



Testing Engineers & Consultants, Inc.

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www.testingengineers.com

TEC Report Number: 59768-02

Date Issued: September 6, 2019

Mr. Richard VanGorder
Manager of Buildings and Grounds
Grosse Pointe Public School System
389 St. Clair
Grosse Pointe, MI 48230

Re: Follow-Up Drinking Water Screening Sampling and Analysis for Lead and Copper.

Dear Mr. VanGorder:

On June 4, 2019 Testing Engineers & Consultants, Inc. (TEC) published the results of the latest district-wide drinking water screening sampling campaign. The findings identified five locations (one in each of five schools) which exceeded either the EPA Action Levels or the more recent Michigan Department of Environment, Great Lakes & Energy (EGLE) guidance recommendations. The fixtures were located in Parcels Middle School, Mason Elementary School, Grosse Pointe North High School, Defer Elementary School and Barnes Early Childhood. A sixth sample location with an elevated lead result was identified in the kitchen at Brownell Middle School. Upon further review, it was determined that this outlet provides water for dish cleaning only and was therefore erroneously included in the screening sampling campaign.

Under the federal Lead & Copper Rule, EPA established an Action Level of 0.015 mg/L for lead and 1.3 mg/L for copper concentrations in drinking water, above which would require additional corrosion control techniques to be implemented by the water system provider. Until recently these criteria had also been used by MDEQ as a means of screening drinking water samples for acceptable levels of lead and copper. In 2016, updated guidance from EGLE included recommendations to take action whenever test results exceeded 0.005 mg/L for lead or 1.3 mg/L for copper¹.

The follow-up drinking water screening sampling and analysis was conducted after modifications were completed at each of the outlets with elevated lead or copper results. It is our understanding that the modifications consisted of the installation of in-line water filters at each of the five fixtures.

Continued....

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CONSULTING ENGINEERS & FULL-SERVICE PROFESSIONAL TESTING AND INSPECTION
OFFICES IN ANN ARBOR, DETROIT, AND TROY
FOUNDED IN 1966

Testing Engineers & Consultants, Inc.

Grosse Pointe Public School System

Mr. Richard VanGorder

September 6, 2019

TEC Report Number: 59768-02

Field work was conducted on August 28th & 29th, 2019. Both first-draw and two-minute flushed water samples were collected at each location. The fixtures were flushed for at least two minutes the previous evening by Grosse Pointe Public School System (GPPSS) facilities staff. Flushing was conducted the previous evening to compensate for the lack of water use in the schools since the beginning of the summer break period. After sampling was completed, the samples were forwarded to an MDEQ-certified drinking water laboratory (Accurate Analytical Testing, LLC; Romulus, MI) and analyzed for lead and copper by EPA Analytical Method 200.8. A summary table of the laboratory findings prepared by TEC is found in Appendix A. Appendix B contains Accurate Analytical Testing, LLC laboratory reports.

Conclusions and Recommendations

First draw and flushed water samples were collected from five water outlets (one in each of five schools) after installation of in-line filters. Our review of the laboratory data indicates that the first draw and flushed water samples collected at each of the five locations met EPA and EGLE drinking water criteria.

Continued routine sampling and analysis on a district-wide basis is recommended as a means of monitoring drinking water quality and implementing corrective actions where appropriate.

We are pleased to provide this service. Should you have any questions or require additional information, please contact this office at your earliest convenience.

Respectfully Yours,
TESTING ENGINEERS & CONSULTANTS, INC.



Scott M. Chandler, CIH, LEED AP
Manager, Industrial Hygiene Services
SMC/sc

¹“MDEQ Guidance on Drinking Water Sampling for Lead and Copper at Schools and Daycares on Community Water Supplies”. Version 3.0- August 1, 2016. Current State of Michigan guidance for copper is 1.3 mg/L and for lead is 0.005 mg/L.

APPENDIX A

Grosse Pointe Public Schools
Drinking Water Screening
Supplemental Sampling
8/28/19-8/29/19

School	Sample ID	Description	Type	Lead, mg/L	Copper, mg/L
Parcells	1P	2nd Floor; Drinking Fountain near 220	1st	<0.0010	0.0203
	1F		F	0.0022	0.041
Mason	2P	2nd Floor; Right Drinking Fountain Near 203	1st	<0.0010	0.0208
	2F		F	<0.0010	0.0042
North HS	3P	1st Floor; Drinking Fountain near Southwest End of Auditorium	1st	<0.0010	0.1479
	3F		F	<0.0010	0.0148
Defer	4P	3rd Floor; Drinking Fountain Outside Room 307	1st	<0.0010	<0.0010
	4F		F	<0.0010	<0.0010
Barnes	5P	1st Floor; Conference Room 111; Sink	1st	<0.0010	<0.0010
	5F		F	<0.0010	<0.0010

APPENDIX B



30105 Beverly Road
Romulus, MI 48174
Ph: 734-629-8161; Fax: 734-629-8431

Certificate of Analysis: Lead In Drinking Water by EPA Method 200.5

Client : Testing Engineers Consulting
1343 Rochester Rd
Troy, MI 48083

Attn : Joe Konrad **Email :** jkonrad@tectest.com
Phone : 248-588-6200 **Fax :**

AAT Project : 510825
Sampling Date : 08/28/2019
Date Received : 08/28/2019
Date Analyzed : 08/30/2019
Date Reported : 8/30/2019 11:18:27AM

Client Project : 59768-02

Collected By : NA

WSSN :

Project Location : PARCELLS MASON NORTH HS

Sample ID	Client Code	Sample Description	Purpose	Collection Time	Results Lead mg/L (ppm)	Reporting Limit	Pb Threshold
4911240	1P	PARCELLS 2FL DF NEAR 220	NA	NA	<0.0010	0.0010	Below
4911241	1F	PARCELLS 2FL DF NEAR 220 F	NA	NA	0.0022	0.0010	Below
4911242	2P	MASON 2FL RIGHT DF NEAR 2	NA	NA	0.0012	0.0010	Below
4911243	2F	MASON 2FL RIGHT DF NEAR 2	NA	NA	<0.0010	0.0010	Below
4911244	3P	NORTH HS 1FL DF NEAR SW E	NA	NA	<0.0010	0.0010	Below
4911245	3F	NORTH HS 1FL DF NEAR SW E	NA	NA	<0.0010	0.0010	Below

Analyst Signature

Robert Limmer

ND = Not Detected, N/A = Not Available, RL = Reporting Limit, The Analytical Reporting Limit for Pb is: 0.001 mg/L (ppm) and for Cu is 0.0015 mg/L (ppm).

For true values assume (2) significant figures. AAT internal SOP S230. The method and batch QC are acceptable unless otherwise stated.

EPA Regulatory Limits: 0.015 mg/L for Pb and 1.3 mg/L for Cu

The laboratory operates in accord with NELAP guidelines and holds accreditation under the NY State DOH ELAP program. These results are submitted pursuant to AAT, LLC current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. Analytical results relate to the samples as received by the lab. AAT will not assume any liability or responsibility for the manner in which the results are used or interpreted. All Quality control requirements for the samples this report contains have been met. Sample data apply only to items analyzed. Reproduction of this document other than in its entirety is not authorized by AAT, LLC. Samples are stored for 15 days following report date.





30105 Beverly Road
Romulus, MI 48174
Ph: 734-629-8161; Fax: 734-629-8431

Certificate of Analysis: Copper In Drinking Water by EPA Method 200.5

Client : Testing Engineers Consulting
1343 Rochester Rd
Troy, MI 48083

Attn : Joe Konrad **Email :** jkonrad@tectest.com
Phone : 248-588-6200 **Fax :**

AAT Project : 510825
Sampling Date : 08/28/2019
Date Received : 08/28/2019
Date Analyzed : 08/30/2019
Date Reported : 8/30/2019 11:18:27AM

Client Project : 59768-02 **Collected By :** NA
Project Location : PARCELLS MASON NORTH HS

WSSN :

Lab Sample ID	Client Code	Sample Description	Purpose	Collection Time	Results Copper mg/L (ppm)	Cu Threshold
4911240	1P	PARCELLS 2FL DF NEAR 2	NA	NA	0.0203	Below
4911241	1F	PARCELLS 2FL DF NEAR 2	NA	NA	0.0410	Below
4911242	2P	MASON 2FL RIGHT DF NEA	NA	NA	0.0208	Below
4911243	2F	MASON 2FL RIGHT DF NEA	NA	NA	0.0042	Below
4911244	3P	NORTH HS 1FL DF NEAR S	NA	NA	0.1479	Below
4911245	3F	NORTH HS 1FL DF NEAR S	NA	NA	0.0148	Below

Analyst Signature

Robert Limmer

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For true values assume (2) significant figures. AAT internal SOP S230. The method and batch QC are acceptable unless otherwise stated.

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NY State DOH ELAP - Lab ID # 11864

Date Printed: 08/30/2019

AAT Project: 510825



30105 Beverly Road
Romulus, MI 48174
Ph: 734-629-8161; Fax: 734-629-8431

To : Testing Engineers Consulting
1343 Rochester Rd
Troy, MI 48083

Attn : Joe Konrad

Email : jkonrad@tectest.com

Phone : 248-588-6200

AAT Project : 510825

Client Project : 59768-02

Date Reported : 8/30/2019 11:18:27AM

Project Location : PARCELLS MASON NORTH HS

Sample	Client Code	Analysis Requested	Completed	Analyst
4911240	1P	Pb/Cu in Drinking Water	08/30/2019	Robert Limmer
4911241	1F	Pb/Cu in Drinking Water	08/30/2019	Robert Limmer
4911242	2P	Pb/Cu in Drinking Water	08/30/2019	Robert Limmer
4911243	2F	Pb/Cu in Drinking Water	08/30/2019	Robert Limmer
4911244	3P	Pb/Cu in Drinking Water	08/30/2019	Robert Limmer
4911245	3F	Pb/Cu in Drinking Water	08/30/2019	Robert Limmer

Reviewed By

Quality Assurance Coordinator - Stephen Northcott

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AIHA LAP- Lab ID #100986, NY State DOH ELAP -Lab ID #11864, State of Ohio- Lab ID # 10042

Date Printed: 08/30/2019 11:32AM

AAT Project: 510825



Email: customersupport@accurate-test.biz

Troy, Michigan 48063

Email: Shanley@fector.com

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AAT is not responsible for shipping delays



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Ph: 734-629-8161; Fax: 734-629-8431

Certificate of Analysis: Lead In Drinking Water by EPA Method 200.5

Client : Testing Engineers Consulting
1343 Rochester Rd
Troy, MI 48083

Attn : Joe Konrad **Email :** jkonrad@tectest.com
Phone : 248-588-6200 **Fax :**

AAT Project : 510985
Sampling Date : 08/29/2019
Date Received : 08/29/2019
Date Analyzed : 09/03/2019
Date Reported : 9/3/2019 9:56:51AM

Client Project : 59768-02

Collected By : NA

WSSN :

Project Location : DETROIT BARNES

Sample ID	Client Code	Sample Description	Purpose	Collection Time	Results Lead mg/L (ppm)	Reporting Limit	Pb Threshold
4912733	4P	DEFER 3FL DF OUTSIDE RM 3	NA	NA	<0.0010	0.0010	Below
4912734	4F	DEFER 3FL DF OUTSIDE RM 3	NA	NA	<0.0010	0.0010	Below
4912735	5P	BARNES 1FL CONF RM 111 SIN	NA	NA	0.0043	0.0010	Below
4912736	5F	BARNES 1FL CONF RM 111 SIN	NA	NA	<0.0010	0.0010	Below

Analyst Signature

Robert Limmer

ND = Not Detected, N/A = Not Available, RL = Reporting Limit, The Analytical Reporting Limit for Pb is: 0.001 mg/L (ppm) and for Cu is 0.0015 mg/L (ppm).

For true values assume (2) significant figures. AAT internal SOP S230. The method and batch QC are acceptable unless otherwise stated.

EPA Regulatory Limits: 0.015 mg/L for Pb and 1.3 mg/L for Cu

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Ph: 734-629-8161; Fax: 734-629-8431

Certificate of Analysis: Copper In Drinking Water by EPA Method 200.5

Client : Testing Engineers Consulting
1343 Rochester Rd
Troy, MI 48083

Attn : Joe Konrad **Email :** jkonrad@tectest.com
Phone : 248-588-6200 **Fax :**

AAT Project : 510985
Sampling Date : 08/29/2019
Date Received : 08/29/2019
Date Analyzed : 09/03/2019
Date Reported : 9/3/2019 9:56:51AM

Client Project : 59768-02

Collected By : NA

WSSN :

Project Location : DETROIT BARNES

Lab Sample ID	Client Code	Sample Description	Purpose	Collection Time	Results Copper mg/L (ppm)	Cu Threshold
4912733	4P	DEFER 3FL DF OUTSIDE R	NA	NA	0.0937	Below
4912734	4F	DEFER 3FL DF OUTSIDE R	NA	NA	0.0318	Below
4912735	5P	BARNES 1FL CONF RM 111	NA	NA	0.0449	Below
4912736	5F	BARNES 1FL CONF RM 111	NA	NA	0.0037	Below

Analyst Signature

Robert Limmer

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For true values assume (2) significant figures. AAT internal SOP S230. The method and batch QC are acceptable unless otherwise stated.

EPA Regulatory Limits: 0.015 mg/L for Pb and 1.3 mg/L for Cu

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NY State DOH ELAP - Lab ID # 11864

Date Printed: 09/03/2019

AAT Project: 510985



30105 Beverly Road
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To : Testing Engineers Consulting
1343 Rochester Rd
Troy, MI 48083

Attn : Joe Konrad

Email : jkonrad@tectest.com
Phone : 248-588-6200

AAT Project : 510985
Client Project : 59768-02
Date Reported : 9/3/2019 9:56:51AM

Project Location : DETROIT BARNES

Sample	Client Code	Analysis Requested	Completed	Analyst
4912733	4P	Pb/Cu in Drinking Water	09/03/2019	Robert Limmer
4912734	4F	Pb/Cu in Drinking Water	09/03/2019	Robert Limmer
4912735	5P	Pb/Cu in Drinking Water	09/03/2019	Robert Limmer
4912736	5F	Pb/Cu in Drinking Water	09/03/2019	Robert Limmer

Reviewed By

Quality Assurance Coordinator - Stephen Northcott

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AIHA LAP- Lab ID #100986, NY State DOH ELAP -Lab ID #11864, State of Ohio- Lab ID # 10042

Date Printed: 09/03/2019 10:08AM

AAT Project: 510985



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SUBMITTING COMPANY
Testing Engineers & Consultants
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CONTACT INFORMATION

Office: 248-988-6600

Fax:

Cell: 248-755-1557

Email: SChandler@tctest.com

PROJECT NUMBER 59768-02	SAMPLING DATE 8/29/2019	REQUESTED ANALYSIS Drinking Water	<input type="checkbox"/> LEAD <input type="checkbox"/> COPPER <input checked="" type="checkbox"/> BOTH	TURNAROUND TIME (please check one) 24 Hour () 48 Hour (X) 72 Hour () 5 Days ()
PROJECT ADDRESS Dewey Barnes				
SAMPLING TIME				
RISK ASSESSOR				
LAB ID # 490777	CLIENT SAMPLE ID 4P	DESCRIPTION Defec 3rd floor; DF outside rm 307	VOLUME	CLIENT COMMENTS EPA method 200.8 SAMPLES SHIPPED
490778	4F	Defec 3rd floor; DF outside rm 307		
490779	5P	Barnes 1st floor; Conference rm III Sink		SAMPLES ACIDIFIED Y N
490780	5F	Barnes 1st floor; Conference rm III Sink		
				SAMPLE CONDITION SEALS INTACT Y N CONTAINERS LABELED Y N RECVD & ACCEPTED Y N SAMPLES ACIDIFIED Y N
				LAB REMARKS 2583
				LAB PROJECT NUMBER 59768
SAMPLES RELINQUISHED BY Jacob Ralloch		SAMPLES RECEIVED BY [Signature]		DATE 5/19/85
				TIME AM PM

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