Hills, MI 48335

BA Project # **53462**
 BA Sample ID **CI05098**

Project Name: **Roosevelt High School IFD**
 Project Number: **AE180812-WPS**
 Sample ID: **Roosevelt HS-13 BottleFill by A-219**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Lead (Drinking Water)	Not detected	ug/L	1	15	EPA 200.8 rev5.4	20:35	10/18/2018

RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.

Analysis not specifically identified as drinking water are for non-regulatory compliance purposes.

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Date 10/22/2018



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 Brighton, Michigan 48114
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 MDNRE Certified #9404
 NELAC Accredited #176507

Sample Date/Time: 10/13/2018 13:03
 Submit Date/Time: 10/15/2018 12:40
 Report Date: 10/22/2018

Arch Environmental Group
 37720 Interchange Dr.
 Farmington Hills, MI 48335

BA Project # **53462**
 BA Sample ID **CI05099**

Project Name: **Roosevelt High School IFD**
 Project Number: **AE180812-WPS**
 Sample ID: **Roosevelt HS-14 WaterCooler by A113**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Lead (Drinking Water)	Not detected	ug/L	1	15	EPA 200.8 rev5.4	20:38	10/18/2018

RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.

Analysis not specifically identified as drinking water are for non-regulatory compliance purposes.

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Brighton Analytical, L.L.C.
 Email: bai-brighton@shcglobal.net
 2105 Pless Drive
 Brighton, MI 48114
 Phone: 810-229-7575
 Fax: 810-229-8650

BA PROJECT #: **53462**
 ABBREVIATIONS FOR MATRIX
 S = Solid
 L = Liquid
 DW = Drinking H₂O
 O = Oil
 P = Wipe
 A = Air (Tedlar Bag)
 F = Filter
 T = Tube
 M = Misc.

Analysis Requested/Method

PAGE OF 2
 COMPANY/MAILING ADDRESS:
ARCH ENVIRONMENTAL GROUP
 ATTN: **KAREN KOLSKI**
 PHONE: **481-233-7300**
 Samples received within hold time? yes no
 Temperature of samples °C: **4**
 pHs verified in login? yes no
 Headspace/bubbles in VOA's? yes no n/a
 Sample containers and COC match? yes no
 BILLING ADDRESS (IF REQUIRED):

PROJECT NAME: **Yooesvelt High School IFO**
 PROJECT #: **1520812**
 PO #: (PLEASE NOTE IF DIFFERENT BILLING ADDRESS)
 Sample collected by: **Andray Zuelch**
 REQUESTED TURNAROUND: (circle one)
 Rush: 1-3 business days (verify with lab & specify date needed)
 1 Day = 2.5X Cost 2 Day = 2X Cost 3 Day = 1.5X Cost
 Standard: 3 business days

Container Type & Quantity

VOA'S (PRES) Y N N/A
 HDPE UNPRESERVED
 HDPE HNO₃
 HDPE H₂SO₄
 HDPE NaOH
 AMBER PRESERVED?
 GLASS, NO PRESERVATIVE
 STERILIZED BACTERIA
 MEOH Preserved Y N

Brighton ID #	Sample Description	Date	Time
1) 5016	Yooesvelt HS-01 Bubbler right of B106	10/13/12	12:29
2) 87	Yooesvelt HS-07 left water cooler by B123	12/3/12	
3) 81	Yooesvelt HS-09 bath fill by room B123	12/3/12	
4) 89	Yooesvelt HS-09 right water cooler by room B123	12/3/12	
5) 90	Yooesvelt HS-09 bubbler by B123	12/3/12	
6) 91	Yooesvelt HS-06 bubbler by room B212	12/4/12	
7) 92	Yooesvelt HS-07 access from B-211, left	12/4/12	
8) 93	Yooesvelt HS-08 access from B-211, left	12/4/12	
9) 94	Yooesvelt HS-09 bubbler by B-206	12/4/12	
10) 95	Yooesvelt HS-10 water cooler by B-240	12/5/12	

Analysis Requested/Method	Trans. #	RECEIVED BY:	DATE:	TIME:
Sample Matrix	3	KKJ	10/15/12	10:40
	4	KKJ	10/15/12	12:40

Special Instructions:

Drinking H₂O:
 Fax to LCHD? yes no
 Chlorinated Water Supply? yes no
 AMT.: _____
 MCL Failure: yes no
 Client Notified (date/time/initials): _____

Please fill out the Chain of Custody completely and review. Incorrect or incomplete information will result in a "hold" on all analyses.

Trans. #	RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:	Trans. #	RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:
1	<i>[Signature]</i>	KKJ	10/15/12	10:40	3				
2	<i>[Signature]</i>	KKJ	10/15/12	12:40	4				



BRIGHTON ANALYTICAL, LLC

QUALITY ASSURANCE/QUALITY
CONTROL

ICP-MS METHOD 200.8/6020

REPRESENTATIVE BATCH PRECISION AND ACCURACY QUALITY CONTROL SUMMARY

Analysis Date: 10/18/2018 Standard ID: 092618 H2O Batch: 10/17/2018 B5
 Matrix Spike Lab ID: CI05080 Matrix: Total Analyst: LT

Metals	Matrix Spike - Precision *			Matrix Spike - Accuracy**				Miscellaneous***		
	Matrix Spike (ug/kg)	Matrix Spike Dup (ug/kg)	RPD (%)	Spk Conc (ug/kg)	MS Recovery (%)	MSD Recovery (%)	Sample Conc (ug/kg)	Method Blk (ug/kg)	LCS-Method STD (%)	Ind. Std. (%)
Lead	984	1055	7.0	1000	98.2	105.3	2	<1	94.2	100.1

* Matrix spike precision range +/- 20% RPD

** Matrix spike accuracy range +/- 20% recovery

*** LCS accuracy range +/- 15% recovery / Ind std accuracy range +/- 10% recovery

Comments: _____

ICP-MS

METHOD 200.8/6020

REPRESENTATIVE BATCH PRECISION AND ACCURACY QUALITY CONTROL SUMMARY

Analysis Date: 10/18/2018 Standard ID: 092618 H2O Batch: 10/17/2018 B6
 Matrix Spike Lab ID: CI05100 Matrix: Total Analyst: LT

Metals	Matrix Spike - Precision *			Matrix Spike - Accuracy**				Miscellaneous***		
	Matrix Spike (ug/kg)	Matrix Spike Dup (ug/kg)	RPD (%)	Spk Conc (ug/kg)	MS Recovery (%)	MSD Recovery (%)	Sample Conc (ug/kg)	Method Blk (ug/kg)	LCS-Method STD (%)	Ind. Std. (%)
Lead	2296	1942	16.7	2000	114.6	96.9	5	<1	88.7	100.1

* Matrix spike precision range +/- 20% RPD

** Matrix spike accuracy range +/- 20% recovery

*** LCS accuracy range +/- 15% recovery / Ind std accuracy range +/- 10% recovery

Comments: _____