

Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444-2673



231-773-5998 Phone
888-979-4469 Fax
www.trace-labs.com

December 08, 2020

John Francilo
Birmingham Public Schools
2305 Cole Street
Birmingham, MI 48009

Phone: (248) 203-3050
Fax: (248) 203-3072

RE: Trace Project 20K0925
Client Project Pembroke - Lead and Copper

Enclosed are your analytical results. The results of this report relate only to the samples listed in the body of this report.

All reports were examined through Trace's validation process to ensure that requirements for quality and completeness were satisfied. All reported analytical results were obtained in accordance with the methods referenced on the reports. Every practical effort was made to meet the reporting limit specifications for this work, however, some results may have raised reporting limits to correct for percent solids.

For clients that require NELAP Accreditation, Trace certifies that these test results meet all requirements of the NELAP Standard, except for those analytes with a "N" notation. These analytes have not been evaluated by NELAP at Trace's discretion and will not be reported unless requested by client.

If you have questions concerning this report, please contact me at 231.773.5998 or by email at jmink@trace-labs.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Jon Mink".

Jon Mink
Senior Project Manager
Enclosures



NJDEP Accreditation No. MI008

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444-2673



231-773-5998 Phone
888-979-4469 Fax
www.trace-labs.com

20K0925-33	PB-A3	Drinking Water	gh	11/30/20 06:15	11/30/20 10:09
20K0925-34	PB-A4	Drinking Water	gh	11/30/20 06:15	11/30/20 10:09
20K0925-35	PB-A5	Drinking Water	gh	11/30/20 06:15	11/30/20 10:09
20K0925-36	PB-A6	Drinking Water	gh	11/30/20 06:15	11/30/20 10:09
20K0925-37	PB-A7	Drinking Water	gh	11/30/20 06:15	11/30/20 10:09
20K0925-38	PB-A8	Drinking Water	gh	11/30/20 06:15	11/30/20 10:09
20K0925-39	PB-A9	Drinking Water	gh	11/30/20 06:15	11/30/20 10:09
20K0925-40	PB-A10	Drinking Water	gh	11/30/20 06:15	11/30/20 10:09
20K0925-41	PB-B1	Drinking Water	gh	11/30/20 06:20	11/30/20 10:09
20K0925-42	PB-B2	Drinking Water	gh	11/30/20 06:20	11/30/20 10:09
20K0925-43	PB-B3	Drinking Water	gh	11/30/20 06:20	11/30/20 10:09
20K0925-44	PB-B4	Drinking Water	gh	11/30/20 06:20	11/30/20 10:09
20K0925-45	PB-B5	Drinking Water	gh	11/30/20 06:20	11/30/20 10:09
20K0925-46	PB-B6	Drinking Water	gh	11/30/20 06:20	11/30/20 10:09
20K0925-47	PB-B7	Drinking Water	gh	11/30/20 06:20	11/30/20 10:09
20K0925-48	PB-B8	Drinking Water	gh	11/30/20 06:20	11/30/20 10:09
20K0925-49	PB-B9	Drinking Water	gh	11/30/20 06:20	11/30/20 10:09
20K0925-50	PB-B10	Drinking Water	gh	11/30/20 06:20	11/30/20 10:09
20K0925-51	PB-C1	Drinking Water	gh	11/30/20 06:25	11/30/20 10:09
20K0925-52	PB-C2	Drinking Water	gh	11/30/20 06:25	11/30/20 10:09
20K0925-53	PB-C3	Drinking Water	gh	11/30/20 06:25	11/30/20 10:09
20K0925-54	PB-C4	Drinking Water	gh	11/30/20 06:25	11/30/20 10:09
20K0925-55	PB-C5	Drinking Water	gh	11/30/20 06:25	11/30/20 10:09
20K0925-56	PB-C6	Drinking Water	gh	11/30/20 06:25	11/30/20 10:09
20K0925-57	PB-C7	Drinking Water	gh	11/30/20 06:25	11/30/20 10:09
20K0925-58	PB-C8	Drinking Water	gh	11/30/20 06:25	11/30/20 10:09
20K0925-59	PB-C9	Drinking Water	gh	11/30/20 06:25	11/30/20 10:09
20K0925-60	PB-C10	Drinking Water	gh	11/30/20 06:25	11/30/20 10:09

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Birmingham Schools Fixture Inventory

Building: **Pembroke**

Date Collected: _____

Trace ID: _____

Sampler's Initials: _____

Logged by: _____

Checked by: _____

Trace No.	Time Taken	Sample Point	Location	Photo(s)	Aerator?	Connecting Plumbing	Notes
		PB-44-BF	Girl's by Gym-Left	2497	Y	Br, Cu	
		PB-45-BF	Girl's by Gym-Left Middle	2497	Y	Br, Cu	
		PB-46-BF	Girl's by Gym- Right Middle	2497	Y	Br, Cu	
		PB-47-BF	Girl's by Gym- Right	2497	Y	Br, Cu	
		PB-48-BF	Boy's by Gym-Left	2498	Y	Br, Cu	
		PB-49-BF	Boy's by Gym-Left Middle	2498	Y	Br, Cu	
		PB-50-BF	Boy's by Gym- Right Middle	2498	Y	Br, Cu	
		PB-51-BF	Boy's by Gym- Right	2498	Y	Br, Cu	
		PB-52-Bott	Hall by Multi Purpose	2499	N	Unknown	
		PB-53-DF	Hall by Multi Purpose	2499	N	Unknown	
		PB-55-KF	Receiving	2501/02	Y	Br, Cu	
		PB-57-BF	2nd Fl Staff Restroom	2504	Y	Br, Cu	
		PB-58-CF	Rm 212	2505/06	Y	Br, Cu	
		PB-59-B	Rm 212	2505/06	N	Br, Cu	
		PB-60-CF	Rm 211	2507/08	Y	Br, Cu	
		PB-61-B	Rm 211	2507/08	N	Br, Cu	
		PB-62-CF	Rm 210	2509	Y	Br, Cu	
		PB-63-B	Rm 210	2509	N	Br, Cu	
		PB-64-CF	Rm 209	2510/11	Y	Br, Cu	
		PB-65-B	Rm 209	2510/11	N	Br, Cu	
		PB-66-CF	Rm 208	2512/13	Y	Br, Cu	
		PB-67-B	Rm 208	2512/13	N	Br, Cu	
		PB-68-CF	Rm 207	2514/15	Y	Br, Cu	
		PB-69-B	Rm 207	2514/15	N	Br, Cu	
		PB-70-BF	Rm 207	2516	Y	Br, Cu	
		PB-71-BF	Rm 204	2517	Y	Br, Cu	
		PB-72-CF	Rm 204	2518	N	Br, Cu	
		PB-73-B	Rm 204	2518	N	Br, Cu	
		PB-74-BF	Rm 203	2519	Y	Br, Cu	
		PB-75-CF	Rm 203	2520/21	Y	Br, Cu	
		PB-76-B	Rm 203	2520/21	N	Br, Cu	
		PB-77-CF	Rm 202	2522	Y	Br, Cu	
		PB-78-B	Rm 202	2522	N	Br, Cu	
		PB-79-CF	Rm 201	2523/24	Y	Br, Cu	
		PB-80-B	Rm 201	2523/24	N	Br, Cu	
		PB-81-CF	Rm 200	2525/26	Y	Br, Cu	
		PB-82-B	Rm 200	2525/26	N	Br, Cu	
		PB-83-DF	2nd Fl between restrooms-L	2527	N	Unknown	
		PB-84-DF	2nd Fl between restrooms-R	2527	N	Unknown	

Birmingham Schools Fixture Inventory

Building: **Pembroke**

Date Collected: _____

Trace ID: _____

Sampler's Initials: _____

Logged by: _____

Checked by: _____

Trace No.	Time Taken	Sample Point	Location	Photo(s)	Aerator?	Connecting Plumbing	Notes
-----------	------------	--------------	----------	----------	----------	---------------------	-------

Abbreviations:

- B= Classroom Bubbler
- BF= Bathroom Faucet
- Bottle= Bottle Filler
- CF= Classroom Faucet
- DF= Drinking Fountain
- DS= Deep Sink
- EW= Eye Wash
- HS= Hand Sink
- KF= Kitchen Faucet

Connecting Plumbing:

- Br= Brass
- Cu= Copper
- G= Galvanized
- P= Plastic
- SS= Stainless Steel

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-01 Date Collected: 11/30/20 05:00
 Sample Point Description: PB-52-Bottle Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
METALS, TOTAL									
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T105130									
Copper	0.58	0.025	mg/L	12/3/20 12:09	ckd	12/7/20 12:31	ckd	N	1.3
Lead	Not Detected	0.0010	mg/L	12/3/20 12:09	ckd	12/7/20 12:31	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444-2673



231-773-5998 Phone
888-979-4469 Fax
www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-03 Date Collected: 11/30/20 05:31
Sample Point Description: PB-58-CF Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
------------	---------	-----	-------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T105130

Copper	0.19	0.025	mg/L	12/3/20	12:09	ckd	12/7/20	12:36	ckd	N	1.3
Lead	Not Detected	0.0010	mg/L	12/3/20	12:09	ckd	12/7/20	12:36	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-05 Date Collected: 11/30/20 05:35
 Sample Point Description: PB-62-CF Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
------------	---------	-----	-------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 200.8 Rev. 5.4

Batch: T105130

Copper	0.078	0.025	mg/L	12/3/20 12:09	ckd	12/7/20 12:42	ckd	N	1.3
Lead	0.0013	0.0010	mg/L	12/3/20 12:09	ckd	12/7/20 12:42	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-07 Date Collected: 11/30/20 05:37
 Sample Point Description: PB-66-CF Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL	
METALS, TOTAL										
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T105130										
Copper	0.19	0.025	mg/L	12/3/20	12:09	ckd	12/7/20	12:44	ckd	N 1.3
Lead	0.0024	0.0010	mg/L	12/3/20	12:09	ckd	12/7/20	12:44	ckd	N 0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-09 Date Collected: 11/30/20 05:48
 Sample Point Description: PB-72-CF Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL	
METALS, TOTAL										
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T105130										
Copper	0.21	0.025	mg/L	12/3/20	12:09	ckd	12/7/20	12:47	ckd	N 1.3
Lead	Not Detected	0.0010	mg/L	12/3/20	12:09	ckd	12/7/20	12:47	ckd	N 0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-11 Date Collected: 11/30/20 05:51
 Sample Point Description: PB-77-CF Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
METALS, TOTAL									
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T105130									
Copper	0.29	0.025	mg/L	12/3/20 12:09	ckd	12/7/20 12:49	ckd	N	1.3
Lead	0.0028	0.0010	mg/L	12/3/20 12:09	ckd	12/7/20 12:49	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-13 Date Collected: 11/30/20 05:53
 Sample Point Description: PB-81-CF Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
METALS, TOTAL									
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T105130									
Copper	0.043	0.025	mg/L	12/3/20 12:09	ckd	12/7/20 12:52	ckd	N	1.3
Lead	Not Detected	0.0010	mg/L	12/3/20 12:09	ckd	12/7/20 12:52	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-19 Date Collected: 11/30/20 05:09
 Sample Point Description: PB-12-CF Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
------------	---------	-----	-------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T105130

Copper	0.24	0.025	mg/L	12/3/20 12:09	ckd	12/7/20 13:03	ckd	N	1.3
Lead	Not Detected	0.0010	mg/L	12/3/20 12:09	ckd	12/7/20 13:03	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-21 Date Collected: 11/30/20 05:13
 Sample Point Description: PB-16-CF Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
METALS, TOTAL									
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T105131									
Copper	0.49	0.025	mg/L	12/3/20 12:10	ckd	12/7/20 13:07	ckd	N	1.3
Lead	0.0066	0.0010	mg/L	12/3/20 12:10	ckd	12/7/20 13:07	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-23 Date Collected: 11/30/20 05:17
 Sample Point Description: PB-22-CF Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
METALS, TOTAL									
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T105131									
Copper	0.35	0.025	mg/L	12/3/20 12:10	ckd	12/7/20 13:13	ckd	N	1.3
Lead	0.0051	0.0010	mg/L	12/3/20 12:10	ckd	12/7/20 13:13	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-25 Date Collected: 11/30/20 05:21
 Sample Point Description: PB-32-CF Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
------------	---------	-----	-------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T105131

Copper	0.20	0.025	mg/L	12/3/20 12:10	ckd	12/7/20 13:16	ckd	N	1.3
Lead	Not Detected	0.0010	mg/L	12/3/20 12:10	ckd	12/7/20 13:16	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-27 Date Collected: 11/30/20 05:26
 Sample Point Description: PB-39-CF Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
METALS, TOTAL									
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T105131									
Copper	0.17	0.025	mg/L	12/3/20 12:10	ckd	12/7/20 13:18	ckd	N	1.3
Lead	Not Detected	0.0010	mg/L	12/3/20 12:10	ckd	12/7/20 13:18	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-29 Date Collected: 11/30/20 04:46
 Sample Point Description: PB-94-CF Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL	
METALS, TOTAL										
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T105131										
Copper	0.17	0.025	mg/L	12/3/20	12:10	ckd	12/7/20	13:21	ckd	N 1.3
Lead	Not Detected	0.0010	mg/L	12/3/20	12:10	ckd	12/7/20	13:21	ckd	N 0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-31 Date Collected: 11/30/20 06:15
 Sample Point Description: PB-A1 Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
METALS, TOTAL									
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T105131									
Copper	0.45	0.025	mg/L	12/3/20 12:10	ckd	12/7/20 13:23	ckd	N	1.3
Lead	Not Detected	0.0010	mg/L	12/3/20 12:10	ckd	12/7/20 13:23	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-33 Date Collected: 11/30/20 06:15
 Sample Point Description: PB-A3 Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL	
METALS, TOTAL										
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T105131										
Copper	0.40	0.025	mg/L	12/3/20	12:10	ckd	12/7/20	13:29	ckd	N 1.3
Lead	Not Detected	0.0010	mg/L	12/3/20	12:10	ckd	12/7/20	13:29	ckd	N 0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-35 Date Collected: 11/30/20 06:15
 Sample Point Description: PB-A5 Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL	
METALS, TOTAL										
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T105131										
Copper	0.36	0.025	mg/L	12/3/20	12:10	ckd	12/7/20	13:31	ckd	N 1.3
Lead	Not Detected	0.0010	mg/L	12/3/20	12:10	ckd	12/7/20	13:31	ckd	N 0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-37 Date Collected: 11/30/20 06:15
 Sample Point Description: PB-A7 Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
METALS, TOTAL									
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T105131									
Copper	0.35	0.025	mg/L	12/3/20 12:10	ckd	12/7/20 13:34	ckd	N	1.3
Lead	Not Detected	0.0010	mg/L	12/3/20 12:10	ckd	12/7/20 13:34	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-39 Date Collected: 11/30/20 08:15
 Sample Point Description: PB-A9 Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL	
METALS, TOTAL										
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T105131										
Copper	0.27	0.025	mg/L	12/3/20	12:10	ckd	12/7/20	13:37	ckd	N 1.3
Lead	Not Detected	0.0010	mg/L	12/3/20	12:10	ckd	12/7/20	13:37	ckd	N 0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-41 Date Collected: 11/30/20 06:20
 Sample Point Description: PB-B1 Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
METALS, TOTAL									
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T105132									
Copper	0.37	0.025	mg/L	12/3/20 12:11	ckd	12/7/20 13:43	ckd	N	1.3
Lead	0.0013	0.0010	mg/L	12/3/20 12:11	ckd	12/7/20 13:43	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-43 Date Collected: 11/30/20 08:20
 Sample Point Description: PB-B3 Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL	
METALS, TOTAL										
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T105132										
Copper	0.23	0.025	mg/L	12/3/20	12:11	ckd	12/7/20	13:47	ckd	N 1.3
Lead	Not Detected	0.0010	mg/L	12/3/20	12:11	ckd	12/7/20	13:47	ckd	N 0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-45 Date Collected: 11/30/20 06:20
 Sample Point Description: PB-B5 Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
METALS, TOTAL									
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T105132									
Copper	0.13	0.025	mg/L	12/3/20 12:11	ckd	12/7/20 13:50	ckd	N	1.3
Lead	Not Detected	0.0010	mg/L	12/3/20 12:11	ckd	12/7/20 13:50	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-47 Date Collected: 11/30/20 06:20
 Sample Point Description: PB-B7 Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
METALS, TOTAL									
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T105132									
Copper	0.16	0.025	mg/L	12/3/20 12:11	ckd	12/7/20 13:52	ckd	N	1.3
Lead	Not Detected	0.0010	mg/L	12/3/20 12:11	ckd	12/7/20 13:52	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-49 Date Collected: 11/30/20 06:20
 Sample Point Description: PB-B9 Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
------------	---------	-----	-------	----------	----	----------	----	-------	-----

METALS, TOTAL

Analysis Method: EPA 200.8 Rev. 5.4
 Batch: T105132

Copper	0.087	0.025	mg/L	12/3/20 12:11	ckd	12/7/20 13:55	ckd	N	1.3
Lead	Not Detected	0.0010	mg/L	12/3/20 12:11	ckd	12/7/20 13:55	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-51 Date Collected: 11/30/20 06:25
 Sample Point Description: PB-C1 Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
METALS, TOTAL									
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T105135									
Copper	0.58	0.025	mg/L	12/4/20 12:20	rl	12/7/20 10:44	ckd	N	1.3
Lead	0.0015	0.0010	mg/L	12/4/20 12:20	rl	12/7/20 10:44	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-53 Date Collected: 11/30/20 06:25
 Sample Point Description: PB-C3 Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
METALS, TOTAL									
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T105132									
Copper	0.17	0.025	mg/L	12/3/20 12:11	ckd	12/7/20 14:01	ckd	N	1.3
Lead	Not Detected	0.0010	mg/L	12/3/20 12:11	ckd	12/7/20 14:01	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-55 Date Collected: 11/30/20 06:25
 Sample Point Description: PB-C5 Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL	
METALS, TOTAL										
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T105132										
Copper	0.18	0.025	mg/L	12/3/20	12:11	ckd	12/7/20	14:04	ckd	N 1.3
Lead	Not Detected	0.0010	mg/L	12/3/20	12:11	ckd	12/7/20	14:04	ckd	N 0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-57 Date Collected: 11/30/20 06:25
 Sample Point Description: PB-C7 Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL	
METALS, TOTAL										
Analysis Method: EPA 200.8 Rev. 5.4										
Batch: T105132										
Copper	0.12	0.025	mg/L	12/3/20	12:11	ckd	12/7/20	14:07	ckd	N 1.3
Lead	Not Detected	0.0010	mg/L	12/3/20	12:11	ckd	12/7/20	14:07	ckd	N 0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

ANALYTICAL RESULTS

Sample Location: Pembroke - Lead and Copper

Trace ID: 20K0925-59 Date Collected: 11/30/20 06:25
 Sample Point Description: PB-C9 Date Received: 11/30/20 10:09

PARAMETERS	RESULTS	RDL	UNITS	PREPARED	BY	ANALYZED	BY	NOTES	MCL
METALS, TOTAL									
Analysis Method: EPA 200.8 Rev. 5.4									
Batch: T105132									
Copper	0.11	0.025	mg/L	12/3/20 12:11	ckd	12/7/20 14:09	ckd	N	1.3
Lead	Not Detected	0.0010	mg/L	12/3/20 12:11	ckd	12/7/20 14:09	ckd	N	0.015

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

Birmingham Schools Fixture Inventory

Page ____ of ____

Building: **Pembroke**

Date Collected: 11/30/20
 Sampler's Initials: GH

Trace ID: 20K0925
 Logged by: [Signature]
 Checked by: [Signature]

Trace No.	Time Taken	Sample Point	Location	Photo(s)	Aerator?	Connecting Plumbing	Notes
	4:51	PB-44-BF	Girl's by Gym-Left	2497	Y	Br, Cu	
	4:52	PB-45-BF	Girl's by Gym-Left Middle	2497	Y	Br, Cu	
	4:53	PB-46-BF	Girl's by Gym- Right Middle	2497	Y	Br, Cu	
	4:54	PB-47-BF	Girl's by Gym- Right	2497	Y	Br, Cu	
	4:55	PB-48-BF	Boy's by Gym-Left	2498	Y	Br, Cu	
	4:56	PB-49-BF	Boy's by Gym-Left Middle	2498	Y	Br, Cu	
	4:57	PB-50-BF	Boy's by Gym- Right Middle	2498	Y	Br, Cu	
	4:58	PB-51-BF	Boy's by Gym- Right	2498	Y	Br, Cu	
1	5:00	PB-52-Bott	Hall by Multi Purpose	2499	N	Unknown	
		PB-53-DF	Hall by Multi Purpose	2499	N	Unknown	
2	6:13	PB-55-KF	Receiving	2501/02	Y	Br, Cu	
	5:30	PB-57-BF	2nd Fl Staff Restroom	2504	Y	Br, Cu	
3	5:31	PB-58-CF	Rm 212	2505/06	Y	Br, Cu	
		PB-59-B	Rm 212	2505/06	N	Br, Cu	
4	5:32	PB-60-CF	Rm 211	2507/08	Y	Br, Cu	
		PB-61-B	Rm 211	2507/08	N	Br, Cu	
5	5:35	PB-62-CF	Rm 210	2509	Y	Br, Cu	
		PB-63-B	Rm 210	2509	N	Br, Cu	
6	5:36	PB-64-CF	Rm 209	2510/11	Y	Br, Cu	
		PB-65-B	Rm 209	2510/11	N	Br, Cu	
7	5:37	PB-66-CF	Rm 208	2512/13	Y	Br, Cu	
		PB-67-B	Rm 208	2512/13	N	Br, Cu	
8	5:40	PB-68-CF	Rm 207	2514/15	Y	Br, Cu	
		PB-69-B	Rm 207	2514/15	N	Br, Cu	
	5:41	PB-70-BF	Rm 207	2516	Y	Br, Cu	
	4:54	PB-71-BF	Rm 204	2517	Y	Br, Cu	
9	5:48	PB-72-CF	Rm 204	2518	N	Br, Cu	
		PB-73-B	Rm 204	2518	N	Br, Cu	
	5:49	PB-74-BF	Rm 203	2519	Y	Br, Cu	
10	5:50	PB-75-CF	Rm 203	2520/21	Y	Br, Cu	
		PB-76-B	Rm 203	2520/21	N	Br, Cu	
11	5:51	PB-77-CF	Rm 202	2522	Y	Br, Cu	
		PB-78-B	Rm 202	2522	N	Br, Cu	
12	5:52	PB-79-CF	Rm 201	2523/24	Y	Br, Cu	
		PB-80-B	Rm 201	2523/24	N	Br, Cu	
13	5:53	PB-81-CF	Rm 200	2525/26	Y	Br, Cu	
		PB-82-B	Rm 200	2525/26	N	Br, Cu	
	5:56	PB-83-DF	2nd Fl between restrooms-L	2527	N	Unknown	
		PB-84-DF	2nd Fl between restrooms-R	2527	N	Unknown	

Released by: [Signature] Received by: 11/30/20 [Signature] Date: 11/30/20 Time: 11:58

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.

Trace Analytical Laboratories, Inc.
 2241 Black Creek Road
 Muskegon, MI 49444-2673



231-773-5998 Phone
 888-979-4469 Fax
 www.trace-labs.com

Birmingham Schools Fixture Inventory

Page ___ of ___

Building: **Pembroke**

Date Collected: 11/30/20
 Sampler's Initials: GH

Trace ID: 20K0925
 Logged by: JMC
 Checked by: JMC

Trace No.	Time Taken	Sample Point	Location	Photo(s)	Aerator?	Connecting Plumbing	Notes
	5:59	PB-85-BF	Boy's 2nd FI-Left	2528	Y	Br, Cu	
	6:00	PB-86-BF	Boy's 2nd FI-Middle	2528	Y	Br, Cu	
	6:01	PB-87-BF	Boy's 2nd FI- Right	2528	Y	Br, Cu	
	6:02	PB-90-BF	Girl's 2nd FI- Left	2530	Y	Br, Cu	
	6:03	PB-91-BF	Girl's 2nd FI- Middle	2530	Y	Br, Cu	
	6:04	PB-92-BF	Girl's 2nd FI-Right	2530	Y	Br, Cu	
		PB-93-B	Rm 110	3897/3898	N	Br, Cu	
29	4:46	PB-94-CF	Rm 110	3997/3998	Y	Br, Cu	
30	5:04	PB-95-KF	Media Center Work Room	3899/3900	Y	Br, Cu	
31	6:15	PB-A1	Incoming Supply				Boiler Room DS
32		PB-A2	Incoming Supply				Boiler Room DS
33		PB-A3	Incoming Supply				Boiler Room DS
34		PB-A4	Incoming Supply				Boiler Room DS
35		PB-A5	Incoming Supply				Boiler Room DS
36		PB-A6	Incoming Supply				Boiler Room DS
37		PB-A7	Incoming Supply				Boiler Room DS
38		PB-A8	Incoming Supply				Boiler Room DS
39		PB-A9	Incoming Supply				Boiler Room DS
40		PB-A10	Incoming Supply				Boiler Room DS
41	6:20	PB-B1	Midway Point				Office Work Room
42		PB-B2	Midway Point				Office Work Room
43		PB-B3	Midway Point				Office Work Room
44		PB-B4	Midway Point				Office Work Room
45		PB-B5	Midway Point				Office Work Room
46		PB-B6	Midway Point				Office Work Room
47		PB-B7	Midway Point				Office Work Room
48		PB-B8	Midway Point				Office Work Room
49		PB-B9	Midway Point				Office Work Room
50		PB-B10	Midway Point				Office Work Room
51	6:25	PB-C1	End Point				Rm 207
52		PB-C2	End Point				Rm 207
53		PB-C3	End Point				Rm 207
54		PB-C4	End Point				Rm 207
55		PB-C5	End Point				Rm 207
56		PB-C6	End Point				Rm 207
57		PB-C7	End Point				Rm 207
58		PB-C8	End Point				Rm 207
59		PB-C9	End Point				Rm 207
60		PB-C10	End Point				Rm 207

Released by: [Signature] Received by: [Signature] Date: 11/30/20 Time: 11:58

CERTIFICATE OF ANALYSIS

STATE OF MICHIGAN LABORATORY ID: 8001

This report shall not be reproduced, except in full, without the written consent of Trace Analytical Laboratories, Inc.