



phone 231.773.5998  
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Trace Analytical Laboratories, Inc.  
 2241 Black Creek Road  
 Muskegon, MI 49444-2673  
 info@trace-labs.com  
 www.trace-labs.com

State of Michigan Laboratory ID: 8001

February 10, 2017

Mr. Stephen King  
 Birmingham Public Schools  
 2305 Cole Street  
 Birmingham, MI 48009

PROJECT: Greenfield Resampling

TRACE ID: T17A436-01

Sample Point Description		Collected		Collected By		Received at Laboratory	
G-49-CF		1/28/17	8:03	twb/eb		1/30/17	8:47
Metals, Total	RESULT	* MCL	PREPARED	ANALYZED	BY	METHOD	
Copper	0.38 mg/L	1.3	1/31/17 11:55	2/3/17 18:56	dtm	EPA 200.8 Rev. 5.4	
Lead	<0.0010 mg/L	0.015	1/31/17 11:55	2/3/17 18:56	dtm	EPA 200.8 Rev. 5.4	

TRACE ID: T17A436-02

Sample Point Description		Collected		Collected By		Received at Laboratory	
G-54-CF		1/28/17	8:05	twb/eb		1/30/17	8:47
Metals, Total	RESULT	* MCL	PREPARED	ANALYZED	BY	METHOD	
Copper	0.90 mg/L	1.3	1/31/17 11:55	2/4/17 13:14	dtm	EPA 200.8 Rev. 5.4	
Lead	<0.0010 mg/L	0.015	1/31/17 11:55	2/3/17 18:59	dtm	EPA 200.8 Rev. 5.4	

TRACE ID: T17A436-03

Sample Point Description		Collected		Collected By		Received at Laboratory	
G-56-CF		1/28/17	8:20	twb/eb		1/30/17	8:47
Metals, Total	RESULT	* MCL	PREPARED	ANALYZED	BY	METHOD	
Copper	5.4 mg/L	1.3	2/7/17 11:04	2/8/17 16:26	dtm	EPA 200.8 Rev. 5.4	
Lead	0.062 mg/L	0.015	2/7/17 11:04	2/7/17 18:09	dtm	EPA 200.8 Rev. 5.4	

\* The MCL (Maximum Contamination Limit) is the maximum concentration allowed under the Federal Safe Drinking Water Act. Results that are reported in bold or red have equaled or exceeded the MCL.

Jon Mink  
 Senior Project Manager



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**PROJECT: Greenfield Resampling**

**TRACE ID: T17A436-04**

<i>Sample Point Description</i> G-60-BF	<i>Collected</i> 1/28/17 8:08	<i>Collected By</i> twb/eb	<i>Received at Laboratory</i> 1/30/17 8:47
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Metals, Total	RESULT	* MCL	PREPARED	ANALYZED	BY	METHOD
Copper	0.31 mg/L	1.3	1/31/17 11:55	2/3/17 19:01	dtm	EPA 200.8 Rev. 5.4
Lead	<0.0010 mg/L	0.015	1/31/17 11:55	2/3/17 19:01	dtm	EPA 200.8 Rev. 5.4

**TRACE ID: T17A436-05**

<i>Sample Point Description</i> G-62-BF	<i>Collected</i> 1/28/17 8:08	<i>Collected By</i> twb/eb	<i>Received at Laboratory</i> 1/30/17 8:47
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Metals, Total	RESULT	* MCL	PREPARED	ANALYZED	BY	METHOD
Copper	0.71 mg/L	1.3	1/31/17 11:55	2/3/17 19:04	dtm	EPA 200.8 Rev. 5.4
Lead	0.0016 mg/L	0.015	1/31/17 11:55	2/3/17 19:04	dtm	EPA 200.8 Rev. 5.4

**TRACE ID: T17A436-06**

<i>Sample Point Description</i> G-64-BF	<i>Collected</i> 1/28/17 8:10	<i>Collected By</i> twb/eb	<i>Received at Laboratory</i> 1/30/17 8:47
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Metals, Total	RESULT	* MCL	PREPARED	ANALYZED	BY	METHOD
Copper	0.38 mg/L	1.3	1/31/17 11:55	2/3/17 19:07	dtm	EPA 200.8 Rev. 5.4
Lead	<0.0010 mg/L	0.015	1/31/17 11:55	2/3/17 19:07	dtm	EPA 200.8 Rev. 5.4

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PROJECT: Greenfield Resampling

TRACE ID: T17A436-07

Sample Point Description		Collected		Collected By		Received at Laboratory	
G-65-BF		1/28/17	8:10	twb/eb		1/30/17	8:47
Metals, Total	RESULT	* MCL	PREPARED	ANALYZED	BY	METHOD	
Copper	0.83 mg/L	1.3	1/31/17 11:55	2/3/17 19:09	dtm	EPA 200.8 Rev. 5.4	
Lead	0.012 mg/L	0.015	1/31/17 11:55	2/3/17 19:09	dtm	EPA 200.8 Rev. 5.4	

TRACE ID: T17A436-08

Sample Point Description		Collected		Collected By		Received at Laboratory	
G-66-BF		1/28/17	8:10	twb/eb		1/30/17	8:47
Metals, Total	RESULT	* MCL	PREPARED	ANALYZED	BY	METHOD	
Copper	0.81 mg/L	1.3	1/31/17 11:55	2/3/17 19:12	dtm	EPA 200.8 Rev. 5.4	
Lead	<0.0010 mg/L	0.015	1/31/17 11:55	2/3/17 19:12	dtm	EPA 200.8 Rev. 5.4	

TRACE ID: T17A436-09

Sample Point Description		Collected		Collected By		Received at Laboratory	
G-72-BF		1/28/17	8:13	twb/eb		1/30/17	8:47
Metals, Total	RESULT	* MCL	PREPARED	ANALYZED	BY	METHOD	
Copper	0.38 mg/L	1.3	1/31/17 11:55	2/3/17 19:15	dtm	EPA 200.8 Rev. 5.4	
Lead	<0.0010 mg/L	0.015	1/31/17 11:55	2/3/17 19:15	dtm	EPA 200.8 Rev. 5.4	

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PROJECT: Greenfield Resampling

TRACE ID: T17A436-10

Sample Point Description	Collected	Collected By	Received at Laboratory			
G-75-CF	1/28/17 8:15	twb/eb	1/30/17 8:47			
Metals, Total	RESULT	* MCL	PREPARED	ANALYZED	BY	METHOD
Copper	1.1 mg/L	1.3	2/7/17 11:04	2/7/17 18:12	dtm	EPA 200.8 Rev. 5.4
Lead	0.012 mg/L	0.015	2/7/17 11:04	2/7/17 18:12	dtm	EPA 200.8 Rev. 5.4

TRACE ID: T17A436-11

Sample Point Description	Collected	Collected By	Received at Laboratory			
G-77-CF	1/28/17 8:17	twb/eb	1/30/17 8:47			
Metals, Total	RESULT	* MCL	PREPARED	ANALYZED	BY	METHOD
Copper	0.83 mg/L	1.3	1/31/17 11:55	2/4/17 13:17	dtm	EPA 200.8 Rev. 5.4
Lead	0.035 mg/L	0.015	1/31/17 11:55	2/3/17 19:17	dtm	EPA 200.8 Rev. 5.4

*WAS COPPER! NOW LEAD??*

TRACE ID: T17A436-12

Sample Point Description	Collected	Collected By	Received at Laboratory			
G-79-CF	1/28/17 8:18	twb/eb	1/30/17 8:47			
Metals, Total	RESULT	* MCL	PREPARED	ANALYZED	BY	METHOD
Copper	0.90 mg/L	1.3	1/31/17 11:55	2/3/17 19:20	dtm	EPA 200.8 Rev. 5.4
Lead	0.064 mg/L	0.015	1/31/17 11:55	2/3/17 19:20	dtm	EPA 200.8 Rev. 5.4

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Jon Mink  
 Senior Project Manager

## Birmingham Schools Fixture Inventory

Page 1 of 2

Building: Greenfield

Date Collected: 1/28/17  
 Sampler's Initials: TWB/ED

Trace ID: TT171440336  
 Logged by: TS  
 Checked by: CP

*\* Resampling \**

Trace No.	Time Taken	Sample Point	Location	Photo(s)	Aerator?	Connecting Plumbing	Notes
40		G-40-B	Rm 103	3853/54	N	Br, Cu	
41		G-41-BF	Rm 102	3855	Y	Br, Cu	
42		G-42-CF	Rm 102	3856/57	Y	Br, Cu	
43		G-43-B	Rm 102	3856/57	N	Br, Cu	
44		G-44-BF	Rm 101	3858	Y	Br, Cu	
45		G-45-CF	Rm 101	3859/60	Y	Br, Cu	
46		G-46-B	Rm 101	3859/60	N	Br, Cu	
47		G-47-CF	Rm 100-Frontside	3861/62	Y	Br, Cu	
48		G-48-CF	Rm 100-Backside	3861/62	Y	Br, Cu	
49	8:03	G-49-CF	Rm 100 Back Sink	3863/64	Y	Br, Cu	
50		G-50-CF	Staff Lounge	3865/66	Y	Br, Cu	
51		G-51-Fridge	Staff Lounge	3867	N	Unknown	
52		G-52-BF	Staff Restroom	3868	Y	Br, Cu	
53		G-53-BF	Clinic	3869	Y	Br, Cu	
54	8:05	G-54-CF	Media Office	3869	Y	Br, Cu	
55		G-55-BF	Preschool	3872	Y	Br, Cu	
56	8:20	G-56-CF	Preschool	3873/74	Y	Br, Cu	
57		G-57-B	Preschool	3873/74	N	Br, Cu	
58		G-58-DF	2nd Fl North- Left	3875	N	Unknown	
59		G-59-DF	2nd Fl North- Right	3875	N	Unknown	
60	8:06	G-60-BF	2nd Fl Staff North	3876	Y	Br, Cu	
61		G-61-BF	Girl's 2nd Fl- South- Left	3877	Y	Br, Cu	
62	8:09	G-62-BF	Girl's 2nd Fl- South- Middle	3877	Y	Br, Cu	
63		G-63-BF	Girl's 2nd Fl- South-Right	3877	Y	Br, Cu	
64	8:10	G-64-BF	Boy's 2nd Fl- South-Left	3878	Y	Br, Cu	
65	8:10	G-65-BF	Boy's 2nd Fl- South- Middle	3878	Y	Br, Cu	
66	8:10	G-66-BF	Boy's 2nd Fl- South- Right	3878	Y	Br, Cu	
67		G-67-BF	2nd Fl Staff South	3879	Y	Br, Cu	
68		G-68-DS	Custodial Rm 2nd Fl South	3880	N	Unknown	
69		G-69-EW	Custodial Rm 2nd Fl South	3881	N	Unknown	
70		G-70-DF	2nd Fl South-Left	3882	N	Unknown	
71		G-71-DF	2nd Fl South- Right	3882	N	Unknown	
72	8:13	G-72-BF	Rm 206	3883	Y	Br, Cu	
73		G-73-CF	Rm 206	3884/85	Y	Br, Cu	
74		G-74-B	Rm 206	3884/85	N	Br, Cu	
75	8:15	G-75-CF	Rm 207	3886/87	Y	Br, Cu	
76		G-76-B	Rm 207	3886/87	N	Br, Cu	
77	8:17	G-77-CF	Rm 208	3888/89	Y	Br, Cu	
78		G-78-B	Rm 208	3888/89	N	Br, Cu	

Released by: TWB

Received by: ED

Date: 1/30/17 Time: 8:47



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**Birmingham Schools Fixture Inventory**

Building: Greenfield

Date Collected: \_\_\_\_\_

Trace ID: T17M46936

Sampler's Initials: \_\_\_\_\_

Logged by: JJ

Checked by: EH

Trace No.	Time Taken	Sample Point	Location	Photo(s)	Aerator?	Connecting Plumbing	Notes
<del>86</del> 1279	8:18	G-79-CF	Rm 209	3890/91	Y	Br, Cu	
<del>87</del> 1280		G-80-B	Rm 209	3890/91	N	Br, Cu	
81		G-81-CF	Rm 210	3892/93	Y	Br, Cu	
82		G-82-B	Rm 210	3892/93	N	Br, Cu	
83		G-83-CF	Rm 211	3894/95	Y	Br, Cu	
84		G-84-B	Rm 211	3894/95	N	Br, Cu	
85		G-85-DS	Boiler Rm	3896	N	Unknown	

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

Released by: [Signature]

Received by: [Signature]

Date: 1/31/17 Time: 8:47

### SAMPLE LOG IN CHECKLIST

Trace ID #: TYA 436 Date: 1/30/11 Package Description: Cooler Temperature: 14.0  
 Client Name: Birmingham Greenfield Time: 8:47 Logged In by: TS

#### Cooler Receipt

Cooler/samples delivered by: Trace courier   
 Hand delivered  Name of delivery person: Tim Brown  
 Commercial courier  UPS  FED EX  US Mail   
 Tracking Number:  Not Applicable  
 Tracking #: \_\_\_\_\_  
 COC Seals present and intact on cooler? No   Not Applicable  
 Yes   
 Custody seals signed by Client? No  Client custody seal # (if applicable): \_\_\_\_\_  
 Yes

#### Coolant and Temperature

**Type of Coolant Used**  
 Slurry w/ crushed, cubed, or chip ice?   
 Multiple bags of ice around samples?   
 Ice Packs/ Blue Ice:   
 No Coolant Present:   
 Ice still present upon receipt (circle one):  
 Yes No NA

**Cooler Temperature**  
 Correction Factors: • Digital Stick Thermometer CF = -1.0°C  
 • Thermocouple CF = -1.0°C  
 Temperature Blank: nme °C (Digital Stick Thermometer)  
 Range of 3 samples: 13.2-13.4 °C (Thermocouple)  
 Melt Water: nme °C (Use Digital Stick Thermometer)

#### General

	Yes	No	NA	Comments
All bottles arrived unbroken with labels in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Each sample point is in a sealed plastic bag?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Labels filled out completely?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
All bottle labels agree with Chain of Custody (COC)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sufficient sample to run tests requested?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
pH checked and samples at correct pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Below*
Correct preservative added to samples?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Air bubbles absent from VOAs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
COC filled out properly and signed by client?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
COC signed in by TRACE sample custodian?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was project manager called and samples discussed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\*EMD pH Test Strips Used:  
 pH 0-2.6 Lot: HC563733  
 pH 11.0-13.0 Lot: HC647328  
 Other: \_\_\_\_\_  
 Lot: HC563733 verified 6/21/16 AY  
 Lot: HC647328 verified 6/30/16 AY  
 TRACE Analytical Laboratories, Inc.

