

April 08, 2016

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

Subject: MacKenzie Elem-Middle School
188BS16179

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 04/01/2016 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 38317 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.
 2105 Pless Drive
 Brighton, MI 48114
 Phone: 810-229-7575
 Fax: 810-229-8650

BA PROJECT #:
38317

Analysis Requested/Method

PAGE 1 OF 1
 COMPANY/MAILING ADDRESS:

PROJECT NAME: **Mackenzie Elem-Primary School**

PROJECT #: **188BS16170**

PO #: (PLEASE NOTE IF DIFFERENT BILLING ADDRESS)

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

Sample collected by: **Dawn Umiker**

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:

Brighton ID # Sample Description Date Time

VOA'S (PRES) Y N N/A
 HDPE UNPRESERVED
 HDPE HNO,
 HDPE H₂SO,
 HDPE NAOH
 AMBER PRESERVED?
 GLASS, NO PRESERVATIVE
 STERILIZED BACTERIA
 MEOH Preserved Y N

Container Type & Quantity

Sample Matrix

Brighton ID #	Sample Description	Date	Time	VOA'S (PRES)	Y	N	N/A	HDPE UNPRESERVED	HDPE HNO,	HDPE H ₂ SO,	HDPE NAOH	AMBER PRESERVED?	GLASS, NO PRESERVATIVE	STERILIZED BACTERIA	MEOH Preserved	Y	N	Sample Matrix
1)	Duf-P-mack-Hell by legs	3/31	13:29		X													LEAD - Primary (P)
2)	Duf-F-mack-Hell by legs	3/31	13:30		X													Copper - Primary (P)
3)	Duf-P-mack-Prek #1013	3/31	13:33		X													LEAD - FLUSH (F) - Hold
4)	Duf-P-mack-Prek #1013	3/31	13:35		X													Copper - FLUSH (F) Hold
5)	3-K-P-mack-K-taken	3/31	13:44		X													
6)	3-K-F-mack-K-taken	3/31	13:45		X													
7)																		
8)																		
9)																		
10)																		

Special Instructions: **If Lead or Copper is above detection limits analyze RUSH 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 Umiker	[Signature]	4/11/16	09:30	3				
2	[Signature]	[Signature]	4/11/16	12:00	4				

Drinking H₂O:

Fax to LCHD? yes no
 Chlorinated Water Supply? yes no
 AMT.: **OK**

MCI Failure: yes no

Client Notified (date/time/initials):

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

Samples received within hold time? yes no

PHONE: **(248) 665-5140**

ATTN: **Robert Smith**

NOTE: **ME 48377**

FAX OR EMAIL: **ROBERT.SMITH@BRIGHTONANALYTICAL.COM**

COMPANY/MAILING ADDRESS: **PTC Group Services, LLC**

46555 Humboldt Dr. STE 101



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: 3/31/2016 13:29
 Submit Date/Time: 4/1/2016 12:00
 Report Date: 4/8/2016

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

BA Project # **38317**
 BA Sample ID **CC08832**

Project Name: **MacKenzie Elem-Middle School**
 Project Number: **188BS16179**
 Sample ID: **1-DWF-P-Mack-Hall by Gym**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Copper (Drinking Water)	210	ug/L	20	1300	EPA 200.8 rev5.4	12:44	04/07/2016
Total Lead (Drinking Water)	Not detected	ug/L	1	15	EPA 200.8 rev5.4	12:44	04/07/2016

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 4/8/16



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 NELAC Accredited #176507

Sample Date/Time: 3/31/2016 13:33
 Submit Date/Time: 4/1/2016 12:00
 Report Date: 4/8/2016

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BA Project # **38317**
 BA Sample ID **CC08834**

Project Name: **MacKenzie Elem-Middle School**
 Project Number: **188BS16179**
 Sample ID: **2-Prek-P-Mack-prek #A103**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Copper (Drinking Water)	760	ug/L	20	1300	EPA 200.8 rev5.4	13:03	04/07/2016
Total Lead (Drinking Water)	5	ug/L	1	15	EPA 200.8 rev5.4	13:03	04/07/2016

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 
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Sample Date/Time: 3/31/2016 13:44
 Submit Date/Time: 4/1/2016 12:00
 Report Date: 4/8/2016

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BA Project # **38317**
 BA Sample ID **CC08836**

Project Name: **MacKenzie Elem-Middle School**
 Project Number: **188BS16179**
 Sample ID: **3-K-P-Mack-Kitchen**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Copper (Drinking Water)	420	ug/L	20	1300	EPA 200.8 rev5.4	13:07	04/07/2016
Total Lead (Drinking Water)	3	ug/L	1	15	EPA 200.8 rev5.4	13:07	04/07/2016

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 4/8/16



BRIGHTON ANALYTICAL, LLC

QUALITY ASSURANCE/QUALITY
CONTROL

ICP-MS METHOD 6020

REPRESENTATIVE BATCH PRECISION AND ACCURACY QUALITY CONTROL SUMMARY

Analysis Date: 4/7/2016 Standard ID: 033116 H2O Batch: 4/1/2016 W10
 Matrix Spike Lab ID: CC08826 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	1106	1099	0.6	1000	99.8	99.1	108	<20	101.4	100.9
Lead	957	960	0.3	1000	95.7	96.0	0	<1	96.7	93.1

* Matrix spike precision range +/- 20% RPD

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

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

Comments: _____