ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

46555 Humboldt Drive
Novi, Michigan 48377
Telephone 248-669-5140
www.atcgroupservices.com

Mathew Sam
Detroit Public Schools
1601 Farnsworth
Detroit, Michigan 48202

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

SUBJECT: Drinking Water Screening Report
Mason Academy
19955 Fenelon Street
Detroit, Michigan 48234

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 Brighton Analytical L.L.C., 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. DPS in coordination with the City of Detroit Health Department determined that the screening would consist of collection of water samples from three (3) high priority water outlets (drinking fountains, kitchen/food preparation area faucets, etc.), regularly used by students and staff for drinking, as designated by DPS personnel. Two (2) samples were collected at each outlet: a first draw (Primary) sample; and a Flush sample. The Primary samples were collected from outlets that had been inactive for a minimum of eight hours. The Flush samples were collected after the water was allowed to run for a minimum of thirty (30) seconds at each of the sample locations.

The drinking water samples were collected in 125 milliliter, wide-mouth sample containers, containing nitric acid (preservative). Each sample container was labeled utilizing a coding system that identified: the type of drinking outlet sampled, Drinking Water Fountain (DWF), Drinking Water Cooler (DWC), Kitchen Faucet (KF) etc.; and a (P) for primary samples and a (F) for flush samples.

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The samples were transported under chain of custody to Brighton Analytical L.L.C., located at 2105 Pless Drive in Brighton, Michigan for MDEQ drinking water certified lead and copper analysis, using analytical method EPA 200.8 rev 5.4.

As per the EPA's *3T's for Reducing Lead in Drinking Water in Schools, Revised Technical Guidance (October 2006)* analysis of the flush sample(s) was only performed if analysis of the first draw (Primary) sample(s) indicated lead and/or copper concentrations greater than the EPA established Maximum Contaminate Level (MCL).

FINDINGS

Analytical results indicate that none of the samples analyzed were above the EPA recommended limits of 15 micrograms per liter (ug/L) for lead. Analytical results indicate that none of the samples analyzed were above the EPA recommended limits of 1300 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 A.

Sample Number	Total Lead (Drinking Water)	MCL	Total Copper (Drinking Water)	MCL
1-DWF-P-Mason-@Exit 19	Not Detected	15 ug/L	Not Detected	1300 ug/L
1-DWF-F-Mason-@Exit 19	NA	15 ug/L	NA	1300 ug/L
2-DWF-P-Mason @Exit 9	Not Detected	15 ug/L	Not Detected	1300 ug/L
2-DWF-F-Mason @Exit 9	NA	15 ug/L	NA	1300 ug/L
3-K-P-Mason-Staff Dining	1 ug/L	15 ug/L	Not Detected	1300 ug/L
3-K-F-Mason-Staff Dining	NA	15 ug/L	NA	1300 ug/L

Key: NA - Not Analyzed

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

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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 are identified above their respective MCL's at any of the drinking water outlets tested, further review of the plumping system, fixtures affected, and testing should 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.

The drinking water screening proposed and conducted by ATC was devised in cooperation with Detroit Public Schools, City of Detroit Health Department and utilizing the EPA's 3Ts for Reducing Lead in Drinking Water in Schools and may not meet all of the recommendations provided by the MDEQ "*Guidance on Drinking Water Sampling for Lead and Copper at Schools and Daycares on Community Water Supplies*" Version 2.0 - April 13, 2016. 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

Martin Gamble
Senior Project Manager

Robert C. Smith
Building Science Department Manager

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ATTACHMENT A

LABORATORY REPORT
AND
CHAIN OF CUSTODY

Brighton Analytical L.L.C.™
2105 Pless Drive · Brighton, Michigan 48114 · Phone (810) 229-7575 · Fax (810) 229-8650 · E-mail bai-brighton@sbcglobal.net

May 02, 2016

ATC Associates
46555 Humboldt Dr.
Suite 100
Novi, MI 48377

Subject: Mason Academy - 19955 Fenelon
188BS16170

Dear Mr. Smith :

Thank you for making Brighton Analytical, L.L.C. your laboratory of choice. Attached are the results for the samples submitted on 04/22/2016 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 38649 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, L.L.C.™

Email: bai-brighton@sbcglobal.net
2105 Pless Drive — Phone: 810-229-7575
Brighton, MI 48114 — Fax: 810-229-8650

BA PROJECT #: 38649

PAGE 1 OF 1

ABBREVIATIONS FOR MATRIX
S = Solid
L = Liquid
DW = Drinking H_2O
O = Oil
P = Wipe
A = Air (Tedlar Bag)
F = Filter
T = Tube
M = Misc.

PROJECT NAME: Mason Academy - 19655 Fenelon

PROJECT #: 188BS1617a

PO #: (PLEASE NOTE IF DIFFERENT BILLING ADDRESS)

Sample collected by: Charlie Gateen

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: 5 business days

If RUSH, approved by: _____

Sample Coll.

Brighton ID #	Sample Description	Date	Time	VOA'S (PRES) Y N N/A	HDPE UNPRESERVED	HDPE HNO_3	HDPE H_2SO_4	HDPE NAOH	AMBER PRESERVED?	GLASS, NO PRESERVATIVE	STERILIZED BACTERIA	MEOH Preserved Y N	Sample Matrix	Lead - Primary (P)	Copper - Primary (P)	Lead - Flush (F) - Hold	Copper - Flush (F) - Hold			
1)	1-D-W-P-Mason Ext 19 @	4/20	0715			X							DW	X	X				CD00778	
2)	1-D-W-F-Mason Ext 19 @	4/20	0715			X							DW				X	X		779
3)	2-D-W-P-Mason Ext 9 @	4/20	0720			X							DW	X	X					780
4)	2-D-W-F-Mason Ext 9 @	4/20	0721			X							DW				X	X		781
5)	3-K-P-Mason - Staff dining	4/20	0729			X							DW	X	X					782
6)	3-K-F-Mason - Staff dining	4/20	0729			X							DW				X	X		783
7)																				
8)																				
9)																				
10)																				

Analysis Requested/Method

COMPANY/MAILING ADDRESS:
ATC Group Services, LLC
46555 Humboldt Dr - Ste 100
Novi, MI 48377
ATTN: Robert Smith
PHONE: (248) 669-5140
FAX OR EMAIL: Robert.Smith@atcassociates.com

Samples received within hold time? yes ☒ no ☐
Temperature of samples °C:
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):
Same as mailing

Drinking H_2O:
Fax to LCHD? yes ☐ no ☒
Chlorinated Water Supply? yes ☒ no ☐
AMT.: NA

MCL Failure: yes ☐ no ☐
Client Notified (date/time/initials): _____

Special Instructions: If Lead or Copper is Above detection Limits Please Analyze F-Flush Samples

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	Dawn Winther		4/22/16	0900	3				
2			4-22-16	9:30 AM	4				

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: 4/20/2016 07:15
Submit Date/Time: 4/22/2016 09:30
Report Date: 5/2/2016

ATC Associates
46555 Humboldt Dr.
Suite 100
Novi, MI 48377

BA Project # **38649**
BA Sample ID **CD00778**

Project Name: **Mason Academy - 19955 Fenelon**
Project Number:**188BS16170**
Sample ID: **1-DWF-P-Mason @ Exit 19**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Copper (Drinking Water)	Not detected	ug/L	20	1300	EPA 200.8 rev5.4	00:05	04/28/2016
Total Lead (Drinking Water)	Not detected	ug/L	1	15	EPA 200.8 rev5.4	00:05	04/28/2016

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 5/2/16

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: 4/20/2016 07:20
Submit Date/Time: 4/22/2016 09:30
Report Date: 5/2/2016

ATC Associates
46555 Humboldt Dr.
Suite 100
Novi, MI 48377

BA Project # **38649**
BA Sample ID **CD00780**

Project Name: **Mason Academy - 19955 Fenelon**
Project Number:**188BS16170**
Sample ID: **2-DWF-P-Mason @ Exit 9**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Copper (Drinking Water)	Not detected	ug/L	20	1300	EPA 200.8 rev5.4	00:10	04/28/2016
Total Lead (Drinking Water)	Not detected	ug/L	1	15	EPA 200.8 rev5.4	00:10	04/28/2016

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 5/2/16

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: 4/20/2016 07:29
Submit Date/Time: 4/22/2016 09:30
Report Date: 5/2/2016

ATC Associates
46555 Humboldt Dr.
Suite 100
Novi, MI 48377

BA Project # **38649**
BA Sample ID **CD00782**

Project Name: **Mason Academy - 19955 Fenelon**
Project Number:**188BS16170**
Sample ID: **3-K-P-Mason-Staff Dining**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Copper (Drinking Water)	Not detected	ug/L	20	1300	EPA 200.8 rev5.4	00:14	04/28/2016
Total Lead (Drinking Water)	1	ug/L	1	15	EPA 200.8 rev5.4	00:14	04/28/2016

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 5/2/16

Brighton Analytical L.L.C.

BRIGHTON ANALYTICAL, LLC

QUALITY ASSURANCE/QUALITY CONTROL

ICP-MS
METHOD 6020

REPRESENTATIVE BATCH PRECISION AND ACCURACY QUALITY CONTROL SUMMARY

Analysis Date: 4/28/2016 Standard ID: 042216 H2O Batch: 4/22/2016 W13

Matrix Spike Lab ID: CD00818 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. (%)
Copper	1253	1229	1.9	1000	103.3	100.9	220	<20	104.9	103.9
Lead	1005	987	1.8	1000	100.3	98.5	2	<1	100.9	96.5

* Matrix spike precision range +/- 20% RPD
** Matrix spike accuracy range +/- 20% recovery
*** LCS accuracy range +/- 15% recovery / Ind std accuracy range +/- 10% recovery

Comments: _____