



*Excellence Delivered **As Promised***

December 7, 2018

Mr. Eric Ritzert, Superintendent
Karns City Area School District
Administrative Office
1446 Kittanning Pike
Karns City, PA 16041

Subject: *Karns City Area School District
Potable Water Lead and Copper Testing Results
Chicora Elementary*

Dear Mr. Ritzert:

Gannett Fleming is pleased to submit a report of the results of the Lead and Copper testing of drinking water fountains and plumbing fixtures in the Karns City Area School District's Chicora Elementary School.

Sampling was conducted on November 12, 2018 at the school. The fixtures selected to be sampled were based on the location in the school, the age of the fixture and results from previous lead and copper sampling events.

Sampling was conducted by Gannett Fleming personnel following USEPA / PADEP guidance. The guidance included the collection 250 mL "first draw" samples. "First draw" samples are samples collected from fixtures that had had been allowed to sit stagnant overnight. Each fixture was tagged and taken out of service so that it was not mistakenly used prior to the collection of the first draw sample.

Sampling Results

A total of 10 samples were collected from Chicora Elementary. One of those samples, Room 202 Restroom Sink, exceeded the lead action level. The result of that analysis was 0.035 mg/L. The lead action level is 0.015 mg/L for one liter first draw samples; EPA guidance suggests that results of less than 0.020 mg/L in 250 mL first draw samples are acceptable. The cause for the elevated result for this sample is unknown. However, it is believed that this fixture gets limited use which can result in elevated lead and copper levels.

A sample collected from the Boy's Locker Room, had results that could not be used to determine if it exceeded the lead action. This was due to an unusually high laboratory reporting limit. The reason for this high reporting limit is unknown. The lab has been contacted for an explanation.

The eight other samples tested were well under the lead action level. The sample collected from the Room 209 A ADA fountain had a lead result 0.0126 mg/L which is close to the lead action

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Mr. Eric Ritzert, Superintendent
Karns City Area School District

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level. Two other samples showed detectable levels of lead but were well under the action level. The remaining samples results were less than the laboratory's reporting limit of 0.0010 mg/L.

All 10 of the samples showed copper levels well under the one liter first draw action level of 1.3 mg/L.

In order to address the elevated lead result from the Room 202 Restroom Sink it is recommended that the fixture, the shut off valves and the supply piping between the shut off valves and the fixture be replaced with new lead free components and then resampled. After the replacement of the plumbing fixture the water should be flushed through the new fixture periodically for a few days. Flushing should consist of opening the cold water tap and allowing water to flow for 10 to 15 minutes at a moderate flow rate. Then the fixture should be shut off and allowed to sit until the next day and then flushed again. After the fixture has been flushed three or four times another lead and copper sample should be collected from that site. Until a satisfactory result is obtained this fixture should be bagged to prevent it from being used.

Since the lead result of the sampling of the Boy's Locker Room could not be used to determine if it was in excess of the lead action level, it is recommended that this fixture be resampled. This can be done in conjunction with the resampling of the Room 202 Restroom Sink.

Since the other fixtures sampled in the school showed low levels of lead and copper, well below the lead and copper action levels, the drinking water fixtures, with the exception the Boy's Locker Room and the Room 202 Restroom Sink can be returned to service.

Please find attached the laboratory reports for this testing.

Gannett would like to thank the School District's administrative and maintenance staff for their assistance in completing this project. Please feel free to contact us if you have any questions or comments.

Sincerely,

GANNETT FLEMING, INC.



ERIC T. BUZZA
Project Manager

Attachment

cc: Steve Andreassi, Karns City School District
GF File



Microbac Laboratories Inc., Pittsburgh Division

CERTIFICATE OF ANALYSIS

8112675

Client Sample ID: Room 202 Restroom	Collected By: Eric Buzza
Sample Matrix: Drinking Water	Collection Date: 11/12/2018 10:52
Lab Sample ID: 8112675-04	

Analyses Subcontracted to: Microbac Laboratories, Inc. - Dayville

Metals, Total - ICP/MS	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.8, Rv. 5.4							
Copper	0.212	0.0010	mg/L		11/20/18 1245	11/20/18 1401	DLO
Lead	0.0357	0.0020	mg/L		11/20/18 1245	11/21/18 1535	DLO

Client Sample ID: nurses sink	Collected By: Eric Buzza
Sample Matrix: Drinking Water	Collection Date: 11/12/2018 10:27
Lab Sample ID: 8112675-05	

Analyses Subcontracted to: Microbac Laboratories, Inc. - Dayville

Metals, Total - ICP/MS	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.8, Rv. 5.4							
Copper	0.117	0.0010	mg/L		11/20/18 1245	11/20/18 1403	DLO
Lead	<0.0010	0.0010	mg/L		11/20/18 1245	11/20/18 1403	DLO

Client Sample ID: bottle Filler outside office	Collected By: Eric Buzza
Sample Matrix: Drinking Water	Collection Date: 11/12/2018 10:30
Lab Sample ID: 8112675-06	

Analyses Subcontracted to: Microbac Laboratories, Inc. - Dayville

Metals, Total - ICP/MS	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.8, Rv. 5.4							
Copper	0.0282	0.0010	mg/L		11/20/18 1245	11/20/18 1404	DLO
Lead	<0.0010	0.0010	mg/L		11/20/18 1245	11/20/18 1404	DLO

Client Sample ID: room 120 Back sink	Collected By: Eric Buzza
Sample Matrix: Drinking Water	Collection Date: 11/12/2018 10:33
Lab Sample ID: 8112675-07	

Analyses Subcontracted to: Microbac Laboratories, Inc. - Dayville

Metals, Total - ICP/MS	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.8, Rv. 5.4							
Copper	0.101	0.0010	mg/L		11/20/18 1245	11/20/18 1406	DLO
Lead	0.0051	0.0020	mg/L		11/20/18 1245	11/21/18 1536	DLO



Microbac Laboratories Inc., Pittsburgh Division

CERTIFICATE OF ANALYSIS

8112675

Client Sample ID: upper Elem Boys Room	Collected By: Eric Buzza
Sample Matrix: Drinking Water	Collection Date: 11/12/2018 10:35
Lab Sample ID: 8112675-08	

Analyses Subcontracted to: Microbac Laboratories, Inc. - Dayville

Metals, Total - ICP/MS	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.8, Rv. 5.4							
Copper	0.0915	0.0010	mg/L		11/20/18 1245	11/20/18 1408	DLO
Lead	0.0027	0.0010	mg/L		11/20/18 1245	11/20/18 1408	DLO

Client Sample ID: Room 209 Bottle filler	Collected By: Eric Buzza
Sample Matrix: Drinking Water	Collection Date: 11/12/2018 10:38
Lab Sample ID: 8112675-09	

Analyses Subcontracted to: Microbac Laboratories, Inc. - Dayville

Metals, Total - ICP/MS	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.8, Rv. 5.4							
Copper	0.0189	0.0010	mg/L		11/20/18 1637	11/20/18 1902	DLO
Lead	<0.0010	0.0010	mg/L		11/20/18 1637	11/20/18 1902	DLO

Client Sample ID: primary boys room	Collected By: Eric Buzza
Sample Matrix: Drinking Water	Collection Date: 11/12/2018 10:40
Lab Sample ID: 8112675-10	

Analyses Subcontracted to: Microbac Laboratories, Inc. - Dayville

Metals, Total - ICP/MS	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.8, Rv. 5.4							
Copper	0.127	0.0010	mg/L		11/21/18 1430	11/26/18 1015	DLO
Lead	<0.0100	0.0100	mg/L		11/21/18 1430	11/27/18 1014	NJP

Definitions

- AL: US EPA Action Level
- RL: Reporting Limit

Project Requested Certification(s)

Microbac Laboratories Inc., Pittsburgh Division
02-00257

PA Department of Environmental Protection
PADEP Accreditation by Rule

Microbac Laboratories, Inc. - Dayville
68-04413

Pennsylvania Department of Environmental Protection



Microbac Laboratories Inc., Pittsburgh Division

CERTIFICATE OF ANALYSIS

8112675

GANNETT FLEMING, INC.

Project Name: Chicora Elementary

Eric Buzza
FOSTER PLAZA III- SUITE 200 601 HOLIDAY DRIVE
PITTSBURGH, PA 15220

Project / PO Number: N/A
Received: 11/12/2018
Reported: 11/29/2018

Analytical Testing Parameters

Client Sample ID:	Boys Locker Room	Collected By:	Eric Buzza
Sample Matrix:	Drinking Water	Collection Date:	11/12/2018 10:42
Lab Sample ID:	8112675-01		

Analyses Subcontracted to: Microbac Laboratories, Inc. - Dayville

Metals, Total - ICP/MS	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.8, Rv. 5.4							
Copper	0.0681	0.0010	mg/L		11/20/18 1245	11/20/18 1346	DLO
Lead	<0.0510	0.0510	mg/L		11/20/18 1245	11/21/18 1549	DLO

Client Sample ID:	Gym Bottle Filler	Collected By:	Eric Buzza
Sample Matrix:	Drinking Water	Collection Date:	11/12/2018 10:43
Lab Sample ID:	8112675-02		

Analyses Subcontracted to: Microbac Laboratories, Inc. - Dayville

Metals, Total - ICP/MS	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.8, Rv. 5.4							
Copper	0.172	0.0010	mg/L		11/20/18 1245	11/20/18 1353	DLO
Lead	<0.0010	0.0010	mg/L		11/20/18 1245	11/20/18 1353	DLO

Client Sample ID:	Room 209 ADA Fountain	Collected By:	Eric Buzza
Sample Matrix:	Drinking Water	Collection Date:	11/12/2018 10:45
Lab Sample ID:	8112675-03		

Analyses Subcontracted to: Microbac Laboratories, Inc. - Dayville

Metals, Total - ICP/MS	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Method: EPA 200.8, Rv. 5.4							
Copper	0.332	0.0010	mg/L		11/20/18 1245	11/20/18 1355	DLO
Lead	0.0126	0.0010	mg/L		11/20/18 1245	11/20/18 1355	DLO



Microbac Laboratories Inc., Pittsburgh Division

CERTIFICATE OF ANALYSIS

8112675

Report Comments

Samples were received in proper condition and the reported results conform to applicable accreditation standard unless otherwise noted.

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included.

Reviewed and Approved By:

A handwritten signature in blue ink that reads "Carolyn M. Vollentine".

Carolyn Vollentine
Service Center Manager
Reported: 11/29/2018 14:33



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CHAIN OF CUSTODY

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1 2 11/12/18

Work Order #:

FULL DATA WORK ORDER

8112675 219 11/12/18
2112675 219 11/12/18

Client/Company Name: **GF KC50**
 Address: **Postar Plaza Bldg. 400 730 Holiday Dr**
 City/State/Zip: **Pittsburgh PA 15220**
 Phone: **412 922 5575** Email/Fax: **ebuzza@gfnet.com**
 Project Name/ID: **Chicora Elementary**
 Sampled By: **Eric Buzza** Due Date:
 Shipped By: Tracking #:

Contact Name: **Eric Buzza**
 Bill To/PO#: **Lead + Copper**
 Potential Hazards:
 Non-Hazard [] Hazard [] Radioactive []
 Disposal: Dispose of [] Return [] Retain []
 Compliance Sample: Yes [] No [] State:
 PWSID#: Monitoring Period:



8 1 1 2 6 7 5

GANNETT FLEMING, INC.

Sample Identification	Date Taken	Time Taken	Comp. Stop:		F-Food	S-Swab	O-Other	Preservatives									
			Type	Tot. #				None	HNO3	H2SO4	NaOH	HCl	Thio	Other			
			G	C													
Boys Locker Room	11/12/18	10:42	✓														
Gym Bottle Filler		10:43															
Room 201 ADA Fountain		10:45															
Room 202 Restroom		10:50															

Instructions/Comments:

Relinquished By: E-Buzza	Date/Time: 11/12/18 13:00	Received By: [Signature]	Date/Time: 11-12-18 13:00	Temp: 9.2 °C
Relinquished By:	Date/Time:	Received By:	Date/Time:	Iced: Y N
Relinquished By:	Date/Time:	Received By:	Date/Time:	Intact: Y N
Relinquished By:	Date/Time:	Received By:	Date/Time:	



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CHAIN OF CUSTODY

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2022 AIC 11/12/18

Work Order #: 8112475 AIC 11/12/18

Client/Company Name: BASE GF KCSID		Contact Name: Eric BUZZA		Analyses	
Address: Foster Plaza, Suite 400 730 Hobday Dr		Bill To/PO#:			
City/State/Zip: Pittsburgh PA 15220		Potential Hazards: Non-Hazard [<input checked="" type="checkbox"/>] Hazard [<input type="checkbox"/>] Radioactive [<input type="checkbox"/>]			
Phone: 412 922 5575		Disposal: Dispose of [<input checked="" type="checkbox"/>] Return [<input type="checkbox"/>] Retain [<input type="checkbox"/>]			
Email/Fax: ebuzza@gfnet.com		Compliance Sample: Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]			
Project Name/ID: Chloro Elementary		PWSID#:			
Sampled By: Eric BUZZA		Due Date:			
Shipped By:		Tracking #:			
Type Code: G-Grab C-Composite		Comp. Start:			
Matrix Code: DW-Potable water WW-Nonpotable water SS-Soil/Sludge F-Food S-Swab O-Other		Comp. Stop:			
Sample Identification		Date Taken	Time Taken	Type	Tot. #
				G	C
Newsr's Sink		11/12/18	1027	<input checked="" type="checkbox"/>	DW 1
Battle Filler Outside Office			1030	<input type="checkbox"/>	
Room 120 Back Sink			1033	<input type="checkbox"/>	
Upper Elem Boys Room			1035	<input type="checkbox"/>	
Room 209 Battle Filler			1038	<input type="checkbox"/>	
Primary Boys Room			1040	<input type="checkbox"/>	
Instructions/Comments:					



Relinquished By:	Date/Time:	Received By:	Date/Time:	Temp: 92°C
<i>E. Boy</i>	11/12/18 1330	<i>Li</i>	11/12/18 1320	Iced: <input checked="" type="checkbox"/> N
Relinquished By:	Date/Time:	Received By:	Date/Time:	Intact: <input checked="" type="checkbox"/> N
Relinquished By:	Date/Time:	Received By:	Date/Time:	