



*Excellence Delivered **As Promised***

December 11, 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
Junior / Senior High School*

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 Junior Senior High School.

Sampling was conducted on November 20, 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 lead and copper rule regulations. The regulations call for the collection of one liter "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. In addition to the first draw samples, a second one liter sample was collected from selected locations. This purpose of this sample was to determine to what extent, if any, the internal piping in the facility, as opposed to the sink and fountain fixtures themselves, were contributing lead and copper to the drinking water. pH readings were also taken from each of the sample sites to determine the potential corrosivity of the water being provided to the facility.

Sampling Results

A total of 12 samples were collected from the Junior / Senior High School. Based on the results, the Maintenance Shop Holding Tank sample, exceeded the lead action level of 0.0015 mg/L for first draw one liter samples. The result of that analysis was 0.0167 mg/L. This result is a significant since, to a certain extent, this represents the quality of the water as it enters the facility. It is important to note that this result may be influenced by the tank and any material which may have accumulated in the tank.

None of the other samples, either first draw or flushed, exceeded the lead action level.

Gannett Fleming, Inc.

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Mr. Eric Ritzert, Superintendent
Karns City Area School District

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However, a number of the samples exceeded the copper action level of 1.3 mg/L. First draw samples from Science Room 205, Kitchen Prep Sink and the Visiting Locker Room all exceeded the copper action level. The sample collected from the Senior High Bottle Filler also exceeded the copper action level. None of the flushed samples exceeded the copper action level.

In addition, pH analyses were conducted on all of the collected samples. pH is the most significant parameter to evaluate when examining the corrosivity of water. Generally, a pH of less than 7.00 is considered corrosive. The pHs of the samples ranged from 6.43 to 7.04. These results indicate that pH is a contributing factor to the elevated lead and copper results that have been obtained.

Please find attached the laboratory reports for this testing.

Typically, when high lead levels are obtained from sampling it is recommended that the fixture from which the sample was obtained be replaced with a lead free fixture and retested. However, in this case, given the quality of the water being received from the current water supplier and that the District is planning on switching to an alternate water supplier, the District may want to consider foregoing fixture replacement until after the switch to the alternate water supplier.

Regardless, it is recommended that the District continue to leave the drinking water fixtures out of service and to continue to supply drinking water to the Junior / Senior High students and staff until such time as satisfactory lead and copper results have been obtained.

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

8113761

GANNETT FLEMING, INC.

Project Name: Jr/Sr High School

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

Project / PO Number: N/A
Received: 11/20/2018
Reported: 11/30/2018

Analytical Testing Parameters

Client Sample ID:	Phys ED Boys Locker Rm First	Collected By:	ERIC BUZZA
Sample Matrix:	Drinking Water	Collection Date:	11/20/2018 9:30
Lab Sample ID:	8113761-01		

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	0.566	0.0010	mg/L		11/26/18 1206	11/26/18 1227	NJP
Lead	0.0044	0.0010	mg/L		11/26/18 1206	11/26/18 1227	NJP

Client Sample ID:	Phys ED Boys Locker Rm Flush	Collected By:	ERIC BUZZA
Sample Matrix:	Drinking Water	Collection Date:	11/20/2018 9:32
Lab Sample ID:	8113761-02		

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	0.229	0.0010	mg/L		11/26/18 1206	11/26/18 1228	NJP
Lead	<0.0010	0.0010	mg/L		11/26/18 1206	11/26/18 1228	NJP

Client Sample ID:	Maintenance Shop Before	Collected By:	ERIC BUZZA
Sample Matrix:	Drinking Water	Collection Date:	11/20/2018 9:20
Lab Sample ID:	8113761-03		

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	0.143	0.0010	mg/L		11/26/18 1206	11/26/18 1230	NJP
Lead	0.0167	0.0010	mg/L		11/26/18 1206	11/26/18 1230	NJP



Microbac Laboratories Inc., Pittsburgh Division

CERTIFICATE OF ANALYSIS

8113761

Client Sample ID: Maintenance Hand Sink First	Collected By: ERIC BUZZA
Sample Matrix: Drinking Water	Collection Date: 11/20/2018 9:25
Lab Sample ID: 8113761-04	

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	0.389	0.0010	mg/L		11/26/18 1206	11/26/18 1232	NJP
Lead	0.0043	0.0010	mg/L		11/26/18 1206	11/26/18 1232	NJP

Client Sample ID: Maintenance Hand Sink Flush	Collected By: ERIC BUZZA
Sample Matrix: Drinking Water	Collection Date: 11/20/2018 9:27
Lab Sample ID: 8113761-05	

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	0.120	0.0010	mg/L		11/26/18 1206	11/26/18 1238	NJP
Lead	<0.0010	0.0010	mg/L		11/26/18 1206	11/26/18 1238	NJP

Client Sample ID: District Entrance First	Collected By: ERIC BUZZA
Sample Matrix: Drinking Water	Collection Date: 11/20/2018 9:45
Lab Sample ID: 8113761-06	

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	0.330	0.0010	mg/L		11/26/18 1206	11/26/18 1240	NJP
Lead	<0.0010	0.0010	mg/L		11/26/18 1206	11/26/18 1240	NJP

Client Sample ID: Sr High School Filler	Collected By: ERIC BUZZA
Sample Matrix: Drinking Water	Collection Date: 11/20/2018 10:08
Lab Sample ID: 8113761-07	

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	1.73	0.0010	mg/L		11/26/18 1206	11/26/18 1241	NJP
Lead	<0.0010	0.0010	mg/L		11/26/18 1206	11/26/18 1241	NJP



Microbac Laboratories Inc., Pittsburgh Division

CERTIFICATE OF ANALYSIS

8113761

Client Sample ID: Jr High School Filler	Collected By: ERIC BUZZA
Sample Matrix: Drinking Water	Collection Date: 11/20/2018 10:11
Lab Sample ID: 8113761-08	

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	0.133	0.0010	mg/L		11/26/18 1206	11/26/18 1243	NJP
Lead	<0.0010	0.0010	mg/L		11/26/18 1206	11/26/18 1243	NJP

Client Sample ID: Girls Restroom South	Collected By: ERIC BUZZA
Sample Matrix: Drinking Water	Collection Date: 11/20/2018 10:04
Lab Sample ID: 8113761-09	

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	0.805	0.0010	mg/L		11/26/18 1206	11/26/18 1249	NJP
Lead	0.0052	0.0051	mg/L		11/26/18 1206	11/29/18 1021	NJP

Client Sample ID: Science Rm 205 First	Collected By: ERIC BUZZA
Sample Matrix: Drinking Water	Collection Date: 11/20/2018 9:58
Lab Sample ID: 8113761-10	

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	1.84	0.0010	mg/L		11/26/18 1206	11/26/18 1251	NJP
Lead	0.0054	0.0010	mg/L		11/26/18 1206	11/26/18 1251	NJP

Client Sample ID: Science Rm 205 Flushed	Collected By: ERIC BUZZA
Sample Matrix: Drinking Water	Collection Date: 11/20/2018 10:00
Lab Sample ID: 8113761-11	

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	0.693	0.0010	mg/L		11/26/18 1206	11/26/18 1253	NJP
Lead	0.0010	0.0010	mg/L		11/26/18 1206	11/26/18 1253	NJP



Microbac Laboratories Inc., Pittsburgh Division

CERTIFICATE OF ANALYSIS

8113761

Client Sample ID: Kitchen Prep Sink First	Collected By: ERIC BUZZA
Sample Matrix: Drinking Water	Collection Date: 11/20/2018 9:50
Lab Sample ID: 8113761-12	

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	1.90	0.0010	mg/L		11/26/18 1206	11/26/18 1254	NJP
Lead	0.0098	0.0010	mg/L		11/26/18 1206	11/26/18 1254	NJP

Client Sample ID: Kitchen Prep Sink Flush	Collected By: ERIC BUZZA
Sample Matrix: Drinking Water	Collection Date: 11/20/2018 9:52
Lab Sample ID: 8113761-13	

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	0.845	0.0010	mg/L		11/26/18 1206	11/26/18 1300	NJP
Lead	0.0029	0.0010	mg/L		11/26/18 1206	11/26/18 1300	NJP

Client Sample ID: Training Rm Fountain	Collected By: ERIC BUZZA
Sample Matrix: Drinking Water	Collection Date: 11/20/2018 9:40
Lab Sample ID: 8113761-14	

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	0.485	0.0010	mg/L		11/26/18 1206	11/26/18 1302	NJP
Lead	<0.0010	0.0010	mg/L		11/26/18 1206	11/26/18 1302	NJP

Client Sample ID: Visiting Locker Rm First	Collected By: ERIC BUZZA
Sample Matrix: Drinking Water	Collection Date: 11/20/2018 9:36
Lab Sample ID: 8113761-15	

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	1.44	0.0010	mg/L		11/26/18 1206	11/26/18 1304	NJP
Lead	0.0042	0.0020	mg/L		11/26/18 1206	11/29/18 1004	NJP



Microbac Laboratories Inc., Pittsburgh Division

CERTIFICATE OF ANALYSIS

8113761

Client Sample ID: Visiting Locker Rm Flush	Collected By: ERIC BUZZA
Sample Matrix: Drinking Water	Collection Date: 11/20/2018 9:38
Lab Sample ID: 8113761-16	

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	0.691	0.0010	mg/L		11/26/18 1206	11/26/18 1306	NJP
Lead	0.0013	0.0010	mg/L		11/26/18 1206	11/26/18 1306	NJP

Definitions

- AL: US EPA Action Level
- RL: Reporting Limit
- SMCL: US EPA Secondary Maximum Contaminant Level

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

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:

Carolyn Vollentine
Service Center Manager
Reported: 11/30/2018 19:00



Microbac Erie Division
1962 Wager Road
Erie, PA 16509

Page ___ of ___

Work Order #: 8113761

Client / Company Name: BOZO GF Kansas City SD		Contact Name: Eric Guiza		Analyses	
Address: Poster Plaza 8 Suite 400 730 Holiday 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		Email/Fax: eguiza@gfmet.com			
Project Name/ID: Jr/Sr High School		Disposal: Dispose of <input checked="" type="checkbox"/> Return <input type="checkbox"/> Retain <input type="checkbox"/>			
Sampled By: Eric Guiza		Compliance Sample: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Shipped By: _____		PWSID#: _____			
Tracking #: _____		Monitoring Period: _____			
Type Code: G-Grab C-Composite		Comp. Start: _____		Preservatives	
Matrix Code: DW-Potable water WW-Nonpotable water SS-Soil/Sludge F-Food S-Swab O-Other		Comp. Stop: _____		None	
Sample Identification		Date Taken		Time Taken	
Type		G		C	
Matrix		Cont.		Tot. #	
Phys Ed Boys Locker Rm		11/20/18		930	
Phys Ed Boys Locker Floor				932	
Maintenance Shop Backstop				930	
Maintenance Hand Sinks Floors				925	
Maintenance Hand Sinks Floor				927	
District Entrance Footst				945	
Instructions/Comments		Date Taken		Time Taken	
Sr High Bottle Filler		1008		1011	
Tr High Bottle Filler					
Relinquished By: E. Guiza		Date/Time: 11/20/18 11:30		Received By: Julie Quail	
Relinquished By: _____		Date/Time: _____		Received By: _____	
Relinquished By: _____		Date/Time: _____		Received By: _____	
Relinquished By: _____		Date/Time: _____		Received By: _____	



GANNETT FLEMING, INC.

Temp: 9.8 °C
Iced: Y
Intact: Y

Date/Time: 11/20/18 11:30
Date/Time: _____
Date/Time: _____
Date/Time: _____

Microbac Erie Division
1962 Wager Road
Erie, PA 16509

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Work Order #: \$113761

Client / Company Name: <u>GF Kerns City SD</u>		Contact Name: <u>Eric Buzza</u>		Analyses	
Address: <u>Foster Plaza 8 Suite 400 730 4th day Dr</u>		Bill To/PO#:			
City/State/Zip: <u>Pittsburgh PA 15220</u>		Potential Hazards: Non-Hazard <input checked="" type="checkbox"/> Hazard <input type="checkbox"/> Radioactive <input type="checkbox"/>			
Phone: <u>412 522 5575</u>		Disposal: Dispose of <input checked="" type="checkbox"/> Return <input type="checkbox"/> Retain <input type="checkbox"/>			
Project Name/ID: <u>JF/SF High School</u>		Compliance Sample: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Sampled By: <u>Eric Buzza</u>		Due Date:			
Shipped By:		Tracking #:			
Type Code: G-Grab C-Composite		Comp. Start:		Comp. Stop:	
Matrix Code: DW-Potable water WW-Nonpotable water SS-Soil/Sludge F-Food S-Swab O-Other		Date Taken		Time Taken	
Sample Identification		Type G C		Matrix G C	
		Date Taken		Tot. # Cont.	
<u>Girls Restroom South</u>		<u>11/20/18</u>		<u>1</u>	
<u>Science Rm 201 First Dean</u>		<u>958</u>			
<u>Science Rm 205 Flushed</u>		<u>1000</u>			
<u>Kitchen Prep Sink First Dean</u>		<u>950</u>			
<u>Kitchen Prep Sink Flush</u>		<u>952</u>			
<u>Training Rm Fountain</u>		<u>940</u>			
Instructions/Comments: <u>Visiting Lecturer Room First</u>		<u>936</u>			
<u>Visiting Lecturer Room Flush</u>		<u>938</u>			
Relinquished By: <u>[Signature]</u>		Date/Time: <u>11/20/18 1130</u>		Received By: <u>[Signature]</u>	
Relinquished By:		Date/Time:		Received By:	
Relinquished By:		Date/Time:		Received By:	
Relinquished By:		Date/Time:		Received By:	



Temp 9.8 °C
Iced: N
Intact: N